



Diterima	: 16 April 2024
Direvisi	: 27 April 2024
Disetujui	: 29 April 2024
Diterbitkan	: 30 April 2024

IMPROVING THE QUALITY OF EDUCATION THROUGH ENVIRONMENTALLY BASED LEARNING

Teguh Trianung Djoko Susanto¹, Syarifah Zahrah², M. Zulfakar Pratama³, Jihan

Aisyah⁴, Andi Kurniawan⁵

¹²³⁴⁵Postgraduate Education

Study Program in Education Management, Faculty of Education, Universitas Negeri Jakarta, Rawamangun Muka Street, East Jakarta 13220, Indonesia

*Corresponding Author E-mail: [e-mail: teguhtrianungdjokos@unj.ac.id](mailto:teguhtrianungdjokos@unj.ac.id)

Abstract: Environmental education is education that helps individuals become more familiar with their environment, develop responsible behavior and environmental skills to improve the quality of the environment. One effort that can be made to improve the quality of the environment is to provide environmental education from an early age through the education process. The purpose of this writing is to analyze improving the quality of environmentally based education and reviewing studies of environmentally based education in improving the quality of education. Increasing insight into the quality of environmentally based education based on a literature review shows that developing environmentally based learning models is one solution in improving the quality of education. Through this model, students not only learn from textbooks, but also from direct experience in the surrounding environment. This can help students understand the relationship between theory and practice in everyday life.

Keywords: Keywords: Environment, Quality, Education

Abstrak: Pendidikan lingkungan hidup adalah Pendidikan yang membantu individu menjadi lebih mengenal lingkungannya, mengembangkan perilaku bertanggung jawab dan keterampilan lingkungan untuk meningkatkan kualitas lingkungan. Salah satu upaya yang dapat dilakukan untuk meningkatkan kualitas lingkungan hidup adalah dengan memberikan pendidikan lingkungan hidup sejak dini melalui proses pendidikan. Tujuan penulisan untuk menganalisis peningkatan mutu pendidikan berbasis lingkungan dan mengkaji studi pendidikan berbasis lingkungan dalam meningkatkan mutu pendidikan. Meningkatkan wawasan mengenai mutu pendidikan berbasis lingkungan berdasarkan literatur review didapatkan hasil bahwa pengembangan model pembelajaran berbasis lingkungan menjadi salah satu solusi dalam meningkatkan mutu pendidikan. Melalui model ini, siswa tidak hanya belajar dari buku teks, tetapi juga dari pengalaman langsung di lingkungan sekitarnya. Hal ini dapat membantu siswa memahami keterkaitan antara teori dengan praktik dalam kehidupan sehari-hari.

Kata-kata Kunci: Lingkungan, Mutu, Pendidikan

INTRODUCTION

The environment is an inseparable part of human life. Humans fulfill their daily needs from natural resources provided by the surrounding environment. However, currently environmental problems are increasingly serious, such as environmental pollution, global warming, forest destruction, and so on. Ironically, this is caused by humans making excessive use of natural resources without considering the impact on the environment. The importance of a holistic approach in improving the quality of early childhood education, by paying attention to relational aspects between teachers and students, as well as their relationship with the surrounding environment. It is hoped that this effort can create meaningful learning and be oriented towards a more sustainable future development (Mahlomaholo et al. 2023).

The Environment Based Learning (EBL) model optimizes student involvement by emphasizing group discussion activities so that students are active and responsible in their learning. The EBL model makes it easier for students to understand content because student learning is based on the local environment. The aim is for students to learn through case studies or environmental issue-based learning to improve students' geographical abilities by thinking critically, innovatively and creatively about phenomena in their environment, as well as having an impact on the quality of education. The appropriate learning method to improve the quality of education is an environment-based learning method. Students are introduced to content related to the introduction of the types of natural resources around them. The aim is for students to be able to think critically and innovatively to describe phenomena and natural resources around them. Problem-based learning about the environment can increase students' knowledge in thinking. Apart from that, this learning approach provides motivation to students (Hamid et al. 2021).

Environmental education is education that helps individuals become more familiar with their environment, develop responsible behavior and environmental skills to improve the quality of the environment. Research result Handiyati et al. (2023) that environmental education in elementary schools is basically given in a separate subject, namely Environmental Education (in the Indonesian context known as PLH). However, in reality students have not shown positive behavior towards the environment. There are still many students who throw rubbish carelessly, don't flush the toilet, scribble on benches, damage plants, waste water, and so on. One of the contributing factors is the low level of environmental awareness.

