

New Education Challenges: The Need To Empower Teachers With Elements Of Environmental Education

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Abstract. Environmental education is planned community education to protect the environment. Environmentalism can be taught in schools. Environmental education supports the national goal of building a society with environmental awareness, knowledge, skills, and values to solve environmental issues. Environmental education is crucial. Teachers who can teach about environmental sustainability can have a big impact on students, but if not, the next generation will struggle to address it. Environmental education can be taught using existing materials and staff. Teacher environmental awareness and attitude affect their capacity to teach environmental education. A teacher's positive attitude toward environmental protection affects student learning through explicit or implicit conduct and speech language. Environmental education is planned community education to protect the environment. Environmentalism can be taught in schools. Environmental education supports the national goal of building a society with environmental awareness, knowledge, skills, and values to solve environmental issues. Teacher education must improve to produce sustainable future teachers who shape sustainable development. Teacher environmental awareness and attitude affect their capacity to teach environmental education.

Keywords: Environmental Education, teacher, nurture, positive behavior, students

1 Introduction

Care for the environment is a value to love, appreciate and preserve the beauty of the environment. This value needs to be cultivated because preserving the environment and its components is crucial. Therefore, the younger generation especially the students need to be educated at the early age to have a high and solid knowledge of the benefits and importance of caring for the environment. Students with a variety of beneficial and up-to-date environmental information will be knowledgeable, informative and appreciative of the environment.

Environmental Education is the medium/platform used to channel information, develop skills, encourage participation and stimulate positive action towards environmental conservation efforts. Education has been accepted as a fundamental tool for environmental control and sustainable development. Environmental Education is a planned efforts made to educate the community, formally or informally so that the well-being and survivality of the community and environment are preserved and sustained. Environmental Education is closely related to the country's goal of building a sensitive society and possessing the right knowledge, skills and values on environmental issues and the ability to contribute to the environmental solution

In depth understanding of the environment and its components can have its postive change to individual and society daily interactions towards the environment. In fact, this understanding can also encourage young people to cultivate the practice of prioritizing environmental conservation more effectively. Younger generation can be taught through educational elements formally or informally to apply the responsibility and awareness of environmental conservation; in addition, as a know how to safeguard or protect the country's natural resources. Science subject at the primary school is the most dominant subjects integrating the knowledge of Environmental Education. Science is closely related to life on earth such as humans and the environment.

Malaysian education system is orientated towards the National Education Philosophy. The environmental ethical values are recommended to be embodied in the process of teaching and learning in schools. Therefore, teachers must equipt themselves with knowledge and to disseminate information on the importance of protecting and safeguarding the environment to their students. However, looking at the education system in Malaysia, there seem to ge a gap in the approach to integrate the enviromental values into the teaching and learning in school, although Environmental Education was almost to be integrated into all subjects at the primary and secondary schools in 1998. Environmental Education Teachers' Handbook was published in 1998 across curriculum for primary and secondary school by the Curriculum Development Division (BPK) of the Ministry of Education Malaysia (MOE) and in 2005 the same book was published for pre-school. This handbook was meant to stimulate teachers to integrate environmental knowledge into their respective subjects. Maria and Hazinah (2009) in their study indicated that 10.6% of Islamic education teachers from 613 secondary school in Perak, Selangor and Federal Territory were uncertain about the application of Environmental Education across the curriculum. Therefore, empowering teachers with environmental knowledge and information is crucial in fostering and nurturing students towards well-being of nature and mankind. In short, the integration of Environmental Education in schools is seen as one of the mechanisms in driving the sustainable development and sustainability of a country. With this integration, holistic exposure of knowledge to students can be applied without separating the environmental component from all subjects.

2 Literature Review

Our knowledge on the relationship between mankind and the environment has developed progressively. Environmental issues become important when the issues become cross-border issues and on the global agenda in regional conferences especially the issue like nuclear tests, forest fires and climate change. Thus, the destruction of the environment and the need for conservation are now emerges as indisputable facts. In other words, environmental protection is not seen only as a virtue, it is seen as a necessity.

Presently, the Environmental Movement plays an important role in championing environmental issues such as construction of incinerators that can cause air pollution and affecting the health of nearby communities. The campaign was further strengthened with protests by the locals and made into a political issue by stakeholders (Rootes, 2009).

