Scope of Learning Evaluation in Science Subject in Junior High School Students: A Systematic Review

Riska Fitriani¹, Lega Anatri², Okta Saputra Joint³, Risnita⁴

1,2,3,4Pascasrjana of Science Education, Universitas Jambi, Jambi, Indonesia

Article Info

Article history:

Received Nov 28, 2022 Revised Dec 27, 2022 Accepted Jan 28, 2023

Keywords:

Evaluation Learning Natural Sciences

ABSTRACT

Purpose of the study: This assessment provides space for students with non-academic weaknesses in science subject skills. This research was used to obtain information related to the scope of evaluation of junior high school students' natural science learning: A Systematic Review.

Methodology: The review method was chosen to obtain research journals with keywords in the scope of evaluation of junior high school science learning on Google reference sources scholar, science direct, and research gates. Twenty journals were reviewed based on author (year), sample, study design, the scope of the evaluation, and findings.

Main Findings: The results of the review show that the scope of learning evaluation can be carried out based on the context to be assessed, such as the scope of the cognitive domain, affective domain, and psychomotor domain. The scope of learning evaluation in the cognitive domain can be in the form of observation and understanding, the affective domain can be in the form of responses given by students as long as the teacher provides knowledge, and the psychomotor domain is in the form of a skills assessment rubric such as doing practicum after being given theory by the teacher.

Novelty/Originality of this study: This research can contribute to the world of education, especially in evaluating science learning.

This is an open access article under the CC BY-NC license



8

Corresponding Author:

Riska Fitriani,

Pascasarjana of Science Education, Universitas Jambi, Jambi, Indonesia

Email: riskafitriani04.rf@gmail.com

1. INTRODUCTION

Productive and quality human resources are the most important part of an educational institution [1]–[3]. Productive and quality human resources can be formed through the learning process. Learning is a concept for linking microscopic, macroscopic, and certain symbols to an object by involving logical, critical and creative thinking processes [4]–[6]. The purpose of learning, especially in science learning, is to develop students' scientific attitudes in discovering, updating, practicing and increasing their ability to reason to construct knowledge and understanding [7]–[9]. So that the learning process can facilitate the development of the potential of students, a learning process is needed that emphasizes student activities and learning responsibilities to students [10]–[12]. Furthermore, it is necessary to carry out an evaluation process because the success or failure of the learning process in achieving its goals can be seen after the learning evaluation.

Evaluation of learning is a process for collecting data and information, as well as making decisions regarding various learning activities consisting of curricula, programs, learning methods, and activities in other schools [13], [14]. The purpose of learning evaluation is to find out how effective and efficient a learning system is both in terms of objectives, materials, learning resources, media, methods, learning environment, and assessment systems, as well as to find out the level of knowledge, attitudes, and skills of students in certain types of education

Journal homepage: http://cahaya-ic.com/index.php/JEE

[15]–[17]. If students obtain learning outcomes in accordance with what is written in the educational goals, then an education is considered successful, but if it is the other way around, then it is considered a failure. Therefore, how important is an evaluation of learning in the educational process according to the scope of the evaluation.

The scope of evaluation of education in schools according to previous researchers [18] consists of three main components, namely: educational programs, educational implementation processes, and educational outcomes. And, other researchers revealed [19] that overall the scope of learning evaluation consists of: 1) domains of learning outcomes: including cognitive domains, affective domains, and psychomotor domains. 2) learning system, in the form of learning programs, learning processes, and learning outcomes. 3) learning processes and outcomes, including: knowledge, understanding, attitudes, intelligence, and skills. 4) class-based assessment, including: basic competencies from subjects, competencies from subject groups, graduation competencies, competencies from across curricula, and life skills.