When viewed from various learning model theories, environment-based learning will create a deep learning experience for students. Through a constructivist approach, students actively build their understanding of the relationship between humans and the environment through direct experience and reflection. The problem-based learning model challenges students to investigate and solve complex environmental problems. In experiential learning, students engage in hands-on activities that strengthen their emotional connections thereby deepening their understanding of the environment. Through the application of these various models, environment-based learning helps students develop the knowledge, skills and attitudes needed to become agents of change who care and are responsible for the environment.

Based on the problems above, if you look at existing theory, this is most likely caused by the learning model used in schools, namely the conventional learning model. This learning model only emphasizes the acquisition of knowledge. Without realizing it, the environment must also be considered to create a comfortable learning atmosphere. In fact, environment-based educational learning must be improved because a good learning process must also include comfortable school and classroom conditions so that the teaching and learning process can be carried out in a conducive manner.

One effort that can be made to improve the quality of the environment is to provide environmental education from an early age through the education process in schools. This is very important, because children act as agents of change who can take action to overcome environmental problems in the future (Rohmawatiningsih et al. 2018). Changes in students' behavior in protecting the environment can be seen from their actions and participation in pro-environment activities. This shows that students have built a better relationship with nature, no longer treating it carelessly, but tending to treat it as they should. (Komalasari et al. 2023).

Given the case above, the author is interested in conducting this literature study with the aim of analyzing the improvement in the quality of education if the learning carried out is environmentally based and the author wants to study in more depth how the environment is developed and preserved. based education can improve

the quality of education. Because as is known in several previous studies, environment-based learning can increase students' understanding.

The learning process that uses the school environment as a learning medium is a method that provides direct experience to students, motivating students to study the concept of spermatophyta diversity actively, creatively and innovatively. Through this approach, students are encouraged to

be independent and responsible in their learning and to preserve the environment around them. Environment-based learning utilizes objects around students as a source of real experience, allowing them to observe directly, collect accurate data, and learn both individually and in groups. The available school environment is considered an effective learning resource and is beneficial for the learning process (Juariah et al. 2014).

Utilizing the environment as a learning tool and source of knowledge provides a number of benefits. The environment provides a variety of material that students can study, expand their knowledge, and go beyond the boundaries of the classroom walls. Utilization of the environment also ensures the accuracy of the information obtained. Learning activities that occur outside the classroom tend to be more interesting, avoid boredom, and stimulate students' interest in learning. Apart from that, learning becomes more meaningful because students are exposed to real situations and involve various methods such as observation, question and answer, experiments and fact testing. Through understanding and direct experience of their environment, students can develop values such as concern for the environment, which have the potential to shape their personal character. (Towansiba et al. 2022)

One of the main goals of education is to direct individuals towards a better life, which includes aspects of humanity and achieving life goals in accordance with their origins. The aim of national education as regulated in Law Number 20 of 2003 is to develop abilities and shape the character and civilization of a civilized nation, with the aim of making the nation's life more intelligent. This aims to optimize individual potential to become human beings who believe, are devoted to God Almighty, have noble character, are healthy, knowledgeable, capable, creative, independent, and become democratic and responsible citizens. However, the current reality of education has not yet reached expectations, because there are still deficiencies in teacher competency which results in low graduate competency. One of the causes is the low professionalism of teachers which is reflected in their mastery of learning materials and methods. Therefore, learning planning is the teacher's main task, because good planning will produce good results. Improving the quality of learning is very important in efforts to improve the quality of education. Teachers are the main focus in this case, because they play a direct role in the learning process. Adequate learning facilities and professional teachers are also needed to support improving the quality of education. Teachers have a big role in helping the development of students to achieve their potential and life goals optimally. Learning strategies, approaches and methods that are relevant to students' daily lives need to be developed by teachers so that learning is more meaningful. The quality of learning can be seen from the strength of the relationship between the behavior of teachers, students, learning materials, learning resources, and learning climate in achieving optimal learning outcomes. Improving the quality of education is the key to responding to the challenges of globalization and scientific progress. Environment-based learning is a form of learning that allows students to encounter various learning resources individually and in groups. However, the teacher's role remains important in every stage of the learning process, including planning, collecting materials, motivation, mentoring, and error correction. In carrying out learning, teachers need to pay attention to learning objectives, choose the right method, collect the necessary materials and tools, and provide a suitable place for learning activities (Wafa 2017).

