





Implementation of National Education Standards (Case Study at SDN Sukadana Ciparay Bandung Regency)

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Abstrak

Penelitian ini dilatar belakangi oleh pentingnya implementasi standar nasional pendidikan untuk meningkatkan mutu pendidikan. Penelitian ini bertujuan untuk mendeskripsikan implementasi standar nasional pendidikan di SDN Sukadana Ciparay Kabupaten Bandung. Penelitian ini menggunakan metode penelitian kualitatif dengan pendekatan studi kasus dan bersifat deskripsi. Tempat dan waktu penelitian ini adalah SDN Sukadana Ciparay Kabupaten Bandung pada Semester Ganjil 2023/2024. Teknik pengumpulan data yaitu observasi, Wawancara dan Dokumentasi. Informan/sumber informasi dalam penelitian ini adalah Kepala Sekolah SDN Sukadana Ciparay Kabupaten Bandung, Wakasek SDN Sukadana Ciparay Kabupaten Bandung dan Guru-guru SDN Sukadana Ciparay Kabupaten Bandung. Teknik analisis data yang dilakukan yaitu reduksi data, penyajian data, dan verifikasi. Hasil penelitian ini menjelaskan bahwa : 1) Implementasi standar nasional pendidikan di SDN Sukadana Ciparay Kabupaten Bandung hingga saat ini belum dapat memenuhi delapan standar nasional pendidikan, 2) Aspek yang perlu ditingkatkan dari standar isi dan proses adalah layanan bimbingan dan konseling, struktur kurikulum dan pengembangan kurikulum, pelaksanaan pembelajaran, kualitas pengelolaan kelas, sumber belajar, kualitas RPP, perencanaan proses pembelajaran, dan 3) Standar isi SD Ciparay Kabupaten Bandung memiliki tantangan yaitu Kurikulum SD Sukadana seperti konselor dan narasumber. Orientasi kurikulum juga harus mendukung mata pelajaran yang diujiankan.

Keywords : Implementasi, Standar Nasional Pendidikan, Sekolah Dasar

Implementation of National Education Standards (Case Study at SDN Sukadana Ciparay Bandung Regency)

Abstract

This research is motivated by the importance of implementing national education standards to improve the quality of education. This study aims to describe the implementation of educational standards at SDN Sukadana Ciparay, Bandung Regency. This study uses a qualitative research method with a case study approach and is descriptive in nature. The place and time of this research is SDN Sukadana Ciparay, Bandung Regency in the Odd Semester 2023/2024. Data collection techniques namely observation, interviews and documentation. The informants/sources of information in this study were the Principal of SDN Sukadana Ciparay, Bandung Regency, the Wakasek of SDN Sukadana Ciparay, Bandung Regency, and the teachers of SDN Sukadana Ciparay, Bandung Regency. Data analysis techniques carried out were data reduction, data presentation, and verification. The results of this study explain that: 1) The implementation of national education standards at SDN Sukadana Ciparay Bandung Regency has not been able to meet the eight national education standards, 2) Aspects that need to be improved from content and process standards are guidance and counseling services, curriculum structure and curriculum development, implementation of learning, quality of class management, learning resources, quality of lesson plans, planning the learning process, and 3) Standard content of Ciparay Elementary School, Bandung Regency has challenges, namely the Curriculum of SD Sukadana such as counselors and resource persons. Curriculum orientation must also support the subjects tested.

Keywords : Implementation, National Education Standards, Elementary Schools

Introduction

Quality basic education is a global issue that is of concern to many countries around the world (Muhson, A., Wahyuni, D., Supriyanto, S., & Mulyani, 2012). Basic education standards have been regulated by UNESCO through the Program for International Student Assessment (PISA) which aims to improve the quality of basic education throughout the world. The educational standards set by PISA cover literacy, mathematics, and science (UNESCO, 2017; Auld, E., Rappleye, J., & Morris, 2019).

In Indonesia, the issue of basic education standards is also a serious concern. Even though the government has issued policies and programs to improve basic education standards, there are still many problems encountered in their implementation (Hermanto, 2020). These problems include the lack of quality teachers, inadequate facilities and infrastructure, and the inability to apply the established curriculum. (Ministry of Education and Culture, 2018; Ginanjar, A., & Herman, 2019).)