Based on the explanation above, it can be understood that the scope of educational evaluation consists of educational programs, educational implementation, and educational outcomes. While the scope of the learning evaluation consists of the results domain learning, learning systems, processes and learning outcomes as well as class-based assessments. Therefore, in learning there needs to be an evaluation. In this case, the researcher aims to evaluate, especially in the evaluation of the learning outcomes domain learning of junior high school students in science learning by reviewing based on literature. The evaluation process is carried out by studying the literature first, followed by a review process of the scientific articles that have been collected to draw conclusions according to the research theme [20]. Based on this, the researcher conducted an article review process by discussing the scope of learning evaluation in the science subject for junior high school students: A Sistmeatic Reviews.

2. RESEARCH METHOD

The method used is System Literature Reviews. This method is used with the intention of identifying, reviewing, and evaluating, as well as interpreting all existing research related to a particular topic [21], [22]. Data collection techniques using literature study. Literature study is a technique of collecting data and information through reading literature or written sources such as books, previous research, papers, journals, articles, reports and magazines related to research [23], [24].

Sampling data was collected by searching for several scientific articles from the results of research by previous researchers on experimental, descriptive, or developmental research, based on literature studies, to be further reviewed and conclusions drawn on the research topic under study. The process of reviewing articles in this study discusses the scope of evaluation of learning science subjects for junior high school students. The instruments used in data collection involved reviewed scientific articles sourced from the last 10 references from Google scholar, science direct, and research gates. There were 20 articles reviewed by researchers focusing on the topic under study.

The analysis technique is carried out using a synthesis matrix. Synthesis metrics are used to manage literature sources and integrate them with unique interpretations such as in the form of tables or diagrams [16], [17]. In this study, the researcher created a table consisting of the author's column (year), sample, research design, scope of evaluation, and findings. Based on the explanation above, it is known that the procedure in this study includes selecting the method used, then determining what instruments are used, determining the sampling technique and research samples and conducting data analysis to draw a conclusion.

3. RESULTS AND DISCUSSION

The review process is carried out on the article scientific selected reputation based on topic studied related room scope evaluation learning in junior high school science perspective. Amount reviewed articles as many as 20 pieces. Following the results of the review of articles on research this:

Table 1. Article Review Results

	Table 1. Afficie Review Results							
No	Author (Year)		Sample		Research Design	gn	Scope Evaluation	Findings
1	Hibullah (2022)	Huda	Student VIII totaling people		Study action that consists two cycle rese Every	class from	Evaluation Cognitive domain	Occur enhancement results study participant educate using quizizz media as application activity
					planning, implementation observation, reflection rese	and		evaluation learning . Enhancement results study participant educate show that understanding

10	J				133N: 2/10-4100
No	Author (Year)	Sample	Research Design consists from two	Scope Evaluation	Findings participant educate to
			meeting		Theory learning increase.
2	Ahmad Amin, Hadiwinarto (2022)	32 students class VII.5 SMP Negeri 3 Lubuklinggau year lesson 2020/2021	which method used is descriptive quantitative.	Evaluation Affective domain learning	Evaluation Results independence study student class VII SMPN 3 Lubuklinggau have independence high learning on the eye science lessons
3	Arifa Umma Nur Fadlilah , Wahyu Budi Sabtiawan , and Wahono Widodo (2021)	SMP Negeri 1 Sumberrejo with sample of 12 students class VII H and 12 students class VII I.	type study descriptive quantitative with method descriptive analytical	Evaluation Cognitive domain learning	Evaluation value learning distance far online and offline on materials heat and displacement obtained results student class VII H and VII I get value above KKM
4	Sari Hidayani , Jamaluddin, Agus Ramdani (2021)	Selected SMPN 2 Mataram with purposive sampling technique based on rank school	Type study this is study descriptive quantitative with use survey method	Evaluation Cognitive domain learning	Evaluation results Participants 'scientific literacy SMPN 2 students are categorized tall that is with average score for 75.95 class VII and an average score of 73.01 for class VIII
5	Yunitha Ulfah, Anton Suryantoro (2021)	Participant educate Class IX.A Purworejo State Middle School Central Lampung, totaling 23 people in odd semesters year teaching 2020/2021	Method experiment with type his research using the selected pre-experimental design is one group pretest-posttest (OneGroup Pretest-Posttest Design).	Evaluation Cognitive domain learning	Evaluation learning during the Covid-19 pandemic against the pretest and posttest scores for Class IX.A Science in SMP Negeri Purworejo , Central Lampung effective.
6	Angie Prasani, Desti Herdiyanti, Lisa Puspita, Ahmad Walid (2021)	Class IX IPA SMP 18 Bengkulu City	Method used in study this is use method qualitative. The data analysis technique used is technique descriptive qualitative.	Evaluation Cognitive domain learning	Evaluation results show that Theory science learning at SMPN 18 Bengkulu City category above average with amount as many as 27 students who got score between 80-85 and as many as 5 students who get score between 86-90.
7	Fahri Eka Ramadhani, Bayu grace Main Realm, Dwi Fitri Khotimah, Ahmad Nu'man Hakim, Vika Puji	State Middle School 5 students Ponorogo generally and for level 9th	Study development this conducted at SMPN 5 Ponorogo with use 4D methods include define, design,	Evaluation Psychomotor domain learning	Evaluation on science process ability participant studied at SMPN 5 Ponorogo belong tall