In accordance with Law of the Republic of Indonesia No.23 BPHN (1997) Regarding environmental management, article 6 states that everyone is obliged to preserve the function of the environment and prevent and overcome environmental pollution and destruction. The environment is where we live today. In line with Mulyanto's opinion, the living environment is all external factors that influence an organism, where the factors in question are living organisms and inanimate object variables. Starting from teaching objectives, teaching techniques, teaching resources and teaching evaluation, everything is part of the learning environment which is fully managed by the teacher. The environment in which we or students live is one component that is very helpful in becoming a learning resource and used as a learning medium. Students can be inspired to be involved in learning activities by using environmentally based media which has a good capacity to be used as a learning resource in improving the quality of education. (Khovia Khusnul and I. Nur Fira 2023).

RESEARCH METHODS

The research design used was a literature review. This article was written to discuss concepts, theories, data and information from textbooks as well as the results of the latest research related to improving the quality of environment-based education. Several articles from various parts of the world are reviewed, plus several relevant articles or research results. The fields of study are divided into 2, namely improving the quality of education and environment-based learning.

DISCUSSION RESULTS

Improving the Quality of Education

Quality is a product that provides quality and ability to satisfy consumer needs. The higher the quality of a product, the better the service to consumers. Likewise regarding the quality of education, the quality of education is a general description of an educational institution. Through quality education, of course you will be able to

produce quality output as well (Makmur Jaya et al. 2021). In the context of education, the definition of quality includes 3 (three) aspects, namely (1) Educational Input. Educational input is part of a functioning educational component, which in turn is part of the Education component which is a resource used in developing quality. the quality of education itself. (2) Educational Process, The Educational Process is part of the activities that can change something that was previously ordinary, from experiencing development to extraordinary or can produce positive changes. (3) Educational Output. Educational Output is a description of the success of a long educational process. This educational outcome shows the success of all school stakeholders in producing quality graduates, this can be seen from the achievements of teachers, students and school achievements in general.

When compared, the quality of education in Indonesia is still relatively low, this is due to limited adaptation to science and technology, social, economic, cultural and societal aspects. Therefore, there is a need for equitable distribution of education in Indonesia, such as infrastructure, adequate facilities for the continuity of the learning process so that this will have an impact on student achievement in learning, and student interests and talents can be formed according to needs. potential because it can be channeled well. Studies in several countries show that the most important competency in improving the quality of education is the quality of the teaching profession. The statements of several researchers are increasingly convincing that quality education will never be realized without teachers who are competent and managed efficiently so that their performance is professional (Diki Maulansyah et al. 2023).

There are several factors that need to be considered in influencing the quality of education, including curriculum factors, educational policies, educational facilities, application of technology, information and communication in the world of education, especially in teaching and learning process activities, application of methods. , the latest and modern educational approach strategies, educational evaluation methods. appropriate education costs, adequate education costs, education management carried out professionally, human resources are educational actors who are trained, knowledgeable and professional. To find out whether an educational institution is qualified or not, it needs to be seen from its moral/character values, good exam results, parental support, abundant resources, application of the latest technology, purpose, concern for students and their use. relevant curriculum (Fadhli 2017).

Efforts that need to be made to improve the quality of education include training to improve the quality of education, procurement of books and learning tools, improvement of infrastructure, and implementation of strategic management which functions to maintain the consistency of the vision and mission that has been set. has been designed and functions as a guide in decision making to achieve future plans. so that management is more focused because quality schools are able to carry out the learning process in accordance with predetermined plans, so that targets are achieved according to plan and can produce quality graduates who are able to compete in the world of higher education and the world. working world (Mistiani 2019). Environmental-based education has an important role in preserving and improving the world's environment, in realizing a sustainable life. Therefore, the main goal of environmental-based education is to make individuals and society

understand the complexity of the natural and built environment through various aspects (Suarlin and Ali 2020).

On the basis of improving the quality of education, applying the latest achievements of science and technology, it is hoped that we can carry out important tasks such as preparing creative, professional, creative and independent thinking, taking the initiative of the younger generation who feel responsible. This in turn requires the use of modern educational technology in the educational process. Educational training organized based on modern educational needs improves the quality of the process, develops students' knowledge, skills and abilities, creative abilities, and increases interest in the profession. In short, improving the quality of the education system is divided into innovation as a scientific instrument, innovative activities and the education system. To assess the level of importance of a series of innovations in improving the quality of education (Solievich 2022).

