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THE RELATIONSHIP BETWEEN CRITICAL THINKING SKILLS AND LEARNING OUTCOMES OF GRADE III ELEMENTARY SCHOOL STUDENTS

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Abstract. This study aims to analyze the relationship between critical thinking skills and the learning outcomes of third-grade elementary school students. The research method used in this study is a quantitative approach with a correlational research type. The population in this study consists of all third-grade elementary school students totaling 19 individuals. The data collection technique used was a test to obtain data on critical thinking skills and learning outcomes. The prerequisite tests used are the normality test and the linearity test. The data analysis technique in this study uses Pearson correlation (Product Moment Correlation). The findings of this research indicate that there is a significant relationship between critical thinking skills and the learning outcomes of third-grade elementary school students.

Keywords: Skills Think Critical, Results Study, School Base

Abstrak. Penelitian ini bertujuan untuk menganalisis hubungan antara keterampilan berpikir kritis dengan hasil belajar peserta didik kelas III Sekolah Dasar. Metode penelitian yang digunakan dalam penelitian yaitu pendekatan kuantitatif dengan jenis penelitian korelasional. Populasi dalam penelitian ini seluruh peserta didik kelas III Sekolah Dasar sebanyak 19 orang. Teknik pengumpulan data yang digunakan berupa tes untuk mencari data keterampilan berpikir kritis dan hasil belajar. Uji prasyarat yang digunakan yaitu uji normalitas dan uji linearitas. Teknik analisis data dalam penelitian ini menggunakan uji korelasi Pearson *(Korelasi Product Moment)*. Temuan peneltiian ini yaitu terdapat hubungan yang signifikan keterampilan berpikir kritis dengan hasil belajar peserta didik kelas III Sekolah Dasar.

Kata Kunci: Keterampilan Berpikir Kritis, Hasil Studi, Basis Sekolah

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INTRODUCTION

Education has role important in increase quality source power humans (Aman et al., 2023; Deris Desmawan et al., 2023; Halean, S., Kandowangko, N., & Goni, 2021; Juita et al., 2024; Kusuma, 2021; Lestari & Nuryanti, 2022; Lian & Amiruddin, 2021; Mantiri, 2019; Rahmatullah & Hidayat, 2021). One of the aspect main in learning is skills think critical, which contributes to improvement results study participant educate (Bialangi , 2019; Ramadhani et al., 2024). Think critical covers ability analyze, evaluate, and solve problem in a way logical and systematic (Fitriani et al., 2021; Juni Yanto Zebua et al., 2024).

In the learning process, participants students who have skills think critical tend more capable understand, solve problem, do more tests and exams good with a more approach effective (Allanta & Puspita, 2021; Ariadila et al., 2023). On the other hand, participants educate with skills think low critical often experience difficulty in understand material, so that impact on low results study they.

A number of study show that there is connection positive between skills think critical and results Study (Nurdiana et al., 2023; Wahyuni et al., 2021; Youllanda et al., 2020) participant capable learner think critical more active in learning, having better understanding deep, and can apply knowledge in various context. Therefore that 's important for educator for develop learning strategies that encourage strengthening skills think critical use increase results study participant educate. Based on pre-research data known that mark think critical participant educate in class III in category good.

Table 1. Value data think critical Participant Educate

Indicator	Amount Participant Educate	Percentage %
Very high	3	15.79%
Tall	6	31.57%
Currently	8	42.1%
Low	2	10.52%

Based on the data in table 1. above known to 15.79% of participants educate own mark think very high critical as many as 31.57 % of students in category high, 42.1% of participants educate in category moderate and 10.52% of participants educate in category low. See matter the need done study more carry on related connection think critical participant educate with results study participant educate. Research similar has also been written (Annisa et al., 2020; Asafa et al., 2023; Fransiskus et al., 2023; Komariyah & Laili, 2018; Mursidah et al., 2019; Raturoma & Laisnima, 2023; Saparuddin et al., 2021; Silas et al., 2024; Telaumbanua et al., 2024) However study the focus is on schools intermediate first and school intermediate above, while for school base especially class low like grade III elementary school not yet found. Even though skills think critical is one of necessary skills developed since early. Opinion the supported by (Dilla, 2023) who stated Skills think critical important for developed since early in the participants educate school basis for them capable finish problem with good.

Study this aiming for analyze connection between skills think critical with results study participant educate grade III elementary school. With understand connection this, it is expected can give contribution for development method more learning effective.

