

**Environmental Education in the Algerian
School from a Sociological Perspective:
A Field Study in Mascara Province**

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Abstract:

This sociological field study aims to demonstrate the importance of environmental education in the Algerian school, through samples of educational schools spread in cities and rural areas of the province of **Mascara**. In order to find out how to apply the objectives of the educational curricula on environmental education, and the general policy of the state. Through the specialists in the educational system. In addition to the extent of its harmonisation and interaction with daily life by the recipients. In order to inculcate environmental culture, we ought to achieve environmental awareness among a wider audience. Where we have recognised the reality of environmental education inside and outside the Algerian school .

Keywords:

Environmental Education; Curriculum; Educational Actors.

التربية البيئية في المدرسة الجزائرية

من منظور سوسيولوجي- دراسة ميدانية بولاية معسكر.

الملخص:

تهدف هذه الدراسة الميدانية السوسيولوجية، إلى بيان أهمية التربية البيئية في المدرسة الجزائرية. من خلال عينات من المدارس التعليمية المنتشرة في المدن والأرياف بولاية معسكر. لمعرفة كيفية تطبيق أهداف المناهج التربوية حول التربية البيئية، والسياسة العامة للدولة. من خلال الفاعلين في المنظومة التربوية. ومدى تلاؤمه وتفاعله مع الحياة اليومية، من طرف المتلقين، بغرض غرس الثقافة البيئية. وتحقيق الوعي البيئي، ونشره على نطاق أوسع. حيث تم التعرف على واقع التربية البيئية داخل وخارج المدرسة الجزائرية.

الكلمات المفتاحية:

التربية البيئية- المنهاج الدراسي- الفاعلون التربويون.

Introduction

Our research examined the integration of a sociological approach to environmental education within the Algerian curriculum. We employed a specific methodology and utilized appropriate research techniques throughout the study. Data analysis, based on our sociological fieldwork conducted in Mascara Province, involved participants from both urban and rural schools. The research culminated in key findings, which are presented in the final report.

As the foundation of all life on Earth, the environment plays a critical role in human well-being. From the air we

breathe to the water we drink, our planet's health and sustainability are inextricably linked to our own. Therefore, understanding and addressing environmental challenges has become a central issue demanding global attention, no longer a matter on the periphery.

Within the Algerian context, integrating environmental studies into the educational curriculum serves a two-pronged purpose: fostering environmental stewardship and equipping future generations with the tools to address pressing environmental challenges. By educating students about Algeria's unique ecosystems and landscapes, a sense of responsibility and appreciation for these natural resources is cultivated.

This educational foundation is then bolstered by equipping students with the knowledge and skills necessary to tackle issues specific to Algeria, such as desertification, water scarcity, and pollution. This combined approach fosters a citizenry not only aware of the importance of environmental protection but also actively empowered to address the unique challenges facing their nation.

Nowadays, environmental studies are no longer a luxury, but a necessity for both the global community and for Algeria. By integrating environmental education into the curriculum, we can empower future generations to become informed and responsible stewards of their planet, ensuring a sustainable future for all.

First: The Methodological Framework of the Study:

1.Importance of the Study:

This study emphasizes the importance of understanding learners' perspectives and actions towards the environment within the context of school activities. We highlight the role of environmental curricula in fostering this awareness by encouraging interaction with the natural world during learning activities. Effectively designed curricula can empower learners to develop ethical and environmental awareness, ultimately instilling positive values for protecting and maintaining their natural environment. By analyzing how these positive values translate into behaviors, the research aims to clarify the practical impact of environmental education on learners' daily lives.

2.Objectives of the Study:

This research investigates the adequacy of environmental content within the current Algerian national education curriculum for fostering environmental literacy among learners. It aims to assess the effectiveness of the reformed curriculum compared to its pre-reform counterpart. Specifically, the study will examine the alignment of environmental content with the different age groups across the three educational phases (primary, middle, and secondary). The research will also explore the role of environmental content in enhancing learners' environmental culture through two key aspects:

- **Curriculum Design:** whether the curriculum effectively equip learners with scientific knowledge about the natural environment.
- **Integration and Problem-Solving:** whether learning activities encourage students to develop skills and find solutions to environmental problems.

By addressing these objectives, the study aims to provide valuable insights into the effectiveness of environmental education within the Algerian national curriculum.

3.Research Problem :

This research begins by acknowledging the growing importance of "environment" as a concept, particularly in scientific, political, and even public discourse. However, the term itself lacks a universally agreed-upon definition. This ambiguity presents a challenge for educators and other social institutions involved in environmental education.

This reframing clarifies the research problem by highlighting the gap between the growing importance of "environment", and the an actual environmental care, which creates an obstacle for effective environmental education.

4.Research Question:

This research problem would be dealt with, the following main research question : Do school environmental programs of a competency-based approach achieve environmental awareness in Algerian society?

5.Hypothesis :

This research investigates the potential of school environmental programs to foster environmental awareness in Algerian society. We hypothesize that implementing competency-based environmental education programs will lead to increased environmental awareness among students. These programs are designed to cultivate knowledge, skills, and positive attitudes towards the environment.

As well as to equip students with the necessary foundation, in order to become environmentally responsible citizens. In addition, focusing on building competencies, these programs aim to create a more lasting impact on environmental awareness, within Algerian society.