Furthermore, the role of politics in environmental issues will have a positive and negative impact in political change and the development and implementation of new environmental policies. Political strategy through political campaigns, environmental political parties manifesto, environmental destruction propaganda and the insistence efforts on environmental authorities is used to shape the environmental policy (Compston, 2009). Among the positive effects are as follow:

- high political will/impulse
- high political awareness
- high public participation in policy decision making
- development of more directed science and technology
- improvement of environmental management practices

Environmental education is a necessity, not an option. Environmental Education refers to the planned efforts made to educate the community either formally or otherwise so that the well-being and survival of the community and the environment are preserved and sustained. The Stockholm Conference (1972), the Belgrade Charter (1975) and the Tbilisi Conference (1977) pioneered towards introducing Environmental Education as a tool to control the destruction of nature (Haliza, 2018). The history of environmental education was first introduced from the Human and Environmental Conference in Stockholm in 1972 which highlighted the relationship between human attitudes and behavior and the environment. The solution of this conference demanded all countries to create educational capacity and space to the citizens regarding environmental preservation and conservation. In general, education has been accepted as a fundamental tool for controlling the environment as well as sustainable development since the Tbilisi conference 1977. This has finally impacted the development of Environmental Education (Moroye, 2005) worldwide, including Malaysia.

Environmental Education is an educational process on the environment, through the environment and for the environment. This process is to understand human interaction with the environment and how human manage the environment responsibly for the sake of human well-being. The teaching of Environmental Education is closely related to the country's goal of building a sensitive society, possessing the right knowledge, skills and values on environmental issues and the ability to contribute environmental solution (Mohamad Zohir and Nordin, 2007).

Environmental Education is an effective instrument in helping future generations to take control of their lives and prosper the future (Perikleous, 2004). In addition, Environmental Education aims to form a human population that has the knowledge, skills, attitudes, motivation and commitment to work individually and collectively in solving today's environmental problems and preventing new problems from emerging. O' Riordan (1981) argued that, the purpose of Environmental Education which is similar to Citizenship Education is to build commitments and social responsibilities based on holistic view of the relationship between human and nature.

3 Method

This manuscript is based on library research of secondary materials like theses, journals, reports, brochures, magazines, newspapers and other forms of manuscript and publications that are then linked and worked out in relation to the topic being focused.

4 Findings and Discussion

Environmental issue such as climate change has reached the emergency stage. Proposal to address such issues have been discussed in an international conferences like the Paris Conference and the Montreal Protocol. Climate change is gradual, but disasters such as hurricanes, floods, wildfires and sea level rise involved millions of people around the world. Climate change is contributed by decades of outrageous use of fossil fuels driven by a culture of wasteful consumption that will destroy the earth, which ultimately the human. Leaders and educators must make an effort in inculcating and strengthening the knowledge, practices and positive attitudes among the younger generation so that they are knowledgeable and able to respond to the environmental issues.

In Malaysia, environmental degradation issue has become a topic of conversation among environmentally sensitive citizen. However, there are some educators who 'don't care and don't bother' about environmental issues and quality either in their own area or at the district, state, national and international levels. In certain places or areas, environmental degradation has reached a crisis and can be considered a disaster. Issues like pollution in major cities, urban traffic congestion, flash floods, water, air, noise and soil pollution are given serious attention. In addition, uncontrolled deforestation and the extinction of various species of flora and fauna were also given attention (Khor, 1995).

Development is vital for the progress of a country. However, unbalanced development with environmental capabilities will certainly render the concept of sustainable development. As a result, present and future will experience problems directly and indirectly. Our future generations will inherit the presently created problems. Awareness of sustainability development requires transformative education. This is required to develop understanding of sustainability issues and change attitudes and behaviours towards the environment, society and economy (Modified from Kalsoom & Khanam, 2017). If teachers are not prepared enough to teach the younger generation about environmental sustainability, then there will be an obstacle for the next generation to solve the problem. TG2 teachers who are ready to teach about the environment can have a profound impact on the students (Ashmann & Franzen, 2017). Therefore, teachers should consider the use of existing materials and human resources to deliver environmental-related education. Ashmann and Franzen (2017) also submitted a brilliant proposal to teachers by adopting the principle of "Start small, do it well".

Teachers will play such an important role in shaping the changes needed to achieve sustainable development (UNESCO, 2010), reclamation of teacher education programs needed to produce responsible teachers for a sustainable future. The awareness and attitude of teachers towards the environment becomes one of the factor that affect the ability of teachers in the implementation of Environmental Education (Yusof et al., 2013). The teacher's positive attitude towards environmental care is closely related to positive behaviour towards environmental care.