METHOD

Method research used in study this use approach quantitative with type study correlation. Method statistics pearson correlation will used For count coefficient correlation between both variables (FM Sari et al., 2023). Population in study this all over class 3 at SD Negeri 1 Margamulya a total of 19 participants determined education with method taking sample using purposive sampling. Purposive sampling is technique taking sample based on consideration researcher (Sugiyono, 2019).

Technique data collection used in study this in the form of a test. The first test for search for result data study. Test results study load aspect cognitive C1-C6, the questions are in the form of choice double. Second test used for search for thinking data critical. Thinking test critical in the form of essay in form because load thinking indicators critical like capable for sharpen the mind in breakdown problem, do investigation, analysis assumptions, and give rational, and take decision (Ramadhani et al., 2024).

Table 2. Interpretation skills thinking critical

Mark	Category
81.25<P≤100	Very high
71.5<P ≤81.25	Tall
62.5<P ≤71.5	Currently
43.75<P ≤62.5	Low
0<P ≤43.75	Very Low

Before the data is analyzed need prerequisite tests were carried out. The prerequisite tests used were: namely the normality test and the linearity test. Normality test used for evaluate does the data follow normal distribution, data must be tested its normality for ensure eligibility analysis parametric (AP Sari et al., 2024). Linearity test aiming for know whether two variable or more tested have linear relationship or no in a way significant. This test usually used as requirements in analysis correlation or linear regression (Setiawan et al., 2020). Data analysis techniques in study this using correlation test pearson product moment. Analysis correlation pearson also known as product moment correlation is analysis for measure closeness connection linearly between two variables that have normal distribution (FM Sari et al., 2023). In study this is the test used for look for connection skills think critical with results study. In the study this using the pearson product moment correlation test (r) which aims to for know level closeness connection between stated variables with coefficient correlation (r) (Jabnabillah & Margina, 2022).

RESULTS

Research data this consists of from one variable free, namely variable skills think critical (X) and variables bound results study (Y). The data presented in table 4 below this:

Table 4. Skills data thinking critical and learning outcomes

Respondents	Intelligence Value Emotional	Respondents	Achievement value Study
R1	64	R1	75
R2	72	R2	83
R3	74	R3	85
R4	70	R4	80
R5	73	R5	80
R6	93	R6	90
R7	74	R7	85
R8	75	R8	80
R9	79	R9	81
R10	63	R10	90
R11	64	R11	78
R12	83	R12	95
R13	70	R13	85
R14	60	R14	90
R15	83	R15	87
R16	78	R16	72
R17	47	R17	65
R18	64	R18	76
R19	67	R19	78

Pre- Test Analysis Correlation Pearson Product Moment

Normality Test

Normality test data taken from results questionnaire intelligence emotional and achievement learning. The normality test was carried out use Kolmogorov-Smirnov[a], with criteria tester that the result data questionnaire intelligence emotional and achievement study participant educate grade IV of elementary school is normally distributed.

Table 5. Normality test

	Kolmogorov-Smirnov [a]			Shapiro Wilk		
	Statistics	df	Sig.	Statistics	df	Sig.
Critical_Thinking	.104	19	.200 *	.976	19	.888
Learning Outcomes	.091	19	.200 *	.978	19	.911

Based on table 5, it can be seen in the Shapiro-Wilk table column that the sig value of the two data is more from 0.05, then the data thinks critical and learning outcomes normally distributed.

Linearity test

Table 6. Linearity test

			Sum of Squares	df	Mean Square	F	Sig.
Learning_Outcomes * Critical_Thinking	Between Groups	(Combined)	927,860	16	57,991	24,853	.039
		Linearity	271,450	1	271,450	116,336	.008
		Deviation from Linearity	656,410	15	43,761	18,755	.052
	Within Groups		4,667	2	2.333		
	Total		**932,526**	**18**			

Based on the data in table 6, it is known that mark from sig deviation from linearity (0.052) more big from 0.05 then the data is linear. Linear means the data is own straight relationship or linear between its variables. Linear data can depicted with straight lines, and changes in one variable will impact on other variables with fixed proportions.