301. L	va. Lau		15511. 2710-4100		
No	Author (Year)	Sample	Research Design	Scope Evaluation	Findings
	Cahyani (2021)	grade in particular	development, and disseminate		
8	Dodi Sunardi (2020)	All junior high school students consisting from 4 schools with a total of 40 students	Approach quantitative with type correlational	Evaluation Cognitive domain learning	Connection Increased learning outcomes Middle school students with Application of Evaluation Media Learning Innovative Quizizz shows very strong correlation of 0.805.
9	Liana Rochmatul Wachidah, Yani Laila, Ayu Irmawati and Shidiq Amin (2020)	Student class VII SMP Negeri 1 Tlanakan	Approach qualitative with method descriptive	Evaluation Cognitive domain learning	Evaluation online learning for students class VII at SMP Negeri 1 Tlanakan is more dominant effective use test description because student more easy answer and develop his knowledge with reason they alone.
10	Princess Rahadian Dyah Kusumawati (2020)	Study this is an evaluation model study based on the Countenance Stake Model.	Teacher eye science class VII lesson. And students from 6 junior high schools in Bantul Regency with each school taken 2 or 3 classes with proportional random sampling technique.	Evaluation Cognitive domain learning	Research results show strong concern Among quality preparation , implementation and outcomes study student. Result result study student categorized as good (t-score = 50.59).
11	Dewy Widiyawati , Cici Dwi Putri, Ahmad Walid (2020)	Student class IX SMP 3 Tanjung Sakti	Method approach qualitative, with type study descriptive	Evaluation Cognitive domain learning	Implementation valuation learning at SMPN 3 Tanjung Sakti Pumi Lahat School , South Sumatra based on observation initial obtained by 75% of students already capable reach average learning standards and there are also some students who haven't reach average standard
12	Arfiati ULFA Utami, Indra Kusuma Wardani (2019)	Grade 7 SMP 2 Srono, Regency Banyuwangi	Type study evaluation learning Knowledge Knowledge Natural use the CIPP model is study with approach qualitative	Evaluation Affective and cognitive domain learning	Implementation categorical science learning very well (93%) indicated from suitability Among implementation learning with implementation process standards