Basic education standards in elementary schools are regulated by the National Education Standards Agency (BSNP) which aims to improve the quality of education at the elementary level (Hatati, 2019). The educational standards set by the BSNP cover 8 aspects, namely graduate competency standards. content standards. process standards, assessment standards, standards, educator management and education staff standards, facilities and infrastructure standards, and financing standards (BSNP, 2016; Amrullah, M., & Wisdom, 2019).

Based on a preliminary study on the implementation of educational standards at SDN Sukadana Ciparay, Bandung Regency also faces a similar problem. Even though there have been efforts made by the school and the local government, there are still some obstacles in its implementation. Some of these obstacles include the lack of quality teachers, inadequate facilities and infrastructure, and the inability to apply the established curriculum. This is also in accordance with research conducted by Siregar, Rosli, Maat, & Capraro, 2019).

In overcoming the problem of implementing education standards at SDN Sukadana Ciparay, Bandung Regency, several actions need to be taken. First, improve the quality of teachers through training and professionalism development. Second, improve educational facilities and infrastructure, including improving learning facilities and internet access. Third, improve students' abilities and motivation in learning subject matter, including through tutoring programs. Fourth, adapting the curriculum to the needs and abilities of students.

These efforts must be supported by the government and local communities through the allocation of sufficient funds for education, as well as active participation in existing education programs. In addition, it is important to regularly monitor and evaluate the implementation of educational standards in schools, in order to ensure better achievement of educational goals.

In this regard, the Directorate of Elementary School Development (Ditpendas) published Guidebook for the has а Implementation of National Education Standards (SNP) in Elementary Schools, which can be used as a reference for schools in implementing the established basic education standards. It is hoped that this will help improve the quality of basic education in Indonesia, including at SDN Sukadana Ciparay, Bandung Regency (Ditpendas, 2019; Aziz, 2014).

Research on the implementation of content standards has been widely studied by previous researchers. Research by Abdi, & Muri'ah (2017) explains that superior schools are schools that meet eight national education standards. The fulfillment of these national education standards will have implications for high public interest in sending their children to these schools. The school's strategy in planning, implementing and evaluating the achievement of the eight SNP standards is to involve various parties through committees and *stakeholders*.

Furthermore, Asmara's research (2015) revealed that in general junior high schools in Seluma Regency that were accredited A had fulfilled eight national education standards. However, there are still national education standards that have not been met, such as standards for educators and education staff and infrastructure standards.

Research was also conducted bv Maranting, HS, Arif, M., & Mala, AR (2020) revealed that good implementation of National Education Standards in schools can increase the competitiveness of Gorontalo 1 State Madrasah Ibtidaiyah . If a school meets national education standards, the school will not only be able to increase its competitiveness but will also receive an A accreditation score.

Based on some previous research, of course national education standards are very important to be implemented in schools. Based on this, the authors are interested in studying the Implementation of National Education Standards (Case Study at SDN Sukadana Ciparay, Bandung Regency). The purpose of this study was to describe the national implementation of education standards at SDN Sukadana Ciparay, Bandung Regency. The findings of this study are expected to be able to provide an overview to all schools regarding the importance of meeting national education standards to obtain superior accreditation.

Method

This study uses a qualitative research method with a case study approach and is descriptive in nature. According to Denzin and Lincoln, qualitative research is research that uses a natural setting, with the intention of interpreting the phenomena that occur and is carried out by involving various existing methods (Solihin, 2021). According to Suharsimi Arikunto (2021) a case study is an intensive, detailed and in-depth approach to certain symptoms.

The place and time of this research is SDN Sukadana Ciparay, Bandung Regency in the Odd Semester 2023/2024. Data collection techniques namely observation, interviews and documentation. The informants/sources of information in this study were the Principal of SDN Sukadana Ciparay, Bandung Regency, the Wakasek of SDN Sukadana Ciparay, Bandung Regency, and the teachers of SDN Sukadana Ciparay, Bandung Regency.

Data analysis techniques carried out were data reduction, data presentation, and verification. Implementation of case studies includes planning, case descriptions, classifying types of problems, describing problems, collecting data, data processing, synthesis and interpretation, evaluation and follow-up.

Results and Discussion

Implementation of National Education Standards at SDN Sukadana Ciparay, Bandung Regency

The ideal condition that is expected in an institution, educational especially SDN Sukadana Ciparay, Bandung Regency is the implementation of educational services that can meet the provisions of eight national education standards, namely content standards, graduate competency standards, process standards, educator and education staff standards, standards, management, facilities standards and infrastructure, assessment standards, and financing standards.