Environment Based Learning

Education is a basic effort to create a learning atmosphere and teaching and learning process so that students actively develop their potential to have religious spiritual strength, self-control, personality, intelligence, noble morals, skills needed by themselves, society, nation and state.

The development of environmentally friendly education can also be carried out through a cultural approach that prioritizes sustainable values, as well as a systematic approach in integrating environmental aspects into the school environment. By combining these two approaches, schools can play an active role in preserving the environment and forming a generation that cares about environmental problems (Safei and Himayaturahmah 2023). Therefore, teachers can easily create a series of learning activities for specific teaching objectives through environment-based education (Yu and Gu 2022).

Humans generally depend on environmental conditions and environmental resources, in the field of environmental education it also plays an important role in shaping future generations. Education in a broad sense is always able to stimulate, accompany change and development of future generations because education is expected to produce quality successors to the nation. Humans and the environment are defined as needing each other because the basis for the development of the existence of living things is what makes living things have life. If it is related to the world of education, the limitations of ecology in environmental development result in a low relationship between science and the environment, which also has an impact on the fields of agriculture, mining, forestry, etc (Thalib 2012).

The school environment is closely related to school conduciveness, to improve the quality of education it needs to be based on a conducive school environment, because one of the factors that influences the quality of education apart from teachers, students, infrastructure is also the environment so that the influence of environmental factors is related to improving the quality of service education. The Environment and the Ministry of National Education also designed an environmental education program packaged in the Adiwiyata program. If you look at it, the Adiwiyata program aims to create school residents who are responsible and try to protect the environment around the school (Pradini et al. 2019).

In the world of education, the main responsibility of education includes three environments, namely the school environment, the community environment and the family environment. Which is called a tricentre of education that is interconnected and continuous with one another to realize the aims and objectives of education. Such as: Education held in schools is formal education, education held in the community is non-formal, and education held in the family is informal. The interrelationship of the three forms a unity in the concept of preserving a conducive educational environment.

In the school education environment it is also called the formal education environment. Formal education is education carried out in schools with rules, attitudes and norms that discipline students, with age limits and length of education starting from elementary school to university. Meanwhile, the out-of-school educational environment consists of two, namely informal and non-formal educational environments. The informal educational environment is an educational pathway that exists in the household which is carried out in the family environment, the main role of which is the family as an environment for each individual to interact. Learning activities in the home environment have a good role for children because they have a dominant educational impact on the surrounding environment (Thalib 2012).

The explanation above concludes that the role of the family is a natural place for nurturing, formation and discipline of children's growth and development, which creates physical development, memory, logic and reasoning in children. Non-formal education, namely education that is included in the Out-of-School Education (LPS) category, is all forms of education that are organized or created through procedures for teaching and learning activities outside of school activities so as to create effective, efficient and orderly teaching, and learning activities. These teaching and learning activities include: private tutoring/courses (Setiyoningsih 2017).

An effective learning process is learning that can adapt to students' needs and uses natural living media and can encourage the emergence of motivation or enthusiasm for learning in students. opinion from Nurhikmah and Hasanah (2021). A conducive learning process helps students to stimulate skills, creativity and critical thinking. One thing that can increase student learning success is by improving the learning process Primayana et al. (2019). In this case, the main focus in the learning process is the role of the teacher who determines the appropriate learning method. The target of the learning process carried out by teachers is that students learn by creating and determining learning methods and the focus applied by teachers is on efforts to provide learning to students.

Conceptually, the development of an environment-based learning model or contextual approach is an important and decisive learning approach in developing process skills-oriented learning strategies, through which learning participants will gain various learning experiences which are expected to develop participants' skills. based on their goals. predetermined learning. The development of environment-based learning includes the development of environment-based teaching materials, namely learning materials developed by combining theoretical concepts and real conditions in the field or contextual environment that are relevant to social, cultural, technological and environmental conditions related to the living environment. teaching that is being developed. This is actually important because in reality schools have rarely implemented environmental-based learning because there are many environmental-based learning models, because learning is still dominated by theoretical learning. The environment-based learning model is an important learning model that must be the main model of learning in schools in improving the quality of education itself (Karwur et al. 2019).

