EDUHUMANIORA: Jurnal Pendidikan Dasar

Journal homepage: https://ejournal.upi.edu/index.php/eduhumaniora/

Learning Innovation with Nature-Based Learning Model at Jogja Green School Elementary School

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ABSTRACT

This study aims to determine the method of Learning Together with Nature (BBA) at SD Jogja Green School from planning, implementation, evaluation, as well as supporting and inhibiting factors. The method used is descriptive qualitative with data collected through observation, interviews, and documentation from the school coordinator/principal, teachers, students, and parents. Data analysis was done by data collection, data reduction, data presentation, and conclusion, and data validity was checked through triangulation of sources and techniques. The results showed that the BBA method at SD Jogja Green School involves several processes, such as planning in accordance with indicators, implementation with nature concept constructive play learning activities, evaluation with assessment principles and with observation and portfolio methods. Supporting and inhibiting factors for the implementation of BBA in this school include teachers, parents, peers, and infrastructure.

ARTICLE INFO

Article History:
Submitted/Received 04 June 2024
First Revised 03 Nov 2024
Accepted 27 Dec 2024
First Available online 03 Jan 2025
Publication Date 03 Jan 2025

Keyword:
Learning,
Learning with nature method.

1. INTRODUCTION

History has shown that education is a very important aspect of life. In fact, there is a saying that the progress of a country depends on the education of its citizens. Education is still seen as a very effective tool to improve the intelligence and character of learners. Therefore, education continues to be built and developed to create future generations. Through the education process, smart, skilled, independent and noble human resources are continuously improved. Lack of practical application in the learning process because learning in schools tends to be very theoretical where students focus more on the process of receiving information than on developing their skills and deep understanding (Isma *et al.*, 2023). This shows that classroom learning has not been able to direct children to implement what they learn in their lives, because experience and theory are separate.

Meanwhile, according to the Morley and Jamil (2021), education is considered too theoretical and limited to academics, without relevance to the real world. Therefore, education that provides life skills to its participants is important. With life skills, they can overcome their life problems and can even create their own jobs wherever they live, whether they are working or not working, or still in school.

Nature-based learning emerges as a learning model that is offered to overcome the existing problems (Amiliya & Dryas, 2020). This method requires a flexible learning process, not bound by conventional rules and labels. However, the selection of the school location should consider the emotional comfort of the learners by making the school a comfortable second home. The concept of the Learning Together with Nature (BBA) method aims to prepare learners to face the challenges of the times, as well as develop critical and creative thinking skills towards their environment. In addition, this method also aims to build learners' ability to use their environment to think scientifically. Indonesia's geographical conditions and biodiversity provide exceptional learning resources and media for students.

The concept of education that allows students to interact directly with nature provides a deeper impression and experience. The natural environment is considered as an open and changing environment that allows children to gain freedom of movement, explore the environment while training children's motor skills (Anggraini *et al.*, 2022). Therefore, nature school can be used as an example because it is an educational institution that shapes students to have high character and morals and love for their surrounding environment.

Jogja Green School is an educational institution that focuses on the nature and environment approach, as well as the character development of students. The learning method applied in this school uses nature as the main laboratory designed with a fun concept to involve students and teachers (Wulansari, 2017). It is structured like daily life, so that learners and the environment are truly connected. A key principle in planning buildings, facilities and infrastructure for the curriculum is to use the kindergarten as a base, not just a place for children to play. By adopting this approach, it is hoped that children will not feel pressured to only focus on academic learning intelligence (calistung/read, writing, count), but will form the character of students, one of which is the character of caring for the environment.

The researcher conducted an initial study in October 2023 at Jogja Green School. The first observation at this natural school gave a very interesting impression. The school's beautiful and green environment is combined with the friendly, orderly atmosphere and intelligence of its students. It provides a comfortable and mesmerizing experience for anyone who visits it. The school has implemented an educational approach that uses nature as the main laboratory. Here, learners and teachers can find joy in their learning process, experiencing

DOI: http://dx.doi.org/10. 17509/xxxx.xxxx
p- ISSN 2085-1243 e- ISSN 2579-5457

and learning the direct interaction between humans and nature in daily life. This approach helps to increase learners' awareness and love for nature, while strengthening their understanding of their role in preserving and protecting the environment. Thus, Jogja Green School specifically emphasizes the position of humans in nature and their responsibility in preserving it.