12					15511. 2710-4100
No 13	Author (Year) Tri Setyowati ,	Sample Student class	Research Design Type study	Scope Evaluation Evaluation	Findings learning, (3) results study participant educate has Fulfill Criteria Minimum completeness (KKM) with actuality categorical achievement of 91%. very good Evaluation results
	Muhammad Zaini , Aminuddin Prahatama Putra (2019)	VII	development this refers procedural model consists over 6 phases namely a) identify problem, b) formulate purpose, c) design and develop model, d) conducting tests, e) evaluating results, and f) communicate test results	Cognitive, affective, and psychomotor domain learning	study cognitive student already reach KKM value . Assessment results performance psychomotor already reach very category ok. Assessment results spiritual attitude (taste thanks) included very good category . Results evaluation behavior character (discipline, and not quite enough answer) incl category good
14	Ratna Sari Amalia, Aloysius Mering, Indri Astuti (2019)	State Middle School 4 students Subdistrict Mempawah Downstream, District Pontianak, West Kalimantan	Study this is type study evaluation (evaluation research). Approach used is approach qualitative	Evaluation Cognitive , affective, and psychomotor domain learning	Evaluation results process on implementation science learning in SMP Negeri 4 Mempawah Downstream already including in very good category Activity introductory and core activities included in very good category, meanwhile for activity Closing including in category good
15	Yudi Sofyan Periadi, Fahmi Yahya, Muhammad Erfan (2018)	Class VIII SMP Negeri 3 Lopok	study development that uses a 4-D development model consisting of on stage (definition), design stage (design), develop stage (development), and stage disseminate (spread)	Evaluation Affective domain learning	results analysis response participant educate is 91% ie participant students totally agree to evaluation mediabased e- portfolio
16	Ulul Azmi Purnamasari , Muhammad Arifuddin, Sri Hartini (2018)	student class VIII G junior high school	Study action class with the Hopkins model, consisting on two cycle with each cycle two	Evaluation Affective domain learning	Evaluation activity study VIII G students of SMP Negeri 1 Banjarmasin on the material

No	Author (Year)	Sample	Research Design	Scope Evaluation	Findings
		Negeri 1 Banjarmasin	meeting		light and tools optical increase moment
		year teachings			applied learning model
		2016/2017 as			cooperative type
		many as 32			group investigation
		people			(GI)
17	Nurwahyuningsih	32	Type study	Evaluation	effectiveness product
	Ibrahim and Ishartiwi (2017)	participants educate	R & D (Research and Development)	Cognitive domain learning	proven through enhancement results
	Ishartiwi (2017)	class VIII.	with models	icarining	study reach number
		1111	development of		average pretest score
			Alessi and Trollip.		of 65.46 and posttest of
					79.53.
18	Peny Nur	class VII SMP	Research design	Evaluation	Profile
	Salamah, and Ani Rusilowati, Sarwi	N 41 Semarang	using R&D (Research and	Cognitive domain learning	ability literacy science state junior high school
	(2017)	41 Schlarang	Development) and	icarining	students in Semarang
	(===/)		engineering		on aspects science as
			analysis Simple		stem
			Random Sampling		body knowledge
					belong enough well,
					meanwhile other aspects are in
					categories
					less.
19	Septiana Indri	5 teachers	Study Evaluation	Evaluation	Evaluation sufficient
	Hapsari, and	IPA and 345	with the models	Psychomotor	ICT application
	Emanuel	participants	used is	domain learning	support Skills
	Nurcahyanto (2016)	educate	Countenance Stake		scientific, however must permanent need
	(2010)				improved
20	Astin Luke	Middle school	Study this is study	Evaluation	results study
	(2015)	students	evaluation with the	Cognitive domain	participant educate not
			Counter Stake	learning	yet
			model. The analysis		Fulfill Criteria Minimum
			technique		completeness (KKM)
			used is descriptive		with actuality
			qualitative		achievement of 65%
			-		category
					enough.

