

## **THE UNDERSTANDING OF PRIMARY SCHOOLS TEACHERS OF THE CONCEPT OF ESD: A MILESTONE TO MANIFEST SDGS**

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### **ABSTRACT**

Education for Sustainable Development (ESD) is a milestone to achieve Sustainable Development Goals. The concept of Education for Sustainable Development must be instilled as early as possible so that students are accustomed to behaving and behaving with the importance of environmental sustainability. This survey research was conducted with the aim of finding out how deep the understanding of teachers. The study was conducted on 46 primary school teachers in Indonesia with random sampling. These respondents are teachers who teach in grades 1 to 6. The data collection instrument uses questionnaires with closed question types (yes or no responses) and open question types to explore the understanding of the concept of Education for Sustainable Development and its implementation in primary school. Research data is analyzed descriptively and presented in the form of percentages, tables and diagrams. The results of the analysis showed that most (52%) teachers did not understand the concept of ESD, while another 48% have understood ESD concepts, although only 68% of teachers who are understand with ESD concepts have integrated ESD concepts in learning.. This is due to several things including the lack of upgrading teacher knowledge who are less concerned about the problems that are currently occurring and the lack of government socialization related to the importance of ESD for the sustainability of life. The recommendation to the results of this study is that the government should pay special attention to conducting trainings for primary school teachers related to the concept of ESD and how to implement it in primary school.

**Keywords** : Education for Sustainable Development (ESD); Sustainable Development Goals SDGs; science teachers

### **INTRODUCTION**

Environmental problems are global problems felt by every country in the world. In Indonesia, environmental problems are problems that have never been resolved and have always been the focus of government attention. Residents in every country today are faced with environmental problems such as global warming, water and air pollution, biodiversity crises, disruption of the ozone layer, illegal conversion of forest land, and other problems (Segara et al., 2015). Governments around the world, including in Indonesia, tried hard to think of ways to overcome these problems, until the idea of Sustainable development Goals (SDGs) was sparked. Basically, the idea of

SDGs is a development of the MDGs (Millennium Development Goals) (Loewe, 2015) which is not implemented as it should. Sustainable development goals (SDGs) have 17 noble goals (Tristananda, 2018) (World Health Organization, 2015), including: (1) no poverty namely alleviating all forms of poverty in all places, (2) zero hunger, achieving food security and improved nutrition, and promoting sustainable agriculture. (3) Good Life and WellBeing: promoting healthy living and supporting well-being for all ages, (4) Quality Education: ensuring decent and inclusive quality education and encouraging lifelong learning opportunities for all (5) Gender Equality: achieving gender equality and empowering mothers

and women, (6) Clean Water and Sanitation: ensuring the availability of clean water and sustainable sanitation for everyone, (7) Affordable and Clean Energy: ensuring access to affordable, reliable, sustainable and modern energy sources for all. (8) Decent Work and Economic Growth: supporting sustainable economic development, productive employment and decent work for everyone. (9) Industry, Innovation and Infrastructure: building quality infrastructure, encouraging sustainable industrial improvement and encouraging innovation, (10) Reduces Inequalities: reducing inequality both within a country and among countries in the world, (11) Sustainable Cities and Communities: building quality, safe and sustainable cities and settlements. (12) Responsible Consumption and Production: ensuring sustainability of consumption and production patterns, (13) Climate Action: act quickly to combat climate change and impact, (14) Life Below Water: Preserving and maintaining the sustainability of the sea and marine resource life for sustainable development, (15) Life on Land: Protecting, returning, and improving the sustainable use of terrestrial ecosystems, managing forests sustainably, reducing barren land and land swapping, (16) Peace, Justice and Strong Institutions: promoting peace including communities for sustainable development, providing access to justice for everyone, including institutions and accountable for all, (17) Partnerships for the Goals: strengthening implementation and reviving global partnerships for sustainable development.

To deal with this, of course, must be prepared as early as possible, starting from the children's phase. Therefore, schools play an important role in developing and implementing Education for Sustainable Development (ESD) (Ferawati, 2018).