It is then converted into learning process for students through explicit and implicit behaviour and spoken language. One way to conduct environmental education is to integrate environmental education in the classroom

Teachers, as a respected and well-regarded member of the community, regardless of a political ideology, teachers must have knowledge and awareness on local, state, national and international environmental issues. Moreover, society has the perception that environmental issues are important to be fought by not only political parties and their leaders but also educators. The educators' image and support will generally increase if they can fight for environmental issues as well as issues related to community welfare and development. Therefore, as an added value, teachers who are dynamic, caring and kind are usually 'environmentally savvy'. They have the expertise in managing environmental issues through research and discussion with the Government, development implementers and the local community. Such educators are busy with the basic tasks, but are also called upon to step down to assist in environmental issues, especially in providing insights aimed at addressing environmental issues in their area. Educators role and contribution are believed to be in structuring and repairing environmental problems that arise to be resolved quickly.

An environmentally literate educators are a person who is able to understand, decide appropriately decisions and act in accordance with environmental interests. They work individually and collectively to acquire a balance between quality of life and environmental quality. On the other hand, if educators do not or lacks of knowledge, skills or commitment about the environment, it is difficult for them to help the students to be educated and the community to be literate about the environment. Educators with the help of leaders need to lift the environmental agenda including through the improvement and strengthening of policies, policies and laws to curb the environmental pollution crisis and ensure the people's well-being. Therefore, the efforts and commitments of educators are needed as the preservation of the environment requires immediate commitment and response before it brings more negative impact to the physical environment and surrounding society.

The efforts to safeguard nature must be redoubled to solve the environmental crisis, among them through the social role of educators. Any effort to preserve and conserve the environment will not be entirely successful without the full support and 'outspoken voice' of the teachers. As a representative or voice of the students and the community, teachers should bringing this important agenda in educating the future generation of students who are future leaders for their ability to influence these groups. Therefore, basic knowledge to the environment and related issues is very necessary in educators. It is time for environmental issues to be a priority and lifted as part of the national education agenda in line with the Sustainable Development Goals (SDGs) 2030 (Haliza, 2022).

Generations of educators need to have knowledge and understanding of the environmental concepts (Zak, 2005), deep awareness of environmental problems, environmental control and education as well as the ability to think creatively and educate on Environmental Education knowledge to the surrounding communities. Its main objective is to change society to be environmental sensitive. Abu Bakar (2010) in his study stated that, the importance of environmental knowledge is to enhance sustainable development and improve human capacity to address environmental and development issues.

In addition, teachers' concern for sociopolitical issues such as environmental issues can affect environmental matters, such as development in environmentally sensitive areas. The ability of teachers to share knowledge and information with the public and policies on the effects of any action (including the impact of not taking any action) and how an individual can play an effective role in their respective communities is also able to preserve nature and resolve environmental issues. This is helped by the role of the press and journalism in promoting environmental issues to make people aware of the importance of environmental protection issues in an area.

However, educators cannot bring about the change without the existence of close relationships with students and society. Therefore, educators need to take the time to listen to the individuals and communities they want to help. Among the most effective way is to put themselves in the same shoe as the members of society who are experiencing environmental-related problems or to empathy with the situation. Students who have received knowledge related to the environment can also serve as 'agents of change' in educating and expanding knowledge, attitudes and practices related to environmental sustainability with their families and community.

Teachers need to apply knowledge on the importance of the environment through formal education to students through subjects such as Science, Biology, Geography, History and Languages. For example, a topic on the environment in the History of year 4. Through this environmental topic, teachers need to expose the students to various types of useful information to students on environmental care. Teachers can also conduct various types of interesting and effective teaching and learning activities on environmental topics so that knowledge of environmental care can be applied in the minds of students in a sustainable manner. For example, an activity like producing a scrapbooks, producing a handicrafts using recycled materials as well as the production of environmental videos according to the level of students.

Students' positive values can be inculcated, revived and preserved by highly dedicated teachers (Maheshwari, 2005). Educators as an implementing agent and the success of environmental education adoption in the student learning process are greatly depends on the efficacy and seriousness of the teacher because the student learning process is greatly influenced by the attitude and behavior of the teacher (Yusof et al., 2013). The key to the successful implementation of Environmental Education depending on the educator too (Ahmad et al., 2007). In order to produce a knowledgeable teacher, efforts must be made by conducting studies and taking follow-up actions to improve the quality of educators' practices before making students as a target group.

Therefore, the teacher's practice guidebook should have a clear perspective, especially on the principles, approaches, methods and techniques of teaching used based on the practical concept (Kurniawan & Masjudin, 2018). The guidance provided should be organized, systematic, diverse, and rich in sources of information. Through a guidebook that prioritizes environmental sustainability practices as routine in everyday life, making it easier for teachers to understand their role and implement reclamation in their respective schools. Investment made during childhood is the best investment to support the development of sustainability presently, and for future (Heckman et al., 2006).

