

Home Education as an Alternative Education to Realise Sustainable Development in Indonesia

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Abstract: This research explores the role of home education in supporting sustainable development, particularly in Indonesia. In recent years, there has been increasing attention to home education, especially because of its flexible approach and relevance to global challenges such as environmental sustainability and social equality. Through qualitative methods and a phenomenological approach, this study collected data from seven families who actively run home education in various regions, such as Salatiga, Solo, Padang, Makassar, Surabaya and Jakarta. The results show that home education plays an important role in developing children's critical thinking skills, creativity and social awareness through more personalized and contextualized learning. In addition, home education allows children to learn about sustainability issues in a supportive atmosphere, with hands-on practices such as gardening, recycling and wise resource management. Parents play a central role in instilling sustainability values through daily activities, shaping a generation that is more environmentally sensitive and socially responsible. This study suggests the need for stronger policy support for home education and better access to educational resources, and opens up opportunities for further research to explore the integration of home education with local communities to strengthen its impact on sustainable development.

1 INTRODUCTION

In recent decades, there has been increasing attention to *home education* or *home schooling*, mainly due to the increasingly complex educational challenges in the era of globalization and the urgent need for sustainable development (Kopnina, 2020; Leal Filho et al., 2009; Wals, 2012). Although often used interchangeably, the two terms have important differences. *Home schooling* generally refers to a model of formal education moved to the home environment, where parents or tutors run a curriculum similar to a conventional school (Baidi, 2019; Kunzman & Gaither, 2013; Martin-Chang et al., 2011; Murphy, 2014). In other words, *home schooling* retains the structure, curriculum and methods that approximate the formal education system (Ballantine et al., 2021; Heise, 2017; Kim, 2016). In contrast, *home education* offers a more flexible approach, where parents are free to customize the learning process according to family values, children's interests and the specific needs of each individual without following a strict curriculum framework.

In Indonesia, the *home education* approach

actually has a strong legal basis through Law No. 20/2003 on the National Education System, which recognizes the existence of informal education pathways. This education provides an opportunity for families to play an active role in children's education in a way that is not too tied to the formal curriculum, so that children can learn through direct interaction with family and the surrounding environment. This informal education approach is highly relevant, especially when it comes to instilling values that are difficult to accommodate in a formal education system that often focuses on academic achievement alone. In this context, *home education* is not just an alternative to formal school education, but a model that allows children to develop themselves as a whole in terms of academics, character, and social and environmental values.

Recent studies have shown that *home education* offers significant opportunities to support sustainable development, particularly by creating spaces for children to learn about sustainability issues in an environment that is familiar and relevant to their daily lives (Annan-Diab & Molinari, 2017; Laurie et al., 2016). In a study by Siraj-Blatchford, Smith, and Samuelsson (Siraj Blatchford & Huggins, 2015) titled

Education for Sustainable Development in the Early Years, it was found that education for sustainability (ESD) is highly effective if it starts at an early age, especially if it takes place in an environment that allows hands-on learning such as the home or community. They found that children who are exposed to the concept of sustainability in a more personalized and purposeful environment - for example by involving them in environmental maintenance activities at home - tend to have higher environmental awareness and a deeper understanding of social and ecological responsibility. With more intense interaction between parents and children in *home education*, these sustainability values can be transmitted more effectively, shaping children's sustainability-oriented mindsets from an early age. Furthermore, *home education* allows families to instill sustainability values in accordance with the specific culture, traditions and conditions that exist within the household environment. This is supported by Agbedahin's (Agbedahin, 2019) view in his study on *Education for Sustainable Development* and the 2030 Agenda for Sustainable Development, which states that the flexibility of the curriculum and its relevance to daily life are important keys in building a generation that is aware of sustainability. Agbedahin emphasizes that effective education in building sustainability awareness does not only happen in formal classrooms, but in environments that enable contextual learning. *Home education* provides this unique opportunity, as it allows families to teach various sustainability issues by engaging children in practical activities at home, such as recycling, energy saving, and wise utilization of natural resources. In this process, children not only understand academic concepts of sustainability, but also gain hands-on experience in applying sustainability principles in their daily lives (Agbedahin, 2019).

