

Increasing Student Learning Outcomes In Environmental Pollution Learning Material By Utilizing Waste as a Hidden Curriculum

Sri Nopia^{1*}, Anda Juanda², Ria Yulia Gloria³

^{1,2,3} IAIN Syekh Nurjati Cirebon, Indonesia

ARTICLE INFO

Article History

Received : 07-09-2022

Accepted : 13-12-2022

Published : 31-12-2022

Keywords:

Hidden Curriculum; Learning Outcomes; Waste Utilization.

*Correspondence email:

srinopia21@gmail.com

ABSTRACT

This study aims to explain student learning activities and compare the learning outcomes of experimental and control classes on environmental pollution materials. The study was carried out at SMA N 1 Plumbon classes X MIPA 1 and X MIPA 2. This study's research design is an experimental design of this design in the form of a Pretest-Posttest Control Group Design. The data for this study was gathered through observations and tests. Because of the high category, the findings showed increased student learning activities, with an average score of 70.72%. There were substantial variations in student learning results in the experimental class, which used waste as a hidden curriculum and obtained an average score of N-Gain of 0.51 medium criteria, compared to the control class, which obtained an average score of N-Gain of 0.28 low criteria. The obtained significance value was 0.030, which is lower than 0.05, it is conclude that using waste as a hidden curriculum can increase student learning outcomes and activities.

Peningkatan Hasil Belajar Siswa Pada Materi Pencemaran Lingkungan Dengan Pemanfaatan Sampah Sebagai *Hidden Curriculum*

ABSTRAK: Penelitian ini bertujuan untuk mendeskripsikan aktivitas belajar siswa dan menganalisis perbedaan hasil belajar siswa kelas eksperimen dengan kelas kontrol pada materi pencemaran lingkungan. Penelitian dilakukan di SMA N 1 Plumbon kelas X MIPA 1 dan X MIPA 2. Desain penelitian yang digunakan dalam penelitian ini adalah experimental design desain ini dalam bentuk Pretest-Posttest Control Group Design. Penelitian ini menggunakan observasi dan tes sebagai metode pengumpulan data. Hasil penelitian menunjukkan peningkatan aktivitas pembelajaran siswa, dengan nilai rata-rata 70,72% berkategori tinggi. Terdapat perbedaan hasil belajar siswa yang signifikan pada siswa kelas eksperimen yang menerapkan pembelajaran dengan pemanfaatan sampah sebagai hidden curriculum diperoleh nilai rata-rata N-Gain 0,51 kriteria sedang, dengan kelas kontrol nilai rata-rata N-Gain 0,28 kriteria rendah. Nilai signifikansi yang diperoleh $0,030 < 0,05$, disimpulkan bahwa penerapan pemanfaatan sampah sebagai hidden curriculum dapat meningkatkan hasil belajar siswa dan aktivitas belajar siswa.

INTRODUCTION

Education is one of the most significant aspects of one's life. Because education may boost intelligence, skills, and self-potential while also forming a responsible, intelligent, and creative individual (Maghfiroh, 2017);(Bidayati et al., 2021);(Pratama et al., 2020). One of the purposeful efforts a person makes in gaining intelligence and abilities and developing self-potential is attending school, where a person receives an education. A person will get a variety of learning experiences through education (Sari et al., 2021);(Aisyah et al., 2019);(Handoko et al., 2021).

Learning outcomes are students' abilities as a result of their learning experience. To determine this, an evaluation or assessment is performed, a follow-up process or a method of measuring the amount of student mastery while participating in the learning process. The outputs of this evaluation or assessment are referred to as learning outcomes (Sudjana, 2012);(Wahyuni, 2021). Assessment is crucial in learning since it helps improve instruction quality. Any assessment is critical since it determines whether or not a lesson was learned (Gloria, 2012);(Pérez-González et al., 2020);(Jiang et al., 2019).

Benson Snyder established the hidden curriculum in 1971, and it is utilized by educators, sociologists, and psychologists in informal systems, such as learning (Aslan, 2019);(Kristanto et al., 2019);(Suwarma & Kumano, 2019). The term hidden curriculum comprises two words: hidden and curriculum. Hidden is derived from the English word hide, which means hidden. And the term curriculum refers to a set of subjects or a series of learning experiences students must complete completing their education. According to this interpretation, a secret curriculum denotes a hidden curriculum (Yuliana et al., 2021);(Gilmour et al., 2019). (Hextrum, 2018) claims that the secret curriculum needs to be documented in the syllabus or learning implementation plans. According to Alsubaie (2015), the hidden

curriculum refers to unspoken or implicit beliefs, behaviors, procedures, and conventions in the educational environment.

The category of hidden curriculum includes not only new content or methods offered to students by schools but also any experience and information provided and received by students in an organized manner, both within and outside the classroom. Students can gain experience and knowledge through adaptation processes between students, between students and teachers, and between students and their environment, which can then influence students' mindsets and behavior (Yahya, 2013);(Ardiansyah & Erihadiana, 2022).

A hidden curriculum is a habitual behavior that has been established and is not included in the ideal curriculum or written in the lesson plan created by the teacher. Extracurricular activities in the form of visual arts and dance courses provide a hidden curriculum (Widiatsih et al., 2021);(Gunawan et al., 2018). Hidden curricular studies, particularly sociological research, are still uncommon in Indonesia. However, the hidden curriculum is an important part of the learning process in schools. The hidden curriculum supplements the government's official curriculum, instructional materials, and learning methods. We can learn more about the learning process in class and student activities in different schools by studying the hidden curriculum (Setiawan, 2017; Orón Semper & Blasco, 2018). (Abdurrahman & Muqorobin, 2018).

