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REVIEW

Environmental Education in Cuba

La Educación Ambiental en Cuba

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ABSTRACT

After the 1st Congress of the Cuban Party, the Ministry of Education and the Ministry of Science, Technology and Environment joined forces in the task of generalising Environmental Education in all corners of the country, with the aim of guaranteeing a human being with an integral education that would allow him/her to live in harmony with the natural and social environment. For this reason, the Cuban State gives this subject of study, at the different levels of education, a vital importance for the conservation of a sustainable world, and highlights the importance of promoting it from an early age. In primary education, it is clearly described why it is important to educate for environmental conservation. From a methodological perspective, the aim is to insert the student into the environmental reality through the use of experiential and active methods. It also seeks to incorporate the community in cooperative activities that favour the achievement of the objectives set specifically in relation to environmental conservation. The teaching that is intended here must be lasting and truly meaningful, demonstrated daily in the conservation of the environment, initially within the school, family and community contexts.

Keywords: Education; Environmental Education; Environment.

RESUMEN

Tras el I Congreso del Partido Cubano, los Ministerio de Educación y de Ciencia Tecnología y Medio Ambiente, se unieron en la tarea de generalizar la Educación Ambiental en todos los rincones del país, con el fin de garantizar un ser humano con una formación integral que permitiera vivir en armonía con el entorno natural y social. Por ello Estado cubano le confiere a esta materia de estudio, en los diferentes niveles de la enseñanza, una vital importancia para la conservación de un mundo sostenible, y resalta la importancia de fomentarla desde tempranas edades. En la Educación Primaria se describe claramente el porqué es importante educar para la conservación ambiental, desde la perspectiva metodológica se busca insertar al estudiante en la realidad ambiental, mediante el uso de métodos vivenciales y activos. También se persigue incorporar a la comunidad en actividades cooperativas que favorezcan el logro de los objetivos planteados con relación a la conservación del ambiente específicamente. La enseñanza que se pretende aquí, debe ser duradera y verdaderamente significativa, demostrada diariamente en la conservación del medio ambiente inicialmente dentro de la institución escolar, los contextos familiares y comunitarios.

Palabras clave: Educación; Educación Ambiental; Medio Ambiente.

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INTRODUCTION

Environmental education is now one of the cornerstones of comprehensive education for citizens in Cuba. Since the triumph of the Revolution in 1959, the Cuban government has promoted educational policies to foster ecological awareness from an early age, understanding that a harmonious relationship between humans and their environment is key to sustainable development. In this sense, environmental education is not an isolated subject but a cross-cutting dimension of the educational process, impacting all stages of the education system and at all levels of society.

Cuba recognizes the urgency of addressing environmental challenges through education and promoting values, habits, and attitudes that strengthen individual and collective responsibility for environmental care. This vision is legally underpinned by Law No. 81, "On the Environment," which establishes the conceptual framework for understanding the environment and ecological education. The law defines the latter as a continuous and permanent process aimed at developing a citizenry capable of interacting respectfully with nature and acting with a critical awareness of ecological problems.

Institutions such as the Ministry of Education (MINED) and the Ministry of Science, Technology, and Environment (CITMA) have supported the implementation of environmental education programs in close collaboration with other government and social agencies. Specific examples of this commitment include environmental content in school curricula, the training of teachers with an ecological focus, and informal education initiatives such as the television course "Introduction to Environmental Awareness," broadcast in 1999 on national media.

The National Environmental Education Strategy reflects the coordinated effort of the State to establish a coherent educational policy that encompasses all sectors of society. In primary education, in particular, the aim is for students to acquire an ecological awareness through experiential learning, promoting active participation in their community and respect for the environment.

In short, environmental education in Cuba is a conscious and strategic commitment to building a more just, equitable, and nature-friendly society. It is a path toward sustainability, where citizen education is essential to guarantee the well-being of present and future generations.