However, the real conditions experienced by SDN Sukadana have yet to meet these eight standards. Each standard still has parts that still need to be improved and developed in order to achieve national standards. Based on the results E valuation School Self (EDS) at SDN Sukadana Ciparay Bandung Regency when compared with the SNP, the current conditions at the school can be described as follows:

1) Content Standard

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Table 1. Analysis of Content Standards			
Component		Average	
Extracurricular		2.00	
activities			
Guidance	and	1.50	
Counseling Servic	es	1.50	
Study Load		2.00	
Curriculum Struct	ure	1.75	
Curriculum		1.57	
Development		1.57	
Content Standard		1.77	

Based on Table 1, compliance has not covered all components of the content standard, some have not met the SNP with an average score of 1.77 points. Minimum Service Standards (SPM) have been met when it has reached a value of 2.00. Aspects that need improvement in order to meet the SNP are the aspects of guidance and counseling services, curriculum structure and curriculum development.

2) Process Standard

Table 2. Process Standard Analysis	
Component	Average
Implementation	1.84
Extracurricular activities	2.00
Implementation of Learning	1.23
Classroom Management Quality	1.23
Learning Resources	1.75
RPP quality	1.42
Learning Process Planning	1.38
Process Standard	1.62

Based on Table 2, most of the fulfillment of the process standard components did not meet the SNP with an average value of 1.62 points. Aspects that need to be improved in order to meet the SNP are the aspects of the implementation of learning, the quality of classroom management, learning resources, the quality of lesson plans, and the planning of the learning process.

3) Graduate competence standard

Table 3. Analysis of Graduate Competency Standards

Component	Average
Take care of the body and	
the environment	-
Physical fitness and healthy	
living	-
Expressing art and culture	1.00
Recognize and analyze	4.00
natural phenomena	1.00
Learn science and	4.00
technology effectively	1.00
Enforce the rules	1.00
Be noble	1.00
Carry out religious	1.00
teachings	1.00
Communicate effectively	1.00
and politely	1.00
Ready to continue on to a	1.98
higher level of education	1.90
Live a clean, healthy, fit and	1.00
safe life	1.00
Productive and responsible	1.00
Achievement	2.67
The usual variety of	1.00
learning resources	1.00
Confidence and	1.00
responsibility	1.00
Graduate competence	0.90
standard	0.50

Based on Table 3, the fulfillment of passing standards is still very far from the expectation of being able to fulfill the SNP with an average score of 0.90 points. All aspects need improvement to meet the SNP. This is because there is only one aspect that meets the SNP, namely the achievement aspect.

4) Standards for Educators and Education Personnel

Table 4. Analysis of Educator and Education		
Personnel Standards		
Component	Average	
Education staff competence	-	
Qualifications of educational staff	2.00	
Teacher competence	0.13	

1.70

1.46

Teacher gualifications

PTK standard

Table 4. Analysis of Educator and Education
Personnel Standards

Based on Table 4, fulfillment does not cover all components of the standard of educators and education personnel. There are still aspects that do not meet the SNP with an average value of 1.46 points. Aspects that need improvement in order to meet the SNP are the competence and qualifications of educators.

5) **Facilities and Infrastructure Standards**

Table 5. Analysis of Facilities and

Infrastructure Standards

Component	Average
ICT Laboratory	0.59
Language Laboratory	0.39
Play/sports area	1.38
Circulation room	2.00
Warehouse	0.50
Toilet	1.10
UKS Room	1.31
Place of worship	1.75
Teacher's room	1.24
Leadership room	1.41
Science laboratory	0.75
Library room	1.27
Classroom	1.06
Building	2.00
Land	2.00
Education units	2.00
Sarpras standard	1.57

Based on Table 5, compliance has not covered all components of the standard of facilities and infrastructure with an average of 1.57 points. Aspects that need improvement in order to meet the SNP are ICT and language

laboratories, playgrounds, warehouses, latrines, UKS, places of worship, teachers' rooms, leadership rooms, science laboratories, libraries, and classrooms.

