



UNIVERSITAS MUHAMMADIYAH MALANG
JP2SD (JURNAL PEMIKIRAN
DAN PENGEMBANGAN SEKOLAH DASAR)

<http://ejournal.umm.ac.id/index.php/jp2sd>
p-ISSN: 2338-1140 e-ISSN: 2527-3043



Outdoor Learning in Elementary Schools: Utilizing the Surrounding Environment to Increase Student Learning Engagement

Bagus Cahyanto^{a1}, Qita Riambada Tsurayya Dewi^{b2}, Ella Oktaviani^{c3}, Titis Angga Rini^{d4}, Nindya Nurdianasari^{e5}, Hairus Saleh^{f6}

^aUniversitas Islam Malang, Indonesia

^{b,c,d}Universitas Negeri Malang, Indonesia

^eUniversitas Jember, Indonesia

^fUniversitas Madura, Indonesia

¹baguscahyanto@unisma.ac.id, ²riambadaqita88@gmail.com, ³ellaoktaviani21@gmail.com,

⁴angga.rini.fip@um.ac.id, ⁵nindyanurdiana.fkip@unej.ac.id

ARTICLE INFORMATION

History:

Received 2 May 2024

Revised 13 July 2024

Published 7 October 2024

Keywords:

Outdoor learning, student engagement, state elementary schools



Copyright © 2024 Bagus Cahyanto, Qita Riambada Tsurayya Dewi, Ella Oktaviani; Titis Angga Rini, Nindya Nurdianasari, Hairus Saleh

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



ABSTRACT

This research aimed to reveal various reasons that encourage teachers to use outdoor learning, the implementation of outdoor learning in schools, obstacles, and the positive impact of implementing outdoor learning at SDN 2 Tajinan. Researchers employed a descriptive qualitative approach, where data collection was carried out through interviews, observation, and documentation. The research results showed that the reasons teachers use outdoor learning include increasing learning engagement, providing authentic learning experiences, honing skills, and introducing students to the environment. Apart from that, outdoor learning is carried out to connect theory and practice in everyday life, create contextual learning, and develop social skills, problem-solving, and students' curiosity. Outdoor learning is carried out by inviting students to plant plants in the school environment, visiting the Arhanud Education Center in Batu City, and inviting students to get to know the environment around the school. The obstacles faced by teachers are difficulties in conditioning students due to the large number of students and the weather and natural conditions. Apart from that, implementing outdoor learning requires more thorough preparation and tends to take longer than conventional learning. The positive impacts that arise include being able to increase student enthusiasm and involvement in learning, making learning more lively, and increasing students' social-emotional aspects, responsibility, and concern for the environment

How to cite: Cahyanto, B., Dewi, Q.R.T., Oktaviani, E., Rini, T.A., Nurdianasari, N., Saleh, H. (2024). Outdoor Learning in Elementary Schools: Utilizing the Surrounding Environment



to Increase Student Learning Engagement. *Jurnal Pemikiran dan Pengembangan Sekolah Dasar (JP2SD)*, 12(2). Doi: <https://doi.org/10.22219/jp2sd.v12i2.33364>

INTRODUCTION

Learning is a system that aims to help the student learning process, which contains a series of events that are designed, arranged systematically to influence and support the student learning process (Czajka & McConnell, 2019; Prince & Diggory, 2023). In the learning process there are at least three elements that involve teachers, students, and the learning process through the student environment. Outdoor learning is learning that is carried out by involving the environment as a learning resource for students other than in the classroom. In implementing outdoor learning in schools, teachers act as facilitators, students as subjects who build their knowledge independently, and the learning process integrates the surrounding environment. Achievement of learning objectives is achieved through diverse and enjoyable activities so that they can provide meaningful learning experiences outside the classroom (Putri, 2023; Tibe et al., 2023). Outdoor learning is learning carried out by teachers and students directly outside the classroom, with learning around the school environment such as fields, markets, villages and other natural environments. Teachers as facilitators at school will facilitate students in achieving good learning goals, so teachers are required to be able to provide space for the formation of creativity for students so as not to make students feel bored when learning is carried out (Ashjae et al., 2024; Sajjad, 2022). Teachers need to understand things related to the use of learning media and also effective learning methods for students so that they can create a pleasant learning climate.

Outdoor learning has long been known and integrated into thematic learning in elementary schools, where thematic learning itself is learning that combines several subjects into one big theme. This learning involves several important points that attempt to achieve competency in a lesson content (Beaudet et al., 2024; Cahyanto et al., 2021). Thematics provide students with varied learning experiences to gain new knowledge and learn to do things. From this, one method that can be used by teachers as a method that provides a pleasant learning experience is outdoor learning. Where students and teachers learn outside the classroom, so students can learn by doing or practicing directly (Khan, Bell, et al., 2020). Outdoor learning has summarized all learning concepts that can involve direct experience in natural environments or open spaces. The main goal of outdoor learning is to provide students with the opportunity to be involved in a broader learning process outside the classroom (Demirtas & Akkocaoglu Cayır, 2021). Learning outside the classroom is not only about moving learning activities to the open air, but also trying to understand the philosophy that learning is not limited to textbooks and classrooms but needs to involve various environments to provide a variety of learning activities. In this context, the natural environment becomes a classroom for students that is very likely to provide direct experience, facilitate exploration activities, and stimulate students' curiosity (Sajjad, 2022).