While previous studies have shown the effectiveness of nature-based learning in improving children's motor skills, natural intelligence and social-emotional development (Annisa & Sutapa, 2019; Tobroni et al, 2022; Tyaningsih & Nurachadijat, 2023). There is a gap in the literature linking nature-based learning specifically to improving children's cognitive and language skills. The novelty of this research lies in the development and application of a nature-based learning model that not only focuses on physical skills and natural intelligence, but also aims to improve cognitive and social-emotional aspects, with a more integrated in children's daily lives. It is hoped that this research can be known in depth regarding the implementation of the Learning Together with Nature (BBA) method at Jogja Green School Elementary School

2. METHODS

This research uses qualitative research methods, which means that the research method is based on philosophy, which is used to research on scientific conditions (experiments) where the researcher is an instrument, data collection techniques and qualitative analysis emphasize more on meaning (Sugiyono, 2018). This study uses a phenomenological approach, which means that this research seeks answers to research questions descriptively through interviews or observations that are closest to the phenomenon. The purpose of this research is to know and understand the application of the Learning Together with Nature (BBA) method in elementary schools.

The data sources in this study consisted of school coordinators, teachers, students, and parents of students. Data collection began with participatory observation, which observed how teachers, learners, and parents were involved in the application of the Learning Together with Nature (BBA) method. Furthermore, interviews were conducted to obtain information related to the implementation of the Learning Together with Nature (BBA) method at school.

The collected data will be analyzed using Miles and Huberman's interactive analysis (Sugiyono, 2018), namely data collection, data presentation and conclusion drawing. The data collection process involves selecting and summarizing data related to the implementation of the Learning Together with Nature (BBA) method in elementary schools. The data presentation process is in the form of data analysis results displayed in the form of descriptions. Finally, conclusions were drawn related to the findings in the form of a description of how the application of the Learning Together with Nature (BBA) method in elementary schools.

3. RESULTS AND DISCUSSION

Nature-based learning is a learning method that utilizes nature as a learning resource and learning place. One of the main principles of the nature-based learning model is learning with nature, which means that the place of learning is mostly done in nature (Anggraini *et al.*, 2022). So, we can already imagine what the learning atmosphere is like and what the rooms and infrastructure are like. Unlike conventional schools, in Jogja Green School or

DOI: http://dx.doi.org/10.17509/xxxx.xxxx
p- ISSN 2085-1243 e- ISSN 2579-5457

nature school, students seem to be integrated with the surrounding environment. In this context, the environment that the author refers to includes nature, teachers, and students. According to Septian and Muhtar (2023), the teaching methods and media used must be adapted to the characteristics of children. By adjusting this learning media, learning objectives can be achieved better. One of the strategies that can be used to achieve these goals is nature-based learning, which focuses on the principle of learning through play and activates children as learning agents. In the context of nature-based learning, children are invited to gain a deeper understanding of nature and learn with great enthusiasm. The implementation of learning with the Learning Together with Nature (BBA) method at Jogja Green School Elementary School is carried out by paying attention to several aspects.

3.1. Planning

Planning is the beginning of a thought process in order to achieve the expected goals Lesson planning is the preparation of managing learning that will be implemented in the classroom to achieve goals (Hakim *et al.*, 2023). Planning must exist in every program or activity and must be clearly conceptualized. Educational planning programs can be carried out in an integrated manner both in learning activities, outside of learning, integration in self-development programs, extracurricular activities, school culture development, and not to forget integrated in each subject. In the planning aspect, Jogja Green School uses the official curriculum, namely the Merdeka Curriculum. Nature is used as a learning medium with facilities and infrastructure that are in harmony with nature, including building forms, facilities, and teaching equipment that use natural resources.