Despite its great potential, *home education* also faces significant challenges. One of them is the lack of policy support from the government, as well as limited access to educational resources that can help families implement this approach optimally. In addition, the social stigma that is often attached to families who choose the home education route is also a barrier. (Agbedahin, 2019; Caiado et al., 2018; Chankseliani & McCowan, 2021) highlights that while *home education* has great potential to support sustainable development, structural and social challenges often hinder its effectiveness. Morton notes the importance of policy support and changing societal views to support families who choose this pathway (Carrico et al., 2019; Wise et al., 2014). This

article aims to explore the contribution of *home education* to sustainable development by identifying the best practices that have been implemented in various families, the challenges faced and the long-term impact on individuals and society. By further understanding how the link between education and sustainability can be created in the context of informal education, it is hoped that this article can offer more effective and applicable strategies for families who want to educate their children with sustainability values. Ultimately, it is hoped that these strategies will help shape a future generation that is not only educated, but also has a strong commitment to maintaining social and environmental sustainability, a commitment that is crucial for the future of our planet which is increasingly threatened by various global challenges.

2 METHOD

This research uses a qualitative approach with a phenomenological method to explore the experiences and views of families who run *home education* in the framework of sustainable development. The phenomenological method was chosen because it is effective in exploring the deep meaning of the informants' direct experiences, which cannot be fully explained by quantitative data alone.

The data collection stage began with a comprehensive literature review. This review aimed to obtain a solid theoretical foundation and contextual understanding of *home education* and sustainability values. The literature analyzed included journal articles, books and other relevant research documents, which provided a broad perspective and also identified gaps in previous research. Thus, this literature review not only built the theoretical framework but also served as the basis for formulating the research focus. The main data in this study were collected through in-depth interviews with each of the seven families at each research location, namely: Salatiga, Solo, Padang, Makassar, Surabaya and Jakarta. To get the right informants, this study used *snowball sampling* technique, where the search the informants started from one family who had home education experience. These families then provide recommendations for contacting other families who share similar practices and values. To reflect broader conditions or views, it is important to expand the number of participants by inviting more families from various social, economic and cultural backgrounds. This snowballing technique allows greater access to relevant informants, so that the

perspectives obtained are richer and cover a variety of contexts.

The data analysis process was carried out by identifying key themes that emerged from interviews with all participants. Each interview was recorded and categorized by theme to see patterns and relationships between emerging concepts. This thematic analysis helps understand how each family interprets and implements home education in the context of sustainability.

This approach not only yields deeper insights into the experience and meaning of education at home, but also makes an important contribution to academic discourse regarding informal education and sustainable development in Indonesia.

3 RESULT AND DISCUSSION

3.1 The Role of Home Education for Educational Progress

The results of this study show that *home education* has a significant role in shaping children's critical thinking, analytical power and creativity. Through learning in the home environment, children gain a much more personalized learning experience that suits their individual needs, interests and learning rhythms.

One informant from Solo, who has been practicing *home education* for five years, mentioned that this method gives her children the space to learn without pressure. "They can explore topics they like for longer, without having to worry about bells ringing or strict schedules," she said. The flexible home environment allows children to learn deeply and ask more critical questions, as well as engage in intensive discussions with family or teachers, so that they do not simply receive information in a one-way manner as is commonly the case in formal schools.

The research also found that *home education* opens up opportunities for children to explore learning methods that are most effective for them, something that is rarely found in the conventional education system. For example, an informant from Padang mentioned that she and her family have the freedom to adjust their learning time based on their children's mental and physical readiness. "We can choose the optimal learning time for them, especially when they are in their prime," she explained. This freedom allows children to better understand their own learning styles and build independent study habits. (Vincent, 2017) study supports this, stating that *home education* gives children the opportunity to take

initiative in their learning process, where they can experiment with different ways of learning until they find the most suitable method. A mother from Surabaya also added that this flexibility teaches her children discipline and responsibility for their time and tasks, which later becomes an important provision for their personal development.

In addition to supporting a more personalized and flexible learning process, *home education* also plays a big role in children's character building. In interviews, many parents mentioned that the home environment provides more opportunities to instill ethical and moral values. An informant from Jakarta explained, "We can directly give examples in daily life about discipline, honesty and responsibility. Children learn not just from theory, but from seeing what their parents do." With direct supervision and guidance from parents, children can internalize positive values more strongly, such as empathy, cooperation, and a caring attitude towards others. (Suizzo et al., 2014) notes that in home-based education, parents play an important role in shaping children's behavior, as they can direct children directly according to the principles held by the family. Moreover, *home education* provides greater opportunities for children to engage in experiential learning, which is often difficult in formal school settings. Some of the families informing this research shared their experiences in practicing the concept of sustainability directly in their daily lives. One family from Makassar, for example, runs a gardening project with their children in their backyard. The children not only learn about plant biology, but also gain an understanding of the importance of protecting nature and environmental sustainability. "Children are more appreciative of nature because they are involved in planting, caring for, and harvesting the produce. They are also more aware not to litter," says the mother of the family. Projects like these teach children about ecological responsibility, which would be difficult to achieve in a more limited school setting.

