



Training in Values in Environmental Education in High School Students: Case Study: Education, Environment, and Society



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Abstract

The objective of the research was to analyze the formation in values in environmental education in high school students of the Enrique López Lascano Educational Unit-Cantón-Santa Lucia. Through a methodology with a mixed qualitative-quantitative approach, with an experimental and descriptive study, where analytical-systemic, inductive-deductive methods were used to collect information that was used in the survey of a population of 150 students and 50 teachers. Justifying the preparation of this scientific article with the need to promote and encourage environmental values in students, parents and teachers of the educational institution and the community in general to achieve behavior with the sustainability of the planet. This objective constitutes one of the main purposes of environmental education within the framework of higher education. The result was that teachers teach classes with environmental values in their classrooms to high school students, but they must devise strategies that help students identify environmental values and transmit them to the educational community.

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1 Introduction

Educational institutions must take the strategies of incorporating reasoned value in their educational skills, if they want to prepare professionals directed towards environmental protection actions and the common good for society and the planet. The exchange of information allows knowing the environment and making proper use of it, so informing, training, guiding, raising awareness through pedagogical strategies lead to promoting a new educational approach aimed at protecting the planet. Environmental education is a process that aims to train and create awareness among all human beings with their environment, being responsible for its use and maintenance and for achieving sustainability. Environmental education must be imparted towards the infinity of sectors and using a great variety of didactic resources ([Rengifo et al., 2012](#)).

Individuals, families, and society have the right and responsibility to participate in the educational process (Ministry of Education, 2017). The Organic Law of Intercultural Education (LOEI) describes that in Ecuador the Constitution of the Republic recognizes education as a right in the life of human beings, allowing to ensure their development in the various environmental environments, gender equity, solidarity, peace, and justice. The purpose of the research is to analyze the formation in values in environmental education in high school students of the Enrique López Lascano-Cantón-Santa Lucia Educational Unit, which is related to the objectives that are desired to be achieved such as the identification of environmental values in the educational community, describe the problems of environmental education in the community and determine the formation of environmental education in students ([Ruchter et al., 2010](#); [Arslan, 2012](#); [Thyagaraju, 2016](#); [Archana et al., 2016](#)).

The research starts from a mixed qualitative-quantitative approach, since quantitative aspects will be addressed to recognize the values that they practice and the levels of training in the matter, the research technique used is the questionnaire, through the tools of the interview and the survey. In addition, for the collection of information from secondary sources, a bibliographic review of guides, scientific articles and specialized magazines will be carried out. Environmental education must develop the reorientation of behaviors about the environment being constant in society, it must promote adequate ways of acting of people in the face of individual responsibilities and in front of their social obligations with respect to the environment ([Herrera Gaviria, 2015](#)).

The occupation for environmental education reaches the school, as one of the most important sources of values with the planet, in this sense these must be created in the classrooms. Respect, care, appreciation, protection, interest, for everything that surrounds us, is a fundamental result for the training and comprehensive development of students ([Márquez-Domínguez et al., 2018](#)). The feasibility and applicability of the results of various titling works were taken into account, among which one related to the formation of values was chosen to generate environmental awareness in the Educational Community of CDI Chapinerito in the city of Ibagué, which establishes that training in values plays an essential role in managing the environment, contributing to the improvement of pedagogical work, in order to achieve a comprehensive education where in the future an entire society is benefited; with the aim of raising student awareness so that their actions generate a relationship with a sense of belonging, identity and responsibility in the face of environmental problems ([Herrera Gaviria, 2015](#)).

Values play an important role within societies, they are characteristic of the actions of people and constitute essential elements for human coexistence ([Moreno, 2021](#)). Taking into account the aforementioned, it is described that environmental values refer to the behavior that people have toward the environment, through the proper and responsible use of natural resources, in order to protect the natural environment of the planet. In Peru, work has been done on environmental education, achieving contributions from a theoretical perspective ([Pulido Capurro & Olivera Carhuaz, 2018](#)), they identified the different strategies related to the models worked in national and international educational environments that made possible the effectiveness of the teaching of education. environment and its impact on sustainable development, which is today one of the aspects that must be dealt with at all levels of education.

In Mexico, one of the Latin American countries that have worked for many years in environmental education, they have had successful results in environmental education in the young people of the Tlaxcala

high school, the students are capable of establishing viable, playful, and creative actions and activities to reduce the deterioration of their school-environmental community, these ideas help to obtain information, directly and indirectly, design ecological programs and projects, expand their skills, attitudes, competencies, and commitments to solve and reduce problems in their environment (Espejel Rodríguez & Flores Hernández, 2017). Taking into account that this research is related to values in environmental education, it is necessary to rethink and seek experience in work already carried out, such as the assessment of micro-curricular content in environmental education, which can promote social responsibility in secondary education, such as have proposed it (Estrada et al., 2021). Promote values in environmental education in students from high school levels, and prepare young people to interact with the environment in such a way that they achieve results that reduce the global effects of climate change.

