# Driving Sustainable Behavior Change Through Education and Public Awareness

# Elly Christanty Gautama, Rahayu Mardikaningsih

Sunan Giri University, Surabaya, Indonesia

# ARTICLE INFO

## Article history: Received 27 January 2022 Revised 25 February 2022 Accepted 21 April 2022

#### Key words:

Sustainable education, Environmental awareness, Behavior change, Sustainable society, Education curriculum, Sustainable policy, Social media.

#### ABSTRACT

Sustainable education is an important element in creating global awareness of the environmental, social and economic issues that affect our lives. People who have a good understanding of sustainability can more easily adapt and change their behavior to support environmental sustainability and create social welfare. It is important to create an education system that can integrate sustainability topics, from elementary to advanced levels. Sustainable awareness can also be strengthened through well-targeted media campaigns. In this way, collaboration between the government, the private sector, the media, and the society is needed to shape a more environmentally friendly mindset. This behavior change depends not only on government policies, but also on the awareness of individuals who are educated about the importance of sustainable living. In the long-term, sustainable education and awareness can drive significant changes in the way we live, work, and interact with our natural surroundings, which in turn will benefit both society and the planet.

#### **INTRODUCTION**

Education has an important role in shaping society's understanding of sustainable issues, especially in the face of increasingly complex environmental challenges. In an era of climate change and worsening environmental degradation, societies around the world are faced with the necessity to change their way of life to be more sustainable. One way to achieve this change is through education that touches on environmental, social and economic aspects (Durac, 2020). An effective education program on sustainable living is expected to provide insights into more environmentally friendly and sustainable ways of living in various aspects of life, from consumption to production patterns (Golub, 2015).

Raising society's awareness of the importance of sustainable practices is often hampered by a lack of access to information and understanding. Studies show that despite efforts to raise awareness, many people do not fully realize the impact of their actions on the environment. This is especially true among groups that are less exposed to relevant information or education on sustainability (Prasad & Mogla, 2016). Many believe environmental issues are the responsibility of governments or corporations, not individuals (Suárez-Orozco & Suárez-Orozco, 2017).

One of the main problems faced in raising sustainable awareness is the lack of curricula and educational materials that integrate sustainability issues thoroughly. Many education systems still do not emphasize the importance of this topic, even within a broader scope, such as environmentally friendly social and economic policies (Karataş, 2013). Although there are sustainable education programs at the school or university level, not all sectors of society receive this education equally. This creates an imbalance in society's level of awareness and understanding of sustainability issues (Lautensach & Lautensach, 2014).

Another problem is the inability of many individuals to translate an understanding of sustainable living into concrete behaviors in their daily lives. Although people have information on how to live more environmentally friendly lives, such as reducing plastic use or saving energy, many find it difficult to change their old habits. This challenge is often influenced by social, economic and cultural factors that affect their decisions (Griffore & Phenice, 2014). Lack of applicable information and limited access to sustainable alternatives are major barriers to shifting people's behavior (Lopes et al., 2018).

<sup>\*</sup> Corresponding author, email address: elly.christantygautama@gmail.com

Sustainable issues are becoming increasingly urgent, and without significant behavioral changes at the individual and society level, achieving global sustainable goals will be very difficult. One way to achieve this is through comprehensive education based on social awareness. If people can understand and internalize the importance of sustainability in their daily lives, then greater changes can occur in the way they interact with the environment and resources. It is important to learn and develop new approaches to sustainable education that can reach all levels of society.

The purpose of this research is to analyze how sustainable education and outreach can be applied to increase society's awareness of sustainable issues and to understand its impact on changing individual behavior in daily life.

#### RESEARCH METHOD

The literature review approach is an effective way to gain an understanding of the implementation of sustainable education and its impact on society's awareness. Through the literature review, researchers were able to identify existing concepts and findings in studies related to sustainable education in various sectors, including primary, secondary and tertiary education. This approach makes it possible to analyze educational policies and practices that have been implemented in different countries and sectors, and understand how they contribute to improving society's understanding and changing behavior related sustainable development. For example, based on Tilbury (2011), effective education for sustainable development requires an approach based on active participation and understanding of the social and environmental challenges faced by the global society.