This integrated curriculum is applied in learning activities, through several stages starting with setting indicators, conceptualizing learning materials, determining themes that support nature-based learning, preparing semester program activity plans (PROMES), weekly activities (RPM/weekly plan), planning learning resources and media, planning time arrangements, and planning the environment and infrastructure facilities. The learning process can be done anywhere according to the theme, in line with the Learning with Nature (BBA) method which utilizes nature as a laboratory.

School curriculum planning is carried out with all components of SD Jogja Green School, involving parents of students and the surrounding community to work together in learning to support the success of student learning. This is supported by (Kamelia *et al.*, 2020: 42-47) revealed that there are 9 stages in planning nature-based learning, namely determining the stage of development of students, determining indicators, conceptualizing learning materials, determining themes, preparing semester program activity plans (PROMES), weekly activities (RPM), and daily (RPPH) based on nature, preparing learning resources and nature-based learning aids.

3.2. Implementation

In the implementation aspect, the learning process is not only carried out in the classroom, but also outside the classroom so that they are not bored when learning takes place. Group work activities during active learning are carried out to train students in discussing and exchanging opinions with their friends. This is expressed by (Uripah, 2023) saying that each center supports children's development in three types of play, namely sensory motor or functional play, role play, and constructive play (building children's thinking). The natural materials center is the center of learning from other centers because

DOI: http://dx.doi.org/10. 17509/xxxx.xxxx
p- ISSN 2085-1243 e- ISSN 2579-5457

the natural materials center uses the five senses directly, trains motor, cognitive, social, and emotional so that the learning process is more effective. The natural materials center facilitates children to develop and expand their sensory motor play experience by providing many opportunities for children to explore natural materials in developing fine motor maturity needed in the process of writing readiness, handwork skills, and stimulating the child's brain work system.

Nature constructive play activities at Jogja Green School encourage learners to be actively involved during the learning process. This is expressed by (Uripah, 2023) saying that the Natural Material Center is a center that provides opportunities for children to interact directly with various materials to support sensorimotor, self-control, and science. The Nature Materials Center aims to provide experiences for children in exploring various materials. In this center, children play and learn to demonstrate the ability to show, recognize, compare, connect and distinguish.

The implementation of learning that begins with initial activities in the form of apperception and delivering an introduction to learning will foster students' knowledge at the beginning of learning. This activity is done by telling stories or dialogs that can be done inside or outside the classroom. In addition, the activity of picking up trash and then throwing it into its place is one of the apperception activities that can be done when nature-based learning takes place. Preliminary activities are carried out by apperception to increase students' readiness to learn (Saidah *et al.*, 2021). Apperception activities are carried out to determine the level of initial experience that children have, and/or to connect today's material with the previous day's material (Octaviani *et al.*, 2020). The next activity is to deliver an introduction to today's learning to foster children's responses to be interested in the learning that will be carried out. Introductory activities can be in the form of stories, pictures, dialog, singing and so on. Interesting introductory activities are the starting point for success.

Furthermore, the implementation of core activities consists of three stages, namely collecting information, conveying information, and carrying out development activities. During nature-based learning, the surrounding environment is used as a source and media in collecting information. Then during the activity of conveying information there will be interaction between the teacher and students, and then developed through development activities such as students conducting discussion activities or presentations in front of their friends. This is in accordance with (Sanusi *et al.*, 2020) which reveals that core activities are carried out in four ways, namely 1) observation/observation skills, 2) data and information gathering skills (colleting), 3) information processing skills, and 4) information communication skills.

The last stage of learning implementation is the closing activity. This closing activity is often carried out with reflection activities where the teacher asks students related to the learning that has been carried out such as mentioning the benefits and can also ask the teacher how the students feel after going through the activities that day. In closing learning activities, it is necessary to ensure that students get a good understanding, so that discussions can be held to draw conclusions from what has been done during the learning process (Andriyani, 2022). In addition, teachers can carry out activities such as adding information to children and drawing on relevant natural environmental issues.

