Education and Sustainable Development: Implementation Challenges

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Abstract

In light of the increasing international competition for spending on education in graduating cadres and research frameworks to possess knowledge and skills, it was necessary to establish two basic dimensions of the knowledge production process, one of which includes knowledge outcomes that are considered essential for building the knowledge assets of a sustainable development society. This study aims to highlight the necessity of building academic awareness that seeks to achieve intergenerational justice and preserve the environment. This can only be embodied by building an educational structure based on clear goals such as preserving the environment and honing talents and skills that build new knowledge outcomes that ensure sustainability Keywords: Education; World Education; sustainable development; environmental education; The Jomtien Conference

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1. INTRODUCTION

Education is the primary means through which the human element is prepared, trained and qualified, and given the skills of continuous innovation and creativity. Thus, it provides society with competencies and skills, which assume its responsibilities, efficiently, competently, and with leadership, to accomplish development tasks.

Most importantly, it is the primary means that enhances the mental and cognitive capabilities of the human element, and it is also the primary means that qualifies individuals for serious and conscious competition in the knowledge society and the information revolution. All of this leads - in the last place - to increasing society's stock of human capital, the accumulation of which results in quantitative and qualitative accumulation that leads to achieving higher levels of development, in the present and in the future. So that the human element becomes the engine of truly sustainable development.

Most literature related to development indicates that education is considered the cornerstone of the development process and that the success of development in any society depends heavily on the success of the educational system in this society.

Education is also considered one of the most important tributaries of development for society in all fields. A society that improves the education and qualification of its children helps in providing human resources capable of operating and managing the elements of development, and contributes to building a strong, healthy society dominated by social security and political and economic stability. From here it becomes clear that there is a close relationship between education and sustainable development in all cultural, economic, social and environmental fields.

Development cannot achieve its goals unless trained and qualified human resources are available, and therefore education is considered the basis for the process of sustainable development in society.

Education for sustainable development also enhances the ability of learners to make informed decisions and responsible measures that ensure environmental safety, economic sustainability, and societal justice, for the benefit of current and future generations, while respecting cultural diversity.

This education falls within the scope of lifelong learning and is an integral part of quality education. Education for sustainable development is comprehensive education with transformative potential that addresses learning content and outcomes, pedagogical approach and learning environment. It achieves its goal by transforming society.

It has received great attention in United Nations development programs as it constitutes a solid foundation for sustainable development, and all thinkers are fully aware of the important and prominent role of education in general and higher education in particular in the development process of societies.

This study aims to shed light on the importance of education in building knowledge assets to achieve sustainable development, wherever it began, by showing the extent of international interest in this concept, by talking about the stages of development of international interest in education for sustainability. But as a foundation for achieving this concept in reality, it was not It is necessary to delve more deeply into what concerns environmental education as a first step in order to embody this concept.

This study also aims to shed light on education and the science and knowledge it provides and provide individuals with skills that will leapfrog countries in building an economy that combines its cognitive, economic and environmental determinants.

Research importance: While environmental taxes were the most important policies adopted in the field of preserving the environment, studies have shown that it is a budget financing tool that does not compensate for what we lose the environment and what is affected by it. If the pursuit of human welfare, diversification of production and achieving economic development is centered on man and society, here is the importance of this research by talking about science and education, spending on it and investing in its fields in changing the mindsets and motivating them in creating new knowledge and innovations and raising the number of research and scientists and technology is an essential tool for achieving Sustainable development.

2. SUSTAINABLE DEVELOPMENT STRATEGY IN EDUCATION:

Interest in the pivotal role that education plays in achieving sustainable development increased after the Earth Summit held in Rio in 1992, which emphasized the great importance of the role that education must play in achieving sustainable development. The need to redirect education to serve this development was also emphasized, and this requires adopting new visions and strategies for this social sector. After the Earth Summit, a succession of initiatives and projects were adopted at the international level to activate the role of education in sustainable development processes, the most important of which are the following:

2.1 The Jomtien Conference in 1990:

The World Declaration Conference on "Education for All," which was held in Jomtien, Thailand, during the period 5-9 March 1990, pointed out a number of facts:

- More than 100 million children, including at least 60 million girls, are deprived of enrollment in primary education.