Overall, the previous researcher [27], limits room scope evaluation learning in four component large, among others; (1) result domain learning, (2) learning system, (3) process and results learning, (4) assessment based class . And in this article Compiler limit room scope Evaluation such, and only focused to room scope in the result domain study with sample special student School Intermediate First (Junior High School), Special in Science (Physics and Biology) subjects general. Based on Analysis Results of the 20 articles , then the results of the discussion Analysis his are:

a) Cognitive Domains

Cognitive Domain from the results of the analysis of 20 articles obtained 15 articles with the cognitive domain, As for the Cognitive Domain his that is demanding abilities participant educate for could recognize or knowing exists existing concepts, principles and facts. So, the point is in the more cognitive domain demanded is ability about knowledge possessed by students, the cognitive domain is very important in room scope evaluation learning, because with the cognitive domain, a teacher can To do evaluation to student good with method test or non-test. Of the 15 articles in the analysis about the cognitive domain, can seen that the cognitive domain is very important used by teachers, this domain succeed increase results study student than any other domain, because this domain of course demand performance brain inside understand about a knowledge, for example from one above article from article Hizbullah Huda with use sample student class VIII B, totaling 32 people, with use Classroom

Action Research, with findings in the cognitive domain, Happens enhancement results study participant educate using quizizz media as application activity evaluation learning [28]. Enhancement results study participant educate show that understanding participant educate to Theory learning increase. of this has proven that cognitive domain of course bring enormous influence within evaluation learning. And this is supported by previous researchers [29] who revealed that this field is always used by teachers in evaluating learning for students.

b) Affective Domains

Affective Domain from the results of the analysis of 20 articles 6 articles were obtained with the affective domain, As for the Affective Domain his that is internalisation pointing attitude to direction growth heart and it happened when participant educate Becomes aware about received value, then take attitude so that Becomes part from himself in form value and define Act behavior. So, the point is in the affective domain which is more evaluated is attitude and behavior in demand students, this domain relate with interest and motivation possessed by students in receive, respond and respond about received knowledge from his teacher, because that is, the affective domain it is also very important inside room scope evaluation Learning, because besides the teacher wants knowing ability cognitive (knowledge) possessed by students, teachers also want knowing ability will attitudes held by students after accept various knowledge given by the teacher. For example from one above article from article Yudi Sofyan Periadi, et al, with use sample student class VIII SMP Negeri 3 Lopok, with use study 4D development with findings in the affective domain that is, yield analysis response participant educate is 91% ie participant students totally agree to evaluation based on e-portfolio media. of this has proven that the affective domain also carries enormous impact and influence within [30]. To do evaluation learning, because teachers do not possible only see from corner view cognitive only, but also must be equipped with the affective domain it 's inside To do evaluation learning.

c) Psychomotor Domain

Psychomotor Domain from the results of the analysis of 20 articles 4 articles were obtained with the psychomotor domain, while the psychomotor domain his that is ability participant related students with movement body or parts, start from simple movement until with complex movement. Change pattern movement eat time at least 30 minutes. So, Psychomotor Domain more emphasize will exists skills possessed by students in study, besides it's the psychomotor domain related with activity physique students at the time To do activity like counting, reading, writing, and practicing, Because In addition, the psychomotor domain is also very important in To do evaluation learning, because besides the teacher does evaluation in the cognitive domain and affective domain, the teacher also did evaluation in the psychomotor domain within see skills possessed by students. For example from one above article from article Fahri Eka Ramadhani, et al, with use Sample student female student class IX SMP Negeri 5 Ponorogo, with use study development with 4D method. with findings in the psychomotor domain. Evaluation on the participant's science process ability studied at SMPN 5 Ponorogo belong height, of This, has proven that the psychomotor domain also carries a very significant impact on the teacher's conduct evaluation learning to students, because teachers do not only looking at the cognitive domain and the affective domain, but the teacher also looks at the psychomotor domain within To do evaluation learning, because student have different abilities inside study, there are students score his more high in the cognitive domain, but low in the affective and psychomotor domains, however there is grade students his low in the cognitive domain, but in the affective and psychomotor domains score his high, then from Therefore, teachers are highly demanded for To do evaluation learning through 3 chambers scope evaluation learning these, namely the cognitive domain, affective domain and psychomotor domain [31].