Hypothesis Testing

Table 7. Hypothesis testing

		Learning Outcomes	Critical_Thinking
Learning Outcomes	Pearson Correlation	1	.540 *
	Sig. (2-tailed)		.017
	N	19	19
Critical_Thinking	Pearson Correlation	.540 *	1
	Sig. (2-tailed)	.017	
	N	19	19

Based on table 7 it is known that sig value (0.017) < α (0.05), then H_0 rejected, and H_1 accepted. Which means there is significant relationship between skills think critical with results learning. From the results analysis of data obtained mark correlation pearson = 0.540, this state level correlation “Medium” category, so obtained coefficient determination = 0.2911 which means "that skills thinking critical give contribution by 29.11% against results Learning”. Category currently It means there is visible relationship between second variable, but connection the no enough strong for allow accurate predictions.

DISCUSSION

Based on the findings data study obtained conclusion that skills thinking critical own significant relationship with results learning. Findings the similar with (Hardianti & Fidrayani, 2022; Mutmainnah et al., 2021) who stated that skills think critical own significant and positive

relationship with results study participant educate grade V of elementary school. With thus can concluded that skills think critical participant educate own connection with results study participant educate good elementary school for level class tall that is grade V of elementary school or class low that is grade III of elementary school.

Minister of education and culture regulation number 22 of 2016 concerning elementary and secondary education process standards, in accordance with standard competence graduates, targets learning covers development realm attitudes, knowledge, and skills that are elaborated for every unit education. Attitude obtained through activities of “receiving, carrying out, appreciating, internalizing, and practicing”. Knowledge and experience learning gained through activities of “remembering, understanding, applying, analyzing, evaluating, and creating”. Skills obtained through activities of " observing, asking, trying, reasoning, presenting, and creating". In frame fulfil elementary and secondary education process standards, then from that skills think critical own a very important role during the learning process ongoing, because activities contained therein is implementation from skills think critical (Anggraeni et al., 2022).

Skills think critical is skills that must be owned by participants educate for can compete globally (Maulidah et al., 2024). Skills think critical must owned by someone for face problem in life socialize and personally (Andriani & Jatmiko, 2018; Ekaputra, 2023; Ismaimuza, 2013; Mustajab et al., 2018). Skills think critical important for developed to participant educate because skills this as one of the competence achievement participant educate in education (Fauzi et al., 2022; Mutakinati et al., 2018; Novianti, 2020)

CONCLUSION

From the results analysis of data obtained mark correlation pearson = 0.540, this state level correlation “Medium” category, so obtained Coefficient determination = 0.2911 which means that skills thinking critical give contribution by 29.11% against results learn. With thus so concluded that there is significant relationship skills think critical with results study participant educate grade III of elementary school

REFERENCES

Allanta, T. R., & Puspita, L. (2021). Analisis keterampilan berpikir kritis dan self efficacy peserta didik: Dampak PjBL-STEM pada materi ekosistem. *Jurnal Inovasi Pendidikan IPA*, *7*(2), 158–170. https://doi.org/10.21831/jipi.v7i2.42441

Aman, A., Joko Raharjo, T., & Supriyanto, T. (2023). Peran dan Strategi Perguruan Tinggi dalam Membentuk SDM Unggul yang Berjiwa Creativepreneurship di Era Society 5.0. *Seminar Nasional Pascasarjana Universitas Negeri Semarang*, 7–12. http://pps.unnes.ac.id/pps2/prodi/prosiding-pascasarjana-unnes

Andriani, D. G., & Jatmiko, J. (2018). Kemampuan Berpikir Kritis Siswa melalui Model Pembelajaran Learning Cycle. *Jurnal Math Educator Nusantara: Wahana Publikasi Karya Tulis Ilmiah Di Bidang Pendidikan Matematika*, *4*(2), 125. https://doi.org/10.29407/jmen.v4i2.12329

Anggraeni, N., Rustini, T., & Wahyuningsih, Y. (2022). Keterampilan berpikir kritis siswa sekolah dasar pada mata pelajaran ips di kelas tinggi. *Jurnal Review Pendidikan Dasar: Jurnal Kajian Pendidikan Dan Hasil Penelitian*, *8*(1), 84–90.

Annisa, L., Oktaviana, C., & Habibi, A. A. (2020). Hubungan Keterampilan Berpikir Kritis Dengan Hasil Belajar Peserta Didik. *Edubiologica Jurnal Penelitian Ilmu Dan Pendidikan Biologi*, *8*(1), 35–37. https://doi.org/10.25134/edubiologica.v8i1.2337

Ariadila, S. N., Silalahi, Y. F. N., Fadiyah, F. H., Jamaluddin, U., & Setiawan, S. (2023). Analisis Pentingnya Keterampilan Berpikir Kritis Terhadap Pembelajaran Bagi Siswa. *Jurnal Ilmiah Wahana Pendidikan*, *9*(20), 664–669.