Education for Sustainable Development (ESD) is defined as meeting current needs that do not injure the ability of future generations to meet their needs (Prabawani & Diponegoro, 2021). This concept is also interpreted as an effort to empower people to change the way they think and work in the face of a more sustainable future (Matitaputty et al., 2022). ESD implementation is divided into two categories, namely implementation in the field of formal education and implementation in the field of community education. The implementation of ESD in the formal field is aimed at educational institutions, such as schools to educate students and teachers related to educational issues and challenges for sustainable development (Tjahyadi et al., 2019)

## **METHOD**

This research is a survey study conducted on primary school's science teachers in Indonesia, with random sampling. The sample number of teachers who were respondents was 46 teachers. Figure 1 below shows the distribution of respondents in this study when viewed from the classes they teach:

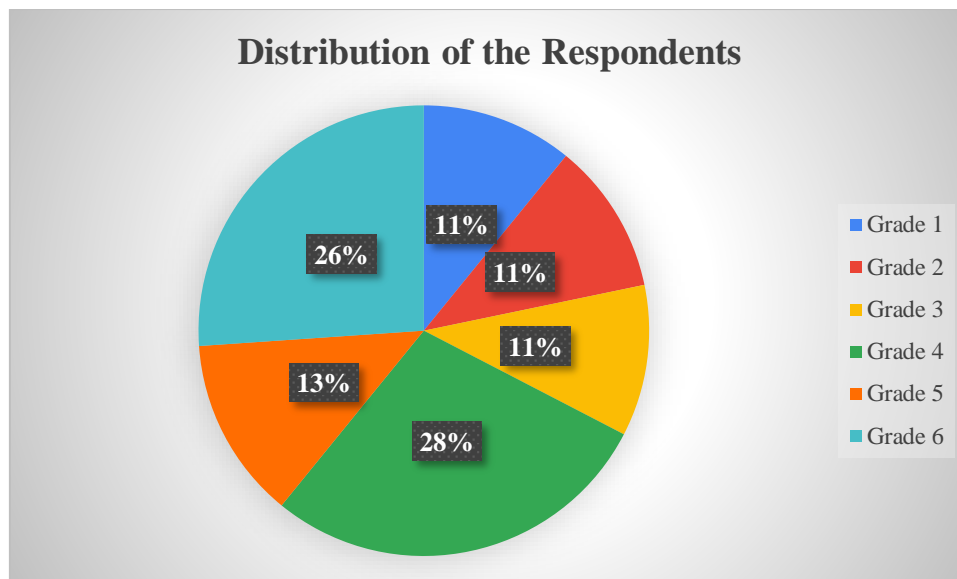


Figure 1. Distribution of Respondents

Figure 1 shows that respondents in this study were mostly dominated by primary school teachers who teach grade 5 students are a percentage of 28%, then the second most percentage is primary school teachers who teach grade 6 by 26%, grade 4 primary school teachers by 13%, and each by 11% are grade 1, grade 2, and grade 3 teachers.

To collect data related to teachers' understanding of the concept of Education for Sustainable Development, researchers use instruments in the form of questionnaires in the form of questions with closed question types (yes or no answer responses) and open question types to explore the knowledge of elementary school teachers. The data obtained is then analyzed descriptively and poured in the form of percentages and tables.

## RESULTS AND DISCUSSION

Education for Sustainable Development is a concept that contains the development of competencies empowering individuals to reflect on their own actions, taking into account various areas of their lives at present and future as well as impacts on the environment, both local and global perspectives (Unesco, 2017). Appropriately, the concept of Education for Sustainable Development is introduced to every individual starting from childhood through education taught by families and educational institutions such as primary schools. To make this happen, of course, elementary school teachers have a key role in conveying the concept of ESD to students. The results of research on the understanding of elementary school teachers related to the concept of Education for Sustainable Development are presented in Figure 2 below.