- More than 960 million illiterate adults, two-thirds of whom are women, are illiterate, and functional illiteracy represents a prominent problem in all countries, including industrialized and developing countries.

- More than a third of adults in the world have no access to printed knowledge, skills, and new technologies that would improve their quality of life and help them shape and adapt to social and cultural change.

- More than 100 million children, and countless adults, are unable to complete basic education programs, and millions more meet the requirements for attendance at this educational stage but do not acquire basic knowledge and skills[1].

Objectives of the Conference: The World Conference on Education for All constituted a new starting point for the world's quest towards universal basic education and eradicating illiteracy. It also constituted the beginning of a broader vision for basic education that includes all forms of organized education and training that meet the basic education needs of individuals. This conference was based on three basic objectives[2]:

- Highlighting the importance and impact of basic education and renewing the commitment to making it accessible to all.

- Reaching global consensus on a framework for action to meet the basic educational needs of children, youth and adults.

- Providing a forum for exchanging experiences and research results to revitalize ongoing and planned programs.

The six targeted dimensions: During the conference, six target dimensions were agreed upon:

- Expanding early childhood care and development activities.

- Universal enrollment and completion of primary education or completion of any educational stage considered essential by the year 2000.

- Improving learning so that an agreed percentage of an age group can reach or exceed a specified level of achievement.

- Reducing the illiteracy rate among adults to half its rate.

- Expanding basic education and training to include other basic skills needed by youth and adults.

- Increasing the acquisition by individuals and families of the knowledge, skills and values necessary to improve lives and achieve sustainable and sound development made possible by all educational channels.

2.2 World Education Forum In Dakar, Senegal 2000

In April 2000, at the World Education Forum in Dakar, Senegal, representatives of the governments of 164 countries met and agreed on a document entitled: The Dakar Framework for Action, Education for All: Fulfilling Our Collective Commitments, in which they announced an ambitious agenda to achieve six broad education goals by 2015[3].

- Expand and improve comprehensive early childhood care and education.

- By 2015, all children will be able to obtain, and complete, free and compulsory quality primary education.

- Ensuring that the learning needs of all children and adults are met through equal access to appropriate programs for learning and acquiring skills necessary for life.

- Improving levels of adult literacy by 50 percent by 2015, especially among women, and achieving equal opportunities for basic and continuing education for all adults.

- Eliminate gender disparities in primary and secondary education by 2015 and achieve gender equality in this area by 2015.

- Improving all qualitative aspects of education and ensuring excellence for all[4].

2.3 Bonn 2009 Germany Conference on Education for Sustainable Development:

The conference was organized by UNESCO and the German Federal Ministry of Education and Research in cooperation with the German Commission for UNESCO, in addition to being one of the four UNESCO global educational conferences organized in 2008-2009 in order to discuss education priorities. Conference participants exchanged best practices on "Education for "Sustainable Development" At the conclusion of the conference, 50 ministers and participants from more than 150 countries adopted and discussed a declaration that reflects the debates that took place during the conference, and proposed guidelines for implementing the "United Nations Decade" in its second half[5]. The declaration mentioned "Education for rural people." As the advertising club in order to make efforts in the following[6]:

- Enhancing the contribution of education for sustainable development to education as a whole and to achieving its quality.

- Increase public awareness and understanding of sustainable development and education for sustainable development.

- Mobilizing the necessary resources and funds for education for sustainable development.

- Reorienting education and training systems towards addressing sustainability issues through coherent policies at the national and local levels.

- Develop and strengthen international, regional and national cooperation mechanisms working for the benefit of education for sustainable development and that respect cultural diversity.

