# ISRG Journal of Arts, Humanities and Social Sciences (ISRGJAHSS)



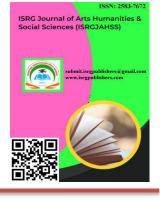
ACCESS



#### ISRG PUBLISHERS

Abbreviated Key Title: ISRG J Arts Humanit Soc Sci ISSN: 2583-7672 (Online)

Journal homepage: <a href="https://isrgpublishers.com/isrgjahss">https://isrgpublishers.com/isrgjahss</a>
Volume – II Issue-II (March – April) 2024
Frequency: Bimonthly



# STUDY OF THE IMPLEMENTATION OF THE INDEPENDENT CURRICULUM IN SUPPORTING EFFECTIVE LEARNING OUTCOMES AT SDN BOLO 01 MADIUN

Lara Prahastina<sup>1\*</sup>, Mintasih Indriayu<sup>2</sup>, Matsuri<sup>3</sup>

<sup>1, 2, 3</sup>Universitas Sebelas Maret, Surakarta, Indonesia

| **Received:** 09.04.2024 | **Accepted:** 13.04.2024 | **Published:** 15.04.2024

\*Corresponding author: Lara Prahastina Universitas Sebelas Maret, Surakarta, Indonesia

## **Abstract**

The purpose of this study is to describe the effectiveness of learning implemented at SD Negeri Bolo 01 Madiun associated with learning outcomes (CP). This type of research is descriptive qualitative. The data source is learning activities in class IV using the Merdeka curriculum. Data collection through questionnaires. The results of the study are the implementation of the Merdeka curriculum in supporting learning outcomes, in terms of measurable and specific, getting an index% of 73.33% in the good category. Meanwhile, flexible got an index% of 62.67% with a good category. Inventory of environmental learning resources, formulating the stages of the learning process, and developing authentic assessments, need to be developed. The conclusion of this study is that the implementation of the Merdeka curriculum can be said to be good, but the ability to realize learning needs attention.

Keywords: Effective, Merdeka curriculum, learning outcomes

# Introduction

Learning effectiveness is the effect of the learning process activity program on achieving predetermined goals. The definition of learning effectiveness according to Rohmawati (Fathurrahman, et al, 2019) is a measure of what is done or achieved in a process of interaction between students and students, students and teachers, in the learning process for the achievement of predetermined learning objectives. Hamalik (Afifatu Rohmawati, 2015) states that effective learning is learning by providing facilities for independent learning opportunities for students. Meanwhile, Deassy and Endang (2018: 2) state that learning effectiveness is the creation of learning conditions that have predetermined benefits

and objectives so that students are able to learn specific skills, knowledge and attitudes in accordance with the learning style of students, namely: easy, fun, and can achieve learning objectives.

The definition of effectiveness above emphasizes that learning activities can basically be measured by looking at several supporting variables. One of the statements that effectiveness can be measured is from Permendagri Number 59 of 2007 which states that effectiveness is a comparison between the achievement of program results and predetermined targets. Considering this statement, we can simplify the definition of learning effectiveness

as the level of achievement of learning outcomes goals from teachers in accordance with planned needs. This directs the understanding of learning effectiveness to pay attention to indicators as a measuring tool in learning.

The definition of learning is explained by Siregar, et al. (2014: 56) which states that learning is a conscious effort that is carried out deliberately, directed, and planned with goals that have been set in advance before the process is carried out, and its implementation is controlled so that the learning process occurs in students. Darsono (Annisa Nidaur Rohmah, 2017) explains that learning is a series of activities carried out by educators or teachers that aim to change the behavior of students towards a positive or better than before. This is different from the definition of the learning process. Trianto. (2014: 10) explains that the learning process is the utilization of facilities and strategies so that students can learn, or in other words, how supporting learning facilities can be effectively utilized to change the behavior of students. Meanwhile, the definition of the learning process explained by Tilaar (Mohamad Surya, 2014) explains that the learning process is a way of how students have, access, get the subject matter to be learned. Taking into account the description of learning above, researchers can conclude that learning is a form of activity that has a purpose.

Learning objectives affect the components of effective learning implementation. Pane (2017) explains that in terms of scope, learning objectives can be divided into two parts, namely: 1) specific learning objectives, which are objectives formulated specifically by the teacher based on the subject matter to be delivered; 2) general learning objectives, which are learning objectives that have been listed in the curriculum as outlined in the teaching plan prepared by the teacher. Learning objectives in the Merdeka curriculum are replaced with learning outcomes. Meanwhile, the teaching plan is replaced by a teaching module.