DOI: http://dx.doi.org/10.17509/xxxx.xxxx
p- ISSN 2085-1243 e- ISSN 2579-5457

3.3. Evaluation

Evaluation of learning with the Learning Together with Nature (BBA) method is important for a program implementation, because evaluation is carried out to conduct an assessment of the learning implementation process to assess what has been achieved and the various causes. The evaluation carried out at Jogja Green School is in the form of summative test assessments, written tests, paper parties, and project activities. These activities are carried out at the end of the semester at Jogja Green School to determine the assessment of students. Not only paper parties, teachers also conduct projects to hone students' abilities in showing their creativity. In addition, teachers also observe the process of learner development as a record in the assessment process. The results of students' work in the form of works will be collected together in the form of a portfolio that will be distributed at the time of receiving report cards. But if the work is completed in groups, it will be kept by the school to be used as an archive. This is supported by Permendikbud Number 66 of 2013 which states that the principles of assessment include comprehensive, continuous, objective, authentic, educational, and meaningful.

In addition, the assessment method is carried out by observation (observation) and portfolio. Observation is a direct observation of the child's behavior or attitude and growth. The form of the observation assessment tool is an observation sheet. While the portfolio is a collection of children's work that is used to determine the development of children's work from time to time. Learning evaluation is carried out to determine the success of a learning that has been implemented (Huljannah, 2021). Therefore, evaluation of the learning model is very important to determine the results of the learning model design that has been made by implementing it into the teaching and learning process activities. From the results of the implementation of the learning model, it can be seen whether the learning model can run as desired.

3.4. Enabling Factors

Enabling factors for the implementation of the Learning Together with Nature (BBA) method at Jogja Green School Elementary School include various aspects that are integral in creating a holistic and effective learning environment. First, the existence of a beautiful and spacious natural environment around the school provides ideal natural facilities to support outdoor learning activities. Secondly, support from the school authorities, including the school coordinator and teachers, is crucial in integrating the BBA method into the school curriculum. They need to have a deep commitment and understanding of the benefits of nature-based learning. In addition, active participation from parents and the surrounding community also plays a crucial role in supporting the program, both through moral and material support. Adequate facilities such as comfortable and safe classrooms, as well as appropriate learning equipment for outdoor activities, are also important factors in supporting the implementation of BBA. Furthermore, training and professional development for teachers to master nature-based learning techniques ensure this method can be implemented effectively.

The combination of these factors creates an educational ecosystem that supports the holistic development of learners through the BBA method at Jogja Green School. This is supported by research conducted by (Khosiah, 2020) revealed that supporting factors come from various parties including the principal, school community, teachers, and the school environment by organizing activities that can provide positive examples in implementing the

DOI: http://dx.doi.org/10. 17509/xxxx.xxxx
p- ISSN 2085-1243 e- ISSN 2579-5457

BBA method. In line with research (Harun & Usman, 2019) revealed that the supporting factors that support the implementation of educational programs in accordance with planning, organizing, and directing that have been carried out include adequate learning facilities available at school as well as the support of parents of students and the Education Office. The similarity of educational patterns applied by parents with educational patterns in schools will be a driver of achieving good educational outcomes for students.

3.5. Inhibiting Factors

The implementation of the Learning Together with Nature (BBA) method at Jogja Green School Elementary School faces several significant inhibiting factors. One of the main factors is the lack of adequate land for outdoor activities. Although the school is located in a relatively green area, the availability of safe and comfortable open spaces for learning is often a challenge. In addition, erratic and often extreme weather, such as heavy rain or scorching heat, can disrupt the schedule and smooth running of outdoor learning activities. Another hindering factor is the limited funds and resources to develop facilities that support the BBA method, such as natural playgrounds, school gardens and proper outdoor classrooms. Lack of teacher training and understanding of nature-based learning methods is also a barrier, as not all teachers have sufficient experience or knowledge to integrate nature activities in the curriculum.

Lastly, resistance from parents who may be concerned about their children's safety and comfort during outdoor activities can also be a challenge in effectively implementing BBA methods. This is supported by research conducted by (Khosiah, 2020) which reveals that inhibiting factors come from the community environment, family environment, and living environment that are less supportive, less guiding, and less giving positive examples, so the BBA method will be difficult to implement.