Asafa, M. P., Hayon, V. H. ., Tukan, M. B., & Baunsele, A. B. (2023). Pengaruh Kemampuan Berpikir Kritis terhadap Hasil Belajar Peserta Didik dengan Menerapkan Pendekatan Saintifik Materi Larutan Penyangga. *Jurnal Beta Kimia*, *3*(2), 57–66. https://doi.org/10.35508/jbk.v3i2.12431

Bialangi, M. S. (2019). Pemberdayaan Keterampilan Berpikir Kritis Dalam Pembelajaran Biologi Melalui Penerapan Model Pembelajaran Kooperatif. *Prosiding Seminar Nasional Pendidikan Biologi*, 56–65.

Deris Desmawan, Fifi Aleyda Cahyaningdyah, Ratu Darwin, Sabrina Salsyabila Putri, Alta Rizqina, & Ikhsanudin. (2023). Analisis Peran Pendidikan Terhadap Kualitas Sumber Daya Manusia Guna Meningkatkan Produktivitas Masyarakat Di DKI Jakarta. *Wawasan:Jurnal Ilmu Manajemen, Ekonomi Dan Kewirausahaan*, *1*(2), 214–224. https://doi.org/10.59024/jumek.v1i2.75

Dilla, M. (2023). Pengembangan Keterampilan Berpikir Kritis Siswa Sekolah Dasar Melalui Model Pembelajaran Inkuiri. *Jurnal Pendidikan Guru Sekolah Dasar*, *1*(2), 7. https://doi.org/10.47134/pgsd.v1i2.138

Ekaputra, F. (2023). Corelation Of Critical Thinking Ability To Learning Activity After Flipped Classroom-Pjbl Learning Model Application. *Jurnal Penelitian Pendidikan IPA*, *8*(1), 43–47. https://doi.org/10.26740/jppipa.v8n1.p43-47

Fauzi, A. A., Susongko, P., & Hayati, M. N. (2022). Tes Kemampuan Berpikir Kritis pada Pembelajaran IPA di SMP Berbasis Model Rasch. *PSEJ (Pancasakti Science Education Journal)*, *7*(1), 59–67. https://doi.org/10.24905/psej.v7i1.146

Fitriani, N., Syaikhu, A., & Rahmad, I. N. (2021). Peningkatan Kemampuan Berpikir Kritis Melalui Model Pembelajaran Kooperatif Pada Materi Suhu Dan Kalor. *Prosiding Seminar Nasional Pendidikan STKIP Kusuma Negara III*, 261–269. https://jurnal.stkipkusumanegara.ac.id/index.php/semnara2020/article/view/1306

Fransiskus, A., Eduk, E. J., & Buku, M. N. I. (2023). Hubungan Kemampuan Berpikir Kritis Dengan Hasil Belajar Peserta Didik Melalui Penerapan Model Discovery Learning di SMP Negeri 5 Kota Kupang. *JBIOEDRA: Jurnal Pendidikan Iologi*, *01*(01), 7–12.

Halean, S., Kandowangko, N., & Goni, S. Y. V. I. (2021). Peranan Pendidikan Dalam Meningkatkan Sumber Daya Manusia Di SMA Negeri 1 Tampan Amma Di Talaud. *Journal Holistik*, *14*(2), 1–17. https://ejournal.unsrat.ac.id/index.php/holistik/article/download/34453/32350

Hardianti, R., & Fidrayani, F. (2022). Hubungan Antara Kemampuan Berpikir Kritis Dengan Hasil Belajar Tematik Peserta Didik Kelas V Sekolah Dasar. *Elementar : Jurnal Pendidikan Dasar*, *2*(2), 168–176. https://doi.org/10.15408/elementar.v2i2.28524

Ismaimuza, D. (2013). Kemampuan berpikir kritis dan kreatif matematis siswa smp melalui pembelajaran berbasis masalah dengan strategi konflik kognitif. *Jurnal Teknologi (Sciences and Engineering)*, *63*(2), 33–37. https://doi.org/10.11113/jt.v63.2002

Jabnabillah, F., & Margina, N. (2022). Analisis Korelasi Pearson Dalam Menentukan Hubungan Antara Motivasi Belajar Dengan Kemandirian Belajar Pada Pembelajaran Daring. *Jurnal Sintak*, *1*(1), 14–18.