6) Management Standard

Table 0. Analysis of Managerin	
Component	Average
The school implements an	2.00
information system	
The principal implements an	2.00
information system	
Participation of the school	2.00
community	
The school is already	2.00
accredited	
The school evaluates the plan	1.67
Schools form partnerships	2.00
The school provides report	
access	1.00
The school creates a	
comfortable environment	2.00
Schools develop guidelines	1.90
Realization of vision and	1 25
mission	1.25
School quality improvement	2.00
program	2.00
Ownership of a school work	1.58
plan	1.50
Dissemination of the vision,	
mission and goals of the	1.50
school	
Scope and determination	1.67
mechanism	1.07
Management Standard	1.82

Based on Table 6, compliance has not covered all components of management standards. There are still aspects that do not meet the SNP with an average value of 1.57 points. Aspects that need to be improved in order to meet the SNP are plan evaluation, partnerships, access to reports, realization of vision and mission, school work plans,

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socialization of vision and mission goals, and setting mechanisms.

Table 7. Analysis of Financing	g Standards
Component	Average
Non-personnel operations	2.00
financing report documents	2.00
Non-personnel operations	2.00
financing report documents	2.00
Realization of non-	
personnel financing	1.70
management	
Realization of the amount of	
financing other than non-	
personnel operations, ATS	1.54
and BAHP Standard Amount	1.54
of Non-personnel	
Operations Costs	
RAPBS and RAKS are	
prepared jointly with the	1.34
school committee	
Financing Standard	1.48

Based on Table 7, fulfillment does not cover all components of standard financing. There are still aspects that do not meet the SNP with an average value of 1.48 points. Aspects that need to be improved in order to meet the SNP are the realization of nonpersonnel costs and the preparation of the RAPBS.

8) Rating Standards

Table 8. Analysis of Assessment Standards	
Component	Average
Rating by government	1.50
Assessment by educators	1.35
Assessment techniques	1.00
The assessment is carried out thoroughly	1.67

The assessment is carried			1.50	
out in an integrated manner				
Assessment	is	done	1.00	
objectively				
Rating Standards			1.37	

Based on Figure 8, compliance has not covered all components of the assessment standard. There are still many aspects that do not meet the SNP with an average score of 1.37 points. Aspects that need to be improved in order to meet the SNP are assessment by the government, assessment by educators, assessment techniques, overall and objective assessment.

The results of this study refer to national education standards. National Education Standards are the minimum criteria regarding the education system in all jurisdictions of the Unitary State of the Republic of Indonesia (Yanti, H., & Syahrani, 2021). SNP coverage consists of 8 (eight) standards, namely: (i) graduate competency standards; (ii) content (iv) standards; (iii) process standards; educational assessment standards: (v) education staff standards; (vi) standard of facilities and infrastructure; (vii) management standard; and (viii) financing standards (Fitri, A., & Syahrani, 2021; Handayani, 2016).

The National Education Standards aim to guarantee the quality of national education in the context of educating the nation's life and forming dignified national character and civilization (Umam, 2020; Sakdiah, H., & Syahrani, 2022). In addition, national education standards serve as the basis for planning, implementing and supervising education in order to create quality national education (Triwiyanto, 2013; Sriwahyuni, E., Kristiawan, M., & Wachidi, 2019).

The results of this study are a refinement of the results of previous studies including (Palahudin, P., Hadiana, ME, & Basri, 2020; Abdi, MI, & Muri'ah, 2017; Putri, 2020; Oktaviani, NM, & Wulandari, 2019).

Challenges faced in implementing National Education Standards at SDN Sukadana Ciparay, Bandung Regency

The school's challenges are the gaps in the real conditions as a result of the School Self-Evaluation (EDS) with the expected conditions. The main challenge is clarified by comparing the results of EDS with SNP. Based on the results of the School Self-Evaluation that has been carried out, there are several challenges faced, namely:

1. Content Standard

SD Sukadana curriculum such as counselors and resource persons. Curriculum orientation must also support the subjects tested. In addition, extracurricular activities at school must be able to involve all students, especially grade 1 and grade 2.

2. Process Standard

The challenges that exist in the standard process content include: a) The preparation of lesson plans by teachers is developed by not only referring to the syllabus but also oriented to the conditions of the school and students, b) Optimizing the use of the school environment and library as a source of learning by all school members, and c) Improving classroom management in a good, quality and fun way so that students are happier in learning and achieve minimal mastery starting from grade 1 to grade 6.