The hidden curriculum, according to Bellack and Kliebar, has three dimensions: First, the hidden curriculum can depict a school relationship, which includes the interaction of teachers and students, class structure, and the overall organizational pattern of students as a microcosm of the social value system. Second, the hidden curriculum can explain various implementation processes within and outside the school, such as things with added value, socializing, and class structure

maintenance. Third, the hidden curriculum contains disparities in researchers' levels of intentionality (internationality), which is connected with incidental consequences. Even this is not always expected from curriculum development concerning the social purpose of education (Sanjaya, 2008);(Hanny & Rizal, 2020);(Kurniawati, 2020)

Hidden Curriculum has two meanings in terms of implementing it in the classroom on a micro-scale. First, it can be understood as an unwritten (hidden) objective, but its achievers must be considered by every instructor so that the quality of learning is more significant. When a teacher uses the discussion technique, for example, there are other goals relating to knowledge of the content, such as the ability of students to express their ideas. Second, the hidden curriculum can be defined as anything that occurs without prior planning and that the instructor can use to achieve learning objectives. For example, as the teacher is lecturing on insects, a butterfly enters the classroom through a window. The butterfly's unforeseen appearance is a hidden curriculum that can be used as a jumping-off point for addressing material (Ortega et al., 2022).

When the teacher teaches environmental pollution material, the teacher can utilize the waste in the classroom yard as an example of a cause of environmental pollution. Garbage in the classroom environment might serve as a starting point for a discussion on learning topics. According to Borges et al., (2017), the hidden curriculum is an unintended source of natural learning.

As a result, garbage is included in the hidden curriculum because its existence can interfere with learning. The more familiar the teacher is with the hidden curriculum, the more authentic the learning experience. In other words, the hidden curriculum encompasses anything that has the potential to influence the learning process but is not explicitly stated in the traditional curriculum

(Agustin & Sukirman, 2021);(Syarifuddin et al., 2021).

Aside from being useful in the continuing learning process, waste has another effect: junk that collects in the schoolyard might interfere with kids' learning concentration because it can generate odors and detract from the beauty of the schoolyard. Classrooms, fields, laboratory rooms, parks, and parking lots are part of the school environment. Wherever there is rubbish, the existence of which is unconcerned. Indeed, we can appropriately utilize the existing garbage in the school environment. In that case, we will acquire a true learning laboratory to be used to assist the learning process, particularly concerning environmental pollution. According to Syamsuri & Anugerah, (2020), cleanliness significantly impacts student learning concentration because students will feel uncomfortable in a messy classroom.

The reality is that teachers appear to be unaware that waste in the school environment might be utilized in the continuing learning process to achieve learning objectives. Garbage in the school setting is often just collected and disposed of in the trash. The problem of trash in the learning environment is not coded in the formal curriculum, so scattered garbage must be rectified and utilized; nevertheless, schools do not use it to assist learning or achieve educational goals, thus the Hidden Curriculum applies. According to Rahmadhania, (2020), the obstacles that impede the implementation of the hidden curriculum are the students' various backgrounds and the teacher's need for more awareness of the hidden curriculum's role.

Furthermore, some unscrupulous students still need to care about their environment, so they continue to litter in the school environment, disrupting learning comfort and cleanliness and tidiness in the classroom, throwing garbage under the table, and being unable to maintain cleaning equipment facilities. According to Syamsuri & Anugerah, (2020), maintaining class

cleanliness requires the participation of students, yet most students still need to be more open to having an active role in it. The immensity of the job for a teacher is to instill in children a concern for the environment. Aside from the skills and information mastered, a teacher's education success is also determined by the teacher's habits or behavior, which indicates a positive attitude and concern for the environment (Al-Nur, 2021).

Based on the facts above, efforts are required to address this issue by leveraging garbage as a hidden curriculum feature of the social system to improve student learning outcomes. Hopefully, this research will improve student learning results, particularly in understanding the biology of environmental degradation. This study aimed to improve student learning outcomes in environmental pollution material, namely cognitive, emotional, and psychomotor outcomes. Students learn through debate and observation by using waste from the school environment as a source of learning so that students understand the importance of environmental protection and can make efforts to reduce pollution in the school environment.

Thus, the objectives of this study are as follows: 1) to describe student learning activities that use waste as a hidden curriculum on environmental pollution material; 2) to analyze the differences in student learning outcomes that use waste as a hidden curriculum to improve student learning outcomes versus those that do not use waste as a hidden curriculum in environmental pollution material.

METHOD

This study on environmental pollution was undertaken at one of Cirebon Regency's public high schools. The experimental design was employed with the Pretest-Posttest Control Group Design. Before and after the learning process, both the experimental and control groups were given concept understanding tests. This study's population

is class X MIPA SMA in the 2021/2022 academic year. The Simple Random Sampling technique was used to choose Class X MIPA 2 as the experimental class and Class X MIPA 1 as the control class. This study's independent variable is the utilization of garbage as a hidden curriculum. The research's dependent variable is the learning outcomes of class X MIPA students at a public high school in the Cirebon Regency in 2021/2022.

