The Role of Environmental Education at the Secondary Level in Achieving the Goals of Sustainable Development in the light of Egypt's Vision 2030

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Abstract

Despite achieving great progress in the field of science and knowledge in the 21st century, man hasn't realized up till now that environment is in bad need for intensive care like human beings. Unless man provided such care for his environment, it would be liable to a sort of instability and illness as what happens to human beings.

Environment sometimes expresses its anger and dissatisfaction against all kinds of damage people do at the shape of reactions as if it wants to give a message to people who aren't aware of the vital function of the environment and how it is important for human's life.

Keywords: Environmental Education, Sustainable Development, Egypt's Vision 2030.

Introduction

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Facing that complicated status, all countries of the world witnessed a great technological revolution during the last decades besides a radical change in the life style; the thing which led researchers to investigate people's behaviors towards the environment. It is natural for schools and other foundations to focus on developing their environments so that teachers can prevent any probable damage.

Jan Jack Roso, one of the most famous and greatest philosophers in the 18th century, was the first to emphasize the importance of focusing education on protecting the environment. After a number of decades, Louis Agaser called for studying natural environment not books. It must be mentioned, however, that Cronil university in the USA was the first to use narrative style and moral stories (Earth day. Net) to teach children cultural values depending on natural environment (Auer, 2010, p.45). Economic depression during the twenties and thirties of the 20th century aroused tendencies for educating children how to protect the environment from pollution. Because of the comprehensive environmental problems which affected badly the human life and threatened the coming generations, there is an incredible world care with environmental education which is translated by launching UNESCO the international cooperation program relating to supporting the environmental education. That program includes two stages: the first stage (1975 – 1978) in which goals and applications of
this new method for education was included (UNESCO, 1977).

UNESCO tries to support and sustain all countries in the field of sustainable development by focusing on basic issues: climate change, biodiversity and reducing disaster risks (Al Mamary Al Nazary 2017, p.55).

As for the second stage (1979 – 1981), it was more practical. It included grouping teachers and forming study programs, and suitable methods for application. It must be stated that after 1977 conference, environmental education became a new concept to which many countries seek to be included in the educational process (Ahmed Al Hattab, 1999, p.12).

Considering the important role it plays worldwide, Egypt has tried during the last decades to translate these universal trends in that respect into educational activities in which students react positively with their surrounding environment by acquiring desired attitudes knowledge and behaviors corresponding with curricula to achieve the sustainable development. That policy bears in mind avoiding traditional educational practices which hinder students' skills, and follows the strategic goals of education mentioned in the national strategy for sustainable development ("Egypt's vision" 2020 - 2030"). Sustainable development assures that it is necessary to manage environment resources well besides investing them in a way which appeals to our necessities nowadays without prejudice to the rights and needs of the coming generation to establish equality principle between current and next generations (Ministry of Education 2017, p.9).

Research problem:
Looking at the general features of development in the field of education, we find that there are many concepts and trends that impose themselves on the educational arena, including environmental education, and this means the need to modify behavior towards the environment; By investing its potentials, and civilized dealing with it, which is based on an individual’s emotional and cognitive background, his behavior is directed towards describing and explaining the natural phenomena seen in the environment, paying attention to the environment and preserving it, and Looking to the future, emphasizing effective participation, and making sound environmental decisions towards improving the environment.

Results of previous studies confirmed the importance of environmental education including Mohamed Salam's study in which he assured that environmental education provides students with experience and important educational values contributing to building well balanced and perfect characters for learners besides making equality between student s’ rights in education, and in enjoying their life (Mohamed Salam, 2002).

Other studies including Waleed Al Qasas & Essam Qamar 2002, p.316, Abd El Monem Mohamed Al Hag, 2003 p.65 and Essam Tawfeeq Qamar 2005., p.78 drew attention to deficiencies in applying activities of environmental education. Those studies showed that Egyptian schools care for environmental education theoretically and are in a bad need for increasing the number of courses for students; the thing on which the document of housing and environmental activities focused for achieving sustainable development corresponding with Egypt's vision 2020- 2030 (Ministry of Education, 2017,p.2). The problem of the research can be formed in the following questions:

- What is the intellectual frame of sustainable development?
- What is the role of the environmental education in general secondary education stage to achieve goals of sustainable development in the light of Egypt's vision 2020-2030?
- What are the suggested recommendations to activate environmental education activities in the pre-university education to achieve sustainable development in the light of Egypt's vision 2020-2030?