Juita, D. P., Priya, P., Azwardi, M., & Amra, A. (2024). Pentingnya Pengembangan Sumber Daya Manusia pada Lembaga Pendidikan. *Indo-MathEdu Intellectuals Journal*, *5*(3), 3068–3077. https://doi.org/10.54373/imeij.v5i3.1243

Juni Yanto Zebua, Zega, Y., & Telaumbanua, Y. N. (2024). Analisis Kemampuan Siswa Dalam Menyelesaikan Soal Matematika. *Didaktika: Jurnal Kependidikan*, *13*(001), 587–594. https://doi.org/10.59098/mega.v5i1.1455

Komariyah, S., & Laili, A. F. N. (2018). Pengaruh Berpikir Kritis Terhadap Hasil Belajar Matematika. *JP3M: Jurnal Penelitian Pendidikan Dan Pengajaran Matematika*, *4*(2), 55–60. https://doi.org/10.33751/jppguseda.v3i1.2013

Kusuma, D. S. I. (2021). Pelaksanaan Manajemen Sumber Daya Manusia Dalam Meningkatkan Mutu Profesionalitas Guru Di Smp Negeri 24 Medan Tahun Pelajaran 2016/2017. *SABILARRASYAD: Jurnal Pendidikan Dan Ilmu Kependidikan*, *6*(2), 53–63. https://jurnal.dharmawangsa.ac.id/index.php/sabilarrasyad/article/view/1686

Lestari, E. A., & Nuryanti. (2022). Pentingnya Kualitas Sumber Daya Manusia Dalam Meningkatkan Mutu Pendidikan Anak. *Jurnal Pendidikan Dan Konseling*, *4*(5), 3689–3694.

Lian, B., & Amiruddin. (2021). Peran Pendidikan Dalam Menciptakan SDM Berkualitas di Era Disrupsi dan Pandemi Covid-19. *Prosiding Seminar Nasional PGRI Provinsi Sumatra Selatan Dan Universitas PGRI Palembang*, *November*, 12–15.

Mantiri, J. (2019). Peran Pendidikan Dalam Menciptakan Sumber Daya Manusia Berkualitas Di Provinsi Sulawesi Utara. *Jurnal Civic Education: Media Kajian Pancasila Dan Kewarganegaraan*, *3*(1), 20–26. https://doi.org/10.36412/ce.v3i1.904

Maulidah, R., Anekawati, A., & Hidayat, J. N. (2024). Dampak Pengetahuan Awal Terhadap Keterampilan Berpikir Kritis Siswa. *Prosiding SNAPP : Sosial Humaniora, Pertanian, Kesehatan Dan Teknologi*, *2*(1), 266–277. https://doi.org/10.24929/snapp.v2i1.3147

Mursidah, S., Susilo, H., & Corebima, A. D. (2019). Hubungan antara Keterampilan Berpikir Kritis dan Keterampilan Berkomunikasi dengan Retensi Siswa dalam Pembelajaran Biologi melalui Strategi Pembelajaran Reading Practicing Questioning Summarizing and Sharing. *Jurnal Pendidikan: Teori, Penelitian, Dan Pengembangan*, *4*(8), 1071–1076. https://doi.org/10.17977/jptpp.v4i8.12676

Mustajab, W., Hadi Senen, S., & Waspada, I. (2018). Analisis Kemampuan Berpikir Kritis Siswa Sma Pada Materi Koperasi. *OIKOS Jurnal Kajian Pendidikan Ekonomi Dan Ilmu Ekonomi*, *II*(1), 52–56. https://doi.org/10.23969/oikos.v2i1.920

Mutakinati, L., Anwari, I., & Yoshisuke, K. (2018). Analysis of students' critical thinking skill of middle school through stem education project-based learning. *Jurnal Pendidikan IPA Indonesia*, *7*(1), 54–65. https://doi.org/10.15294/jpii.v7i1.10495

Mutmainnah, S. L., Suhartono, S., & Suryandari, K. C. (2021). Hubungan Antara Kemampuan Berpikir Kritis Aspek Menganalisis Dan Menarik Kesimpulan Terhadap Hasil Belajar Ipa Siswa Kelas V Sdn Sekecamatan Klirong Tahun Ajaran 2020/2021. *Kalam Cendekia: Jurnal Ilmiah Kependidikan*, *9*(3), 860–866. https://doi.org/10.20961/jkc.v9i3.53491