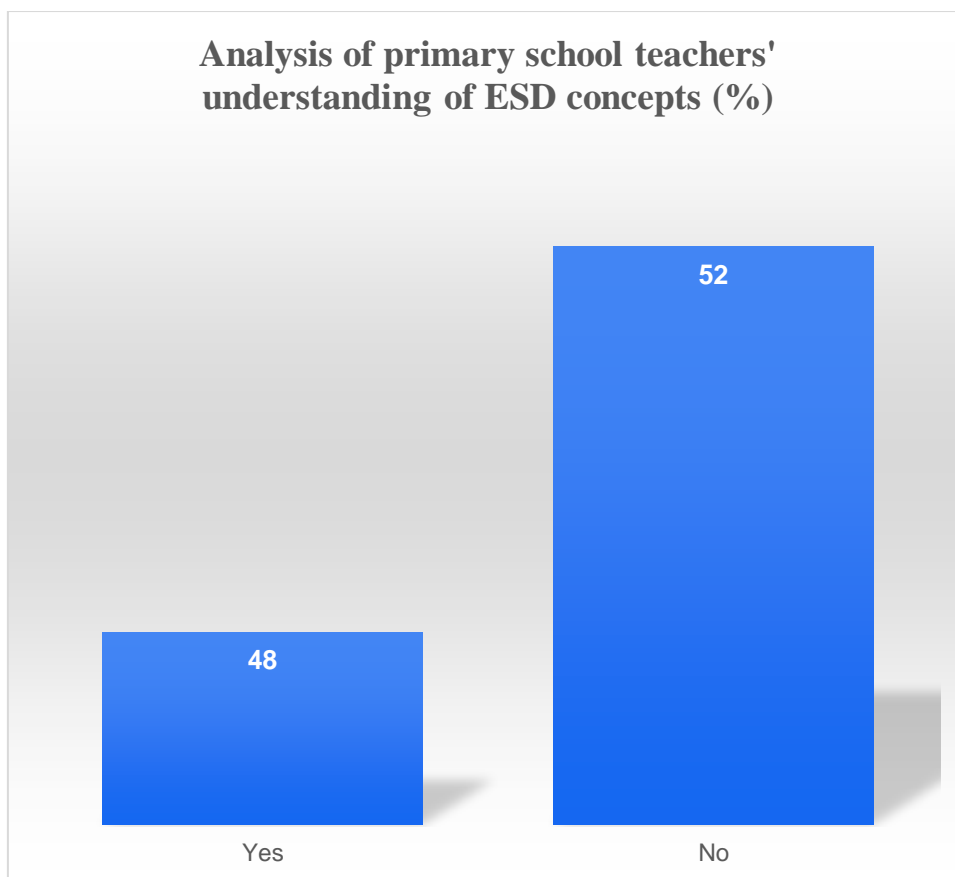


Figure 2. Percentage of primary school teachers' understanding of ESD concepts

Based on the results of data analysis conducted on 46 elementary school teachers in Indonesia shown in Figure 1, it is known that 48% of teachers who answered that they knew the concept of ESD, while the other 52% answered that they did not know the concept of ESD.

These results were surprising enough that an in-depth analysis of researchers conducted on 50% of teachers who responded that they understood ESD concepts. The results of the follow-up analysis are shown in Table 1 below.

**Table 1. Teacher understanding related to the concept of Education for Sustainable Development**

<b>Respondent</b>	<b>Statement of ESD</b>
<b>R1</b>	The concept of ESD is a way to fulfill the needs of the present without sacrificing the needs of future generations.
<b>R2</b>	An education to maintain the quality of human life both present and future.
<b>R3</b>	The Development that pays attention to and manages natural resources well and wisely for current and future needs
<b>R4</b>	Education about to continue the unfinished development or continued the development to be even better.

<b>R5</b>	Education to make the welfare of life improvement.
<b>R6</b>	Education Sustainable development is a Long-term development education
<b>R7</b>	Do something that will have a positive impact in the future. In the field of education, namely providing motivation in the field of education so that in the future it will be even better
<b>R8</b>	Simply, friendly development, which does not harm future generations
<b>R9</b>	Using natural resources in accordance with environmental support data
<b>R10</b>	The concept of sustainable development is an effort to maintain survival with the surrounding environment
<b>R11</b>	principled development process to meet present needs with the needs of future successors
<b>R12</b>	development that can meet the needs of the present without jeopardizing the safety and health of future generations
<b>R13</b>	Development that is able to meet the needs of the current generation without jeopardizing the health and safety of future generations in order to meet their own needs.
<b>R14</b>	the process of developing land, cities, businesses, and communities, which has the principle of "to meet the needs of the present without sacrificing the fulfillment of the needs of future generations.
<b>R15</b>	Education to make the welfare of life improvement.
<b>R16</b>	Education for improves the quality of life
<b>R17</b>	Development with the principle of utilizing natural resources in the current generation optimally while still not endangering the next generation
<b>R18</b>	The concept of sustainable development that is carried out sustainably is able to make the welfare of life increase.
<b>R19</b>	Empowering and equipping present and future generations to meet their needs using a balanced and integrated approach to economic, social, social and environmental dimensions by education
<b>R20</b>	Notifications that are able to meet the needs of the current generation without jeopardizing the health and safety of future generations just for the sake of meeting their own needs
<b>R21</b>	Education that encourages change in the knowledge, skills, values and attitudes that exist in the environment around us to enable society to address interconnected global challenges.
<b>R22</b>	Development that is able to meet the needs and without endangering the health and safety of the next generation just for the sake of meeting their own needs