The update in this research is the topic of the study discussed, where there has not been any previous research that examines it based on literature studies regarding the scope of learning evaluation in the last 10 years. The limitation in this study is the scope of learning evaluation which is discussed only in the scope of the cognitive, affective, and psychomotor domains. The results of this study are expected to have implications in the world of education, especially in the learning process so that educators can know and evaluate the learning process based on the scope of evaluation in the cognitive, affective, and psychomotor domains. It is recommended that future researchers be able to conduct more in-depth research related to the scope of evaluation in other domains.

4. CONCLUSION

The update in this study is the topic of study discussed, where there has not been previous research that examines based on literature studies regarding the scope of learning evaluation in the cognitive, affective, and psychomotor domains. Based on the results and discussion above, it can be concluded that the three scope domains cannot be separated from one another because they are interconnected. For example, there are students who score high in the cognitive domain but have low scores in the cognitive and psychomotor domains, and vice versa, students who score high in the affective and psychomotor domains but score in the low cognitive domain, as well as students who score high in the psychomotor domain but scores in the cognitive and affective domains are still low, of course one of these domains can help student scores because the teacher does not only look at one domain, but must look at the three domains of the scope of learning evaluation, because the abilities of students differ from one another. The results of this study can have implications for the learning process so that educators should use all domains of the scope of learning evaluation in conducting evaluations. It is recommended that future researchers be able to conduct more in-depth research related to the scope of evaluation in other domains.

ACKNOWLADGEMENT

The researcher would like to thank all stakeholders who have given permission to the researcher to do service and those who helped with this research.