By reviewing a wide range of academic sources, journals, reports and case studies, the literature study approach allowed the researcher to gain a broad insight into the interaction between education and sustainability awareness. In this regard, literature covering a wide range of perspectives, both theoretical and practical applications, helped identify the challenges faced by individuals and societies in adopting more environmentally friendly behaviors. For example, research by Griggs et al. (2013) explains the importance of society's awareness of the social and environmental impacts of their actions, and how education can play a key role in changing individuals' mindsets and habits. The literature review approach also enabled the researcher to identify gaps in the existing literature and provide direction for further studies.

## **RESULT AND DISCUSSION**

Education for sustainable development has an increasingly important role to play in creating profound behavioral change in society. Amidst growing global challenges such as climate change, biodiversity declines and social inequalities, education can serve as a key driver to build a better understanding of the importance of sustainability (Thakran, 2015). Effective education can raise awareness of sustainability and foster a collective sense of responsibility for the future of the planet. Through a relevant and inclusive curriculum, students from different social and cultural backgrounds can understand the impact of their actions and learn how to contribute positively on a local and global scale. This is important because sustainability awareness cannot be forced, but must grow out of deep understanding and engagement. With increased awareness, society is expected to actively contribute to creating a more sustainable world, both in social, economic and environmental aspects. This is why the integration of sustainable concepts in the education system and public policy is vital (Wamsler, 2020).

Sustainable awareness is not only limited to certain groups, but must involve all levels of society. Increasing knowledge through formal and informal education and hands-on experience is key to driving behavior change (Dunetzet al., 2017). Holistic learning can be more effective in shaping awareness and promoting behavior change than conventional instructional methods. By involving various sectors such as the government, private sector, and civil society, a more effective education strategy can be realized. Through this comprehensive approach, individuals are expected to understand and practice behaviors that support sustainable practices in their daily lives (Kaur, 2016). Deep behavioral change cannot be imposed but can be nurtured through sustainable, contextual, and experiential education.

For the desired change to be achieved, cooperation from various parties is needed, including educational institutions, the government, and the media. Education, as the main pillar in this process, has a strategic role in shaping the mindset of future generations. For example, formal education in schools and colleges need to include sustainable aspects in their curriculum, while the government can develop policies that support sustainable behavior (Tiepo, 2018). Collaboration between educational institutions, government, and media will create an aligned social ecosystem to support sustainable behavior. If all parties move towards the same goal, society will increasingly have an awareness of the importance of maintaining sustainable for a better future (Ali, 2017).

Improving sustainable education and awareness among the society is one of the crucial steps in encouraging sustainable behavior change. Adequate education can introduce basic sustainable concepts to individuals from an early age and engage them in an indepth experience of the impact of human activities on the environment. This education is not only limited to knowledge of environmental issues, but also includes an understanding of the social and economic aspects of sustainable development. This is very important because sustainable individual behavior change requires not only knowledge, but also understanding and commitment to act responsibly towards the and society (Sachs, environment 2015). progressively introducing the concept of sustainability, individuals can begin to form a critical mindset towards global issues such as climate change, environmental degradation, and social inequality. This learning process will be more effective if accompanied by interactive and contextual approaches, such as outdoor activities, local case studies, and simulations of the environmental impact of daily behavior.

Education for sustainable development should be created to reach all levels of society, including policymakers, the private sector, and the general public. One effective approach is to integrate education for sustainable development into the formal curriculum in schools and universities, as well as to organize educational programs that can reach the wider society through social media, seminars, and public campaigns. Based on Sterling (2001), education for sustainable development should emphasize the development of critical skills and systemic thinking to enable individuals to understand the complexity of environmental and social issues. In this way, people will be better prepared to face challenges related to sustainability.

As part of the education strategy, communitybased activities that educate people about sustainability can play a significant role. This approach allows learning to happen not only in the classroom, but also through direct participation in real action in the surrounding environment. Local initiatives that engage society in activities such as recycling, energy conservation, and efficient use of natural resources can help raise collective awareness and change behavior patterns. One successful example is the "Earth Hour" program initiated by the World Wide Fund for Nature (WWF), which invites people around the world to turn off their lights for one hour as a symbol of commitment to environmental conservation (WWF, 2019). Programs like this show that community involvement in educational movements can strengthen collective consciousness and become a driver of change.