In this study, the research instrument comprised an observation sheet to collect data on student learning activities when employing waste as a hidden curriculum and a test instrument using 40 multiple-choice questions to collect students' cognitive learning results. The test data, in the form of student learning outcomes, were then statistically parametrically calculated using an independent sample t-test to evaluate differences in learning outcomes between the experimental and control groups. To measure the increase in learning outcomes following different treatments, the N-gain test is calculated based on the pre-test and post-test findings of student learning outcomes. The following formula is used to compute the proportion of each feasible answer based on data acquired from observations in the form of student learning activities:

$$P = \frac{F}{N} \times 100$$

Description:

P = Percentage of each possible answer

F = Frequency of each possible answer

N = Number of respondents

RESULT AND DISCUSSION

Based on observations of student actions, distinct outcomes were obtained at each learning meeting that used waste as a hidden curriculum. In the social system, the use of waste as a hidden curriculum variable influences student activity during learning. The results of the average observation of student activity at meetings 1, 2, and 3 are shown in the graph below for further information.

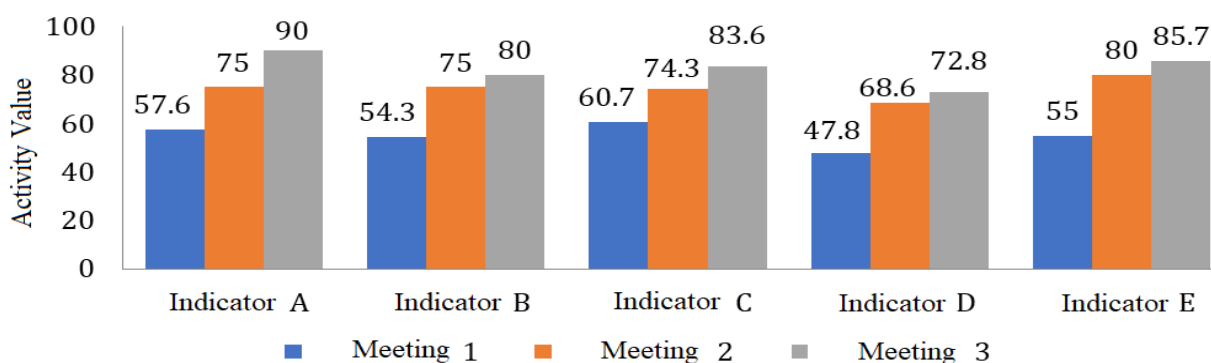


Figure 1. The Average Value of Student Activity Observations

Indicator description:

- A = Student's sensitivity to waste in the school environment
- B = Students' responses to waste in the school environment
- C = Student efforts in protecting the school environment from garbage
- D = Student organization toward a waste-free school environment
- E = Student's concern for the school environment

According to Figure 1, the average value of student activity observation results from indicator A to indicator E is 74.20, with the highest activity value being students' sensitivity to waste in the school environment and the lowest being student organizations towards a waste-free school environment, with a value of 63.06.

According to these findings, learning activities in which students make observations to observe waste in the school environment promote the increase in markers of students' sensitivity to waste in the school environment. As stated in the lesson plan, the goal of employing this observation approach is for students to identify the sources of pollution in the school

environment. However, in addition to increasing students' understanding, this observation method increases students' sensitivity to the trash in the school environment because students witness firsthand the impact of the garbage itself. According to Lestari (2016), the hidden curriculum is essentially the product of an unintended educational process, which means behavior that appears outside the teacher's objectives. Several hidden curriculum notions lead to the conclusion that hidden curriculum is the behavior, attitude, manner of speech, and treatment of teachers toward their students that include moral lessons.

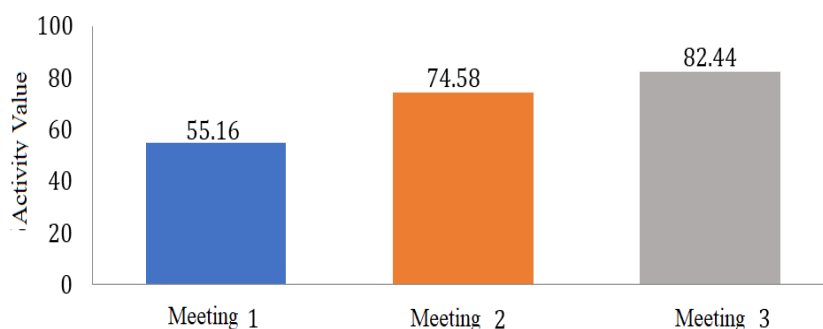


Figure 2. The Average Value of Student Activity Observations in Each Meeting

According to Figure 2, the graph of the average value of student observations at each

meeting generated from Figure 1 has increased and indicates diverse outcomes.

The highest average value, 82.44%, was recorded at the third meeting. Meanwhile, the average value of individual observation presentation recapitulation differed between the first and second meetings by 19.45%, and the average value of individual observation presentation recapitulation differed between the second and third meetings by 7.86%. As a result, the average value of student participation in the High category is 70.72%.

The variables forming the hidden curriculum are the form of the interaction behavior of the variables of the social system and its surroundings, namely all the experiences and knowledge provided by the school through the teacher, and the school environment, which are then capable of changing the mindset and behavior of students. The social system variable reflects an atmosphere in the patterns of relationships between school components (Gunawan et al., 2018). Many aspects of the social system's hidden curriculum variables can impact student attitudes and behavior, particularly student behavior and attitudes about trash in the school environment. To develop this behavior, the instructor provides genuine knowledge and experience to students, allowing them to witness firsthand the garbage in the school environment and how to use it, with the goal of instilling in students a caring attitude toward the surrounding environment.