In the context of sustainability, *home education* also opens up space for children to develop a deeper understanding of the social and environmental impacts of their daily actions. A father from Salatiga revealed that his family has a habit of discussing social issues such as social justice, diversity and sustainability over dinner. "We often talk about how small actions we take, such as using recycled goods or not buying excessive items, can have an impact on the environment," he explains. This habit leads children to think critically about the impact of their own actions and the importance of making sustainable choices. According to (Rieckmann, 2018) education

that involves discussions like this helps children develop a deeper understanding of the interconnections between their actions and the world around them, building a responsible attitude that will be useful in the future.

Home education also allows for the integration of sustainability values directly into the daily curriculum. One family in Jakarta even implemented the concept of zero waste in their daily lives as part of their children's learning process. "We involve the children in household waste management, teaching them about recycling, composting, and how to minimize plastic waste," explains the mother. In this way, the children not only learn theory but are directly involved in practices that support environmental sustainability. This shapes children into environmentally conscious individuals from an early age and encourages them to actively participate in preserving nature. Then besides that if taken from the perspective between how the level of education and the perspective of parents have a significant influence on the success of education at home because they determine the extent to which parents are able to support children's learning. Parents with higher levels of education tend to have better knowledge of subject matter, teaching methods, and the importance of education, so they are more effective in guiding children. Their perspectives on education, such as views on the importance of creativity, independent learning, or academic values, also shape their approach to educating children. Conversely, parents with low education may face limitations in understanding the curriculum or providing adequate learning support. However, a positive perspective and motivation to improve children's opportunities can still be important supporting factors, especially if they try to find additional resources or involve children in learning experiences based on family values.

Beyond the educational and sustainability aspects, *home education* also serves as a means to develop essential social skills. Despite learning at home, some families organize meeting sessions with other families who also run *home education* to share experiences and organize activities together. In these meetings, children have the opportunity to socialize and collaborate with other children, learn to work in teams and build communication skills. "We often have weekly meetings in the city park with other families, where children can play and learn together," explains a mother from Surabaya. These gatherings enrich children's learning experiences, allowing them to develop social skills that are often seen as a drawback of *home education*.

Then in the concept of Indonesian cultural and

social norms play an important role in shaping the implementation and outcomes of *education at home* because they determine the values, habits, and expectations held by the family. In Indonesian culture, norms such as respect for parents, mutual cooperation, and kinship are the foundation for educating children. Parents tend to prioritize character and moral formation based on religious values and local traditions. However, this approach can also be influenced by various challenges, such as social changes due to globalization and urbanization, which can cause a shift in traditional values. In addition, social norms that emphasize hierarchy often make children less free to think critically, which can affect educational outcomes. By combining positive cultural norms with a modern educational approach, Indonesian families can create a holistic learning environment that is relevant to the needs of the times.

Overall, *home education* offers a unique and comprehensive approach, allowing children to learn more than just academic material. With flexible learning methods, personalized contexts and sustainability values directly instilled, children become not only independent learners but also critical, creative and responsible individuals. They grow up with a broader understanding of the world around them, as well as an awareness of their role in maintaining the sustainability of the environment and society. With all these advantages, *home education* is not only an alternative to formal education, but can also be considered as an important tool in building a more resilient, caring and committed generation for positive change.

3.2 The Role of Home Education in Realizing Sustainable Development

Home education plays an important role in promoting sustainable development by fostering environmental awareness, social responsibility and community involvement at an early age.

In this flexible educational environment, children have the opportunity to learn the values of togetherness and develop a deeper understanding of relevant global issues. An informant from Solo, for example, explained that her children often engage in recycling projects at home, such as using used materials to make crafts. "We teach them to think about the impact of every object they use, so they realize that waste has value if we are willing to process it," she said. Such experiences not only introduce children to sustainable practices but also help shape positive attitudes toward the environment. Likewise, an informant from Salatiga said that

"reinforcing good behavior in children, usually through good behavior from parents, being an example and enforcing discipline. What has been agreed upon with the child must be carried out. Not making promises that cannot be carried out and not delivering something that cannot be realized." In line with that, informants from Padang said that "The formation of children's morals requires parental consistency. Once an act is declared wrong, then the act must continue to be realized as wrong. If there is no consistency, not only is the effort to form morals threatened to fail, but the child will also be confused and have no clear direction." This is also different from each region that was used as a research location, such as informants from Makassar and Surabaya who both said that "their families provide reinforcement of children's morality, preceded by the application of discipline to children's behavior. In addition, we are also an example for children, doing it first before asking children to do it. When we ask children to pray, we have shown them the clothes for prayer, so that it can be done in congregation" in line with that, one informant in Jakarta said that "from his experience seeing homeschooling families in other areas, he wanted to follow in those footsteps and later his children would have strong characters."