2 Materials and Methods

In this research, a mixed qualitative-quantitative approach was proposed, since quantitative aspects were addressed through surveys applied to students and teachers to recognize the values they practice and the levels of training in the matter; and from the qualitative point of view through interviews with members of the community to recognize the problems of environmental education in the local environment. An investigation of a descriptive and experimental type is implemented, since it is an experiment, and an explanation based on reality is detailed in an orderly manner, taking into consideration the group of people from the Enrique López Lascano Educational Unit of the Santa Lucia Canton.

The analytical-synthetic method will also be used for the evaluation of various sources used in the study of values and environmental education. The inductive-deductive method to specify the trends in the development of environmental education in the training of students; For the processing and analysis of the results, the statistical method will be used, through the Google forms platform where students and teachers will be able to respond interactively to the surveys, the interviews will be carried out in person considering the social restrictions and availability of those involved; These instruments will serve as the basis for the discussion and the results of the investigation (Isaac-Márquez et al., 2011; Ardoin et al., 2020; Kyun et al., 2015).

The research technique used is the questionnaire, using the tools of the interview and the survey. The surveys, aimed at students and teachers, will be made up of closed questions. The interview will be made up of open questions to generate accurate information about the problem in the community, both instruments will facilitate the collection of information to fulfill the research objectives. A population of 150 people was taken as a sample between students and teachers of the institution of the high school level for the object of study and three members of the community of the Santa Lucía Canton. Sampling in this case will be applied to the total population to obtain reliable results (Frantz & Mayer, 2014; Monroe, 2010; Keene & Blumstein, 2010).

In addition, the collection of information from secondary sources was carried out, and a bibliographic review of guides, scientific articles, and specialized, national, and international journals on issues related to values and environmental education was carried out. The concepts of values in environmental education have been addressed by several authors.

3 Results and Discussions

The planetary crisis, which is becoming increasingly global, is an existential phenomenon of the mode of production and consumption that human beings assume since the primitive forms of production were abandoned and especially in the last 150 years, Recognizing this reality is only justified in denying human responsibility in the face of the serious problems that a large part of humanity suffers today in all orders. Several sources allow the implementation of environmental education processes and sustainability, and many young people have been sensitized and motivated, through the knowledge acquired in the classroom, about

environmental deterioration, this topic is currently widely addressed, but it is about many years ago, so it is time for environmental actions to be implemented (Espejel Rodríguez & Castillo Ramos, 2019).

The level of environmental culture of high school students is a good indicator of the progress of environmental education since higher and secondary education is a responsible training space for young people of entry age to recognize their rights and obligations as citizens and acquire knowledge and skills. increase., this helps you make informed and responsible decisions to fully integrate into the economic development of the country, secondary school students are in the process of building their worldview and making valuable decisions about their lives and the world around them (Márquez-Domínguez et al., 2018).

It agrees with the authors Espejel Rodríguez & Castillo Ramos (2019), who indicate that the family is the basis for transmitting values and behaviors friendly to the environment, for the care, conservation, and preservation of nature; however, it is unavoidable to increase knowledge, promote and develop environmental awareness to get involved in practical and viable actions in the family, school, and community context. It was possible to show that the teachers consider that at present the subject of training in environmental values is essential because it serves to recognize the environmental values in the educational community, the problems that exist in the context of environmental education, as well as the level of training in this subject in the students, in figure 1, some results of the survey applied by the teachers are observed.