- Support work on integrating sustainable development issues into formal education and into non-formal and informal education at all levels using an integrated systems approach.

- Reorienting teacher education curricula and programs to integrate education for sustainable development into pre-service and in-service training programmes.

It should be noted that UNESCO and the Government of Japan organized the World Conference on Education for Sustainable Development in Aichi Nagoya. More than 1,000 people participated in this three-day conference, under the slogan "Learning for a Sustainable Future." These participants included 76 representatives at ministerial level from UNESCO Member States, non-governmental organizations, academia, the private sector, United Nations agencies, experts and individuals, as well as youth from 150 countries[7].

This conference was held on the occasion of the end of the United Nations Decade of Education for Sustainable Development 2005-2014. The following are the objectives of this conference:

- Redirecting education to build a better future for all.

- Accelerating the pace of work for sustainable development.

- Setting an agenda for education for sustainable development for the post-2014 period[8].

3. EDUCATION FOR SUSTAINABLE DEVELOPMENT CONCEPT AND IMPORTANCE

Education is considered one of the most important areas of sustainable development and has received great attention in United Nations development programs as it constitutes a solid foundation for sustainable development. All thinkers are fully aware of the important and prominent role of education in general and higher education in particular in the development process of societies. Education is the factory that It is human capital, on which the process of development of human societies in all its aspects depends. Therefore, it specializes in forming the most advanced types of human capital.

3.1 The concept of education for sustainable development:

The concept of education for sustainable development remains a broad and comprehensive concept that includes interconnected environmental, economic and social issues, and expands the concept of environmental education that addresses a wide and increasing range of topics related to development. Education for sustainable development also includes different elements of development and targeted forms of education. Education for sustainable development is also called education or sustainable education, and it is the main idea of the third millennium. It is a learning process or an approach to teaching based on the ideals and principles of sustainability, and it is concerned with all levels and types of education. The concept of education for sustainable development is based on the one hand on the pedagogical characteristics of education for sustainable development, and on the other hand, sustainable development and the values associated with it.

Education for sustainable development is defined as the educational contents, with their cognitive and training fields, of non-governmental organization programs that are consistent with the goals of sustainable development, and expressed in the questionnaire of the beneficiary audience[9].so, Education for sustainable development is the process of equipping students with the knowledge, understanding, skills and attributes necessary to work and live in a way that protects environmental, social and economic well-being, both now and for future generations[10]. Also, Education for sustainability develops the knowledge, skills and values needed for people to act in ways that contribute to more sustainable lifestyles.

It is a future direction, based on protecting and creating a more ecologically and socially just world through action that recognizes the importance of environmental, social, cultural and economic considerations and their interconnectedness[11].

In general, the various previous definitions are based on the idea that education for sustainable development seeks to achieve the principles of sustainable development, whether social, economic, or environmental. In general, education for sustainable development can be defined as that education that seeks to build the cognitive determinants of sustainable development.

3.2 Characteristics of education for sustainable development:

Education for sustainable development is closely related to the needs and realities of people. It provides the skills needed to find solutions to their problems and draws on practices and knowledge embedded in local cultures, as well as new ideas and technologies.

Education also contributes to achieving sustainable development through the ability to achieve synergy between a group of factors represented in the following[12]:

- The ability to improve the quality of the basics of the educational process.

- Diversifying the methods of educational programs and differentiating between them based on the amount of development they achieve.

- Increase the level of awareness and understanding of the philosophy of sustainable development in its general form.

- Increase the level of training on mechanisms for achieving sustainable development.

According to UNESCO, the idea of education for sustainable development is based on a set of characteristics[13]:

- It is based on the principles and values that underlie sustainable development.

- It includes the three facets of sustainability: environment, society, and economy, with the underlying dimension of culture.

- Uses a variety of pedagogical techniques that promote participatory learning and higher-level thinking skills.