3. Graduate competence standard

Challenges in graduate competency standards include: a) Increasing the use of various study references by students in understanding the basic competencies of a material for Mathematics, Science, Social Sciences, Civics and PAI lessons for students in grades 4, 5 and 6, b) Increasing behavior habits courtesy by grade 1 to grade 6 students towards teachers, and 3) Habituation of realizing works of art and culture, physical fitness, and the use of healthy technology in education at school for all students.

4. Standards for Educators and Education Personnel

The challenges that exist in the standards of educators and education staff include a) Maximizing the PTK recruitment system in accordance with the required educational qualifications, and b) Improving the quality and facilitating all class teachers in achieving the competencies set by the SNP.

5. Facilities and Infrastructure Standards

The challenge lies in the standard of facilities and infrastructure, namely having to meet the availability of learning support infrastructure, namely 2 classrooms, 1 room for UKS, 1 room for libraries, 1 room for leadership, 1 prayer room, 1 place for playing and sports. fruit, 1 room Warehouse, 1 room Laboratory, 1 circulation room, 1 room canteen room and 6 student toilets.

6. Management Standard

The challenges faced related to management standards include: a) Developing the vision, mission and goals of the school in an accountable mechanism that is in accordance with the SNP then implementing them in all educational activities in schools, b) Establishing partnerships with related parties that can drive the process fast quality education, such as departments, government agencies, law enforcement, social and nongovernmental organizations, as well as companies that are committed to education, c) Creating a conducive and friendly learning environment in the midst of heterogeneous and diverse population settlements, and d) Carry out education guality services and PTK evaluations at least once a year.

7. Financing Standard

The challenges faced related to financing standards include a) Effectiveness and efficiency in the use of school budgets by taking into account the priority scale set by applicable regulations and b) Accountability in reporting according to the mechanism set out in relevant regulations.

8. Rating Standards

The challenges faced related to assessment standards include a) Carrying out assessments using valid assessment techniques and recognized levels of accuracy and b) Conducting assessments in a fair, valid, comprehensive and transparent manner regarding the subjects presented and student behavior related to ethics.

Conclusion

Based on the results and discussion that the author has presented regarding the Implementation of National Education Standards (Case Study at SDN Sukadana Ciparay, Bandung Regency), the authors can draw conclusions: 1) Implementation of national education standards at SDN Sukadana Ciparay, Bandung Regency, until now has not been able to meet eight national standards education, 2) Aspects that need to be improved from content and process standards are guidance and counseling services, curriculum structure and curriculum development, learning implementation, quality of classroom management, learning resources, quality of lesson plans, learning process planning, and 3) Content standards of SD Ciparay District Bandung has challenges, namely the SD Sukadana Curriculum such as counselors and resource persons. Curriculum orientation must also support the subjects tested.

Based on the conclusions regarding the National Implementation of Education Standards (Case Study at SDN Sukadana Ciparay, Bandung Regency), the recommendations submitted by the author are that SDN Sukadana Ciparay, Bandung Regency, should 1) Increase the role of parents in children's education, 2) Improve teacher quality, 3) Improve quality learning facilities and environment, and 4) Strengthening supervision and evaluation of the education system.

References

- Abdi, M. I., & Muri'ah, S. (2017). Implementasi Standar Nasional Pendidikan pada Sekolah-Sekolah Unggulan di Samarinda. *Fenomena*, 9(1), 83-104.
- Amrullah, M., & Hikmah, K. (2019).
 Pendidikan Ramah Anak dalam Standar Nasional Pendidikan Indonesia. PEDAGOGIA: Jurnal Pendidikan, 8(1), 1-7.
- Asmara, R. (2015). Analisis Implementasi Delapan Standar Nasionalpendidikan Pada Smp Yang Terakreditasi A Di Kebupaten Seluma. Manajer Pendidikan: Jurnal Ilmiah Manajemen Pendidikan Program Pascasarjana, 9(2).
- Aziz, A. N. (2014, April). Implementasi Pelaksanaan 8 Standar Nasional Pendidikan dalam Rangka Peningkatan Mutu Sekolah di SMPN 2 Geger Kab. Madiun. In *FIPA: Forum Ilmiah Pendidikan Akuntansi* (Vol. 2, No. 1).
- Auld, E., Rappleye, J., & Morris, P. (2019).
 PISA for Development: How the OECD and World Bank shaped education governance post-2015. *Comparative Education*, 55(2), 197-219.
- Fitri, A., & Syahrani, S. (2021). Kajian Delapan Standar Nasional Penelitian yang Harus Dicapai Perguruan Tinggi. Adiba: Journal of Education, 1(1), 88-96.
- Ginanjar, A., & Herman, M. (2019).
 Kepemimpinan Kepala Sekolah dalam Mengimplementasikan Manajemen Berbasis Sekolah pada SMA Negeri. Indonesian Journal of Education Management & Administration Review, 3(1), 1-8.
- Hatati, W. L. (2019). Manajemen Kurikulum di Sekolah Dasar Sebagai Upaya Peningkatan Pendidikan Karakter (Studi Lasus Sekolah Dasar Lazuardi Al-Kaffah Bekasi) (Master's thesis, Jakarta: FITK UIN Syarif Hidayatullah Jakarta).
- Handayani, M. (2016). Pencapaian standar nasional pendidikan berdasarkan hasil akreditasi SMA Di provinsi dki Jakarta. Jurnal Pendidikan dan Kebudayaan, 1(2), 179-201.