One concrete example of a strategy for integrating *home education* with the local community is through community-based learning group programs. For example, families can join a local community that provides additional classes or educational activities, such as reading together at the village library or skills workshops. In this program, parents and children can learn together, share knowledge, and access resources that may not be available at home. In addition, the community can involve local experts, such as teachers or professionals, to provide direct guidance, thereby strengthening the quality of education at home. This strategy also strengthens social relationships between community members, creating a collaborative and supportive learning environment.

In the context of *home education*, parents have an important role in instilling an understanding of climate change, efficient use of resources, and the importance of protecting the environment through practical daily activities. A study by (Acevedo, 2019) shows that learning based on hands-on experiences—such as gardening, recycling or keeping the home environment clean—helps children understand the direct impact of their actions on the environment. An informant from Makassar stated, "Our children take care of the plants in our backyard, from sowing the seeds to taking care of them. They get to know how the plants grow, and learn patience in taking care of

them." Such practices allow children to learn that nature needs attention and care, which in turn promotes their awareness of the importance of environmental sustainability.

Socioeconomic status influences a family's ability to implement effective home education because it is related to access to resources, time, and the level of parental education. Families with higher socioeconomic status tend to have better access to educational facilities, learning materials, and environments that support child development. In contrast, families with lower socioeconomic status may face time constraints due to work or lack of knowledge about effective educational methods. According to Coleman (1966), family resources, including educational level and

In addition to providing a relevant knowledge base, *home education* also contributes to the formation of children's characters who are responsible and empathetic towards their social environment. (Anderson & Strecker, 2012) emphasizes that when children understand the importance of sustainable development, they will be better equipped to be part of the solution in society, helping to create a better future. In an interview, a mother from Surabaya shared how she and her husband try to instill the values of responsibility and empathy through daily activities at home. "We teach them not to take more than they need, whether it's food or other items. Small things like this can build a wiser life habit," she explains. This method has proven effective in shaping children who are caring, sensitive and have a high sense of responsibility towards their environment. In terms of education equity, *home education* is also a means of supporting equal access to education, especially for families in remote areas or those with physical and social limitations. (Rushton & Larkin, 2001) notes that home education allows children to learn in an environment more suited to their own needs and rhythms, so they can learn more optimally. Some families in rural areas interviewed revealed that home education is a solution to the limited educational facilities around them. A father from Padang explained that his children can study in peace without having to travel far every day to attend school. "We provide materials from the internet and books that we have at home, and the children can still learn even though they are far from school facilities," he said. This approach helps to reduce inequality in access to education, giving every child the opportunity to grow and learn in a more purposeful and personalized way.

Home education also encourages the active involvement of parents and community members in

the education process. This involvement not only strengthens family ties but also increases community awareness of relevant local and global issues (Kunzman & Gaither, 2013). An informant from Salatiga mentioned that *home education* groups in her city often organize community meetings to share educational experiences and resources. “We often gather with other families who also teach at home. From there, the children can make friends and learn together, while we, the parents, share creative ways to teach various topics,” she said. This builds a solid network among families, enables collaboration in developing sustainable value-based education programs, and increases social support among community members.

In addition, the flexibility of *home education* allows for adaptation to different learning styles, so that each child can develop their full potential. This environment creates a more responsive and inclusive learning space that adapts to each child's individual uniqueness. In an interview, a mother in Jakarta explained that her children tend to be more comfortable learning through visual methods and practical projects. “We often use pictures, videos and crafts in the learning process, because that's what works best for them,” she explained. This

In scope of how The role of technology in home education is very important in facilitating access to wider learning materials, enabling distance learning, and supporting more interactive and flexible learning methods. In the digital era, technologies such as educational apps, online learning platforms, and online resources help children to learn independently, enrich the learning experience, and overcome limitations that may exist in the home environment. It also allows parents to monitor their children's progress and provide support that is more tailored to their individual needs. Comparative studies with other countries show variations in the implementation of sustainable home education. For example, in Finland, which is known for its highly effective education system, the home education approach is supported by policies that strengthen parental involvement and the judicious use of technology. Parents are encouraged to become facilitators in the learning process without having to be the main teacher. On the other hand, in countries such as the United States, many families are adopting a home education approach with the help of technology, but the biggest challenge is the irregularity in curriculum standards and the lack of support from national policies. The government has formulated a policy on homeschooling in the regulation (Ministry of Education and Culture No. 129 of 2019 concerning Homeschooling). This policy explains that

Homeschooling is a process of educational services that is consciously and planned by parents/families at home or other places in the form of single, multiple, and community where the learning process can take place in a conducive atmosphere with the aim that each unique student's potential can develop optimally.