According to Mustaqim, (2018), the instructor must be able to provide a positive example. This may appear standard and trite, yet it is crucial in building student character. Values, culture, and learning methods will be developed through the hidden curriculum to help students develop their character and mindset. Gunawan et al., (2018) contend that the hidden curriculum is also important in shaping students' personalities.

Measuring student learning success involves not just cognitive characteristics but also effective and psychomotor factors to determine the amount to which learning outcomes can bring changes not only in cognitive aspects but also in terms of skills

and attitudes (Puspita et al., 2018). This is evident from the outcomes of the observations that have been conducted. According to Nursa'adah et al., (2014), the development of students' thinking skills in studying each educational material should be directed toward appreciating the values included in it through comparison reasoning, parables, and pouring profoundly to touch the heart. This will improve students' understanding of nature's norms, with all the wisdom and teachings for their own life or the lives of others. The learning process must generate feelings, empathy, and emotions in order to balance the activities of the left and right brains and provide optimal learning results (Small, 2020). (Gunio, 2021).

Students' attitudes and conduct, the activities they engage in, the amount of engagement in an activity, the process of the activities they engage in, their abilities, and even the outcomes of their activities may all be observed (Sudjana, 2012). According to the data from the observation sheet, there is a beneficial influence on the affective and psychomotor elements of students due to the change in the learning environment. Because waste in the learning environment can affect students' concentration and comfort in learning, utilizing waste as a source of learning can affect both learning outcomes. Integrating the observation method into the surrounding environment adds to the student's experience and changes the student's learning atmosphere. According to (Yuliana et al., 2021), learning must be geared to products or learning outcomes and the learning process.

Positive traits and attitudes toward the teaching and learning process are expected to emerge in each group presentation, which refers to the group observation sheet indicators so that group observation is part of student activities in learning with the use of waste as a hidden curriculum social variable. Learning by converting waste into a useful product is beneficial because students can use waste that is a source of pollution by creating a product from this waste, with the

goal of not only overcoming the problem of pollution sources, namely waste, but also gaining experience and skills in making or processing waste. This seminar will stress affective behaviors and psychomotor activity (Puspitasari & Nurhayati, 2019).

The results of student observation sheets on environmental pollution material are students' psychomotor aspects; students can identify problems that occur around them, collaborate with other students in solving problems that exist in the surrounding natural environment, and apply them in daily life. Students participated in observation and group discussion activities as part of implementing the trash as a Hidden Curriculum. Social variables can reveal a school relationship, which includes interactions between teachers and students, class structure, students and their surroundings, and the overall organizing pattern of students as a microcosm of the social value system (Akramova, 2021).

The preceding notion is consistent with what Rahardjanto & Malang (2019) stated: learning is more than merely acquiring knowledge. Learning is a mental process that occurs within a person and results in behavioral changes. Mental activity occurs as a result of the individual's conscious interaction with their surroundings. Learning is essentially a process in which one's brain activity in interacting with the environment produces beneficial changes in behavior, including changes in knowledge, attitudes, and psychomotor characteristics.

Students must be able to voice their opinions or ideas when conversing or working with friends in the observation group. Students' capacity to detect problems that cause environmental pollution near the observation site and their willingness to listen to and respect the perspectives of others in every observation or presentation. So that the process of teaching and learning might be enjoyable, on the one side, some students have yet to take an active position, who are shy to express their thoughts, and who lack self-confidence. The problem with

teaching and learning activities is that they are less time efficient as a result of the Covid-19 epidemic, therefore class hours are less typical than they are in general (Widiatsih & Prystiananta, 2022).

The statement above is consistent with what Sanjaya, (2008) stated in the dimension of curriculum implementation in the hidden curriculum class has a meaning that can be seen as an unwritten (hidden) goal, but achieving it requires consideration by every teacher so that quality of learning is more meaningful. This statement refers to this research, particularly the methods researchers utilize, such as observation and discussion. Researchers have specific learning objectives for the discussion method as outlined in the lesson plan, but there are other goals that must be reached in addition to mastery of learning material goals. Another goal for researchers is to improve students' ability to voice their thoughts, their mood when listening to their friends' opinions, and their ability to listen and solve problems. As a result, in this setting, the deeper the teacher's determination of the hidden curriculum, the higher the quality and learning outcomes. At the same time, another purpose of the observation method is stated in the preceding paragraph.

Another aspect of establishing a hidden curriculum in the classroom is that it might be regarded as something that happens unexpectedly and that the teacher can use to achieve learning objectives (Kurniawati, 2020). Based on this concept, the instructor can, for example, turn the trash in front of the class or the used drink bottles on the student's desks into a hidden curriculum that is utilized as a learning apperception to engage students before learning begins. Furthermore, the teacher can use waste as an example of the causes of environmental contamination.

Observing student activity at the first meeting revealed that students' sensitivity to the trash in the school environment was more obvious, as was students' enthusiasm to keep the classroom environment clean.

Meanwhile, four other aspects, such as students' reactions to waste in the school environment, students' efforts to protect the school environment from waste, student organizations for a waste-free school environment, and students' concern for the school environment, need to be explored with knowledge and experience that can be directly given to students during learning, and students are still adjusting to a different learning environment (Jusuf & Bahuwa, 2020).