Goals of Research:
1- Defining the concept frame of the environmental education.
2- Defining the intellectual frame of sustainable development.
3- Explaining the role of secondary school courses in providing environmental education to achieve the goals of sustainable development in the light of Egypt's vision 2020-2030.
4- Suggesting proposed recommendations to provide environmental education at the secondary level to achieve the goals of sustainable development.

Research Importance:
1- Studying environmental education at schools is very important because it encourages schools to incorporate with its surroundings putting into consideration that schools aren't only a place for gaining knowledge but they are also places for helping students, teachers and managers to keep their environment where they live.
2- Research is important for preparing learners to be able to keep pace with preserving the environment and achieving sustainable development goals.

Study terms:
1-Environmental Education:
Environmental education can be defined as a process of preparing humans to react positively with their environment surroundings. That preparation requires providing students with environmental knowledge which helps them to understand the mutual relations between humans and their environment on the one hand and between the components of the environment on the other one, besides developing skills and values which controls people's behaviors towards their environment.
2. Sustainable Development

Sustainable development is a philosophy of life and a comprehensive vision of the world with all its dimensions and variables. It aims to shape human capabilities, improve the knowledge and skills of members of society, evoke the future of future generations when dealing with natural resources and wealth, determine the share of current generations, and focus on various community issues in order to improve the quality of life. (Howida Eleterebi, 2015, 158)

Research methodology:
The research used the descriptive methodology which pays attention to describing the phenomenon as it occurs in reality (Al ArebBellah Al Ghandoor, 1991, p.167) in order to define strength and weakness aspects of the phenomenon. Thus, it will be easy to test the validity of that defacto and how it is possible to make basic or partial changes (Zoqan Obaidat 2002, 186).

The research categories:
The current research is categorized by identifying and determining the role of secondary school courses in environmental education, and then achieving the goal of sustainable development in the light of Egypt's Vision 2030.

Time categories:
The current research was done on high school courses in the academic year 2020-2021.

Previous studies:
In her study (2017) Nasera Arabawy found out that most Arab societies suffer from the crisis of the environmental values which are apparent in the daily behaviors. Despite exerting great efforts, there was a sort of anarchy and chaos in the environmental education practices which included two initiatives: responsible citizen award and voluntary participation.

In her Study (2018), Rehab Yahya Radwan tried to design a proposal to develop extra – curricular activities at elementary schools in the light of accreditation and quality standards after scanning their problems. To achieve those goals, the research made a questionnaire to be applied on teachers at Port Said primary schools. Data given by teachers were tested and analyzed. Finally, the research presented a proposal to develop extra- curricular activities at Port Said primary schools in the light of the requirements of quality and accreditation.

In her study (2018), lai Ching tried to explore the learning results of the environmental education for primary 5th students in Taipei. A quasi-experimental design was applied on a group of students for 5 weeks to practice environmental cultural activities besides organising a field trip to Elephant Mountain in Taipei. Three tools were used to do the research including achievement test of the environmental education, a measurement of environmental education and a measurement of the environmental work skills. Results showed that works of students in the post test were more than the previous one. In addition, their marks in the environmental education measurement were higher in the post test than the previous one. The same happened in the measurement of environmental work skills.

As for the study of (Mahat Hanefa, 2018) levels of education for sustainable development were applied on students of secondary schools in Malaysia. A questionnaire was used in that study as a research tool. The study results showed that students have a high percentage of knowledge about sustainable development and average percentage of environmental and health education. Meanwhile, GIS map showed that knowledge levels varied among geographical areas; they were high in Northern, middle and eastern Malaysia, whereas they were average in the south and low in the east. To conclude, levels of knowledge of sustainable education vary from place to another.