Learning is essentially an operational form of the Education unit operational curriculum (KOSP) in the Merdeka curriculum. The term curriculum in the National Education System Law No. 20 of 2003 is a set of plans and arrangements regarding the objectives, content, and learning materials as well as the methods used as guidelines in the preparation of the education unit level curriculum and its syllabus in each education unit. Zainuri and Ahmad (2018) explain that the curriculum in general terms is a design program that contains a set of subjects and materials to be studied, or that teachers will teach to students. Nurfitri, et al, (2023) explained that the curriculum can be interpreted narrowly and broadly. Narrowly, the curriculum is defined as a collection of a number of subjects that students must learn in order to complete their education at a particular institution. While broadly speaking, the curriculum is defined as all learning experiences provided by schools to students while attending education at a certain level of education.

The post-Covid-19 Pandemic Education Curriculum implemented is the Merdeka curriculum. The Merdeka Curriculum is implemented as an effort to improve the quality of learning in schools. The Merdeka Curriculum has hopes for empowering learners and developing 21st century skills. Darmawan and Winataputra (2020) explain that the Merdeka Curriculum seeks to develop and strengthen learner independence and facilitate learner-centered learning by emphasizing empowerment and developing skills needed in the 21st century. Riyanto (2019) explains that the Merdeka Curriculum aims to give students freedom from a theoretically focused curriculum and direct a form of learning that

is more contextual and relevant to real life, so that students are able to explore in building their knowledge.

Amrazi Zakso (2022) explained that schools implementing the Merdeka curriculum have several changes, namely: the teaching device, the indicator component changes to the form of the learning achievement component (CP), the teaching starts from the lesson plan (RPP) to the teaching module, the teacher used to determine the learning objectives while now students are based on their readiness. Learner readiness is viewed from 3 things, namely: Readiness, Profile, and Interest. The assessment includes two forms, namely formative and summative. This statement emphasizes that there are three roles of the curriculum, namely playing a conservative role, a critical or evaluative role, and a creative role.

The change from indicators to learner outcomes is the focus of teachers to understand the Merdeka curriculum. This is because learning outcomes are more familiar in universities than in elementary schools. The term learning outcomes is often used interchangeably with competencies, although they have different meanings in terms of the scope of their approach. Allan (Kemristek Dikti, Republic of Indonesia, 2015) explains that many terminologies are used to explain educational intent, including; learning outcomes; teaching objectives; competencies; behavioral objectives; goals; and aims. This is confirmed by Butcher (Kemristek Dikti, Republik Indonesia, (2015) who states that "aims" is a broad and general expression of educational objectives, which explains information to learners about the purpose of a lesson, program or module and is generally written for teachers not for learners. In contrast, learning outcomes are more focused on what learners are expected to do during or at the end of a learning process. "Objectives" cover both learning and teaching, and are often used in the assessment process.

The above statement is also emphasized in the Decree of the Minister of the Republic of Indonesia Number 958 of 2020 concerning Learning Outcomes in Early Childhood Education, Basic Education, and Secondary Education, which states that the definition of Learning Outcomes (CP) is a form of integration of core competencies and basic competencies that are comprehensively arranged in the form of a narrative which includes: a set of competencies and scope of material. This statement directs the researcher's mindset that CP provides opportunities for students to gain learning experiences according to their level of competence. Thus, this statement directs the existence of phases in education units ranging from elementary school (SD), junior high school (SMP), senior high school (SMA) and vocational (SMK).

Taking into account the above description, Bolo 01 Madiun State Elementary School (SD) implemented the Merdeka Curriculum in the 2023/2024 academic year. The implementation of the Merdeka curriculum has logical consequences on the preparation of the administration of the Education unit operational curriculum and teaching modules. One of the focuses in this study is the development of learning outcomes (CP). The lack of socialization and limited information obtained, SD Negeri Bolo 01 Madiun, the preparation of learning outcomes is the focus of this research for analysis. The analysis of learning outcomes is related to learning in the odd semester of the 2023/2024 academic year. Mardiasmo (Kurniasari, et al, 2020) states that effectiveness is the achievement of the objectives of a set activity through the completion of planned activities. The measure of the success or failure of an

institution's activities depends on whether the objectives have been achieved, so it can be said that the organization is said to have run effectively.