4. CONCLUSION

Based on the results of the research and discussion, it can be concluded that the Learning Together with Nature (BBA) method at Jogja Green School Elementary School is implemented through several processes, namely planning including BBA methods, learning resources and media, time management, and environment and infrastructure. The implementation of the BBA method also involves activities such as nature concept constructive play, nature constructive play, preliminary activities, core activities, and closing activities. Evaluation of the implementation of the BBA method is carried out thoroughly, continuously, objectively, authentically, educationally, and meaningfully using observation and portfolios to measure the development and achievement of learners. Supporting factors and inhibiting factors include the role of teachers, parents, peers, and infrastructure.

5. ACKNOWLEDGMENT

The authors would like to thank the first and second supervisors. Next, as well as, thank's to the school coordinators in Jogja Green School Elementary School for giving permission to conduct research.

DOI: http://dx.doi.org/10.17509/xxxx.xxxx
p- ISSN 2085-1243 e- ISSN 2579-5457

6. REFERENCES

Andriyani, M. (2022). Keterampilan dasar mengajar yang harus dikuasai oleh guru untuk meningkatkan kreativitas & efektivitas dalam proses pembelajaran. *Jurnal Pendidikan Teknologi Informasi Dan Komputer*, *1*(1), 1—4. https://journal.grahamitra.id/index.php/petik/article/view/13.

Anggraini, D. D., Gupita, N., Kusuma, D. P., & Puspitasari, R. N. (2022). Optimalisasi pemanfaatan lingkungan sekolah pada kegiatan pembelajaran luar kelas dalam pendidikan anak usia dini. *SELING: Jurnal Program Studi PGRA, 8*(2), 199—207. https://jurnal.stitnualhikmah.ac.id/index.php/seling/article/view/1233.

Annisa, A. & Sutapa, P. (2019). The Implementation of nature-based learning models to improve children's motor skills. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*, *3*(1), 170—182. https://obsesi.or.id/index.php/obsesi/article/view/140.

Amiliya, R., & Dryas, A. M. (2020). Pembelajaran berbasis alam untuk kemampuan problem solving anak usia dini. *Mitra Ash-Shibyan: Jurnal Pendidikan Dan Konseling*, *3*(02), 79—87. https://ejournal.stai-tbh.ac.id/mitra-ash-syibyan/article/view/158.

Harun, C. Z., & Usman, N. (2019). Manajemen sarana dan prasarana pendidikan dalam meningkatkan mutu pembelajaran di SD Negeri Lamteubee Aceh Besar. *Jurnal Administrasi Pendidikan: Program Pascasarjana Unsyiah*, *7*(1). https://jurnal.usk.ac.id/JAP/article/view/13184.

Huljannah, M. (2021). Pentingnya proses evaluasi dalam pembelajaran di sekolah dasar. *Educator (Directory of Elementary Education Journal)*, *2*(2), 164—180. https://ejournal.iaingorontalo.ac.id/index.php/edu/article/view/157.

Hakim, L., Safruddin, S., & Husniati, H. (2023). Analisis kesulitan guru dalam menyusun rencana pelaksanaan pembelajaran (rpp) kurikulum 2013 di Sekolah Dasar Yayasan Hadi Sakti. *Jurnal Ilmiah Profesi Pendidikan*, *8*(1), 142—153. https://jipp.unram.ac.id/index.php/jipp/article/view/1100.

Isma, A., Isma, A., Isma, A., & Isma, A. (2023). Peta permasalahan pendidikan abad 21 di Indonesia. *Jurnal Pendidikan Terapan*, 11—28. https://journal.diginus.id/index.php/JUPITER/article/view/153.

Kamelia, D., Nurillah, N., Jannah, S. U., & Pratiwi, Y. W. (2020). Pengembangan kurikulum PAUD berbasis alam. *Islamic EduKids: Jurnal Pendidikan Anak Usia Dini, 2*(1), 40—49. https://journal.uinmataram.ac.id/index.php/IEK/article/view/2274.

Khosiah, N. (2020). Perilaku spiritual keluarga dalam membangun keharmonisan rumah tangga di Desa Tambakrejo-Tongas-Probolinggo. *Al-Ishlah: Jurnal Pendidikan Islam, 18*(2), 189—210. https://ejurnal.iainpare.ac.id/index.php/alislah/article/download/1520/862.