Rawan Abu shaqra (2021) tried to detect the role of Jordanian school principals in achieving the fourth goal of the sustainable development goals. The sample consisted of (378) principals. The results revealed that they contributed to achieving the fourth goal of sustainable development goals in a medium degree. The study recommended holding periodic courses to enhance the awareness of school principals of the requirements of employing the fourth concept of sustainable development and ensuring its activation in Jordanian schools.

Urba 'nska, M., et al (2022), note that there are significant differences between students' level of knowledge about climate change or air and water pollution (relatively high awareness of global warming) and issues related to soil and vegetation (low awareness of soil depletion, soil pollution, changing vegetation zone occurrence limits, etc.), recommended The study stressed the need to pay attention to education in educating students about the importance of the environment and its preservation, the global challenges it faces, and achieving sustainable development.

Discussion

Educational institutions are interested in developing environmental awareness for their students to rationalize their behavior towards protecting the environment, and to inform them of the dangers that surround them - present and future - resulting from environmental problems and negatively affecting sustainable development, especially since human practices in recent times have been characterized by danger to the Earth's ecosystem and caused many environmental problems the most important of which is climate change.

The school curriculum includes the experiences provided to the learner inside and outside the school
and acquires great importance in the educational process.
It is the field in which all those in charge of the educational process in the school gather and their efforts are integrated in its application, evaluation, and development to achieve the desired goals in light of technical progress and rapid rates of change in various aspects of life, the textbook is an important means for educating students to preserve and sustain the environment.
Positive attitudes towards the environment can be developed in the learner through:
His direct contact with the environment improves the investment of its resources, avoids wasting its wealth, participates in solving its problems, recognizes the wrong beliefs that pervade his environment and may negatively affect some of its resources, and invites specialists in various environmental fields to transfer their experiences as role models.

The absence of long-term strategies and the lack of objective evaluation of the experiences, initiatives and programs already applied are among the most important obstacles to the implementation of environmental education programs through sustainability.

Results of the research:
By analyzing the content of the curricula in general secondary education, we found the absence of environmental education from each of the following books: Arabic, English, French, history, physics, biology, mathematics in all grades, as well as its absence from: Philosophy and Principles of Thinking for the first grade, Philosophy and Life For the second grade, psychology and sociology for the second and third grades, chemistry for the second and third grades, religious education for the second and third grades, national education for the first grade, citizenship and human rights for the second grade, and national education for the third grade.

We found some information related to environmental education and sustainable development in some books as follows: Geography for the first grade, referring to climate change and sustainable development, natural reserves in the first semester, geography for the second grade, referring to natural grazing and sustainable development in the first and second semesters, geography for the third grade She referred to natural grazing in the first semester.
The two researchers stress that the school must have an important role in spreading and establishing environmental awareness for students so that they learn cultural values, behaviors and customs at all educational stages with the help of the various institutions of society, because what the students learned about customs and traditions through their interaction with the environment is not enough to make them adaptable to their society. To achieve this, a number of steps can be mentioned:

*It's important to encourage citizens to participate and co-operate to conserve their environment. Participation in society works is one of the most important principles which contribute to make environmental projects successful.
*It's important for persons to do social work in the field of environmental conservation.
*Schools should play a vital role in conserving environment through doing activities of environmental education.
*It's important to acknowledge the mutual relationship between the environmental and economic dimensions for any issue to achieve the sustainable development.
*It's necessary for us to change our thinking styles by providing a good environment for sustainable development.

Recommendations
1- It's necessary to improve the quality of pre-university education continually.
2- Satisfying people's needs without hindering the coming generation to meet their needs.
3- Applying teaching and religious values which stop the environmental pollution.
4- Goals and concepts of sustainable development should be included in school activities to provide an organized environment to achieve these rules.
5- Education institutions must try to develop abilities of students from the very beginning to help them to conserve the environment.

Reference
1. Abdel Moneim Muhammad Al-Haji: "A proposed conception of environmental concepts for Islamic education courses for the primary stage in Egypt - an Islamic vision", a paper presented to a symposium towards better environmental education held at King Khalid University in the period 21-23/12/1423 AH, Abha, Saudi Arabia, 2003.
5. Auer, M. R., "Sense of Place and the Physical Senses in Outdoor Environmental Learning, In “Teaching Environmental Literacy: Across