Students not only learn about subject matter, but also connect with nature, improve collaboration skills, and gain a deeper understanding of the environment. Several activities outside the classroom such as natural exploration, investigations in the surrounding environment, and environmental-based projects are a means of applying the concepts or knowledge that students learn in the classroom into real life. This gives students the opportunity to feel, touch, and reflect on their learning through hands-on experience. Outdoor learning also has broad benefits for teachers, a community and

society. Learning outside the classroom can improve social emotional functioning and foster positive student behavior at school (Cahyanto, Maghfirah, et al., 2021; Oberle et al., 2021b). The importance of outdoor learning also lies in forming a sense of responsibility and appreciation for natural diversity. By learning in the open air, students are expected to be able to become humans who care about environmental sustainability and are able to understand their role in preserving the natural environment (Harris & Bilton, 2018; Khan, McGeown, et al., 2020). In the current technological era, outdoor learning is becoming increasingly important as a response to the tendency of students to spend a lot of time operating gadgets. By integrating learning outside the classroom, education not only forms students' academic intelligence, but also forms students who relate well to the environment and society. In this way, it is hoped that it will be able to develop social skills, problem solving, students' emotional well-being, and student involvement in learning (Harris & Bilton, 2018; Khan, Bell, et al., 2020).

Student involvement in learning is influenced by many things that involve psychological factors, such as the level of attention, interest and emotional level of students in learning activities. This shows that there is a complex interaction between students, learning materials, and the environment. In elementary schools, student involvement is a major part that has an impact on learning success. Student engagement is not just the extent to which students participate in the learning process, but also includes the extent to which students experience learning experiences that are relevant to their daily lives. Student involvement can be seen from the level of attention to the subject matter, interest that encourages students to carry out further exploration, and emotional conditions that provide valuable experiences for them. High student involvement in learning will create a productive learning climate (Antari et al., 2021; Waite, 2009). The level of student involvement in learning also reflects the success of the teacher's implementation of learning methods. By understanding students' levels of engagement, teachers can design more effective learning strategies, select relevant materials, and create a classroom atmosphere that supports positive interactions between teachers and students. Thus, student engagement is not only an indicator of individual success, but also a determinant of the success of the learning system as a whole (Koto & Susanta, 2019; Prasetya et al., 2020). Therefore, creating a learning environment that stimulates and supports student engagement is the shared responsibility of all educators (Derman, 2023; Tao et al., 2022; Thornberg et al., 2022).

This research tries to explore student involvement that occurs from the perspective of outdoor learning in elementary schools. SDN 2 Tajinan is a public elementary school located in Malang district. In this school, teachers apply outdoor learning in class 1. Based on preliminary studies at SDN 2 Tajinan, it shows that the rationale for teachers implementing outdoor learning includes so that students have diverse learning experiences through the real environment around the school. Apart from that, it aims to facilitate student growth and development, especially in developing responsibility, curiosity and various competencies to understand the surrounding environment. Because students in class 1 are still in their early development, in the learning process it is necessary to strengthen character and skills so that students are able to recognize the surrounding environment and their physical, cognitive, social and emotional development can grow optimally. This research was conducted by researchers because they were interested in exploring more deeply how outdoor learning is implemented in schools.

METHOD

This research aims to reveal various reasons that encourage teachers to use outdoor learning, the implementation of outdoor learning in schools, obstacles, and the positive impacts of implementing outdoor learning. This research was conducted at SDN 2 Tajinan, which is located in Malang district. The approach to this research uses a descriptive qualitative approach, this is because in accordance with the aim of this research it wants to explore and describe natural conditions which emphasize processes, meaning and understanding in the form of words (Kusumastuti & Mustamil, 2019; Taylor et al., 2016). The stages of this research are divided into three stages, namely the preparation, implementation and reporting stages. In the initial stage, researchers conducted a preliminary study at the school location where this research was conducted. After the researcher finds the research focus, then continues data collection. Data was collected using various techniques such as interviews, observation and documentation. In general, research instruments can be seen based on Table 1.