Novianti, W. (2020). Urgensi Berpikir Kritis Pada Remaja Di Era 4.0. *Journal of Education and Counseling (JECO)*, *1*(1), 38–52. https://doi.org/10.32627/jeco.v1i1.519

Nurdiana, Atikah, C., & Nulhakim, L. (2023). Hubungan Berpikir Kritis dengan Hasil Belajar pada Mata Pelajaran Pendidikan Pancasila dan Kewarganegaraan Kelas VIII di SMPN 15 Kota Serang. *Linear : Jurnal Ilmu Pendidikan*, *7*(1), 66–78. https://doi.org/10.53090/jlinear.v7i1.414

Rahmatullah, & Hidayat, W. (2021). Peran Pengelolaan Manajemen Sumber Daya Manusia Dalam Meningkatkan Mutu Sekolah Di SMPN 2 Parepare. *AL-ISHLAH Jurnal Pendidikan Islam*, *19*(2), 157–170.

Ramadhani, N. N., Mafudoh, & Oman Farhurohman. (2024). Pengaruh Kemampuan Berpikir Kritis terhadap Model Pembelajaran Problem Based Learning di Sekolah Dasar. *Jurnal Pendidikan Tambusai*, *8*(2), 18792–18800. https://doi.org/10.24114/jh.v15i1.58575

Raturoma, T. L. R., & Laisnima, L. (2023). Hubungan Keterampilan Berpikir Kritis Dengan Hasil Belajar Kognitif Peserta Didik Pada Materi Bentuk Molekul Kelas X Di Sma Kristen Yabt Manokwari. *Chemistry Education Journal*, *3*(1), 487–494.

Saparuddin, S., Patongai, D. D. P. U. S., & Sahribulan, S. (2021). Hubungan Antara Kemampuan Berpikir Kritis Dan Hasil Belajar Peserta Didik Melalui Penerapan Model Pembelajaran Berbasis Masalah. *Jurnal IPA Terpadu*, *5*(1), 103–111. https://doi.org/10.35580/ipaterpadu.v5i1.25502

Sari, A. P., Hasanah, S., & Nursalman, M. (2024). Uji Normalitas dan Homogenitas dalam Analisis Statistik. *Jurnal Pendidikan Tambusai*, *8*(2012), 51329–51337.

Sari, F. M., Hadiati, R. N., & Sihotang, W. P. (2023). Analisis korelasi pearson jumlah penduduk dengan jumlah kendaraan bermotor di provinsi Jambi. *Multi Proximity : Jurnal Statistika Universitas Jambi*, *2*(1), 39–44.

Setiawan, C. K., Yanthy, S., Mahasiswa, Y., Dosen, D., & Unsurya, M. (2020). Pengaruh Green Marketing Dan Brand Image Terhadap Keputusan Pembelian Produk The Body Shop Indonesia. *Jurnal Ilmiah M-Progress*, *10*(1), 1–9.

Silas, E. I., Ismail, & Suryani, A. I. (2024). Hubungan Berfikir Kritis Terhadap Hail Belajar Siswa Kelas XI SMAN 3 Palopo. *Bioprospek*, *16*(1), 20–28.

Sugiyono. (2019). *Metode Penelitian Kuantitatif Kualitatif dan R&D*. Alfabeta.

Telaumbanua, N., Telaumbanua, A., Harefa, E. B., & Zebua, Y. (2024). Pengaruh kemampuan berpikir kritis siswa terhadap hasil belajar pada kompetensi dasar menganalisis penggunaan material dan alat untuk pekerjaan konstruksi. *Jurnal.Balitbangda.Lampung.Go.Id/*, *12*(2), 111–125.

Wahyuni, E. S., Rahmayanti, H., & Ichsan, I. Z. (2021). Hubungan Berpikir Kritis Dan Motivasi Belajar Terhadap Hasil Belajar Di Masa Pandemi Covid 19. *Jurnal PenSil*, *10*(3), 120–129. https://doi.org/10.21009/jpensil.v10i3.19275

Youllanda, W., Medriati, R., & Swistoro, E. (2020). Hubungan Antara Kemampuan Berpikir Kritis Dengan Hasil Belajar Melalui Model Inkuiri Terbimbing. *Jurnal Kumparan Fisika*, *3*(3), 191–198. https://doi.org/10.33369/jkf.3.3.191-198