DEVELOPMENT

Environmental Education in Cuba

Since the triumph of the Cuban Revolution in 1959, our country has taken steps to make environmental education universal in all corners of the country. This is one of the main tasks that the revolutionary government has set itself to guarantee that all human beings receive a comprehensive education that allows them to live in harmony with our natural and social Environment. For this reason, the Cuban State attaches vital importance to this subject at all levels of education for conserving a sustainable world. It emphasizes the importance of promoting it from an early age.

To delve deeper into the key aspects of environmental education in Cuba, it is necessary to establish the main definitions of basic concepts such as "environment," which is defined in Law No. 81 on the Environment as "the system of biotic, abiotic, and socioeconomic elements with which humans interact, while adapting to it, transforming it, and using it to satisfy their needs".[1] In general terms, the above definition covers this concept's main characteristics.

Environmental education, according to the definition proposed and approved by the National Assembly in Chapter II of Law No. 81 on the Environment, is "a continuous and permanent process that constitutes a dimension of the comprehensive education of all citizens, aimed at ensuring that the acquisition of knowledge, the development of habits, skills, abilities, and attitudes, and the formation of values harmonize the relationships between human beings and between them and the rest of society and nature, to promote the orientation of economic, social, and cultural processes toward sustainable development".[2]

These criteria clearly show that Environmental Education aims to improve the quality of life of present and future generations by promoting sustainable development, respect for all forms of life, and the formation of more just and ecologically balanced societies where individual and collective responsibility is expressed, respecting human diversity and that of nations.

The term Environmental Education began to be used in the late 1960s. Its origin is linked to the interdisciplinary approach to the analysis of environmental problems promoted by the natural sciences and the social sciences at the basic and secondary levels of education.[3]

Since the beginning of the Cuban Revolution, the new government has included Environmental Education in its social programs. The course "Introduction to Environmental Awareness" offered by the University for All in 1999 significantly impacted the population. Broadcast on national television channels for all ages, it aimed to contribute to the socialization of knowledge on environmental issues.[4]

Within the National Education System, collaboration between the Ministry of Science, Technology and the Environment (CITMA) and the Ministry of Education (MINED) has been strengthened to develop environmental education, adapting actions to changes that have taken place and are planned, both in terms of improving the curriculum of the various courses and in the training of comprehensive teachers within the framework of the municipalization of teacher training universities.

In formal education, elements related to the Environment have been institutionally introduced into subject programs at different levels, especially those whose subject matter is linked to natural systems, with greater emphasis at the primary level.

Efforts are also being made in higher education, especially in courses related to natural resources and particularly in some teacher training centers, and significant results have been obtained in research related to solving environmental problems.

Efforts are also being made in informal education to systematize the transmission of messages that contribute to stimulating environmental care and protection and establishing harmonious human relations in the neighborhood and community through information and dissemination systems.[5]

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Various environmental education projects and ideas involve a wide range of state institutions and organizations, as well as Cuban civil society. These are characterized by the search for local solutions to environmental problems and the active participation of different environmental actors.

The National Environmental Education Strategy

This is the long-term educational program through which the State's environmental policy is expressed, setting out the central projections and guidelines to reorient and strengthen citizens' education toward awareness of sustainable development. CITMA is responsible for developing environmental education strategies and promoting their implementation, encouraging the execution of programs in all sectors of the economy and services, social groups, and the general population. To this end, it will coordinate with MINED, the Ministry of Higher Education (MES), the Ministry of Culture (MINCULT), the media, and other relevant bodies and agencies.[6]

Environmental education from the ground up. Primary education

Primary education clearly describes why it is important to educate about ecological conservation and the leading role that educational institutions play in this reality, becoming authentic centers of change in students' perspectives in transforming their responsibilities towards the Environment and its conservation.

From a methodological perspective, the aim is to immerse students in the environmental reality of the protected area through experiential and active methods, which ensure a meaningful experience. It also seeks to involve the community in cooperative activities that promote the achievement of the objectives set about environmental conservation.