Tabel 1. Outdoor Learning Instrument Grid: Adapted Janattaka & Sari, 2022

Indicator	Aspects explored
Learning is carried out outside the classroom	<ul style="list-style-type: none"> • Motivates teachers to carry out outdoor learning • Supporting factors for implementing outdoor learning • Challenges experienced by teachers in outdoor learning
There is a surrounding environment that can be used as a learning resource	<ul style="list-style-type: none"> • Which environment is chosen for implementing outdoor learning • The teacher's reasons for choosing the learning location • Environmental diversity in implementing outdoor learning
Students learn more about nature or the environment	<ul style="list-style-type: none"> • Introduction of students to the surrounding environment • The experience felt by students in getting to know the surrounding environment • Students' meaning of outdoor learning
Improved learning outcomes and student skills	<ul style="list-style-type: none"> • The impact of outdoor learning on student learning outcomes • The impact of outdoor learning on student skills • Effectiveness of outdoor learning in elementary schools

The next step is that the data is presented according to the code and an in-depth analysis is carried out based on the findings. Researchers also added data to complement and confirm information originating from various informants. To ensure that the findings of this research are valid, researchers used analytical techniques which include stages of data reduction, presentation, verification and drawing conclusions (Miles et al., 2014). To reduce research data, the researcher simplified and classified the data obtained while the researcher was in the field. Researchers remove unnecessary data so that they can produce information that is meaningful and relevant to the final goal. This is done during research at school until all the data is collected.

Apart from that, data presentation is also carried out in order to organize the data so that a pattern of relationships is arranged so that it is easier for researchers to understand it. At the end, conclusions are drawn and data verification is carried out to ensure that the data reduction results remain in accordance with the analysis objectives to be achieved. Researchers look for meaning from research data in the field by looking for relationships, similarities or differences to draw conclusions by checking valid evidence, so that the conclusions produced are credible (Miles et al., 2014). The data analysis flow can be seen in Figure 1.

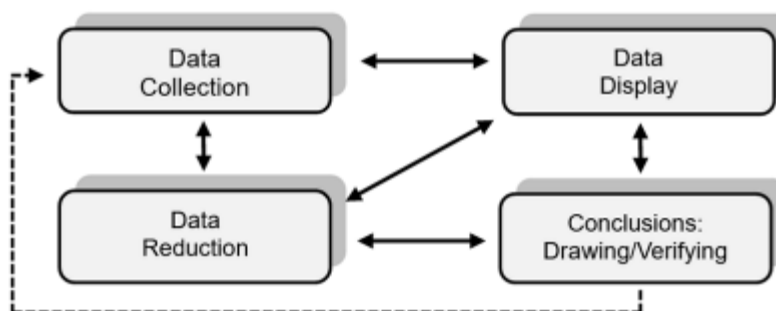


Figure 1. Qualitative Data Analysis (Miles & Huberman, 2014)

RESULTS AND DISCUSSION

The In this section, the results and discussion are presented in several themes according to the researchers' findings while in the field. Based on the focus of this research, the results and discussion include the reasons that encourage teachers to use outdoor learning, the implementation of outdoor learning in schools, obstacles to implementing outdoor learning, as well as the positive impact of outdoor learning on students. These findings are as follows.

Reasons that Encourage Teachers to Use Outdoor Learning

Outdoor learning can be done in all types of lessons and at all levels of education. Based on the results of in-depth interviews with SDN 2 Tajinan teachers, it shows several reasons that encourage teachers to implement outdoor learning, including so that the experience students get in the classroom is balanced with learning outside the classroom. This can be seen from the teacher's statement as follows.

"When studying at school, students need to be facilitated in a variety of ways and activities, including activities outside the classroom. "This is so that they have a balanced learning experience between in the classroom and in the real environment at school, so that theory and practice complement each other"

The learning carried out at SDN 2 Tajinan always strives to facilitate student growth and development through various activities at school. This is in accordance with the views of Khan & McGeown, et al., (2020) who explain that essentially elementary school age children always want to be connected to the natural surroundings, explore their environment, engage in activities that challenge themselves, be physically active, and socialize with friends. Apart from that, the knowledge that students gain while in class is sometimes not always in accordance with everyday life, so through real experience outside of class it is hoped that they will be able to provide a deeper understanding of the knowledge learned in class. On the other hand, students also need to be introduced to the surrounding environment so that they have good sensitivity.

The class 1 teacher at SDN 2 Tajinan also explained that the knowledge or knowledge students gain in class needs to be proven in real life in everyday life. Applying concepts in real situations outside the classroom is one of the keys to honing students' skills. This is also useful for increasing students' understanding of the knowledge they are studying, especially since outdoor learning in class 1 is also part of efforts to introduce students to the surrounding environment. This contextual learning is expected to have a positive impact on the development of students' attitudes and behavior towards the environment (Ariesandy, 2021; Prasetya et al., 2020). Therefore,

outdoor learning is an important aspect, especially when applied to basic education, as stated by the teacher as follows.

“Primary school students are students who have a high level of sensitivity to the environment. Through direct experience with the surrounding environment, students can develop their understanding more deeply, so that proving or applying science in a real environment can not only increase students' theoretical understanding but also learn how this theory is useful in their daily lives.”