Personalized approach helps children focus and explore the material according to their learning style, which in turn allows for maximum skill development. Through collaboration between families and communities, *home education* also helps strengthen educational support networks and enables children and parents to access local resources that supportsustainable practices. (Arief et al., 2022) states that home-based education offers opportunities to integrate sustainability values such as environmental awareness and social justice in the daily curriculum. For example, a family in Surabaya involved in *home education* actively works with local farmers to learn about sustainable agriculture. “Our children learn directly from the farmers how to plant organically and maintain soil fertility,” said one parent. This opens children's minds to the importance of environmentally friendly farming practices and gives them the opportunity to learn from real practices in the field, thus nurturing their awareness of the importance of protecting nature from an early age.

Home education also encourages innovation and skills within the family, which helps improve children's skills and independence. Through this approach, children are not only taught theory but also engaged in various activities that support practical understanding. According to research by (Torro et al., 2018) families who run *home education* tend to have greater opportunities to tailor the curriculum to children's interests, which promotes more relevant and in-depth learning. For example, a family in Makassar integrated sustainability topics into daily projects, such as cooking with local ingredients or composting food scraps. “Children learn to appreciate every step of the process, from planting to enjoying the results,” says the mother. These experiences shape the children into individuals who are ready to face global challenges with creative and practical skills.

Regarding how sustainable values are instilled through home education, there are several ways, such as strengthening children's morality, where the process of educating and shaping children's character to have strong moral values, such as honesty, responsibility, empathy, and integrity. This process involves the active role of the family, school, and social environment in providing examples, guidance, and consistent support. By strengthening morality,

children can develop the ability to distinguish between right and wrong, make responsible decisions, and act in accordance with the ethical values adopted by society. One respondent said that his family chose homeschooling because they wanted to instill complete morals in their children before they became adults. Homeschooling is the right choice at this time, because if children are instilled with goodness from a young age and are not influenced by the environment, then in their adulthood they will become good people. Then the family ties that are able to strengthen even more and the last is the habituation or cultivation of normative behavior in children such as praying on time, eating with the right hand, being on time, being able to take responsibility for mistakes made.

Overall, *home education* contributes greatly to realizing sustainable development through a variety of approaches that are more flexible, personalized and based on sustainable values. Not only does it support character development and environmental awareness, but it also provides opportunities for children to grow into individuals who are critical, empathetic and responsible towards their social and ecological environment. With more equitable and affordable *education*, *home education* is not only an alternative to education, but also a strategic step to produce a generation that is better prepared to face future challenges and build a more just and sustainable society.

Families implementing homeschooling in the context of sustainable development often face challenges such as limited access to quality educational resources, including technology and teaching materials, especially in remote or less developed areas. In addition, children who are homeschooled may face barriers in terms of socialization, such as lack of interaction with peers, which can affect their ability to develop social skills. According to Reimers and Schleicher (2020), the success of homeschooling is highly dependent on systemic support that includes access to digital infrastructure and parental training to support children's learning.

4 CONCLUSION

In conclusion, home education has shown significant contributions in shaping a generation that is more sensitive to sustainability, both in environmental, social and educational contexts. Home education allows for more personalized, flexible and relevant

learning, allowing children to optimally develop their individual potential while understanding global issues such as climate change and social equality. With a more responsive learning environment, home education not only complements formal education but also enriches children's experiences in understanding and practicing sustainability principles in their daily lives. For this study, it is important for the government and related institutions to strengthen policy support and access to appropriate educational resources so that families who choose the home education path can get more structured guidance in teaching sustainability values. For future research, it is recommended to explore how home education communities can be more integrated with local communities, to strengthen collaboration and knowledge exchange that can enrich the learning process. In addition, further research could also deepen the analysis of the impact of home education on children's psychosocial development and its effectiveness in building sustainability-oriented character, so as to provide more comprehensive insights for educators and policy makers.

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