Student activities rose at the second meeting, indicating that markers of student sensitivity to waste in the school environment have increased. Students can discover the simplest things that can have a negative impact at the second meeting when learning by observation in the surroundings around the school. When students encounter trash, they become more aware of what to do. Students can learn about different sorts of waste and how they might contribute to pollution. As a result, indicators of concern and effort in safeguarding the school environment from littering have increased (Humphrey & Wiles, 2021).

In the third meeting, the results of observing student activity rose, indicating that students can interact with their surroundings. Increasing the indicators of students' efforts to preserve the school environment from scattered garbage, as evidenced by students' ability to use used goods to recycle used waste that cannot be broken down for use in everyday life. Students could work successfully with their peers, teachers, and natural surroundings. Each signal increased in every meeting, especially the indicator of student concern for the environment so that it was waste-free, demonstrating the successful application of

learning by exploiting waste as a hidden curriculum, free features of social factors. Students are used to themselves, but not totally so with the usage of waste, demonstrating the hidden curriculum students can correctly place themselves as social beings.

When educational implementers or planners are unaware of the role and application of the hidden curriculum in an effort to support educational goals, the effectiveness of character education can be seen in the daily interaction patterns carried out by teachers, staff, and students. Included are all forms of speech, attitudes, and behavior that occur in parts of the school environment and are recorded and assimilated by students to become truths and values (Junaedi, 2018).

Some good arguments for using garbage as a material, context, and learning resource in the learning process include the fact that using waste can enrich instructional materials and learning activities by releasing students' creativity. Furthermore, because students are directly presented with genuine conditions, it provides a more meaningful and functional learning process. Intensive interaction with the environment surrounding the school is more likely to promote signs of student environmental concern and indicators of students' attempts to protect the school environment from litter (Inayah et al., 2021).

Students' hidden curriculum activities may become habitual or conform to the values and norms that apply. As a result, educational institutions must comprehend the process of formation and the activities that comprise a hidden curriculum (Yolanda, 2019).

Table 1. The Recapitulation of Pre-test, Post-test, and N-Gain Scores for the Experimental and Control Classes

Class	<i>Pre-test</i>	<i>Post-test</i>	N-gain
Experimental	56,82	80,14	0,51 (moderate)
Control	56,91	72,80	0,28 (low)

Table 1 shows a difference in the value of learning outcomes between the experimental class that utilizes garbage as a hidden curriculum and the control class that does not, demonstrating that learning using waste as a hidden curriculum has a beneficial effect and can increase abilities. This is consistent with the findings of research by Inayah et al., (2021), who discovered that adopting a hidden curriculum through the utilization of the environment using a natural exploration approach to environmental pollution material influenced boosting student learning outcomes.

Increasing student learning outcomes refers to students' achievement in increasing overall learning outcomes, which include cognitive, emotional, and psychomotor elements. In regard to biology disciplines, learning outcomes on environmental pollution material seek to determine how much mastery and understanding students have obtained while studying environmental pollution material. Based on the findings, Abdurrahman & Muqorobin (2018) stated that hidden curricula are occurrences or activities that occur without being planned for but can be used by the instructor to achieve learning outcomes.

The hidden curriculum functions in the school environment, supporting and perfecting the formal curriculum. There are several parts to implementing a hidden curriculum in schools, such as activities and learning outcomes that are not defined in the formal curriculum and are only described through school guidelines and policies. As a result, the official and hidden curricula complement one another, and the two cannot be separated in practice in the educational setting (Junaedi, 2018).

Students take the pre-test and post-test using a Google form. This is more effective because of increased technical complexity, allowing pre-test and post-test work to be completed online. According to Juanda et al., (2021), technological sophistication and access to information in the twenty-first century motivate education providers to alter to prepare students for a more challenging future. To address the demands

of future generations, effective and relevant teaching and learning methodologies are required in biology education. Furthermore, assessing and calculating student scores can be completed rapidly, allowing the teacher to evaluate which strategy or method is appropriate for the teaching and learning process.

Several factors influence the high or low or good or bad grades received by the two classes based on differences in learning outcomes. According to (Gilmour et al., 2019), various elements can influence the learning system process activities, including instructor factors, student factors, available facilities, tools, media, and environmental factors. Some of these variables can influence the variations in learning outcomes between classes X-MIPA 2 and X-MIPA 1.

Increasing learning outcomes is influenced by the activities that occur during the learning process. This can be seen in the activities contained in the hidden curriculum, which can help students become more competent. Garbage is a social issue in human life; this waste is hidden curriculum learning material. Aside from that, another function of the Hidden Curriculum is to provide students with tools and strategies for expanding their knowledge beyond what is covered in the curriculum. According to Islam (2021), a hidden curriculum is tied to classroom learning and student experiences that students can see, hear, and feel, which can alter student behavior and learning results.

This distinction may be seen in the application of trash as a hidden curriculum in the free component of social factors to improve student learning results on environmental pollution material in the teaching and learning process in class X-MIPA 2. Changes in affective and psychomotor components also increased when using garbage as a hidden curriculum as an independent aspect of social factors was used. According to the study, there are substantial disparities in using waste as a hidden curriculum to increase student

learning outcomes on environmental pollution at SMAN 1 Plumbon.

The hidden curriculum's involvement in completing an educational program must be considered, even if it results from something unanticipated or a student's natural experience. Hidden curriculum about Students' learning and experiences as a result of interactions in the school environment has a significant impact on the student education process (Caswita, 2013).