This shows that teachers as learning facilitators have an important role in efforts to link theory and practice in students' daily lives. Teachers must be able to explain that the knowledge students learn in class also has relevance and relevance in their daily lives. In this way, students can see the real benefits of learning at school, with the hope that student learning engagement will be higher and they will be able to develop a deeper understanding of the knowledge they are building. The implementation of outdoor learning at SDN 2 Tajinan not only provides additional experience for students, but is also able to present real conditions in everyday life. Through outdoor learning, students are trained to develop their social skills, problem solving and curiosity from an early age (Maulana & Saputra, 2019; Pambudi, 2022).

By designing a variety of activities and experiences, teachers can create a learning climate that keeps students actively involved while supporting holistic student growth and development. The teacher also emphasized that grade 1 students are the age where students are in the early stages of learning, so the basic point that must be introduced to children is how they recognize their environment from an early age. Another reason that encourages teachers to apply this model is to strengthen students' mentality, because when they face challenges in learning outside the classroom they also practice being brave and confident. When they learn outside the classroom, conditions are always dynamic and not always the same as learning in the classroom. It is hoped that the new things they encounter in the surrounding environment can improve their mental and motor skills (Rifai et al., 2023; Zulvikar et al., 2023).

Implementation of Outdoor Learning at SDN 2 Tajinan

Implementation of outdoor learning in schools is carried out by involving the environment around the school to introduce students to the nature they live in every day. Outdoor learning is carried out with the aim of facilitating students' physical, emotional, attitude and motor skills development. Outdoor learning at SDN 2 Tajinan has been carried out with various activities such as activities that take place in the school environment, cultural places and educational sites such as the following.



Figure 2. Planting activities in the school environment

Figure 2 shows one of the outdoor learning activities in the school environment. In this activity the teacher uses the environment around the school as a learning resource close to the students. The teacher as a facilitator plays a role in directing students to engage in real learning experiences. In this activity, students not only sit in the classroom, listening to the teacher's explanation, but they are actively involved in the process of planting plants. This process includes various stages, starting from students tilling the soil, selecting plant seeds, to the actual planting in the school environment. Through direct interaction with the environment, students not only understand the theoretical life cycle of plants, but also experience for themselves how plants grow and develop.

By involving students in real activities such as planting plants, students not only gain a conceptual understanding of growing plants, they also build practical skills that can be applied in everyday life (Slee & Allan, 2019; Yokus, 2020). During this outdoor learning process, students also interact with their peers, share knowledge, and work together to achieve common goals. Student involvement in learning continues to increase, they also develop a sense of responsibility and environmental concern because students are directly involved in the process of preserving nature. The intense enthusiasm of students shows that the outdoor learning implemented by SDN 2 Tajinan teachers is able to increase student involvement consistently. This is also confirmed by the teacher with the following statement.

“Students not only learn from books, but they experience learning with the natural surroundings through exploration and direct interaction. “It is also easier for us as teachers to observe student progress in detail.”



Figure 3. Outdoor learning at the arhanud education center

Figure 3 is documentation of students at the Arhanud TNI AD Education Center in Batu City, Malang. This activity aims to enable students to understand one of the professions and educational and historical sites. Apart from that, the teacher also introduced TNI warfare equipment, seeing directly the equipment used or the vehicles used by the TNI. Students do not only look at books or pictures, but by hearing direct explanations from Arhanud, it is hoped that they can increase students' understanding of the concepts they have gained from books through direct experience (Oberle et al., 2021a). Students looked enthusiastic about seeing the equipment used by soldiers, seeing military vehicles, and interacting with Arhanud TNI AD personnel.

This activity outside the classroom is an opportunity to connect the knowledge students gain from books with real phenomena in the surrounding environment. This is in accordance with the view of (Cahyanto, 2023; Dijk et al., 2020) who explains that good learning is learning that is able to foster positive character and present real experiences to students, so that students can build their understanding independently.

Outdoor learning is not only a fun activity for students, but also causes students' enthusiasm for learning to increase (Dijk et al., 2020; Tibe et al., 2023). This is also confirmed by the following teacher's statement.

“Through this outdoor learning activity, students not only increase their understanding of the TNI AD environment, but also develop valuable experience about the world of professions and education. It is hoped that students can be motivated and have an idea of their dreams. Many after this visit aspire to become TNI, want to be able to drive war cars, and have other positive imaginations.”

The learning atmosphere becomes more interesting when students are involved in exploration activities outside the classroom, especially by exploring the natural surroundings of the school. Figure 4 below is a documentation of precious moments where students experienced firsthand the beauty and diversity of the nature around them. In an effort to provide real learning experiences, teachers invite students to utilize the potential of the environment around the school as a source of knowledge that is close to students. This is in line with the views of Derman (2023 & MacQuarrie (2018) who explain that one of the advantages of outdoor learning is that it is able to raise students' awareness of the environment around them. Through this activity the teacher hopes that students can optimize their competencies through environmental exploration activities to recognize the state of the surrounding environment. Through this exploration, students can also learn about plants, animals and various other natural elements that they may not be able to study in depth during classroom learning as shown in Figure 4 below.