If seen from existing theory, the learning model used in schools is a learning model that can support quality improvement, based on a constructivist environment.

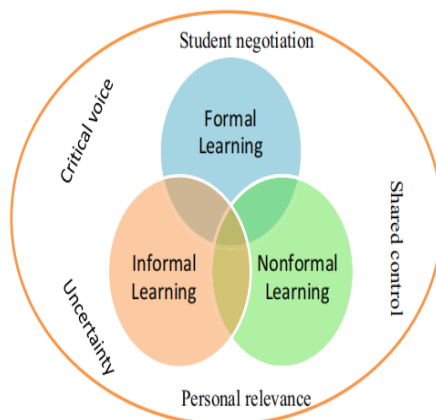


Figure 1: Holistic conceptualization of constructivist forms of learning and learning environments

In Figure 1 above, it is explained that the learning environment is assumed to consist of five interrelated dimensions: students' critical thinking abilities, relevance of material to students' personal lives, negotiation or interaction between students, uncertainty or ambiguity in the learning process. , and joint control between teachers. and students in the teaching and learning process. Therefore, the learning environment is operationalized or represented by these five variables. Likewise, the form of learning consists of three different but interrelated domains, namely formal, non-formal and informal learning. By emphasizing the interconnected nature of the three forms of learning in constructivist learning environments, this research examines the factor structure and predictive models through which undergraduate students' learning experiences and constructivist learning environments can be promoted simultaneously (Tadesse et al. 2021).

Therefore, learning in an institution is a combination of formal, non-formal and informal activities which strengthens previous findings about the relationship between the learning environment and student learning,

and reveals the multidimensional nature of learning forms in constructivist learning environments in higher education. which is a combination of formal and informal activities. -formal, and informal.

Opinion from Kopnina (2012) Previously, environmental education focused more on environmental issues, such as waste management, nature conservation, and so on. However, with the concept of Education for Sustainable Development (ESD), the scope becomes broader and more comprehensive. ESD not only answers environmental problems, but also integrates other aspects such as social, economic and cultural in an effort to achieve sustainable development. This is a holistic approach that recognizes that environmental issues are interconnected with other factors in human life. Therefore, ESD is a transition from limited environmental education to more comprehensive and sustainable education. The aim is to produce a generation that has a complete understanding of global development challenges and how to overcome them in a sustainable manner.

Then in research conducted by Erhabor and Don (2016) recommends that more efforts be made to promote and encourage environmental education (EE) at all levels of education in the country. This recommendation is primarily addressed to the government and its institutions, considering the important role they play in implementing environmental education effectively at all levels of education. Apart from that, non-governmental organizations (NGOs) and international bodies also have an important role in realizing sustainable development goals in the country. The existence of NGOs and international organizations can help support and strengthen government efforts in advancing environmental education as an important pillar in achieving sustainable development. Therefore, researchers underline the need for greater involvement and collaboration from various parties, including government, educational institutions, NGOs and international organizations, to jointly encourage and implement environmental education effectively at all levels of education, in order to realize development goals sustainable in the future. country.

Environmental education and the quality of education have a close relationship and are interrelated. Environmental education is a process that aims to form a society that has knowledge, skills, attitudes and concern for the environment. Through environmental education, students are taught to understand environmental problems and can participate in efforts to resolve these problems. Environmental education also encourages students to develop critical thinking skills, problem solving, and environmentally responsible decision making.

One important aspect of the quality of education is the success of the learning process. Environment-based learning has proven to be effective in increasing the success of the learning process. Research conducted by van de Wetering et al. (2022) shows that environment-based learning can improve student learning outcomes significantly compared to conventional learning. In line with these findings, research conducted by Zamora (2023) also shows that an environment-based learning approach can improve student learning outcomes in school subjects. The research also concluded that environment-based learning can increase students' learning motivation, critical thinking skills, and concern for the environment.

Apart from that, environmental education can also contribute to the development of 21st century skills which are much needed in the world of modern education. Skills such as critical thinking, problem solving, collaboration, and communication can be developed through environmental

education. This is in line with educational goals which not only emphasize mastery of subject matter, but also the development of skills needed to face the challenges of the 21st century. In line with this, research conducted by Damoah (2023) shows that the application of environment-based learning can improve students' critical thinking abilities.