REFERENCES

- [1] S. E. F. Rini *et al.*, "Pengaruh Karakter Kerja Keras Terhadap Hasil Belajar Fisika di SMA Negeri 1 Kota Jambi," *PENDIPA J. Sci. Educ.*, vol. 5, no. 2, pp. 256–261, 2021, doi: 10.33369/pendipa.5.2.256-261.
- [2] Tanti, D. A. Kurniawan, W. Sukarni, E. Erika, and R. Hoyi, "Description of Student Responses Toward the Implementation of Problem-Based Learning Model in Physics Learning," *JIPF (Jurnal Ilmu Pendidik. Fis.*, vol. 6, no. 1, pp. 30–38, 2021, doi: 10.26737/jipf.v6i1.1787.
- [3] R. Fitriani et al., "Analisis Karakter Kerja Keras Siswa Kelas XI IPA di SMAN 1 Kota Jambi," PENDIPA J. Sci. Educ., vol. 5, no. 2, pp. 188–194, 2021, doi: 10.33369/pendipa.5.2.188-194.
- [4] T. aprilini Tiara, A. Hamidah, and R. Risnita, "Pengaruh Penerapan Instrumen Penilaian Unjuk Kerja Pada Materi Organisasi Kehidupan Terhadap Hasil Belajar Siswa SMP," *Biodik*, vol. 8, no. 1, pp. 24–32, 2022, doi: 10.22437/bio.v8i1.14455.
- [5] R. Fitriani, W. A. Putri, E. F. S. Rini, N. H. Sehab, and M. R. Pratiwi, "Pengaruh kerja keras terhadap hasil belajar siswa ipa di sman 1 kota jambi," *SAP (Susunan Artik. Pendidikan)*, vol. 5, no. 3, pp. 213–220, 2021, doi: http://dx.doi.org/10.30998/sap.v5i3.7750.
- [6] S. Agustiani, I. P. Diani, R. Fitriani, and A. Farradlla, "Analisis Kemampuan Berpikir Kritis Siswa Sma Dalam Menyelesaikan Soal Matematika Berdasarkan Gender Dan Geogebrathe," vol. 1, no. 2, pp. 83–97, 2021.
- [7] I. Mardi, "Peningkatan Kegiatan Pembelajaran Tematik Terpadu Dengan Menggunakan Pendekatan Scientific Di Kelas Iv Sd," *J. Pelangi*, vol. 8, no. 1, pp. 55–74, 2015, doi: 10.22202/jp.2015.v8i1.387.
- [8] A. Ramadhanti, N. Natalia, E. Febri, and R. Fitriani, "Deskripsi Motivasi Belajar Fisika Siswa Kelas X MIPA di SMAN 1 Kota Jambi," *J. Eval. Educ.*, vol. 3, no. 3, pp. 82–86, 2022, doi: 10.37251/jee.v3i3.245.
- [9] A. Ramadhanti, K. Kholilah, R. Fitriani, E. F. S. Rini, and M. R. Pratiwi, "Hubungan Motivasi Terhadap Hasil Belajar Fisika Kelas X MIPA di SMAN 1 Kota Jambi," *J. Eval. Educ.*, vol. 3, no. 2, pp. 60–65, 2022, doi: 10.37251/jee.v3i2.246.
- [10] R. Fitriani, Astalini, and D. A. Kurniawan, "Studi Ekploratif: Pengembangan Modul Elektronik pada Mata Kuliah Fisika Matematika 1," *Al Ulum Sains dan Teknol.*, vol. 7, no. 1, pp. 1–9, 2020, doi: 10.31602/ajst.v7i1.5462.
- [11] Tanti, Astalini, Darmaji, D. A. Kurniawan, and R. Fitriani, "Student Perception Review from Gender: Electronic Moduls of Mathematical Physics," *J. Pendidik. Indones.*, vol. 11, no. 1, pp. 125–132, 2022.
- [12] Astalini *et al.*, "A Study for Student Perception of Mathematical Physics E-Module Based on Gender," vol. 19, no. 3, pp. 911–936, 2022.
- [13] D. A. Astuti, S. Haryanto, and Y. Prihatni, "Evaluasi implementasi kurikulum 2013," *Wiyata Dharma J. Penelit. dan Eval. Pendidik.*, vol. 6, no. 1, p. 7, 2018, doi: 10.30738/wd.v6i1.3353.
- [14] M. D. W. Ernawati *et al.*, "How Scaffolding Integrated With Problem Based Learning Can Improve," *Eur. J. Educ. Res.*, vol. 11, no. 3, pp. 1349–1361, 2021.
- [15] A. Nurkholis, "Melalui Metode Eksperimen Dan Poe Ditinjau Dari Kemampuan Menggunakan Alat Ukur," *J. Inkuiri*, vol. 2, no. 3, pp. 216–227, 2013.
- [16] I. P. Suardipa and K. H. Primayana, "Peran Desain Evaluasi Pembelajaran untuk Meningkatkan Kualitas Pembelajaran," Widyacarya, vol. 4, no. 2, pp. 88–100, 2020, [Online]. Available: http://jurnal.stahnmpukuturan.ac.id/index.php/widyacarya/article/view/796
- [17] A. S. Wandini and F. Y. Lubis, "Jurnal basPelaksanaan Evaluasi Pembelajaran secara Daring pada Belajar dari Rumah (BDR) jenjang Sekolah Menengah Pertama (SMP)," *J. Basicedu*, vol. 5, no. 4, pp. 1985–1997, 2021.
- [18] T. Hidayat and A. Asyafah, "Konsep Dasar Evaluasi Dan Implikasinya Dalam Evaluasi Pembelajaran Pendidikan Agama Islam Di Sekolah," *Al-Tadzkiyyah J. Pendidik. Islam*, vol. 10, no. 1, pp. 159–181, 2019, doi: 10.24042/atjpi.v10i1.3729.
- [19] I. Magdalena, F. Mulyani, N. Fitriyani, and A. H. Delvia, "Konsep Dasar Evaluasi Pembelajaran Sekolah Dasar Di Sd Negeri Bencongan 1," *J. Pendidik. dan Ilmu Sos.*, vol. 2, no. 1, pp. 87–98, 2020.
- [20] W. F. Firmansyah, A. Kristiyandaru, and A. Widodo, "Instrumen Penilaian Mata Pelajaran Pendidikan Jasmani Olahraga dan Kesehatan Pada Siswa SMP: A Systematic Review," *J. Ilm. Mandala Educ.*, vol. 7, no. 2, pp. 162–167, 2021, doi: 10.36312/jime.v7i2.2023.