Figure 4. Outdoor learning in the environment around the school

More than that, activities outside the classroom are also able to foster students' spirit of innovation and creativity. By observing and interacting directly with the surrounding environment, students can take away positive values from the experiences they have (Pitiporntapin et al., 2023; Rifai et al., 2023). SDN 2 Tajinan teachers continue to be committed to providing meaningful learning experiences by honing students' courage to explore and curiosity, to equip students with the skills needed in the future.

Barriers to Implementing Outdoor Learning in Schools

The results of in-depth interviews with grade 1 teachers show that the implementation of outdoor learning at SDN 2 Tajinan cannot be separated from several obstacles faced by teachers. Among the existing obstacles is the difficulty in conditioning students when learning outside the classroom, this is due to the large number of students. Apart from that, maintaining the continuity of learning and ensuring

that all students are involved in it is also a challenge for teachers. Moreover, the large number of students means that teachers need extra supervision when students are outside the classroom. Teachers also need to ensure that all students receive sufficient attention and are actively involved in every stage of learning (Williams & Scott, 2019).

Apart from that, weather factors and natural conditions also often become obstacles in implementing outdoor learning. The availability of learning support facilities and equipment also greatly influences the success of outdoor learning, so teachers are expected to be more flexible and try to ensure student safety when studying outside the classroom. When implementing outdoor learning in lower elementary school grades, one of the challenges that teachers often face is related to students' understanding of following teacher directions. Students in lower grades are still in the early stages of cognitive development, so understanding complex instructions requires extra effort. Lower class students tend to have a relatively low level of focus, so teachers need to use more interactive and interesting communication methods so that students can understand directions well (Guerra et al., 2021; Meighan & Rubenstein, 2019).

Apart from that, low class students have a high interest in the environment outside the classroom, students tend to follow their own wishes. Teachers need to understand students' characteristics well, so they can design learning strategies that suit the development level of low grade students to minimize obstacles and ensure that each student has an enjoyable experience when studying outside the classroom. Apart from that, implementing outdoor learning requires more thorough preparation and tends to take longer than conventional learning in the classroom. This time management challenge requires teachers to plan lessons carefully and flexibly. In this way, teachers can optimize the available time to ensure that each activity can run and achieve the desired learning outcomes (Slee & Allan, 2019; Zapata-Cuervo et al., 2021).

Positive Impact of Using Outdoor Learning for Students

The implementation of outdoor learning at SDN 2 Tajinan has been proven to have a positive impact, especially in increasing student learning engagement. When compared with conventional learning methods, the use of the outdoor learning model shows an increase in the level of student enthusiasm for learning. Based on the results of observations, students seemed more enthusiastic and enthusiastic in participating in learning activities. Activities carried out outside the classroom, such as planting plants, exploring the natural environment, or project-based activities, provide a special attraction for students. Through direct experiences that involve their five senses, they can provide enjoyable experiences as stated by the following students.

"It's great to learn outside the classroom, we can learn while playing with friends. "Learning outside the classroom also makes us more enthusiastic because learning becomes more fun."

Apart from that, outdoor learning is also able to change students' perceptions of learning into a meaningful experience. Outdoor learning is able to foster curiosity and strong motivation, which in turn increases students' enthusiasm for learning (Derman, 2023; MacQuarrie, 2018). Students are directly involved in building their knowledge through activities outside the classroom. Interaction with the surrounding environment makes learning more alive for students. Apart from increasing learning engagement, implementing outdoor learning also strengthens the emotional relationship between students and teachers. Direct interaction in activities outside the classroom creates more

intimate moments between teachers and students. Teachers are not only teachers in front of the class, but also facilitators and friends who support students at every stage of learning. This helps create a learning climate that is more favorable to students.

The positive impact of outdoor learning can also be felt in students' social and emotional aspects. Students can learn to work together in teams, develop social skills, and understand the importance of maintaining environmental sustainability. This learning not only creates students who are academically intelligent but also individuals who have environmental awareness and the ability to adapt in various situations (Prince & Diggory, 2023). In this way, outdoor learning is not just an alternative learning method, but is also an approach to improving the quality of learning and the emotional relationship between students and teachers. The visible positive impact, students' interest in learning outside the classroom, and the emotional relationships that exist strengthen that outdoor learning is one of the right steps in providing meaningful and memorable learning for students at school.