Review conducted by Ardoin et al. (2018) about environmental education has produced interesting reflections. On the one hand, this review reaffirms how versatile and useful environmental education is in instilling awareness and concern for the natural environment in the wider community, especially the younger generation. Environmental education has been proven to be able to build a solid foundation for efforts to preserve the environment and achieve sustainable development. Therefore, the importance of environmental education is beyond doubt.

However, on the other hand, this study also opens new insights for researchers and practitioners in the field of environmental education. The results of the reflection show that there are opportunities to explore new approaches that are bolder, more creative and diverse in terms of research design and the conceptual basis used. Researchers are invited to get out of old habits and think outside the box in developing new, fresher methods, strategies or perspectives in studying environmental problems through an educational lens. In this way, it is

hoped that research in the field of environmental education can continue to develop, including new perspectives that give new colors and enrich knowledge in this field.

So in short, this review confirms the relevance of environmental education while also paving the way for bolder, more innovative and varied research approaches so that environmental education can continue to grow and develop along with the complexity of environmental challenges faced in the future.

Apart from that, environmental education can also encourage the creation of an environmentally friendly school culture. Schools that implement environmentally friendly practices, such as waste management, energy efficiency, and resource conservation, can set a good example for students and encourage them to adopt sustainable lifestyles (Begum et al. 2021). This can contribute to achieving a more holistic quality of education, where students are not only educated academically, but are also educated to become citizens who are responsible for the environment. Research conducted by (Lubis (2022) also emphasized the importance of instilling environmental values from an early age through environmental education in schools to form students' characters who care about environmental sustainability.

However, to achieve an optimal relationship between environmental education and educational quality, support and commitment from various parties is needed. School curricula must be designed to systematically integrate aspects of environmental education. Teachers must also be equipped with adequate knowledge and skills to teach environmental education effectively.

CLOSING

Conclusion

It can be concluded that improving the quality of education and environment-based learning are two aspects that are interrelated and have an important role in advancing the education system.

1. The Importance of Improving the Quality of Education:
 - Education quality includes aspects of educational input, process and output. Improving the quality of education requires attention to factors such as curriculum, educational policy, educational facilities, technology, educational management, and teacher quality.
 - Limited adaptation of science and technology, as well as social, economic, cultural and societal aspects are factors that influence the low quality of education in Indonesia.
2. The Importance of Environment Based Learning:
 - Environment-based learning helps form a society that cares about the environment.
 - The school environment, community and family are three centers of education that are interrelated and sustainable.
 - Environment-based learning can increase the success of the learning process, student learning motivation, critical thinking skills, and concern for the environment.
3. Relationship Between Environmental Education and Education Quality:
 - Environmental education has an important role in improving the quality of education by increasing the success of the learning process, developing 21st century skills, and encouraging the creation of an environmentally friendly school culture.
 - Support and commitment from various parties is needed, including curriculum designers, teachers and other stakeholders, to achieve an optimal relationship between environmental education and educational quality.

Suggestion

Environmental-based learning can improve the quality of education, so there is a need for sustainability studies with a broader scope, especially the impact of implementing environmental-based learning itself on the overall quality of education. Apart from that, it is also important to understand more deeply the role of teachers in environment-based learning, including the knowledge, attitudes and skills they have as well as the factors that influence their ability to apply this approach. In addition, research can also produce effective strategies and approaches for integrating environmental education into the school curriculum, with a focus on analyzing existing curricula, developing teaching methods, and training for teachers. In addition, it is also important to identify and develop more diverse environment-based learning models to suit different educational contexts.