The key aspects of effective learning described by Guntur (Kurniasari, et al, 2020) are: Clarity; Variety; Task Orientation; Engagement in learning; High student success rates. Student engagement in learning is the focus of researchers to reveal the relationship between effective learning and the formulation of learning outcomes. This is because the Merdeka curriculum is oriented towards learner-centered learning, so that the learning outcomes implemented lead to what students are expected to do at the end of a learning process (end of phase).

Research that is relevant to this study is research from Punaji Setyosari (2-14) with the title Creating Effective and Quality Learning. The results of the study formulated the criteria for effective learning models, including four main things, namely: 1) learning quality, 2) adequate learning level, 3) rewards and 4) time. Meanwhile, the quality of learning refers to the activities designed and the actions taken by learners and learners, including the materials or learning experiences (curriculum) and the media used. The equation with the research that researchers carry out is the effective learning model. While the difference is, Punaji Setyosari's research refers to the criteria for effective learning models, while the researcher's research refers to its relationship with the formulation of learning outcomes.

Research from Norsandi and Sentosa (2022) with the title Effective Learning Model in the New Normal Era. The results of the study recommend the right post-Covid-19 Pandemic learning model so that learning objectives can be achieved, namely the learning model: 1) Blended Learning; 2) Flipped Classroom; 3) Hybrid Learning. The similarity with the researcher's research is effective learning. The difference is that Norsandi and Santoso's research focuses on learning models that can be applied after the Covid-19 Pandemic, while the researcher's research focuses on effective learning with its connection to the concept of learning outcomes formulated by teachers.

Based on the description above, the researcher can formulate the research that the researcher studied, namely: how is the effectiveness of learning carried out at SD Negeri Bolo 01 Madiun associated with learning outcomes (CP)? The purpose of this study is to describe the effectiveness of learning carried out at SD Negeri Bolo 01 Madiun associated with learning outcomes (CP).

# **Research Method**

This type of research is descriptive qualitative. The research time began in July to December of the 2023/2024 academic year. The research subject is learning by implementing the Merdeka curriculum at Bolo 01 Madiun State Elementary School (SD). The research focus on the effectiveness of learning carried out at SD Negeri Bolo 01 Madiun is associated with learning outcomes (CP)

in natural and social science learning (IPAS). The main data source is the IPAS learning activities in class IV. The data collection technique was carried out with a Likert scale questionnaire filled in by observers, namely: school supervisors, core teachers, and administrators of the Madiun district principal's meeting. Questionnaire processing using the help of SPSS version 26.

Research focus on: measurable and specific; and flexible. The research focus on measurable and specific, indicated by: understanding and knowledge; practical; and generic skills. While the research focus on flexible is indicated by: the development of CP clearly defines the outcomes that students must achieve at the end of the learning program; curriculum design, learning strategies, and learning opportunities are carried out to ensure the achievement of CP; the assessment process is adjusted to CP and assessment of each individual learner is carried out to ensure that learners achieve learning targets.

The questionnaire processing is done as follows:

Number of respondents : n 
Number of highest scores (Y) for each indicator : n x 5 
The highest score ( $_{Ytotal}$ ) for each research focus : n x 5 x 5 
Lowest score (X) for each indicator : n x 1 
Total lowest score ( $X_{Totol}$ ) for each research focus: n x 1 x 5 
Interval :  $I = \frac{Y}{T}$ 

Criteria for the results of observer measurements for each indicator using the index % formula, which is formulated:

$$\frac{Total\ Skor}{y} x\ 100\%$$

Questionnaire processing criteria using the results of the index % calculation. The processing results are as follows:

Very good : 81% to 100% Good : 61% to 80% Medium : 41% to 60% Lack : 20% to 40%

# **Results and Discussion**

### Results

The questionnaires were completed by two school supervisors, two Madiun district core teachers, and one administrator of the Madiun district primary school principals' meeting. The results of the document analysis of the school operational curriculum of SD Negeri Bolo 01 Madiun, the teaching module of grade IV teachers of SD Negeri Bolo 01 Madiun, and learning activities carried out during the odd semester of the 2023/2024 academic year. The results of the calculation for the research indicators obtained data that the highest score is  $5 \times 5 = 25$ , the lowest score is  $1 \times 5 = 5$ ; and the class division interval is While the calculation for the research focus obtained data that the highest score is  $5 \times 5 \times 3 = 75$ , the lowest score is  $1 \times 5 \times 3 = 15$ , and the class division interval is the results of the observer's assessment are arranged in the following table:

**Table 1. Calculation of Observer Assessment Results** 

Descriptive Statistics								
	N	Range	Minimum	Minimum	Sum	Mean		Std. Deviation
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic
ITEM 1: MEASURABLE & SPECIFIC	5	1	3	4	18	3.60	.245	.548

ITEM 2: MEASURABLE & SPECIFIC	5	1	3	4	18	3.60	.245	.548
ITEM 3: MEASURABLE & SPECIFIC	5	3	2	5	19	3.30	.583	1.304
TOTAL: MEASURABLE & SPECIFIC	5	3	10	13	55	11.00	.548	1.225
ITEM 1: FLEXIBLE	5	2	2	4	16	3.20	.374	.887
ITEM 2: FLEXIBLE		1	2	3	14	2.80	.200	.447
ITEM 3: FLEXIBLE	5	1	3	4	17	3.40	.245	.548
TOTAL_FLEKSIBLE	5	1	9	10	47	9.40	.245	.548
Valid N (listwise)	5							

Calculations for indicators and each research focus are organized in the following table:

**Table 2. Indicator Criteria and Research Focus** 

Research Focus	Index %	Criteria					
1. Measurable and Specific	73,33%	Good					
a. Understanding and knowledge	72%	Good					
b. Practical	72%	Good					
c. Generic skill	76%	Good					
2. Flexible		Good					
a. CP development clearly defines the outcomes that learners should achieve by the end of the learning program	64%	Good					
b. Curriculum design, learning strategies, and learning opportunities are conducted to ensure the achievement of CP	56%	Medium					
c. The assessment process is aligned with CP and assessment of each individual learner is done to ensure that learners achieve learning targets	68%	Goodk					

#### Discussion

Learning carried out at SD Negeri 01 Bolo Madiun is oriented towards learning outcomes (CP) in phase B. The preparation of CP in the teaching module is based on Bloom's taxonomy. This is because learning activities in class IV can be measured as planned. The results of the assessment from the observer team, obtained data that the focus of measurable and specific learning carried out received an index % of 73.33% with Good criteria. This is because the learning is carried out in accordance with the CP plan written in the teaching module. Providing material in stages from Cognitive 1 to cognitive 5 is carried out by classifying the material and the form of evaluation. As for cognitive 6 has not been implemented, because it requires adaptation of the packaging of the material being taught. This is in accordance with the study of Deby Luriawati Naryatmojo (2018) which explains that the preparation of CP based on Bloom's Taxonomy aims to classify material or goals of education based on domains (cognitive, affective, and psychomotor domains). This classification makes it easier for teachers to conduct evaluations. Sukardi (Deby Luriawati Naryatmojo, 2018) explains that evaluation is an assessment process to pay attention to the development of students in the learning process.

The achievement of index% for measurable and specific focus is supported by the achievement of index% for understanding and knowledge indicators of 72% with Good criteria. This is because, teachers have planned and implemented learning in accordance with the plan, namely distinguishing the notion of understanding as meaning from facts and knowledge focusing on facts. Thus, the

teacher distinguishes each level in the cognitive domain. This is clarified by Dewi Amaliah Nafiati (2021) who states that Bloom's Taxonomy is a classification framework that is useful in measuring the level of students' understanding of subject matter. Bloom's revised taxonomy includes six cognitive categories, namely: remember, understand, apply, analyze, evaluate, and create these categories have several indicators in order to determine the level of achievement of students. For example: in the remembering category, the indicators are writing, mentioning, identifying, and so on. For the creating category, the indicators are designing, developing, producing, and so on.

The achievement of index% for measurable and specific focus is also supported by the achievement of index% for practical indicators of 72% with Good criteria. Learning planning is linked to problems in the lives of students. Thus, learners are able to carry out activities with minimal instruction from the teacher and replaced with two-way interaction. An example of linking lesson material with the environment around students is a photosynthesis experiment between plants that have green leaves and mushrooms. The process of linking with the environment around learners is often referred to as contextual. This is in line with the explanation of I Wayan Sukra Warpala (2019) that the achievement of multicultural education ideas can be done by modifying contextual learning concepts through: the application of content integration, the knowledge construction process, an equity paedagogy, and prejudice reduction.