DOI: http://dx.doi.org/10. 17509/xxxx.xxxx
p- ISSN 2085-1243 e- ISSN 2579-5457

Morley, D. A., & Jamil, M. G. (2021). Introduction: Real world learning—recalibrating the higher education response towards application to lifelong learning and diverse career paths. *Applied Pedagogies for Higher Education: Real World Learning and Innovation across the Curriculum*, 1—17. https://link.springer.com/chapter/10.1007/978-3-030-46951-1_1.

Octaviani, F. R., Murniasih, A. T., Dewi, D. K., & Agustina, L. (2020). Apersepsi berbasis lingkungan sekitar sebagai pemusatan fokus pembelajaran biologi selama pembelajaran daring. Buletin Pengembangan Perangkat Pembelajaran, 2(2). https://journals.ums.ac.id/index.php/bppp/article/view/13792.

Peraturan Menteri Pendidikan Dan Kebudayaan Republik Indonesia Nomor 66 Tahun 2013. https://peraturan.go.id/id/permendikbud-no-66-tahun-2013.

Saidah, K., Primasatya, N., Mukmin, B. A., & Damayanti, S. (2021). Sosialisasi peran apersepsi untuk meningkatkan kesiapan belajar anak di Sanggar Genius Yayasan Yatim Mandiri cabang Kediri. Dedikasi Nusantara: Jurnal Pengabdian Masyarakat Pendidikan Dasar, 1(1), 10—16. https://ojs.unpkediri.ac.id/index.php/dedikasi/article/download/16065/2102/.

Sanusi, A., Muqowwim, M., & Munastiwi, E. (2020). Studi kasus lingkungan keluarga di Desa Pejanggik: Pola pembiasaan pemecahan masalah bagi anak usia dini. *Jurnal Golden Age*, *4*(01), 201—215. https://e-journal.hamzanwadi.ac.id/index.php/jga/article/view/2245.

Septian, C. D. P., & Muhtar, T. (2023). In elementary schools, mentoring is an attempt to create a culture of quality in response to the environmental crisis facing civilization. *JSEP (Journal of Science Education and Practice)*, *7*(2), 103—112. https://journal.unpak.ac.id/index.php/jsep/article/download/9253/4562.

Sugiyono. (2018). *Populasi penelitian kuantitatif, kualitatif, dan R&D*. Alfabeta, CV.

Tobroni, M., Rozi, F., Rofi'ah, A., & Fadilah, N. (2022). Nature-based learning management in improving children's natural intelligence. *Al-Tanzim: Jurnal Manajemen Pendidikan Islam*, *6*(4), 1010—1020. https://doi.org/10.33650/al-tanzim.v6i4.3899.

Tyaningsih, S. & Nurachadijat, K. (2023). The role of nature-based learning model in increasing student learning motivation at SD Islam Alam Junudurahman Cijedil Cianjur. *Journal of Humanities and Social Studies*, *1*(1), 228—240. https://humasjournal.my.id/index.php/HJ/article/view/80.

Uripah, U., Rifki, M., & Komarudin, O. (2023). Upaya meningkatkan karakter anak usia dini melalui bermain bahan alam kelompok A RA Darul Ma'arif Pamanukan Subang: Meningkatkan karakter anak dengan media bahan alam. *JUPIDA: Jurnal Pendidikan Anak Usia Dini Miftahul Huda, 1*(1), 43—56. https://ejournal.stai-mifda.ac.id/index.php/jupida/article/view/200.

DOI: http://dx.doi.org/10.17509/xxxx.xxxx
p- ISSN 2085-1243 e- ISSN 2579-5457

Wulansari, B. Y. (2017). *Model pembelajaran berbasis alam sebagai alternatif pengembangan karakter peduli lingkungan*. *5*. https://journal.umpo.ac.id/index.php/dimensi/article/view/575.

DOI: http://dx.doi.org/10. 17509/xxxx.xxxx
p- ISSN 2085-1243 e- ISSN 2579-5457