The implementation of outdoor learning also encourages students to express their opinions and convey what they have learned in their own language. The positive impact of implementing the outdoor learning model also has a deep impact on student development in various dimensions, one of which is the growing sense of responsibility and concern for the environment. By being directly involved in the learning process based on the surrounding environment, students indirectly become more sensitive to environmental sustainability (Guerra et al., 2021). A close relationship with nature will also have an impact on the formation of other positive attitudes.

Activities outside the classroom create a fun learning experience, motivating students to actively participate and be involved in every learning activity. The opportunity to explore knowledge through direct experience can increase student involvement in learning, create a dynamic atmosphere and foster curiosity (Rini & Cahyanto, 2020; Zuhaida & Kinesti, 2023). It is hoped that this experience will also be able to develop students' critical thinking patterns towards various aspects of the environment and knowledge. Thus, the outdoor learning model not only changes the way students learn, but also shapes their character as a whole through integrating learning based on the surrounding environment.

CONCLUSION

Based on the research results, it shows that the reasons teachers use outdoor learning include increasing learning engagement, providing real learning experiences, honing skills, and as a form of introduction to the environment. Apart from that, outdoor learning is carried out to connect theory and practice in everyday life, create contextual learning, develop social skills, problem solving and students' curiosity. The implementation of outdoor learning in class 1 of SDN 2 Tajinan was carried out by inviting students to plant plants in the school environment, visiting the Arhanud Education Center in Batu City, and inviting students to get to know the environment around the school. The obstacles faced by teachers are difficulties in conditioning students due to the large number of students, weather and natural conditions. Apart from that, implementing outdoor learning requires more thorough preparation and tends to take longer than conventional learning. Furthermore, the positive impacts that arise from outdoor learning include being able to increase student involvement in learning, making learning more lively, and increasing students' social, emotional sensitivity, responsibility and concern for the environment. Thus, the implementation of outdoor

learning at SDN 2 Tajinan can broaden students' understanding and develop complex skills. School is not only a place to gather knowledge but also a real laboratory for building students' character, skills and sense of responsibility towards the surrounding environment.

REFERENCES

- Antari, C. J., Triyogo, A., & Egok, A. S. (2021). Penerapan Model Outdoor Learning pada Pembelajaran Tematik Siswa di Sekolah Dasar. *Jurnal Basicedu*, 5(4), 2209–2219. <https://doi.org/10.31004/basicedu.v5i4.1165>
- Ariesandy, K. T. (2021). Pengaruh Pembelajaran Luar Kelas (Outdoor Learning) Berbentuk Jelajah Lingkungan Dan Motivasi Terhadap Hasil Belajar Biologi Siswa. *Wahana Matematika Dan Sains: Jurnal Matematika, Sains, Dan Pembelajarannya*, 15(1), 110–120.
- Ashjae, S., Fattahi, K., & Derakhshanian, F. (2024). Investigating the links between outdoor class and learning in primary school students (case study of a male-school in Shiraz). *Journal of Adventure Education and Outdoor Learning*, 24(2), 232–248. <https://doi.org/10.1080/14729679.2022.2135117>
- Ayotte-Beaudet, J.-P., Hasni, A., Vinuesa, V., Rodrigue-Poulin, É., Quintela Do Carmo, G., Beaudry, M.-C., L'Heureux, K., & Paquette, A. (2024). Impact of outdoor place-based learning on elementary school students' ability to make unsolicited observations about living organisms over time. *Journal of Biological Education*, 1–19. <https://doi.org/10.1080/00219266.2024.2332741>
- Cahyanto, B. (2023). School Culture-Based Character Education: Implementation of Strengthening Religious Character in Islamic Primary Schools. *MODELING: Jurnal Program Studi PGMI*, 10, 832–843.
- Cahyanto, B., Lutfia, M. S., Muawana, N., & Ilmi, I. N. (2021). Teacher Strategies in Online Learning During the Covid-19 Pandemic: A Practice in Elementary School. 262–269.
- Cahyanto, B., Maghfirah, M., & Hamidah, N. (2021). Implementasi Pembelajaran Daring di Masa Pandemi Covid-19. *At-Thullab: Jurnal Pendidikan Guru Madrasah Ibtidaiyah*, 5(1).
- Czajka, C. D., & McConnell, D. (2019). The adoption of student-centered teaching materials as a professional development experience for college faculty. *International Journal of Science Education*, 41(5), 693–711. <https://doi.org/10.1080/09500693.2019.1578908>
- Demirtas, S., & Akkocaoglu Cayir, N. (2021). An Investigation of Elementary School Teachers' Experiences about Outdoor Education Activities Project. *TED EĞİTİM VE BİLİM*. <https://doi.org/10.15390/EB.2021.9565>
- Derman, M. (2023). Outdoor Learning in Environmental Education: Evaluation of Science Curriculums. *International Conference on Engineering, Natural and Social Sciences*, 1(1), 166–171.
- Dijk, J. E., Wesselijs, Berg, A. E. van den, Maas, J., & Hovinga, D. (2020). Green Schoolyards as Outdoor Learning Environments: Barriers and Solutions as Experienced by Primary School Teachers. *Frontiers in Psychology*, 10(January), 1–16. <https://doi.org/10.3389/fpsyg.2019.02919>
- Guerra, M., Villa, F., Latinoamericana, V. G.-Rela. R., & 2021, undefined. (2021). Creativity and outdoor education in primary schools: a review of the literature.