16 ☐ ISSN: 2716-4160

[21] Y. Wahyudin and D. N. Rahayu, "Analisis Metode Pengembangan Sistem Informasi Berbasis Website: A Literatur Review," *J. Interkom J. Publ. Ilm. Bid. Teknol. Inf. dan Komun.*, vol. 15, no. 3, pp. 26–40, 2020, doi: 10.35969/interkom.v15i3.74.

- [22] D. Chen, R. Fitriani, S. Maryani, E. F. Setiya Rini, W. A. Putri, and A. Ramadhanti, "Deskripsi Keterampilan Proses Sains Dasar Siswa Kelas VIII Pada Materi Cermin Cekung," *PENDIPA J. Sci. Educ.*, vol. 5, no. 1, pp. 50–55, 2020, doi: 10.33369/pendipa.5.1.50-55.
- [23] E. I. Sari, C. Wiarsih, and D. Bramasta, "Strategi Guru Dalam Meningkatkan Keterampilan Membaca Pemahaman Pada Peserta Didik di Kelas IV Sekolah Dasar," *J. Educ. FKIP UNMA*, vol. 7, no. 1, pp. 74–82, 2021, doi: 10.31949/educatio.v7i1.847.
- [24] M. Sari, "Penelitian Kepustakaan (Library Research) dalam Penelitian Pendidikan IPA," *J. Penelit. Bid. IPA dan Pendidik. IPA*, vol. 6, no. 1, pp. 41–53, 2020.
- [25] Kholilah, A. Ramadhanti, R. Fitriani, E. Febri, and M. R. Pratiwi, "Hubungan Kerja Keras Dan Hasil Belajar Fisika Di Sma Negeri 1 Kota Jambi," *J. Sci. Educ. Pract.*, vol. 4, pp. 41–48, 2020, [Online]. Available: https://journal.unpak.ac.id/index.php/jsep
- [26] H. Syiarah, E. D. Novista, F. L. Agatha, N. N. Simamora, H. Safitri, and R. Fitriani, "Sebaran Tingkat Pemahaman Pembelajaran Fisika Kelas XI Sma Negeri 4 Kota Jambi," no. 2, pp. 113–121, 2021.
- [27] M. Sidi and Mukminin, "Penggunaan Media Audiovisual untuk Meningkatkan Hasil belajar IPS di SMP," SOCIA J. Ilmu-Ilmu Sos., vol. 13, no. 1, pp. 53–72, 2016, doi: 10.21831/socia.v13i1.9903.
- [28] H. Huda, "Humantech jurnal ilmiah multi disiplin indonesia," *J. Ilm. Multi Diisiplin Indones.*, vol. 2, no. 2, pp. 217–231, 2022.
- [29] M. A. S. Amin, "Peran Guru Dalam Pengembangan Keterampilan Sosial Siswa Di Sdn 1 Jatipamor," *J. Cakrawala Pendas*, vol. 8, no. 1, pp. 195–202, 2022.
- [30] Y. S. Periadi, F. Yahya, and M. Erfan, "Analisis Faktor Penyebab Kesulitan Belajar IPA Fisika pada Materi Bunyi Kelas VIII SMP Negeri 1 Labuhan Badas Tahun Ajaran 2016/2017," *Quark J. Inov. Pembelajaran Fis. dan Teknol.*, vol. 1, no. 1, pp. 51–57, 2018, doi: 10.31227/osf.io/dwh5e.