REFERENCES

- Ardoin, N. M., Bowers, A. W., Roth, N. W., and Holthuis, N. 2018. Environmental education and K-12 student outcomes: A review and analysis of research. *Journal of Environmental Education* Taylor & Francis 49(1): 1–17. DOI: 10.1080/00958964.2017.1366155
- Begum, A., Liu, J., Marwat, I. U. K., Khan, S., Han, H., and Ariza-Montes, A. 2021. Evaluating the impact of environmental education on ecologically friendly behavior of university students in Pakistan: The roles of environmental responsibility and Islamic values. *Sustainability (Switzerland)* 13(18). DOI: 10.3390/su131810188
- BPHN. 1997. Undang-Undang Republik Indonesia Nomor 23 Tahun 1997 Tentang Pengelolaan Lingkungan Hidup, Lembaran Negara Republik Indonesia Tahun 1997 Nomor 68, Tambahan Lembaran Negara RI. 1997 No. 3699. *Undang-Undang No. 23* 1–59.
- Damoah, B. 2023. Tracing The Footprints of Environmental Education in Teacher Education: A Review of Pre-Service Teachers' Training in Universities. *Journal for Educators, Teachers and Trainers* 14(5): 184–196. DOI: 10.47750/jett.2023.14.05.020
- Diki Maulansyah, R., Febrianty, D., and Asbari, M. 2023. Peran Guru dalam Peningkatan Mutu Pendidikan: Penting dan Genting! *Journal of Information Systems and Management (JISMA)* 2(5): 31–35.
- Erhabor, N. I., and Don, J. U. 2016. Impact of environmental education on the knowledge and attitude of students towards the environment. *International Journal of Environmental and Science Education* 11(12): 5367–5375. DOI: 10.25073/0866-773x/68
- Fadhli, M. 2017. Manajemen Peningkatan Mutu Pendidikan. *Tadbir : Jurnal Studi Manajemen Pendidikan* 1(2): 215. DOI: 10.29240/jsmp.v1i2.295
- Hamid, N., Roehrig, G., Setyowati, D. L., Rachmah, H., Royyani, M. A., and Mahat, H. 2021. Development Model for Environment-Based Learning to Improve Junior High School Students' Geographical Skills. *Review of International Geographical Education Online* 11(2): 461–481. DOI: 10.33403/rigeo.833857
- Handiyati, T., Qomariyah, S., and Kurniawan, J. 2023. Peran Pembelajaran Berbasis Lingkungan Dalam Meningkatkan Pemahaman Peserta Didik Di MI Cimahi Peuntas Kabupaten Sukabumi. *Jurnal Pendidikan Berkarakter* 1(4): 86–105.
- Juariah, Yunus, Y., and Djufri. 2014. Pembelajaran Berbasis Lingkungan Untuk Meningkatkan Hasil Belajar Siswa Pada Konsep Keanekaragaman Spermatophyta. *Jurnal Biologi Edukasi Edisi* 13 6(2): 83–88.
- Karwur, H., Lobja, X., and Andaria, K. 2019. Environment-Based Learning Development in Geography Learning. 383(Icss): 607–611. DOI: 10.2991/icss-19.2019.79
- Khovia Khusnul and I. Nur Fira. 2023. Penerapan Media Pembelajaran Berbasis Lingkungan Pada Pembelajaran Ipa Di Madrasah Ibtidaiyah Nur Muhammad Klakah Lumajang. 02(01).
- Komalasari, A., Dewantara, J. A., Sulistyarini, S., Arifiyanti, F., and Ochieng, O. P. 2023. Implementation Adiwiyata Program in Shaping the Environmental Care Character of Senior High School Students. *IJECA (International Journal of Education and Curriculum Application)* 6(1): 33. DOI: 10.31764/ijeca.v6i1.13499
- Kopnina, H. 2012. Education for sustainable development (ESD): The turn away from “environment” in environmental education? *Environmental Education Research* 18(5): 699–717. DOI: 10.1080/13504622.2012.658028
- Lubis, N. S. 2022. Pembentukan Akhlak Siswa di Madrasah: Kontribusi Lingkungan Sekolah, Kompetensi Guru, dan Mutu Pendidikan. *Jurnal Pendidikan Agama Islam Al-Thariqah* 7(1): 137–156. DOI: 10.25299/al-thariqah.2022.vol7(1).8847
- Mahloholo, M. R., Israel, H., and Mahloholo, S. M. G. 2023. Relationally Enhancing Teacher Education in Early Childhood Learning Environments Towards Sustainability. *Journal of Curriculum Studies Research* 5(2): 56–68. DOI: 10.46303/jcsr.2023.18
- Makmur Jaya, Evaniroso, and Marlina. 2021. Implementasi Manajemen Berbasis Sekolah Untuk Meningkatkan Mutu Pendidikan Anak Usia Dini. *Pedagogika: Jurnal Ilmu-Ilmu Kependidikan* 1(2): 41–47. DOI: 10.57251/ped.v1i2.137
- Mistian, W. 2019. Penerapan Manajemen Strategik Dalam Meningkatkan Mutu Pendidikan Madrasah. *Paedagogia: Jurnal Pendidikan* 7(1): 171–186. DOI: 10.24239/pdg.vol7.iss1.38
- Nurhikmah, and Hasanah, E. 2021. Manajemen Pembelajaran Berbasis Lingkungan di Sekolah Dasar 07 Pekat