- Revistas.Usc.Es, 10(1), 2255–0666.
<https://revistas.usc.es/index.php/reladei/article/view/7671>
- Harris, R., & Bilton, H. (2018). Learning about the past: exploring the opportunities and challenges of using an outdoor learning approach. *Cambridge Journal of Education*, 49(1), 69–91. <https://doi.org/10.1080/0305764X.2018.1442416>
- Khan, M., Bell, S., McGeown, S., & Silveirinha de Oliveira, E. (2020). Designing an outdoor learning environment for and with a primary school community: a case study in Bangladesh. *Landscape Research*, 45(1), 95–110. <https://doi.org/10.1080/01426397.2019.1569217>
- Khan, M., McGeown, S., & Bell, S. (2020). Can an Outdoor Learning Environment Improve Children’s Academic Attainment? A Quasi-Experimental Mixed Methods Study in Bangladesh. *Environment and Behavior*, 52(10), 1079–1104. <https://doi.org/10.1177/0013916519860868>
- Koto, I., & Susanta, A. (2019). Introducing Outdoor Learning in Science and Mathematics to Elementary School Teachers via Professional Development. *Proceedings of the International Conference on Educational Sciences and Teacher Profession (ICETeP 2018)*. <https://doi.org/10.2991/icetep-18.2019.69>
- Kusumastuti, A., & Mustamil, A. K. (2019). *Metode Penelitian Kualitatif* (F. Annisya & Sukarno (eds.)). Lembaga Pendidikan Sukarno Pressindo.
- MacQuarrie, S. (2018). Everyday teaching and outdoor learning: developing an integrated approach to support school-based provision. *Education 3-13 International Journal of Primary, Elementary and Early Years Education*, 46(3), 345–361. <https://doi.org/10.1080/03004279.2016.1263968>
- Maulana, G. G., & Saputra, J. (2019). Penggunaan Metode Pembelajaran Outdoor Learning untuk Meningkatkan Hasil Belajar Siswa pada Subkonsep Vertebrata. *BIOSFER: Jurnal Biologi Dan Pendidikan Biologi*, 3(1), 30–33. <https://doi.org/10.23969/biosfer.v3i2.1263>
- Meighan, H. L., & Rubenstein, E. D. (2019). Outdoor Learning into Schools: A Synthesis of Literature. *Career and Technical Education Research*, 43(2), 161–177. <https://doi.org/10.5328/cter43.2.161>
- Miles, M. B., Huberman, A. M., & Saldana, J. (2014). *Qualitative Data Analysis: A Methods Sourcebook* (Third Edit). SAGE Publications, Inc.
- Oberle, E., Zeni, M., Munday, F., & Brussoni, M. (2021a). Support Factors and Barriers for Outdoor Learning in Elementary Schools: A Systemic Perspective. *American Journal of Health Education*, 52(5), 251–265. <https://doi.org/10.1080/19325037.2021.1955232>
- Oberle, E., Zeni, M., Munday, F., & Brussoni, M. (2021b). Support Factors and Barriers for Outdoor Learning in Elementary Schools: A Systemic Perspective. *American Journal of Health Education*, 52(5), 251–265. <https://doi.org/10.1080/19325037.2021.1955232>
- Pambudi, D. S. (2022). The Effect of Outdoor Learning Method on Elementary Students’ Motivation and Achievement in Geometry. *International Journal of Instruction*, 15(1), 747–764. <https://doi.org/10.29333/iji.2022.15143a>
- Pitiporntapin, S., Butkatanyoo, O., Piyapimonsit, C., Thanarachataphoom, T., Chotitham, S., & Lalitpasan, U. (2023). The development of a professional development model focusing on outdoor learning resources to enhance in-service teachers’ STEM literacy. *Kasetsart Journal of Social Sciences*, 44(2), 489–496. <https://doi.org/10.34044/j.kjss.2023.44.2.19>