The biggest challenge in educating the society about sustainable practices is how to change mindsets habits. Many established and environmentally harmful behaviors have been socially and culturally embedded for many years, requiring an approach that goes beyond simply conveying information. Established mindsets often relate to perceptions of convenience, consumption habits, as well as a lack of awareness of the long-term consequences of daily actions. Society tends to change behavior more easily if they understand the direct economic, social and environmental benefits of such changes. One effective approach in raising awareness is to showcase real-life examples of people or societies that have successfully implemented sustainable practices in their daily lives. This can also include recognizing local initiatives that successfully reduce environmental impacts or improve quality of life (Orr, 1992). Sustainability is not just about what is taught, but about how people are invited to see and understand the world differently, in a more responsible and visionary way towards the future.

It is important to involve the private sector in efforts to raise sustainable awareness. Companies involved in the production of goods or services can play an important role in educating their consumers about sustainable practices. One way this can be done is by providing environmentally friendly products and offering incentives to consumers who choose these products. For example, companies such as Patagonia have long promoted sustainability in their products by using eco-friendly materials and educating their consumers through campaigns that lead to reduced overconsumption (Chouinard, 2005).

Developing public policies that support sustainable practices can also be an effective way to raise society's awareness. Policies designed with sustainability principles in mind can be a powerful steering tool to integrate environmental, social and economic values into daily life. Governments need to create policies that facilitate the adoption of green technologies, reduce pollution, and protect natural resources for the future. By providing fiscal or tax incentives that support sustainable practices, governments can provide a strong impetus for individuals and companies to make positive changes to the environment (Macabontoc & Vargas, 2021). It is also important for public policy to be accompanied by an educative and participatory approach so that the community is not only the object, but also the subject of change. The combination of supportive regulations and community engagement can create an ecosystem conducive to sustainable practices, which in turn promotes equitable and responsible development for future generations.

One effective way to encourage behavioral change is through the provision of fiscal or tax incentives that support sustainable practices. These incentives can take the form of tax reductions for individuals or companies that invest in green technologies, such as solar panels or electric vehicles. By providing such incentives, the government not only provides a financial boost, but also creates synergies between economic and environmental interests. For example, Keller (2019) notes that subsidies for renewable energy use can reduce the initial costs that are often a barrier to green technology adoption. Policies that sustainable development can serve as a catalyst for positive changes in society's behavior.

Public policies that support sustainable development can also raise society's awareness through education programs and information campaigns. The government can work with educational institutions, non-governmental organizations and the private sector to disseminate information about the importance of sustainable practices and ways to achieve them. These programs can include training on energy efficiency, waste management and sustainable agricultural practices. By improving people's knowledge and understanding of environmental governments can encourage active participation in sustainable initiatives. When society feels educated and engaged, they are more likely to adopt behaviors that support sustainable practices, creating a broader positive impact on the environment and overall quality of life (Lamoureux et al., 2019).

The mass media also has an important role to play in raising sustainable awareness among the society. Through various media platforms, such as television, the internet, or social media, information about sustainable practices can be disseminated quickly and widely. Continued coverage of environmental crises or successful green initiatives can help build collective awareness and place sustainability issues as part of important public discourse. Effective campaigns through social media, such as the "Reduce, Reuse, Recycle" movement, can be a very powerful tool in driving changes in consumer behavior and society as a whole. Viral hashtags (#), short educational videos, and collaboration with environmental influencers have proven to be able to slowly change people's behavior, such as reducing the use of single-use plastics or choosing more environmentally friendly products. For example, The Ocean Cleanup's campaign to clean up ocean plastic waste has gained widespread attention and supported more sustainable actions among the public (The Ocean Cleanup, 2018).

One method that has proven effective in raising sustainable awareness is experiential learning, where individuals are directly involved in activities that have environmental impacts. Activities such as participation in reforestation programs, waste management, and sustainable agriculture provide first-hand understanding of the importance of conserving natural resources. By being directly involved in the process, people more easily feel the impact and are motivated to maintain sustainable behaviors in their daily lives (Vare & Scott, 2007).

The next challenge is how to build strong partnerships between the public, private and community sectors in creating education that supports sustainable development. This collaboration allows more resources and expertise to be channeled in order to achieve greater sustainable goals. Programs based on these partnerships can cover a wide range of sectors, such as education, urban planning, renewable energy and biodiversity protection (O'Brien, 2011). This collaboration also creates a space to share knowledge and create more innovative solutions to sustainability challenges. By involving a wide range of parties, these partnerships strengthen networks that enable collective action to tackle big issues such as climate change, the water crisis, or ecosystem destruction. These strong partnerships will not only accelerate the implementation of sustainability solutions, but also drive broader cultural change, which can ultimately create a more caring and environmentally responsible society.

