

## Vol. 22, 2021

# A new decade for social changes







### **Environmental Education: Revealing Some Current Problems** from Personal Opinion

#### Chia-Hsuan Hsu

National Sun Yat-sen University, Taiwan

johnson20535@hotmail.com

Abstract. Air and water pollution, wildlife habitat loss, soil desertification, and other environmental problems affect cities and the surrounding environment. Thus, increasing public environmental awareness and environmental literacy are essential for mitigating these problems. Although environmental education has been critical in solving problems that affect humans and the environment for more than five decades, the question remains whether the environment is improving or being degraded. Educators are devoted to popularizing environmental education, but as a result of many problems, people are gradually becoming paralyzed. Efficient methods of motivating people to perform environmentally friendly behaviors are required. Moreover, the term "environmental education" has been abused in some situations to receive government benefits. Thus, as an environmental educator and researcher, I provide opinions and reveal problems in environmental education.

Keywords. Environmental education, Problems

#### **1. Introduction**

As the condition of cities and the environment worsens in the anthropocene because of climate change, biodiversity loss, and pollution (Huong & Pathirana, 2013; Puppim de Oliveira et al., 2011; Shao et al., 2006), environmental education has been critical in solving problems between humans and the environment for over five decades. In 1972, the United Nations Conference on the Human Environment stated that humans must attach importance to environmental problems, and the most effective means of solving the environmental crisis is environmental education. Since then, we have aimed to solve several environmental concerns through environmental education. Such education is highly purposeful because it expects to change the public's environmental literacy, namely environmental knowledge, attitudes, and behavior (Hungerford & Volk, 1990; Roth, 1992). Hungerford and Volk (1990) described several models of changing learners' behavior by using environmental education. For example, by providing information or experiences through educational programs, people can change their daily negative environmental effects by performing so-called responsible environmental behavior (Sia et al., 1986). Alternatively, environmental educators aim to reveal environmental problems, such as biodiversity loss, supported by scientific research, to encourage people to engage in conservation (Tilbury, 1995). Another crucial goal is informing governments of our concern for environmental problems in the hope that they formulate suitable policies (Stapp, 1969). Learning is an effective means of changing human behavior because it occurs in daily



Technium Social Sciences Journal Vol. 22, 113-116, August, 2021 ISSN: 2668-7798 www.techniumscience.com

life (Dunst et al., 2001). Efforts in environmental education have achieved some positive outcomes (Dettmann-Easler & Pease, 1999; Öllerer, 2015). However, the question remains whether our overall environment is improving or being degraded. Evidently, the environment continues to be degraded. Although 50 years of efforts have provided sufficient time to witness positive results, positive outcomes for the overall environment have not yet been obtained. Thus, as an environmental educator and researcher, I intend to provide opinions and reveal problems in environmental education.

#### 2. Popularization of environmental education

Currently, in response to multiple problems, multiple strategies have been developed to promote environmental education in formal and informal settings. Environmental topics can be integrated with instruction in formal education and combined with school courses. People can visit environmental exhibitions in museums, science centers, zoos, and national parks (Falk\*, 2005). People can also participate in citizen science projects, explore the wilderness, or participate in ecotourism activities to learn from, in, and about the environment (Forestell, 1993; Hsu et al., 2019; Hsu et al., 2018; Kopnina, 2015). In this era of information overload, we can even use the Internet to learn. In addition, some countries, namely the United States, Brazil, Japan, South Korea, the Philippines, and Taiwan, have enacted environmental education legislation to ensure that people receive environmental education annually. Although environmental education is popular in developed countries, these countries still emit the most carbon dioxide and cause the most pollution. This problem still confuses those concerned for the environment. Although these countries exert the most effort in environmental education, its effects are unclear or unsuccessful.

#### **3.** Too much information for the public

Because of multiple environmental problems, people are gradually becoming paralyzed. The public is familiar with the image of the polar bear standing on floating ice that symbolizes climate change. The numerous images of environmental tragedies illustrate the extent of environmental damage. Although the images depict the truth, their frequent and pervasive appearance immunizes people to such tragedies. Although some people may have concern for the environment, the problems are too numerous, and people might prioritize them. This causes people to abandon certain problems. People encounter problems in daily life, and environmental problems add to their worries. People might believe that they have insufficient energy or time. In addition, environmental problems such as climate change, plastic pollution, and ocean acidification are too difficult to solve, and must continue for a long period before consequences develop. Because of the aforementioned factors, people might believe that environmental education is too stressful.