The index% for measurable and specific focus is supported by the achievement of an index% for the generic skills indicator of 76% with Good criteria. In this indicator, the school determines lesson planning by focusing on general skills, namely problem solving techniques and formulating the core of the lesson. Problem solving skills that are fixed at SD Negeri 01 Bolo Madiun, direct the ability to think creatively. This ability can be indicated from the ability to formulate the core of the lesson. Sofi Nurqolbiah (2016) explains that the ability to think creatively has an effect on the ability to give birth to something new, such as: ideas and real works, both in new works and combinations with existing things, all of which are relatively different from what has existed before. On the other hand, Filsaime (Sofi Nurqolbiah, 2016) explains that there are four characteristics of creative thinking ability, namely: 1) originality (originality, composing something new); 2) fluency (fluency, generating many ideas); 3) flexibility (flexibility, changing perspective easily); and 4) elaboration (elaboration, developing other ideas from an idea).

Flexible focus obtained an index% of 62.67% with Good criteria. Flexible in this sense is that learning outcomes become the center of attention in understanding the progress of students' learning progress. So that CP in phase B has been planned and implemented according to the process and stage of learning of students. The determination of the operational curriculum of the Education unit of SD Negeri 01 Bolo Madiun has contained the formulation of CP whose implementation of learning takes into account the abilities of students. This can be interpreted that the learning leads to quality education characterized by learner-centered learning and students are able to carry out exploratory learning. Oinam (2017) explains that the realization of quality education requires a shift in the focus of teacher-centered activities to students or often referred to as a learner-centered approach in the learning process. The learner-centered approach has learning methods, namely: active learning, cooperative learning, and inductive learning.

The achievement of the % index for flexible focus is supported by the achievement of the % index for the CP development indicator clearly defining the results that students must achieve at the end of the learning program of 64% with Good criteria. Some learning planning in the teaching module is in accordance with the learning outcomes written in the Merdeka curriculum. This is a special concern of the observer team, namely that schools need to formulate the form of attitudes, knowledge, and behavior after the end of phase B learning. the learning process needs attention because the form of implementation is less varied. So that the form of assessment is less authentic.

The achievement of index % for flexible focus is supported by the achievement of index % for indicators of curriculum design, learning strategies, and learning opportunities carried out to ensure the achievement of CP of 56% with moderate criteria. The implementation of learning during the odd semester of the 2023/2024 academic year, the lesson plan is designed by directing exploration learning, but teacher preparation in inventorying environmental learning resources is not optimal. This can be seen from the fact that the form of learning has not been designed when implemented in the field.

The achievement of the % index for flexible focus is supported by the achievement of the % index for the indicator of the assessment process adjusted to the CP and the assessment of each individual learner is carried out to ensure that students reach the learning target of 68% with Good criteria. The indicator at this stage that is

of concern to the observer is the form of evaluation. Kurniasari, et al, (2020) explained that assessment should reflect skills and knowledge that are appropriate to the real world context. The use of various forms of assessment should be implemented immediately. The Merdeka Curriculum really provides space for teachers to assess students authentically. The forms of assessment, namely: projects, presentations, practical tasks, and exams. This form of assessment can provide an accurate picture of students' skills and understanding.

Based on the description above, the effectiveness of learning carried out at SD Negeri Bolo 01 Madiun which is associated with the learning outcomes (CP) of measurable and specific focus has been said to be successful. This can be seen from the preparation of planning in the teaching module and the implementation of learning in accordance with the indicators of measurable and specific focus. While in the flexible focus, SD Negeri 01 Bolo Madiun needs to inventory environmental learning resources, formulate the stages of the learning process, so as to realize several learning methods set out in the teaching module.

#### Conclusion

The implementation of Merdeka curriculum at SD Negeri 01 Bolo Madiun from the focus: measurable and specific, and flexible, can be said to be successful, although there needs to be notes for improvement in the next semester. These notes, namely: the inventory of environmental learning resources needs to be inventoried and the stages of the learning process formulated, the form of authentic assessment needs to be developed according to the type of activity and student abilities.