In developing the teaching and learning process focused on environmental issues in primary education, educators and promoters must consider the pedagogical definitions of the essence of this complex phenomenon. The author Ramírez[7] points out that "the school teaching process is very complex, and its development is influenced by a series of components that must be interrelated to achieve optimal results". It is not possible to optimize the process without components such as the prior behavior of students and teachers, educational context, resources, strategies, and planning.

Students must improve in all areas, which cannot be achieved by attempting to implement a single teaching model. "Progress in teaching consists of the increasing mastery of various models and the ability to use them effectively." Teacher training should reflect this reality and prepare future teachers to master a basic repertoire of six to eight models to meet their future needs.[8]

Interestingly, the education sought here must be lasting and truly meaningful, demonstrated daily in the conservation of the Environment, initially within the institution but also in the family and community contexts. It should aim at a definitive consolidation of both cultural and artistic aspects, which can be channeled through various activities related to environmental conservation.

CONCLUSIONS

Environmental education in Cuba stands as an essential pillar in citizens' comprehensive education, fostering a culture of respect, care, and commitment to the natural and social Environment. Since the triumph of the Revolution in 1959, the Cuban State has recognized the need to incorporate ecological awareness at all levels of the education system, promoting a cross-cutting and interdisciplinary vision that places the Environment at the center of the educational agenda.

This approach is legally consolidated through Law No. 81 on the Environment, which defines Environmental Education as a continuous, permanent, and transformative process to develop values, habits, and attitudes responsible for the Environment. In this sense, environmental education in Cuba is not an isolated practice but part of a coherent national strategy that encompasses both formal and informal education, from primary school to university, and involves multiple institutional and community actors.

The National Environmental Education Strategy represents a planned and sustained effort by the Cuban State to guarantee the ecological education of its citizens. It highlights the coordination between institutions such as CITMA, MINED, and other agencies. This strategy promotes educational programs that encourage the active participation of students and the community, strengthening social responsibility around local and global environmental issues.

Special attention should be paid to primary education, where experiential learning and active methodologies are used to enable students to understand and appreciate their Environment meaningfully. This stage is considered crucial for the formation of solid, lasting, and effective environmental awareness that can later be projected onto the family, the community, and society as a whole.

Likewise, the link between environmental education and sustainable development is vital. Through critical and participatory education, the aim is to build a more just, equitable, and ecologically balanced society. By promoting the integration of knowledge, values, and actions, Cuban environmental education becomes a powerful tool for addressing current ecological challenges and ensuring the well-being of future generations.

In conclusion, environmental education in Cuba responds to an educational need. It constitutes an ethical and political commitment to building a sustainable future where humans live harmoniously with nature.

REFERENCES

1. Soler A. Ley No. 81 "Ley del Medio Ambiente": Parte General. La Habana (CU): Ed. ONBC; 2013. p. 5.

2. Ley No. 81. Ley del Medio Ambiente. Gaceta Oficial de la República de Cuba. La Habana (CU): Ed. ONBC; 1997.

3. González E. Educación ambiental: historia y conceptos a veinte años de Tiblisi. México, DF: Sistemas Técnicos de Edición; 1997. p. 23.

4. Universidad para Todos. Introducción al conocimiento del medio ambiente. La Habana (CU): CIDEA; 1999. p. 14.

5. CIDEA. Estrategia Nacional de Educación Ambiental. La Habana (CU): CIDEA; 1997. p. 11.

6. Soler A. Ley No. 81 "Ley del Medio Ambiente": Gestión ambiental. La Habana (CU): Ed. ONBC; 2013. p. 43.

7. Ramírez M. Estrategias grupales. Buenos Aires (AR): Kapeluz; 2007. p. 265.

8. Díaz M. Plan integral de refuerzo educativo, utilizado como recurso en las actividades artísticas. [s.l.]: Fondo Editorial; 2006. p. 21.

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CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

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