Nevertheless, if teachers are not sensitive to the importance of their active role as environmental agents to students, it is difficult for teachers to support environmental sustainability efforts. The environmental education has been criticized for discouraging changes in the positive behavior of individuals (Buchanan et al., 2019). Environmental education in Malaysia was officially introduced in 1998 with the publication of the Environmental Education Teachers Handbook across the Curriculum for primary and secondary schools by the Ministry of Education's Curriculum Development Centre. For the preschool stage the book was published in 2005. Yet the extent to which it is implemented is still debatable.

In fact, the teaching of Environmental Education is closely related to the country's goal of building a sensitive society and possessing the right knowledge, skills and values on environmental issues and the ability to contribute to solve any environmental problems. The integration of Environmental Education in all subjects taught in schools is seen as one of the mechanisms that play an important role in driving the sustainable development and sustainability of the country (Nurul Hidayah, 2013). Through this integration, holistic exposure of environmental disciplines to students can be done. In this regard, Hotinli (2004) pointed out that although the environmental issues that need to be taught have been listed according to the subjects through the decrees made by the Ministry of Education, the quality of implementation is highly dependent on the awareness and interest of the teachers individually. Teachers should use this book as a guide in implementing teaching and learning related to environmental education. Teachers should also use all available opportunities to inculcate, nurture and preserve environmental education through activities in schools either inside or outside the classroom.

Teacher commitment is very important because environmental education across the curriculum requires all subjects to be involved and contributed to the Environmental Education. In the success of environmental education across the curriculum, the school needs teachers with high quality and commitment to prepare and perform the main tasks of educating future generations. Quality environmental education is difficult to achieve without sincere efforts from a dedicated and committed teacher. Only committed teachers can inculcate and preserve values and help students to bring values to life (Maheshwari, 2005). The commitment from a teacher is vital because commitment is an internal strength. Commitment comes with a great responsibility, diversity and challenges in their careers as well as the external pressures that come from the reform movement that wants high standards and teacher accountability (Park, 2005). The application of environmental education should not be considered as a new burden to the existing curriculum. Instead teachers should try to deepen the matter and put the importance of service, organization, students and the country as the main thing in the job of being a teacher. A positive attitude of the teacher to the environment will be translated into teaching (through action and speech) in the classroom. In other words, attitudes can influence how humans think and then act (Watson, 2002).

This is very important because, students learn through experience and also observation especially the students identification process towards parents, teachers and people in their environment. When students make observations on teachers' sustainability practices, this will stimulate students to do the same. Social learning, a transitional and transformative process, can help create systematic change needed to overcome the challenges of sustainability efforts (Borg et al., 2017). Therefore, teachers should always volunteer to apply environmental education and strive to enhance their knowledge of the environment and pedagogical knowledge to deliver the content to the students. Complaints such as "workload", "not enough time" or various other

reasons that could undermine the implementation and retention of environmental education in schools can be minimized.

5 Conclusion and Recommendations

The deterioration of the environmental quality comes from the human desire to fulfill the development agenda that causes disruption to the environment. Changes in attitudes and behavior can only occur through education (Yalcin et al., 2016). Environmental education is a content of knowledge, and a lifestyle that needs to be practiced. Teachers as moral individuals need to equip themselves with the value of love for the environment in order to address this issue of environmental pollution. As an idol of students, teachers should have the value of appreciating and caring for the environment, thus exposing and providing full environmental education to the students in order to produce a younger generation that is responsible for maintaining environmental harmony and sustainability.

In addition to formal education, teachers can apply environmental knowledge among students through informal education through co-curricular activities. This is because, formal education in the classroom does not necessarily disclose all environmental information to the students. For example, educators can conduct various types of interesting activities for students through the establishment of the Environmental Lovers Club as a group. Through such a club teachers can effectively inculcate environmental values among the students.

Rahman et al. (2018) concluded that, the lack of manuals and courses related to environmental education among teachers has resulted in teachers having less knowledge. This leaves teachers unable to integrate environmental education in their teaching. Among the factors contributing to the low percentage of this practice is that most of the development programmes on environmental issues are implemented in urban areas. Teachers in the rural and remote areas have to travel long distances and require high costs for this purpose. Therefore, all these constraints should be considered in 'striking' and empowering teachers towards inculcating knowledge, knowledge and information related to the environment to their respective students.

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