#### References

- 1. Afifatu Rohmawati. (2015). Efektivitas Pembelajaran. Jurnal Pendidikan Usia Dini, 9(1), 15-32.
- 2. Amrazi Zakso. (2022). Implementasi Kurikulum Merdeka Belajar di Indonesia. (J-PSH): Jurnal Pendidikan Sosiologi Dan Humaniora, 13(2), 916-922.
- Annisa Nidaur Rohmah. (2017). Belajar Dan Pembelajaran (Pendidikan Dasar). Cendekia: Media Komunikasi Penelitian dan Pengembangan Pendidikan Islam, 9(2), 193-210
- Darmawan, D., & Winataputra, U. S. (2020). Analisis dan Perancangan Kurikulum Merdeka. Jurnal Kependidikan: Jurnal Hasil Penelitian dan Kajian Kepustakaan di Bidang Pendidikan, 4(2), 182-197.
- Deassy May Andini dan Endang Supardi. (2018).
   Kompetensi Pedagogik Guru Terhadap Efektivitas
   Pembelajaran Dengan Variabel Kontrol Latar Belakang
   Pendidikan Guru. Jurnal Pendidikan Manajemen
   Perkantoran. 1(2), 1-7.
- Deby Luriawati Naryatmojo. (2018). Penggunaan Taksonomi Bloom Dalam Pembelajaran Keterampilan Menyimak Bermuatan Pendidikan Karakter Profetik Untuk Mengukur Keberhasilan Hasil Belajar Mahasiswa. Prosiding Semnas PIBSI-40, 601-620.
- 7. Dewi Amaliah Nafiati. (2021). Revisi taksonomi Bloom: Kognitif, afektif, dan psikomotorik. Humanika: Kajian Ilmiah Mata Kuliah Umum, 21(2), 151-172.
- Fathurrahman, Sumardi, Yusuf, Harijanto. (2019).
   Peningkatan Efektivtas Pembelajaran Melalui

- Peningkatan Kompetensi Pedagogik Dan Teamwork. Jurnal Manajemen Pendidikan, 7(2), 843-850
- I Wayan Sukra Warpala. (2019). Pembelajaran Kontekstual: Sebuah Inovasi Penerapan Pendidikan Multikultural dan Belajar untuk Penemuan. Media Edukasi: Jurnal Ilmu Pendidikan, 3(1).
- Kemristek Dikti, Republik Indonesia. (2015). Paradigma Capaian Pembelajaran: Dokumen 005. Jakarta: Direktorat Jendral Pembelajaran dan Kemahasiswaan
- 11. <u>Kurniasari, Pribowo dan Putro. (2020).</u> Analisis Efektivitas Pelaksanaan Belajar Dari Rumah (BDR) Selama Pandemi Covid-19. Jurnal Review Pendidikan Dasar: Jurnal Kajian Pendidikan Dan Hasil Penelitian, 6(3), 246–253.
- 12. Mohamad Surya. (2014). Psikologi Guru: Konsep dan Aplikasi. Bandung: Alfabeta
- 13. Norsandi & Sentosa. (2022). Model Pembelajaran Efektif di Era New Normal. Jurnal Pendidikan, 23(2), 125 139.
- Nurfitri, Amelia, Noviani. (2023). Peran Administrasi Kurikulum dalam Sebuah Pendidikan. Jurnal Pendidikan Indonesia (PJPI), 1(1), 183-192.
- Oinam, S. (2017). Student- Centered Approach to Teaching and Learning in Higher Education for Quality Enhancement. IOSR Journal of Humanities and Social Science, 22(06), 27–30
- 16. Pane. (2017). Belajar dan Pembelajaran. FITRAH: Jurnal Kajian Ilmu-ilmu Keislaman, 3(2), 333-352.
- Punaji Setyosari. (2-14). Menciptakan Pembelajaran Yang Efektif dan Berkualitas. urnal Inovasi dan Teknologi Pembelajaran, 1(1), 20-30.
- Riyanto, Y. (2019). Kurikulum Merdeka: Tantangan dan Peluang Membangun Pendidikan di Era Digital. Prosiding Seminar Nasional Pendidikan, 2(1), 30-36.
- Siregar, Evelune dan Nara, Hartini. (2014). Teori Belajar dan Pembelajaran. Bogor: Ghalia Indonesia
- Sofi Nurqolbiah. (2016). Peningkatan kemampuan pemecahan masalah, berpikir kreatif dan self-confidence siswa melalui model pembelajaran berbasis masalah. JP3M: Jurnal Penelitian Pendidikan dan Pengajaran Matematika, 2(2), 143–158.
- Trianto. (2014). Model Pembelajaran Terpadu, Konsep, Strategi dan Implementasinya dalam KTSP. Jakarta: Bumi Aksara
- Zainuri dan Ahmad. (2018). Konsep Dasar Kurikulum Pendidikan. Palembang: CV. Amanah.