The government can also introduce policies that integrate the sustainable principle in every development sector, so that society can see sustainable as a whole and inseparable from other aspects of life. For example, sustainable urban planning not only considers environmental factors, but also housing affordability, access to education, and equitable employment (Beatley, 2009). These effective public policies will strengthen education about sustainability by providing concrete examples of how people can live in a sustainable manner.

To encourage sustainable behavior change, it is important for various parties to work together, whether in the scope of formal education, public policy, or community-based activities. Through this combination, people can better understand how they can contribute to sustainability, both at an individual and collective level. With all these sectors working together, communities will have a clearer understanding of how they can contribute to sustainability, both as individuals and in groups. This is a step towards achieving a greener and more just future (Broska, 2021).

Sustainable education and awareness a key foundation for sustainable change in society. Sustainability-based education can teach important values related to the preservation of natural resources, protection of ecosystems, and the importance of environmentally friendly behavior. This is the first step in ensuring that future generations understand the basic concepts of sustainability and feel compelled to play an active role in solving global problems such as climate change, deforestation and biodiversity loss. With the right approach, this awareness can grow and spread to all aspects of life. Through strengthening education, raising awareness through the media, and engaging society in communitybased activities, positive steps towards sustainability can be further strengthened. In this case, it is not only important for individuals to understand their role, but also for the whole society to collaborate towards a common goal (Stevenson, 2016).

The success of this effort depends on governments, the private sector and communities taking sustainable principles seriously. This includes supportive public policies, more environmentally friendly business practices, and changes in individual attitudes and habits in daily life. Sustainable is not just about preserving the environment, but also about creating a more just and equitable society that benefits future generations (Ioan & Carcea, 2013).

With these measures, a more sustainable behavior change among the society is not an unachievable dream. It requires a shared commitment and the integration of various aspects of life, from education to public policy. If society can increasingly realize the importance of sustainable living, then a greener and more equitable future will become a reality that can be enjoyed by all.

## **CONCLUSION**

Sustainable education and awareness play an important role in driving behavior change towards more sustainable living. Increasing people's knowledge and understanding of sustainability issues, through various approaches such as formal education curricula, informal training, and community-based activities, can have a far-reaching impact on society. To ensure this awareness reaches all levels of society, close cooperation between the government, private sector, educational institutions and civil society is needed. The media has an important role to play in disseminating correct and relevant information about sustainable development to build a society that cares more about the future of the planet and future generations.

To support this change in behavior, policies are needed that encourage the implementation of sustainable principles in various aspects of life. The government has a strategic role in designing policies that integrate sustainability in various sectors, ranging from education, urban planning, to the use of natural resources. These policies include regulations that support environmental preservation, carbon emission reduction, and energy conservation, as well as supporting industries that implement green practices. Formal education also includes a curriculum that emphasizes the importance of sustainability in environmental, social and economic contexts. This includes not only theory but also practical application through activities that engage students, such as environmental conservation projects, management, or the use of renewable energy. The private sector is also expected to prioritize sustainable business practices, while the society must be actively involved in activities that support sustainable development. Awareness of sustainable practices must start early, through education based on sustainable values that can be implemented in everyday life.

#### **REFERENCES**

Ali, M. (2017). Sustainable Development - Role of Education. UPI Press.

Basiago, A. (1999). The Sustainable Development: Defining the Concept. *Environmental Conservation*, 26(1), 11-17.

Beatley, T. (2009). Planning for Sustainability: Creating Livable, Equitable and Ecological Communities. Island Press.

Broska, L. H. (2021). It's All about Community: On the Interplay of Social Capital, Social Needs, and Environmental Concern in Sustainable Community Action. Energy Research and Social Science.

Chouinard, Y. (2005). Let My People Go Surfing: The Education of a Reluctant Businessman. Penguin Books.

Dunetz, D., Avissar, I., & Gan, D. (2017). Education for Sustainability: Using the Society/Environment and Global/Local Binaries as Catalysts for Pedagogical Renewal. In Beyond Bystanders: Educational Leadership for a Humane Culture in a Globalizing Reality (pp. 307-318). Rotterdam: SensePublishers.

Durac, L. (2020). *Education as an Element Enhancing Individual and Collective Awareness of the Need to Preserve the Environment*. Present Environment and Sustainable Development.

Golub, T. P. (2015). The Role of Education in Sustainable Development. Advanced Education.