CONCLUSIONS AND SUGGESTIONS

Based on the research data analysis, the average value of student participation in the high category is 70.72% after learning by employing garbage as a hidden curriculum in environmental contamination material. There is a significant difference in increasing student learning outcomes between the experimental class, which used waste as a hidden curriculum and received a post-test score of 80.14, and the control class, which received only general learning on environmental pollution material and received a post-test score of 72, 8. Furthermore, the experimental class had an average N-Gain of 0.51 for medium criteria, and the control class had an average N-Gain of 0.28 for low criteria. The average value of N-Gain indicates a considerable improvement in learning outcomes.

REFERENCES

- Abdurrahman, U., & Muqorobin, A. (2018). The internalization of anti-corruption values as hidden curriculum in Gontor Educational System the model of anti-corruption education in Indonesian Islamic educational Institution view project. *Islamic Education Journal*, 14(2), 191–216.
<https://doi.org/10.21580/nw.2021.15.2.9873>
- Agustin, A. B., & Sukirman, S. (2021). Aktualisasi Hidden Curriculum Pendidikan Agama Islam dan Implikasinya Dalam Pembentukan Sikap Sosial Siswa. *Alim / Journal of Islamic Education*, 3(1), 13–30.
<https://doi.org/10.51275/alim.v3i1.189>
- Aisyah, S., Lokaria, E., & Harmoko, H. (2019). Analisis Hasil Belajar Biologi Siswa Kelas X Program IPS: Dampak Model Pembelajaran Problem Posing. *Biosfer: Jurnal Tadris Biologi*, 10(2), 95–108.
<https://doi.org/10.24042/biosfer.v10i2.4927>
- Akramova Surayo Renatovna, A. G. R. (2021). Pedagogical and psychological conditions of preparing students for social relations on the basis of the development of critical thinking. *Psychology and Education Journal*, 58(2), 4889–4902.
<https://doi.org/10.17762/pae.v58i2.2886>
- Al-Nur, W. R. (2021). Inseri Nilai-Nilai Antikorupsi Melalui Pengembangan Hidden Curriculum Di Min 1 Banyumas. *MOZAIC: Islam Nusantara*, 7(2), 1–23.
- Alsubaie, M. A. (2015). Hidden Curriculum as One of Current Issue of Curriculum. *Journal of Education and Practice*, 6(33), 125–128.
- Ardiansyah, A. A., & Erihadiana, M. (2022). Strengthening Religious Moderation as A Hidden Curriculum in Islamic Religious Universities in Indonesia. *Nazhruna: Jurnal Pendidikan Islam*, 5(1), 109–122.
<https://doi.org/10.31538/nzh.v5i1.1965>
- Aslan. (2019). *Hidden Curriculum*. CV. Pena Indis.
- Bidayati Haka, N., Handayani, W., Anggoro, B. S., Hamid, A., History, A., & Haka, N. B. (2021). *Developing Android-Based Educational Puzzle Game for Biology To Improve Students' Cognitive Ability Article Info Abstract*. 12(1), 51–64.
<https://doi.org/10.24042/b>

- Borges, J. C., Ferreira, T. C., Borges de Oliveira, M. S., Macini, N., & Caldana, A. C. F. (2017). Hidden Curriculum In Student Organizations: Learning, Practice, Socialization And Responsible Management In A Business School. *International Journal of Management Education*, 15(2), 153–161. <https://doi.org/10.1016/j.ijme.2017.03.003>
- Caswita. (2013). The Hidden Curriculum: Studi Pembelajaran PAI di sekolah. *Leutikaprio*. 6(2), 109-121.
- Gilmour, A. F., Fuchs, D., & Wehby, J. H. (2019). Are Students With Disabilities Accessing the Curriculum? A Meta-Analysis of the Reading Achievement Gap Between Students With and Without Disabilities. *Exceptional Children*, 85(3), 329–346. <https://doi.org/10.1177/0014402918795830>
- Gloria, R. Y. (2012). Pentingnya Asesmen Alternatif dalam Meningkatkan Kemampuan Berpikir dan Membaca Ilmiah Siswa pada Pembelajaran Biologi. *Jurnal Scientiae Educatia*, 1(1), 1–17. <https://doi.org/DOI:10.24235/sc.educatia.v1i1.502>
- Gunawan, I., Eri Kusumaningrum, D., Triwiyanto, T., Zulkarnain, W., & Nurabadi, A. (2018). *Hidden Curriculum and its Relationship with the Student Character Building*. 269(CoEMA), 9–11. <https://doi.org/10.2991/coema-18.2018.3>
- Gunawan, I., Kusumaningrum, D. E., Triwiyanto, T., Zulkarnain, W., & Nurabadi, A. (2018). Pengaruh Kurikulum Tersembunyi terhadap Motivasi Diri Mahasiswa. *Prosiding Seminar Nasional Pendidikan, Tema: Mendidik Cerdas Generasi Digital, Fakultas Ilmu Pendidikan Universitas Negeri Malang*, 4, 90–97.
- Gunio, M. J. (2021). Determining the Influences of a Hidden Curriculum on Students' Character Development Using the Illuminative Evaluation Model. *Journal of Curriculum Studies Research*, 3(2), 194–206. <https://doi.org/10.46303/jcsr.2021.11>
- Handoko, A., Sartika, S., & Anggoro, B. S. (2021). Subject-specific pedagogy: Development of biology teaching materials based on van hiele thinking theory. *JPBIO (Jurnal Pendidikan Biologi)*, 6(1), 125–132. <https://doi.org/10.31932/jpbio.v6i1.933>
- Hanny, Y. R., & Rizal, N. (2020). Hidden curriculum: The concept of integrating islamic value in higher education accounting at muhammadiyah on ulab albab perspective. *Journal of Advanced Research in Dynamical and Control Systems*, 12(1), 113–121. <https://doi.org/10.5373/JARDCS/V12I1/20201018>
- Hextrum, K. (2018). The Hidden Curriculum of College Athletic Recruitment. *Harvard Educational Review*, 88(3), 355–377. <https://doi.org/10.17763/1943-5045-88.3.355>
- Humphrey, E. A., & Wiles, J. R. (2021). Lessons learned through listening to biology students during a transition to online learning in the wake of the COVID-19 pandemic. *Ecology and Evolution*, 11(8), 3450–3458. <https://doi.org/10.1002/ece3.7303>
- Inayah, I., Juanda, A., & Yunita. (2021). Application of " Hidden Curriculum " through Utilization of the School Environment on the Concept of Environmental Pollution to Improve Student Learning Outcomes. *International Journal of Education and Humanities*, 1(4), 181–189.
- Islam, M. H. (2021). Hidden Curriculum Sekolah dalam Menangkal Rasisme Keberagamaan. *Journal Multicultural of*