- Supports lifelong education.

- Locally connected and culturally relevant.

- It is based on local needs, perceptions, terms and conditions, but recognizes that meeting local needs often has international implications and consequences.

- Formal and informal educational participation.

- Accommodates the natural evolution of the concept of sustainability.

- The content addresses and takes into account global issues and local priorities.

4. ENVIRONMENTAL EDUCATION IS THE FIRST REQUIREMENT FOR EDUCATION FOR SUSTAINABLE DEVELOPMENT:

Interest in human behavior has developed significantly with the increase in interest in education and the development of its concept. Education is considered to have a greater impact on our behavior and is the most important industry in daily life. Throughout the ages, it has had its philosophical, social, political and scientific starting points and goals. Therefore, it was necessary to search for methods to develop human behavior. After understanding this behavior and knowing its various aspects, environmental education derives its role in building science to achieve sustainable development. It is the process of forming the values, attitudes, skills and perceptions necessary to understand and appreciate the complex relationships that link man and his civilization with his physical biosphere and demonstrate the inevitability of preserving natural environmental resources and the necessity of exploiting them. Rationalization is for the benefit of man, to preserve his dignified life, and to improve his standard of living.

Due to the importance of environmental education, conferences were held at the global level, starting with the Stockholm Conference (1972), the Belgrade Conference on Environmental Education in (1975), the Tbilisi Conference on Environmental Education in (1977), and the Shilcun Conference in Switzerland in (1971), which demanded the acceleration of the introduction of environmental concepts. In school curricula, and at the Rio de Janeiro Conference in Brazil in 1992, where it came to reaffirm that the environment still suffers from imbalances more seriously than before, and the Johannesburg/South Africa Conference (2002) came to reinforce the decisions of the Rio de Janeiro Conference (1992) and the Bali Conference. In Indonesia (2007), these global conferences came to confirm the importance of environmental education and address it within an international framework and to warn of the seriousness of the situation if rational and wise procedures are not followed in the field of environmental preservation within the framework of the entire world[14].

4.1 The concept of environmental education:

There have been many definitions of "environmental education" depending on the multiplicity and diversity of viewpoints about it, and according to the concept of education and its objectives on the one hand, and the concept of the environment on the other hand. It may seem to some educators that only studying the environment in its biological and natural aspects achieves environmental education, while some believe that environmental education goes beyond that concept. The narrowing of the environment, and that it is a deeper and more comprehensive process, and they see it as an educational process that aims to form the values, attitudes, skills, and perceptions necessary to understand and appreciate the complex relationships that link man and his civilization with his bio-physical environment, and clarifies the inevitability of preserving the resources of the natural environment, and the necessity of rationally exploiting them for the benefit of man in order to preserve his life. dignity and raise their living standards.

Environmental education is defined as teaching about and about the environment. Environmental education is education that helps people develop a sense of their surroundings and the world around them[15]. Moreover, Environmental education is the aspect of education that helps people live successfully on planet Earth, which is known as environmental education. Environmental education is also defined as learning how to comprehensively manage and improve relationships between humans and their environment. Environmental education also means learning how to use modern technologies and increase their productivity, avoid

environmental risks, remove existing environmental damage, and make rational environmental decisions[16]. so, the aim of environmental education is to develop awareness and concern about the environment and the problems associated with it, possess knowledge, skills, attitudes and motivations, and commit to working individually and collectively towards solutions to existing problems and preventing new ones. In general, it can be said that environmental education is based on developing a person's cognitive perceptions about his environment. It can also be said that it is education directed to raise human awareness to preserve the environment and ensure its sustainability. Here, the relationship between environment and development is reciprocal and interactive, and achieving development in all its dimensions requires simultaneous protection of the environment and preservation of its natural resources. With the development of economic growth, protecting and preserving the environment was considered an integral part of the economic, social and cultural structure of society as a result of the high educational level and growing public awareness[17].