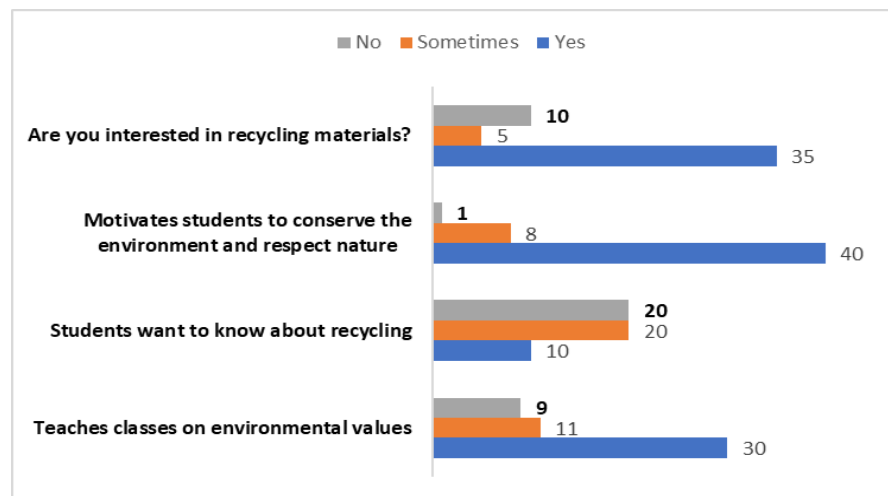


Figure 1. Motivation of the teachers to the students

Through the investigation carried out to determine how the values on the care of the environment are, it was verified that the teachers motivate the students and impart environmental values, he motivates and offers knowledge through his classes, but In many cases, students do not act appropriately, because they do not have much interest in the subject, so it is suggested that more work be done on drawing motivating strategies that manage to link all students through conferences, workshops, recycling campaigns, this would help the bond of all in this task of protecting the planet.

It agrees with a study carried out in Spain by the authors (Márquez-Domínguez et al., 2018), Respect, care, appreciation, protection, and interest shown toward the environment, a fundamental aspects of the education and integral development of children. students. Environmental Education takes a special turn in an educational setting, given that the current situation is one of progressive deterioration of the environment, it favors the development of key skills related to active participation and values in students. The analysis of the results of the surveys and interviews carried out in the Educational Unit Enrique López Lascano-Cantón-Santa Lucia, is necessary since the majority of teachers and students consider that it is necessary to incorporate the formation of environmental values in education in order to in this way, raise awareness about the environmental pollution that is present at a planetary level. In the investigation, 150 students of the educational unit were surveyed, to verify the levels of knowledge acquired by the students in relation to the environmental values taught by the teachers and the understanding of the strategies treated, in figure 2, these results are shown

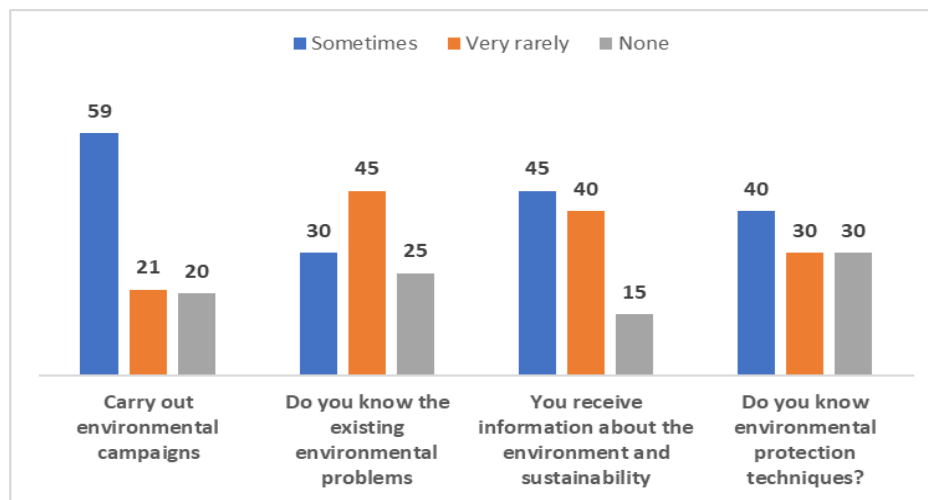


Figure 2. Understanding of environmental strategies by students

As can be seen, most of the students agree that environmental campaigns are carried out, demonstrating that the teacher guides them in this activity, but it is noted that not all of them are aware of the current environmental problems at the time. Just as many do not know the techniques of environmental protection. The various concepts that allow raising knowledge about environmental education are ethical values, which provide the opportunity to introduce or incorporate values in environmental education in the different educational units, since the values in the curricula help to contribute largely to environmental education, both in our country and in the educational systems of other countries (Crohn & Birnbaum, 2010; Perez-Rodriguez et al., 2017; Ors, 2012).

4 Conclusion

It was possible to show that in the Enrique López Lascano-Cantón-Santa Lucia educational unit, environmental education, teachers teach classes with environmental values in their classrooms to high school students, but they must draw up strategies that help students identify environmental values and that are transmitted to the educational community, to help in this way the environmental protection and sustainability of their region and the country. This study indicates that training in environmental values in educational units leads to awareness of the importance of adequate academic planning; as well as the use of appropriate methodological strategies for the formation of values and environmental education will demonstrate changes in attitudes toward the care of the environment.

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