- Islamic Education*, 5(1), 87–99.
<https://doi.org/https://doi.org/10.35891/ims.v5i1.2765>
- Jiang, Y., Zhang, J., & Xin, T. (2019). Toward Education Quality Improvement in China: A Brief Overview of the National Assessment of Education Quality. *Journal of Educational and Behavioral Statistics*, 44(6), 733–751.
<https://doi.org/10.3102/1076998618809677>
- Juanda, A., Maulida, A. N., Gloria, R. Y., & Nasrudin, D. (2021). Learning Observation: The Demands of 21st Century Biology Learning in Senior High School. *Jurnal Pendidikan Sains Indonesia*, 9(3), 445–458.
<https://doi.org/10.24815/jpsi.v9i3.20162>
- Junaedi, E. (2018). Implementasi Pendidikan Karakter Siswa Dalam Hidden Curriculum Di Sekolah Tunas Unggul Bandung. *Jurnal Pendidikan Islam Rabbani*, 2(1), 2, 457–463.
- Jusuf, R., & Bahuwa, M. A. (2020). Penanaman Nilai-Nilai Moral Melalui Metode Movie Learning dalam Pembelajaran Aqidah Akhlak Siswa Kelas IX MTs N 2 Kotamobagu. *Journal of Islamic Education Policy*, 5(2), 111–120.
<https://doi.org/10.30984/jiep.v5i2.1352>
- Kristanto, A., . S., & . G. (2019). Promoting Local Wisdom in International Primary Curriculum Aims to Develop Learners' Problem Solving Skills. *International Journal of Educational Research Review*, 439–447.
<https://doi.org/10.24331/ijere.573947>
- Kurniawati, A. (2020). Hidden Curriculum Practices Case Study Avicenna Jagakarsa Senior High School. *JISAE: Journal of Indonesian Student Assessment and Evaluation*, 6(1), 55–72.
- Lestari, P. (2016). Membangun Karakter Siswa Melalui Kegiatan Intrakurikuler, Ekstrakurikuler, dan Hidden Curriculum di SD Budi Mulia Dua Pandansari Yogyakarta. *Jurnal Penelitian*, 10(1), 71.
<https://doi.org/10.21043/jupe.v10i1.1367>
- Maghfiroh, L. (2017). Membangun Karakter Siswa dan Meningkatkan Kecerdasan Spiritual melalui The Hidden Curriculum di MI Wahid Hasyim Yogyakarta. *Jurnal Studi Keagamaan, Pendidikan Dan Humaniora*, 4(2), 208–225.
- Mustaqim, M. (2018). Konsep Pendidikan Good Netizen Melalui Kurikulum Tersembunyi. *Jurnal Perspektif*, 2(1), 80–92.
<https://doi.org/http://dx.doi.org/10.15575/jp.v2i1.15>
- Nursa'adah, S., Gloria, R. Y., & Juanda, A. (2014). Penerapan Metode Guided Discovery Berbasis Imtaq Untuk Meningkatkan Hasil Belajar Siswa Pada Materi Pokok Ekosistem Di SMA Negeri 6 Cirebon. *Scientiae Educatia: Jurnal Pendidikan Sains*, 3(1), 107–122.
<https://doi.org/DOI:10.24235/sc.educatia.v3i1.550>
- Orón Semper, J. V., & Blasco, M. (2018). Revealing the Hidden Curriculum in Higher Education. *Studies in Philosophy and Education*, 37(5), 481–498.
<https://doi.org/10.1007/s11217-018-9608-5>
- Ortega, H. C., Castro, R., Tolentino, J. C., Pusung, D. S., & Abad, R. (2022). The hidden curriculum in a Filipino pre-service physical educators' virtual ecology. *Edu Sportivo: Indonesian Journal of Physical Education*, 3(1), 25–40.
[https://doi.org/10.25299/es:ijope.2022.vol3\(1\).8851](https://doi.org/10.25299/es:ijope.2022.vol3(1).8851)
- Pérez-González, J. C., Saklofske, D. H., & Mavroveli, S. (2020). Editorial: Trait Emotional Intelligence: Foundations, Assessment, and Education. *Frontiers in*