- NTB. *Jurnal Studi Guru dan Pembelajaran* 4(2): 272–281. DOI: 10.30605/jsgp.4.2.2021.570
- Pradini, I. K., Sudjanto, B., and Nurjannah, N. 2019. Implementasi Program Sekolah Adiwiyata Dalam Peningkatan Mutu Pendidikan Di Sdn Tanah Tinggi 3 Kota Tangerang. *Jurnal Green Growth dan Manajemen Lingkungan* 7(2): 122–132. DOI: 10.21009/jgg.072.03
- Primayana, K. H., Lasmawan, W. I., and Adnyana, P. B. 2019. Pengaruh Model Pembelajaran Kontekstual Berbasis Lingkungan Terhadap Hasil Belajar IPA Ditinjau Dari Minat Outdoor Pada Siswa Kelas IV. *Jurnal Pendidikan Dan Pembelajaran IPA Indonesia* 9(2): 72–79.
- Rohmawatiningsih, W., Rachman, I., and Kodama, Y. 2018. Improving Critical Thinking Skills and Environment Caring Attitude Through Integrated Environment-Based Learning Model. *Journal of Sustainable Development Education and Research* 2(1): 69. DOI: 10.17509/jsder.v2i1.12360
- Safei, A. A., and Himayaturmah, E. 2023. Development of Environmentally Friendly Culture in the Islamic Boarding School through Social Intervention Strategy. *Al-Hayat: Journal of Islamic Education* 7(1): 226. DOI: 10.35723/ajie.v7i1.323
- Setiyoningsih, T. 2017. Pengelolaan Pembelajaran IPA Berbasis Lingkungan di SMPN 1 Gabus-Grobogan. *Manajemen Pendidikan* 12(1): 1–9. DOI: 10.23917/jmp.v12i1.2970
- Solievich, T. N. 2022. Specific aspects of improving the quality of education in higher education institutions. *ACADEMICIA: An International Multidisciplinary Research Journal* 12(9): 31–34. DOI: 10.5958/2249-7137.2022.00759.5
- Suarlin, S., and Ali, M. I. 2020. The Effect of Environmental Education Learning on Students at University. *International Journal of Environment, Engineering and Education* 2(3): 49–56. DOI: 10.55151/ijeedu.v2i3.39
- Tadesse, T., Melese, W., Ferede, B., Getachew, K., and Asmamaw, A. 2021. Constructivist learning environments and forms of learning in Ethiopian public universities: testing factor structures and prediction models. *Learning Environments Research* Springer Netherlands 25(1): 75–95. DOI: 10.1007/s10984-021-09351-4
- Thalib, M. D. 2012. Pendidikan Berperspektif Lingkungan (Analisis Pengaruh Terhadap Peningkatan Mutu Pendidikan). *Jurnal KOMUNIDA Media Komunikasi dan Dakwah* II, No. 1(Januari 2012): 95–106.
- Towansiba, S., Warami, H., and Tanujaya, B. 2022. Model pembelajaran berbasis lingkungan untuk meningkatkan kreatifitas guru di SMP Negeri 22 Satu Atap Mubri Kampung Mandopi Rimon, Distrik Manokwari Utara, Kabupaten Manokwari, Provinsi Papua Barat. *Cassowary* 5(2): 151–164. DOI: 10.30862/cassowary.cs.v5.i2.116
- Wafa, A. 2017. Peningkatan Mutu Pembelajaran Berbasis Aneka Sumber Belajar. *provid by portal jurnal online kopertais wilayah IV (EKIV)* 2(2): 237–253.
- van de Wetering, J., Leijten, P., Spitzer, J., and Thomaes, S. 2022. Does environmental education benefit environmental outcomes in children and adolescents? A meta-analysis. *Journal of Environmental Psychology* Elsevier Ltd 81(March): 101782. DOI: 10.1016/j.jenvp.2022.101782
- Yu, T., and Gu, M. 2022. Analysis on the Policy Environment Influencing Factors of Chinese Environmental Education Development and the Reform Trend in Combination with Environmental Education History. *Journal of Environmental and Public Health* 2022. DOI: 10.1155/2022/3454709
- Zamora, M. B. 2023. Enhancing environmental education through community service learning : a qualitative exploration of curriculum integration. *“Science and Education” Scientific Journal* 4(4): 736–747.