- Prasetya, S. P., Segara, N. B., & Imron, A. (2020). Effectiveness Of Outdoor Learning Optimization Program In Learning Social Studies. *JPI (Jurnal Pendidikan Indonesia)*, 9(2), 314. <https://doi.org/10.23887/jpi-undiksha.v9i2.19160>
- Prince, H. E., & Diggory, O. (2023). Recognition and reporting of outdoor learning in primary schools in England. *Journal of Adventure Education and Outdoor Learning*, 1–13. <https://doi.org/10.1080/14729679.2023.2166544>
- Putri, C. S. (2023). Peran Pembelajaran Berbasis Outdoor dalam Meningkatkan Keterampilan Berpikir Kritis Siswa: Studi Quasi-Eksperimental di Sekolah Menengah Atas di Bandung. *Sanskara Pendidikan Dan Pengajaran*, 1(2), 68–77. <https://doi.org/10.58812/spp.v1i02.113>
- Rifai, A. Y., Wahid, F. S., Yasin, & Fitri, R. M. (2023). Pengaruh Pendekatan Outdoor Learning terhadap Hasil Belajar Peserta Didik Kelas IV Sekolah Dasar Negeri Losari Kidul 03, Kecamatan Losari, Kabupaten Brebes. *Era Literasi: Jurnal Penelitian Pendidikan Dan Ilmu Sosial*, 1(3), 15–30. <https://jurnal.eraliterasi.com/index.php/eraliterasi/article/view/87%0Ahttps://jurnal.eraliterasi.com/index.php/eraliterasi/article/download/87/73>
- Rini, T. A., & Cahyanto, B. (2020). Supporting Elementary Students Creative Writing Skill With Assessment as Learning. 487(Ecpe), 51–57. <https://doi.org/10.2991/assehr.k.201112.010>
- Sajjad, A. M. (2022). Implementasi Strategi Pembelajaran Outdoor Learning dalam Mata Pelajaran IPS di MI Sabilul Muttaqin Bungkal. *Islamic Elementary School: Journal of Education*, 2(2), 1–25.
- Slee, V., & Allan, J. F. (2019). Purposeful Outdoor Learning Empowers Children to Deal with School Transitions. *Sports*, 7(6), 1–14. <https://doi.org/10.3390/sports7060134>
- Tao, Y., Meng, Y., Gao, Z., & Yang, X. (2022). Perceived teacher support, student engagement, and academic achievement: a meta-analysis. *Educational Psychology*, 42(4), 401–420. <https://doi.org/10.1080/01443410.2022.2033168>
- Taylor, S. J., Bogdan, R., & DeVault, M. L. (2016). Introduction to Qualitative Research Methods: A Guidebook and Resource. In *News.Ge (Fourth Edi)*. John Wiley & Sons, Inc.
- Thornberg, R., Forsberg, C., Hammar Chiriatic, E., & Bjereld, Y. (2022). Teacher–Student Relationship Quality and Student Engagement: A Sequential Explanatory Mixed-Methods Study. *Research Papers in Education*, 37(6), 840–859. <https://doi.org/10.1080/02671522.2020.1864772>
- Tibe, A. M., Yanti, R., & Jamaluddin, N. E. (2023). Analisis Efektivitas Penggunaan Metode Outdoor Learning dalam Meningkatkan Hasil Belajar Siswa (Studi Kasus: MTs As’Adiyah No . 45 Lonra Kabupaten Wajo). *INNOVATIVE: Journal Of Social Research*, 3(1), 769–781.
- Waite, S. (2009). Outdoor learning for children aged 2-11: perceived barriers, potential solutions. *International Outdoor Education Research Conference*, La Trobe University, Beechworth, Victoria, Australia, 4(1), 1–12. <https://www.researchgate.net/publication/242494391>
- Williams, R. T., & Scott, C. D. (2019). The Current State of Outdoor Learning in a U.K Secondary Setting: Exploring the Benefits, Drawbacks and Recommendations. *ABC Journal of Advanced Research*, 8(2), 109–122. <https://doi.org/10.18034/abcjar.v8i2.537>

- Yokus, G. (2020). Integrating Outdoor School Learning Into Formal Curriculum: Designing Outdoor Learning Experiences and Developing Outdoor Learning Framework for Pre-Services Teachers. *Encyclopedia of Teacher Education*, 5(13), 1380–1380.
- Zapata-Cuervo, N., Montes-Guerra, M. I., Shin, H. H., Jeong, M., & Cho, M. H. (2021). Students' Psychological Perceptions Toward Online Learning Engagement and Outcomes during the COVID-19 Pandemic: A Comparative Analysis of Students in Three Different Countries. *Journal of Hospitality and Tourism Education*, 00(00), 1–15. <https://doi.org/10.1080/10963758.2021.1907195>
- Zuhaida, K., & Kinesti, R. D. A. (2023). Teacher Creativity in Implementing Indonesian Language Learning Using Cursive Letter Writing. *MUDARRISA: Jurnal Kajian Pendidikan Islam*, 15(2), 196–214. <https://doi.org/10.18326/mudarrisa.v15i2.278>
- Zulvikar, M., Azis, S. A., & Pasiri, Y. (2023). Pengaruh Metode Outdoor Learning Terhadap Keterampilan Menulis Karangan Deskripsi Kelas IV SDN 135 Palae. *Education, Language, and Culture (EDULEC)*, 3(3), 267–277.