In general, teachers who replied that they knew the concept of ESD answered correctly regarding the meaning of Education for Sustainable Development that sustainable education is education that is carried out by emphasizing the ability of individuals or groups to consider natural and social dimensions in the decision-making process in various areas of life so as

to meet current needs without harming future needs (Ermenc, K. S., & Niemczyk, 2022). But unfortunate, most of elementary school teachers who do not know and understand the concept of ESD. While teachers play a key role in communicating important concepts of ESD (Indrati & Hariadi, 2016). This is because teachers can be agents of change in learning (Damayanti

et al., 2022). As agents of change, the role of teachers is to shape and produce potential and superior generations (Andrian, 2018). The role of teachers in Education of Sustainable Development through science subjects is that teachers are expected to learn students to know more about what sustainable development is and how sustainable development exists in Indonesia. Discussions related to sustainable development can be related to the three perspectives described in the ESD component, namely socio-cultural, environmental, and economic. The teacher also acts as a facilitator, by creating a

conducive atmosphere of learning activities, in harmony with student development, so that teaching and learning interactions take place optimally.

ESD or education for sustainable development is indirectly already contained in the curriculum or subject matter in schools, one of which is in the field of science studies. However, of the 48% of teachers who understand ESD concepts, it turns out that not all of them have integrated ESD concepts in learning. Figure 3 illustrates this.

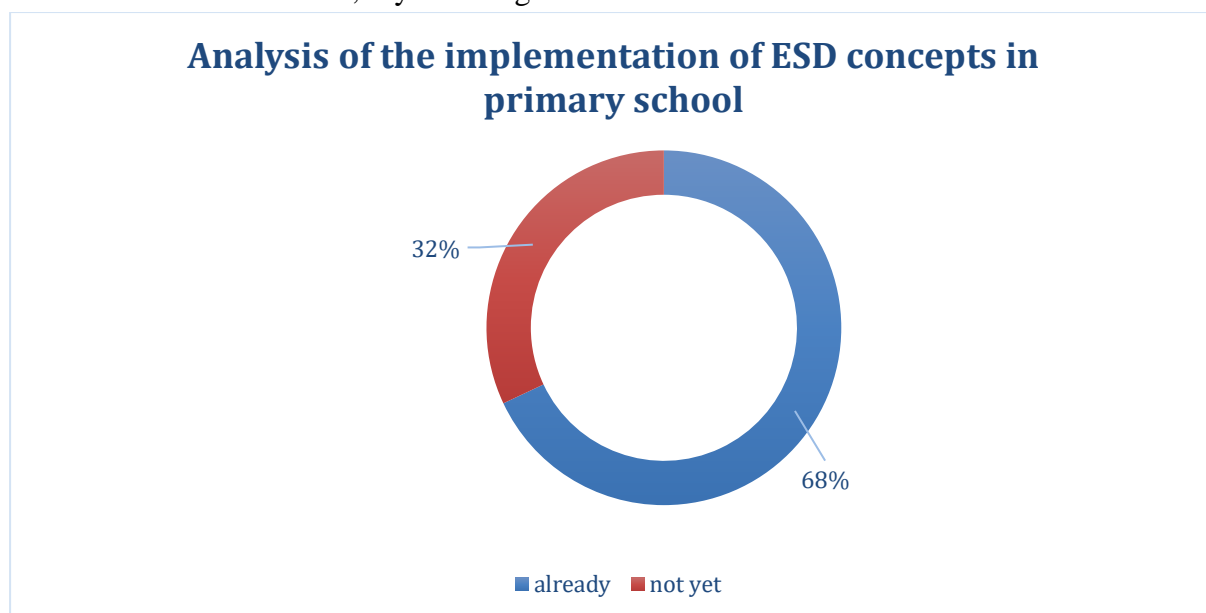


Figure 3. Analysis of the implementation of ESD concepts in primary school

Based on the results of a survey to 48% of teachers who have understood the concept of ESD, it turns out that not all teachers who already understand the concept of ESD have integrated the concept of ESD in learning in elementary schools. As many as 32% of teachers stated that they have not integrated and introduced ESD concepts in learning (Another 68% have integrated ESD concepts in learning). This is because they lack confidence in the competencies and knowledge they have

related to the concept of ESD. This is certainly a challenge that must be faced and prepared both by the teacher concerned, the school and other related parties. Teachers are not only required to play an active role in the actualization of ESD in learning but good cooperation is also needed with schools including teachers and school residents, students, communities, and school environmental conditions.

## CONCLUSION

This research informs that there are still many elementary school teachers who do not understand the concept of Education for Sustainable Development, namely as many as 52% of teachers do not understand it, while another 48% have understood ESD concepts, although only 68% of teachers who are understand with ESD concepts have integrated ESD concepts in learning. This is due to several things including the lack of upgrading teacher knowledge who are less concerned about the problems that are currently occurring and the lack of government socialization related to the importance of ESD for the sustainability of life.

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