- Griffore, R. J., & Phenice, L. A. (2014). Education for Sustainability: Confidence in Major Institutions. *Journal of Emerging Trends in Educational Research and Policy Studies*, 5(6), 656.
- Griggs, D., et al. (2013). Sustainable Development Goals for People and Planet. *Nature*, 495, 305-307
- Ioan, C. C., & Carcea, M. I. (2013). Awareness and Environmental Attitude in the Context Sustainable Development within a Knowledge-based Society. *Environmental Engineering and Management Journal*, 12(8).
- Karataş, A. (2013). The Importance of Environmental Education in the Adoption of a Sustainable Life Style in a Society. *International Journal of Global Education (IJGE)*, 2(2), 31-36.
- Singh, S., Kaur, A., Kakkar, P., Dhar, S., Madduru, D., Yasin, J. K., Banerjee, A., & Suravajhala, R. (2022). Post-COVID-19 Pandemic Impact Assessment of Bioinformatics and Women Bioinformaticians: A Realm of Possibilities or Gloom-Ridden. *The Open COVID Journal*, 2(1), 1-9.
- Keller, L. (2019). *Policies for Sustainable Development*. Cambridge University Press.
- Lamoureux, S. M., Movassaghi, H., & Kasiri, N. (2019). The Role of Government Support in SMEs' Adoption of Sustainability. *IEEE Engineering Management Review*.
- Lautensach, A., & Lautensach, S. (2014, October).

  Education for Sustainability: How Can
  Educators Address the Failure of Government?.

  In The 4th World Sustainability Forum.

  Multidisciplinary Digital Publishing Institute.
- Lopes, R. P., Mesquita, C., de la Cruz del Río-Rama, M., & Álvarez-García, J. (2018). Developing Sustainability Awareness in Higher Education. *Strategies and Best Practices in Social Innovation: An Institutional Perspective*, 131-152.
- Macabontoc, N. A., & Vargas, D. (2021). Public Awareness and Communication Strategies in the Implementation of Environmental Policies. Social Science Research Network.
- Moser, S. C. (2010). Communicating Climate Change: History, Challenges, and Future Directions. WIREs Climate Change, 1(1), 31-48.
- O'Brien, K. (2011). Global Environmental Change: Perspectives on Sustainability. Oxford University Press.

- Orr, D. W. (1992). Ecological Literacy: Education and the Transition to a Postmodern World. State University of New York Press.
- Prasad, A., & Mogla, R. (2016). Environmental Education: Component of Sustainable Development. *IEEE Region Humanitarian Technology Conference*.
- Sachs, J. (2015). *The Age of Sustainable Development*. Columbia University Press.
- Sterling, S. (2001). Sustainable Education: Revisioning Learning and Change. Green Books.
- Stevenson, C. N. (2017). Taking action from awareness: Pre-university Student Perspectives, Programs on Climate Change Issues, and Environmental Education. In Natural Resources Management: Concepts, Methodologies, Tools, and Applications (pp. 758-778). IGI Global.
- Suárez-Orozco, M. M., & Suárez-Orozco, C. (2016). The Sustainable Planet: Towards an Education for Sustainability. *In Children and Sustainable Development: Ecological Education in a Globalized World* (pp. 93-99). Cham: Springer International Publishing.
- Thakran, S. (2015). Education for Sustainable Development. Educational Quest-An International Journal of Education and Applied Social Sciences, 6(1), 55-60.
- The Ocean Cleanup. (2018). *Global Effort to Clean the Oceans*. The Ocean Cleanup Project.
- Tiepo, C., Brandli, L. L., Kalil, R. M., & Rocha, V. T. (2018). Education for Sustainability as a Tool to Promote Sustainable Development: An Experience in the South of Brazil. *Lifelong Learning and Education in Healthy and Sustainable Cities*, 219-233.
- Tilbury, D. (2011). Education for Sustainable Development: An Expert Review of Processes and Learning. Paris: UNESCO.
- Vare, P., & Scott, W. (2007). Learning for a Sustainable Future: Sustainability in Education. *Journal of Education for Sustainable Development*, 1(1), 2-7.
- Wamsler, C. (2020). Education for Sustainability: Fostering a More Conscious Society and Transformation Towards Sustainability. *International Journal of Sustainability in Higher Education*, 21(1), 112-130.

\*Gautama, E. C. & R. Mardikaningsih. (2022). Driving Sustainable Behavior Change Through Education and Public Awareness, *Journal of Social Science Studies*, 2(1), 259 - 264.