- Psychology*, 11(April), 1–4.
<https://doi.org/10.3389/fpsyg.2020.00608>
- Pratama, R., Handoko, A., & Anwar, C. (2020). Association of physical body-kinesthetic (Multiple Intelligences) mobility with learning results biology in SMA negeri 2 bandar lampung. *Journal of Physics: Conference Series*, 1521(4), 0–7.
<https://doi.org/10.1088/1742-6596/1521/4/042001>
- Puspita, L., Supriadi, N., & Pangestika, A. D. (2018). Pengaruh Model Pembelajaran Creative Problem Solving (Cps) Disertai Teknik Diagram Vee Terhadap Keterampilan Berpikir Kreatif Peserta Didik Materi Fungi Kelas X Man 2 Bandar Lampung. *Biosfer : Jurnal Tadris Biologi*, 9(1), 01.
<https://doi.org/10.24042/biosf.v9i1.2871>
- Puspitasari, Y., & Nurhayati, S. (2019). Pengaruh Model Pembelajaran Discovery Learning Terhadap Hasil Belajar Siswa. *Jurnal Pendidikan Dan Kewirausahaan*, 7(1), 93–108.
<https://doi.org/10.47668/pkwu.v7i1.20>
- Rahardjanto, A., & Malang, U. M. (2019). Hybrid-PjBL: Learning Outcomes , Creative Thinking Skills , and Learning Motivation of Preservice Teacher. *International Journal of Instruction* 12(2), 179–192.
- Rahmadhania, S. (2020). Implementasi Hidden Curriculum Dalam Pembelajaran Pendidikan Agama Islam Di Ma Nurul Islam Tengaran Kabupaten Semarang. *Skripsi*. IAIN Salatiga.
- Sanjaya, W. (2008). *Kurikulum Dan Pembelajaran (Teori & Praktek KTSP)*. Jawa Barat : Kencana.
- Sari, D. P., Puspita, L., Handoko, A., & History, A. (2021). Contextual Teaching And Learning Model Assisted By Zoom Cloud Meetings: The Impact On Students' Critical Thinking Skills. *Biosfer : Jurnal Tadris Biologi*, 12(1), 32–39.
<https://doi.org/10.24042/b>
- Setiawan, R. (2017). Pembangunan Nilai Demokrasi dan Nasionalisme sebagai Kurikulum Tersembunyi di SMAN CMBBS. *Hermeneutika : Jurnal Hermeneutika*, 3(1), 10.
<https://doi.org/10.30870/hermeneutika.v3i1.3010>
- Small, D. (2020). The Hidden Curriculum in Public Schools and its Disadvantage to Minority Students. *International Forum of Teaching and Studies*, 16(1), 16–24.
- Sudjana, N. (2012). *Penilaian Hasil Proses Belajar Mengajar*. Remaja Rosda Karya.
- Suwarma, I. R., & Kumano, Y. (2019). Implementation of STEM education in Indonesia: Teachers' perception of STEM integration into curriculum. *Journal of Physics: Conference Series*, 1280(5).
<https://doi.org/10.1088/1742-6596/1280/5/052052>
- Syamsuri, S., & Anugerah, I. N. (2020). Pengaruh Kebersihan Kelas Terhadap Konsentrasi Belajar Siswa. *Jurnal Cendikia Sambas*, 1(1), 60–69.
- Syarifuddin, A., Sutisna, D., Cahyadi, A., Padjrin, P., & Cholidi, C. (2021). Implementasi Hidden Curriculum Melalui Ekstrakurikuler Keagamaan: Studi Kasus. *Intizar*, 27(1), 57–65.
<https://doi.org/10.19109/intizar.v27i1.8741>
- Wahyuni S, T. M. (2021). Analisis Keterlaksanaan Praktikum dan Hasil Belajar Biologi Siswa Kelas XI SMA. *Musamus Journal of Science Education*, 3(2), 71–83.
<https://doi.org/10.3572/mjose.v3i1.3611>
- Widiatsih, A., & Prystiananta, N. C. (2022). Implementation of The School-Community Relationship Program

Through The Hidden Curriculum During Pandemic. *Al-Tahzim*. 06(04), 1300-1312.

Widiatsih, A., Triono, U., & P., N. C. (2021). Implementasi Program Pembelajaran Berbasis Budaya Lokal Melalui Hidden Curriculum. *JOEAI:Journal of Education and Instruction*, 4(1), 338-342. <https://doi.org/10.31539/joeai.v4i2.28>

Yahya, M. S. (2013). Hidden Curriculum Pada Sistem Pendidikan Sekolah Tinggi Agama Islam Negeri (Stain) Purwokerto Tahun 2013. *Jurnal Kependidikan*, 1(1), 123-149. <https://doi.org/10.24090/jk.v1i1.535>

Yolanda, P. (2019). Implementasi Program Pendidikan Karakter Berbasis Hidden Curriculum Di Mi Muhammadiyah 1 Pare Kediri. *Inspirasi Manajemen Pendidikan*.

Yuliana, L., Muhajir, & Apud. (2021). Peran Core Dan Hidden Curriculum Dalam Pembentukan Kepribadian Siswa (Studi Kasus Di Sma Insan Kamil Tartila Dan Sma Al -Asmaniyah Kabupaten Tangerang). *Jurnal Qathruna*, 8(2), 2013-2015. <https://doi.org/http://dx.doi.org/10.32678/qathruna.v8i2.5368>