- Hermanto, B. (2020). Perekayasaan sistem pendidikan nasional untuk mencerdaskan kehidupan bangsa. *Foundasia*, 11(2).
- Maranting, H. S., Arif, M., & Mala, A. R. (2020). Implementasi Standar Nasional Pendidikan dalam Meningkatkan Daya Saing Madrasah Ibtidaiyah Negeri 1 Gorontalo. *Tadbir: Jurnal Manajemen Pendidikan Islam*, 8(2), 188-206.
- Muhson, A., Wahyuni, D., Supriyanto, S., & Mulyani, E. (2012). Analisis relevansi lulusan perguruan tinggi dengan dunia kerja. Jurnal Economia, 8(1), 42-52.
- Oktaviani, N. M., & Wulandari, I. (2019). Implementasi Standar Proses Dalam Kurikulum 2013 Di Sekolah Dasar. *Primary: Jurnal Pendidikan Guru Sekolah Dasar*, 8(2), 180-187.
- Palahudin, P., Hadiana, M. E., & Basri, H. (2020). Implementasi Standar
 Pengelolaan Pendidikan Dalam
 Mencapai Tujuan Pendidikan Islam. *J*-*PAI: Jurnal Pendidikan Agama Islam*, 7(1).
- Pendidikan, B. S. N., & Indonesia, K. R. (2016). Standar proses Pendidikan dasar dan menengah. Peraturan Menteri Pendidikan dan Kebudayaan Republik Indonesia Nomor, 22.
- Putri, Z. D. (2020). Implementasi standar pengelolaan pendidikan SMK Negeri 1 Bengkalis. JURNAL MINDA, 1(2), 61-73.
- Raharjo, S. B. (2014). Kontribusi delapan standar nasional pendidikan terhadap

pencapaian prestasi belajar. *Jurnal Pendidikan dan Kebudayaan*, 20(4), 470-482.

- Sakdiah, H., & Syahrani, S. (2022). Pengembangan Standar Isi dan Standar Proses Dalam Pendidikan Guna Meningkatkan Mutu Pembelajaran di Sekolah. *Cross-border*, 5(1), 622-632.
- Siregar, N. C., Rosli, R., Maat, S. M., & Capraro, M. M. (2019). The effect of science, technology, engineering and mathematics (STEM) program on students' achievement in mathematics: A meta-analysis. *International Electronic Journal of Mathematics Education*, 15(1), em0549.
- Sriwahyuni, E., Kristiawan, M., & Wachidi, W. (2019).
 Strategi Kepala Sekolah Dalam Mengimplementasikan Standar Nasional Pendidikan (SNP) Pada SMK Negeri 2 Bukittinggi. JMKSP (Jurnal Manajemen, Kepemimpinan, dan Supervisi Pendidikan), 4(1), 21-33.
- Triwiyanto, T. (2013). Standar nasional pendidikan sebagai indikator mutu layanan manajemen sekolah. *Jurnal Ilmu Pendidikan*, 19(2).
- Umam, M. K. (2020). Dinamisasi Manajemen Mutu Persfektif Pendidikan Islam. *Jurnal Al-Hikmah*, 8(1), 61-74.
- Yanti, H., & Syahrani, S. (2021). Standar bagi pendidik dalam standar nasional pendidikan indonesia. *Adiba: Journal of Education*, 1(1), 61-68.