4.2 Objectives of environmental education:

- Creating national awareness of the importance of the environment in efforts aimed at development in society.

- Developing the spirit of responsibility and solidarity among the different countries of the world, both developed and developed, to be the basis of a system that guarantees the protection, development and improvement of the environment, including developing the educational process to disseminate knowledge and values and bring about a change in human behavior towards the environment.

- Working to find competencies and practical technology for all members of society that facilitate the implementation of rational activities in the field of the environment.

- Promoting awareness and interest in the interconnectedness of economic, social, political and environmental issues in rural and urban areas.

- Clarifying the complexity of environmental problems and working to develop critical thinking and skills related to dealing with environmental problems, including diagnosing the purposes of environmental problems, their causes, and ways to address them[18].

4.3 Principles of environmental education

Environmental education is guided in setting its goals and building its programs by the following principles:

- Environmental education is a lifelong process that continues at all formal and non-formal levels of education.

- Adopting a comprehensive content between the branches of knowledge, using the topic of each branch to facilitate arriving at a comprehensive, balanced view.

- Identify major environmental issues from a local, national, regional and international perspective, while enhancing cooperation with these levels to avoid problems and contribute to resolving them.

- Focus on current and potential environmental conditions.

- To explicitly take into account environmental aspects in development plans.

- Linking environmental sensitivity, knowledge of the environment, and the skills necessary to solve its problems, and clarify the values related to it, at every stage of life.

- Helping students discover the symptoms of problems and their real causes.

- Emphasizing the complexity of environmental problems and hence the necessity of developing critical thinking about them.

- Use diverse environments for learning with an emphasis on hands-on activities and direct experiences[19].

4.4 Characteristics of environmental education

Environmental education is characterized by a number of features, the most prominent of which can be summarized as follows[20]:

- Environmental education usually seeks to solve specific problems of the human environment by helping people become aware of these problems.

- Environmental education seeks to clarify complex environmental problems and provides a combination of the types of knowledge necessary to explain them.

- Environmental education is keen to be open to the local community, believing that individuals do not pay attention to the quality of the environment and do not take any action to maintain or improve it seriously.

- Environmental education, by its nature and function, seeks to direct various sectors of society to exert their efforts with the means at their disposal to understand the environment. Thus, it adopts the idea of comprehensive, sustainable education available to all individuals.

CONCLUSION

Sustainable development is a vision of development that involves respect for all forms of human and non-human life and natural resources, education for all, health, human security, and intellectual dialogue, and seeks to meet the needs of the present without neglecting the needs of future generations. Education for sustainable development aims to help people have the attitudes, skills and knowledge necessary to make informed decisions and act on them to achieve benefits for themselves and others now and in the future. These points were the focus of the study in this research.

Perhaps the title "Education for Sustainable Development" is the term that is primarily given to the role that education plays in building knowledge, skills, and individual acquisitions in order to create a generation that fully understands the importance of building sustainable development with integrated dimensions that is sustainable through which we preserve the environment, as we discussed through This research refers to international strategies and the most important initiatives and agreements adopted by the international community in order to embrace education that allows living in a way that protects environmental, economic and social well-being. We also discussed in this field the most important characteristics of education for sustainable development, as we did not forget to mention environmental education, which is considered the first requirement for sustainable development.

Based on what we discussed in our research, it is necessary to develop our view of education and move from the idea that it is consumer spending to being investment spending, spending on individuals that contributes to their skills and awareness and raises their level. The results of this spending will be on the individual and society alike.

- The necessity of adopting a curriculum based on the principle of setting educational goals for the educational process so that educational costs become value-added in light of the adopted public policy.

- Work to benefit from countries' policies in the field of education and sustainable development, especially those that were reference countries according to this study.

- Develop a clear and thoughtful strategy for this field or vision that will have an impact on the journey of the educational system, aiming to achieve more achievements in the field of education and sustainable development.

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