#### 4. Abuse of "environmental education"

Although environmental education is crucial, the term is currently abused by many groups. By only adding the term "environmental education," an educational program might attract additional participants or more easily receive government grants. However, environmental education is a professional field that I believe has a strong educational purpose. Environmental education facilitators must be professionally trained to develop required skills and gain multidisciplinary knowledge. Some commercial programs or activities abuse the term of environmental education. These programs do not provide meaningful learning opportunities for participants and provide superficial experiences. Moreover, these programs convey



erroneous messages. As a result, people might gradually lose confidence in or develop antipathy toward environmental education.

#### **5.** Conclusion

Environmental education remains a vital instrument for promoting environmental protection in cities and their surrounding environments. However, effectively promoting environmental education to be easily accepted warrants further research. Because environmental education is interdisciplinary, it should be integrated with other topics or scientific fields (Wals et al., 2014). Environmental education should be based on scientific research to avoid delivering inaccurate messages to the public. Moreover, environmental education should relate to the practical lives of people and be used positively. We still believe that education can change the world and look forward to positive changes in cities and their surrounding and overall environments in the next decade.

#### References

[1] Dettmann-Easler, D., & Pease, J. L. (1999). Evaluating the effectiveness of residential environmental education programs in fostering positive attitudes toward wildlife. *The journal of environmental education*, 31(1), 33-39.

[2] Dunst, C. J., Bruder, M. B., Trivette, C. M., Hamby, D., Raab, M., & McLean, M. (2001). Characteristics and consequences of everyday natural learning opportunities. *Topics in Early childhood special education*, *21*(2), 68-92.

[3] Falk\*, J. H. (2005). Free-choice environmental learning: framing the discussion. *Environmental Education Research*, 11(3), 265-280.

[4] Forestell, P. H. (1993). If Leviathan has a face, does Gaia have a soul?: Incorporating environmental education in marine eco-tourism programs. *Ocean & coastal management*, 20(3), 267-282.

[5] Hsu, C.-H., Chang, Y.-M., & Liu, C.-C. (2019). Can Short-Term Citizen Science Training Increase Knowledge, Improve Attitudes, and Change Behavior to Protect Land Crabs? *Sustainability*, *11*(14), 3918. https://www.mdpi.com/2071-1050/11/14/3918

[6] Hsu, C.-H., Lin, T.-E., Fang, W.-T., & Liu, C.-C. (2018). Taiwan Roadkill Observation Network: An Example of a Community of Practice Contributing to Taiwanese Environmental Literacy for Sustainability. *Sustainability*, *10*(10), 3610.

[7] Hungerford, H. R., & Volk, T. L. (1990). Changing learner behavior through environmental education. *The journal of environmental education*, *21*(3), 8-21.

[8] Huong, H. T. L., & Pathirana, A. (2013). Urbanization and climate change impacts on future urban flooding in Can Tho city, Vietnam. *Hydrology and Earth System Sciences*, *17*(1), 379-394.

[9] Kopnina, H. (2015). Requiem for the urban weeds: an exploration of green spaces in Amsterdam. *Urban ecosystems*, *18*(4), 1125-1137.

[10] Öllerer, K. (2015). Environmental education–The bumpy road from childhood foraging to literacy and active responsibility. *Journal of Integrative Environmental Sciences*, *12*(3), 205-216.

[11] Puppim de Oliveira, J. A., Balaban, O., Doll, C. N., Moreno-Peñaranda, R., Gasparatos, A., Iossifova, D., & Suwa, A. (2011). Cities and biodiversity: Perspectives and governance challenges for implementing the convention on biological diversity (CBD) at the city level. *Biological Conservation*, 144(5).

[12] Roth, C. E. (1992). Environmental Literacy: Its Roots, Evolution and Directions in the 1990s.



Technium Social Sciences Journal Vol. 22, 113-116, August, 2021 ISSN: 2668-7798 www.techniumscience.com

[13] Shao, M., Tang, X., Zhang, Y., & Li, W. (2006). City clusters in China: air and surface water pollution. *Frontiers in Ecology and the Environment*, *4*(7), 353-361.

[14] Sia, A. P., Hungerford, H. R., & Tomera, A. N. (1986). Selected predictors of responsible environmental behavior: An analysis. *The journal of environmental education*, *17*(2), 31-40.

[15] Stapp, W. B. (1969). The concept of environmental education. *Environmental Education*, *1*(1), 30-31.

[16] Tilbury, D. (1995). Environmental education for sustainability: Defining the new focus of environmental education in the 1990s. *Environmental Education Research*, *1*(2), 195-212.

[17] Wals, A. E., Brody, M., Dillon, J., & Stevenson, R. B. (2014). Convergence between science and environmental education. *Science*, *344*(6184), 583-584.