6.Methodological Approach of the Study:

6.1. Symbolic Interactionism:

In his important study, the American scholar George Herbert Mead, in his seminal work "Mind, Self, and Society" (often referred to as "The Philosophy of Social Action"), emphasizes the role of social interaction in shaping individual perception. He argues that the reality of the environment is not an objective truth, but rather constructed through the individual's interpretation of their surroundings, heavily influenced by social interactions. (Muslim, page 7).

6.2.Fields and Tools of the Study:

The study was conducted in the Mascara province from September 2022 to December 2022 and included urban and

rural schools located in the major districts of the province represented in Mascara- Mohammadia- Sig- Tighennif- Wadi El Abtal. Here, we relied on a self-completion questionnaire in distributing the forms to the respondents and used both closed and open questions:

This study employed a purposive sample of 199 participants from various educational categories (teachers, directors, educational counselors, administrative agents, and economists) in both urban and semi-urban areas across the Mascara Province.

The sample reflects a gender and regional balance among educational actors. The total sample comprised 199 males and females. Males accounted for 25% (50 participants), with 20% residing in urban areas and 28% in rural areas. Females made up the remaining 75% (149 participants), with 80% residing in urban areas and 72% in rural areas. These statistics are based on the respondents' self-reported data.

6.3. Environmental Education:

Environmental education, in its general concept, is the intentional process carried out by educational institutions through their school programs and curricula, implementing the general policy of the state. It aims for harmony and coexistence between humans and their natural environment, creating a shared understanding and unifying efforts to protect it and solve its problems, thereby embedding an environmental culture and achieving the desired environmental awareness.

6.4. Curriculum:

It is the product of the state's general policy, where educational policy is planned according to previously set philosophical, social, and political goals.

6.5. Educational Actors:

This category includes teachers, directors, educational counselors, administrative staff, and economists, with learners represented by the students.

Second part: The Field Framework of the Study:

The call for rationalizing behaviors at the individual and group levels to promote the natural environment and repair its deterioration has become clear. School educational curricula should play a role in raising awareness about the risks threatening humans in their environment.

1. The Call for Environmental Education:

The growing recognition of environmental challenges has led to a global call for the integration of environmental education across various societal institutions. This extends beyond traditional schooling to encompass families, environmental organizations, associations, and other entities that contribute to the social, economic, and political fabric of society. Environmental education itself can be defined as a directed educational process designed to cultivate perceptions, attitudes, and values. Through this process, individuals gain a deeper understanding of the complex relationships between humans and their surroundings. This encompasses both the "civilized environment" - the built and social environment influenced by humans - and the "natural environment" with its diverse ecosystems and biological processes.

This enables individuals, by themselves and in partnership with others, to make decisions towards achieving sustainable development goals to improve their quality of life (Al-Sayed, 2008, p. 60).

This research is based on a field-based approach to investigate environmental education programs within Algerian schools. The study employs a regional focus, examining

schools located in both urban and rural areas. Data analysis is facilitated by the tables presented herein, which provide statistics and insights into educational interaction with environmental education among learners. These interactions are assessed through a set of indicators, which will be outlined in the following sections:

2. Investigating the Comprehensiveness of Environmental Education in Study Programs :

Table (1): Sufficiency of Environmental Content in the Study Programs in the Algerian National Education Curriculum

Variable	School Environment					
	Urban	Percentage (%)	Rural	Percentage (%)	Total	Percentage (%)
Sufficient	40	53	77	62	117	59
Insufficient	35	47	47	38	82	41
Total	75	100	124	100	199	100

➤ Comment on Table (1):

This table represents the sufficiency of environmental content in the curricula, where the responses from educational actors in both urban and rural schools indicate a regional environmental disparity. 59% of responses indicated sufficiency in both urban and rural schools, while 41% indicated insufficiency.

Specifically, urban schools showed 53% sufficiency versus 62% in rural schools, highlighting the greater importance given to the environment in rural schools,

embodying the spirit and value of the program and a positive outlook towards the environmental study program.

3. Enhancing Environmental Culture among Learners:

Throughout history, the relationship between humans and the natural environment has undergone a complex evolution. Initially, human populations and activities existed in relative harmony with the finite resources of the environment. However, population growth and the concentration of human activity in specific areas have surpassed the natural environment's capacity to sustain them. This has resulted in the overexploitation of resources and the generation of vast amounts of waste and pollutants beyond nature's ability to assimilate them. Consequently, ecosystems are struggling to replenish resources and naturally repair the damage caused by this unsustainable pattern of interaction.

The growing urgency of environmental challenges underscores the importance of targeted environmental education in fostering a culture of environmental stewardship. This education, delivered through both formal and informal educational institutions, empowers individuals to interact with the natural world in a healthy and sustainable manner. Environmental education has transcended its traditional focus on social interaction to encompass the critical skill of adapting to and protecting the physical environment upon which human existence and future generations depend. (Mahmoud, 2008, p. 142).

Environmental education represents an intellectual direction and philosophy aimed at developing human environmental ethics, guiding individual behavior in dealing with the natural environment, its human influences, and the resulting reactions from and to the environment. The table below would illustrate the environmental content and its role in enhancing environmental culture among learners.

Table (2): Responses on Environmental Content and its Role in Enhancing Environmental Culture among Learners in Urban and Rural Schools:

Variable	School Environment					
	Urban	Percentage (%)	Rural	Percentage (%)	Total	Percentage (%)
Yes	79	93	103	90	182	91
No	06	07	11	10	17	09
Total	85	100	114	100	199	100

➤ **Commentary on Table 02:**

This table represents the environmental content and its role in enhancing environmental culture among learners, showing the responses of educational actors in both rural and urban schools. It highlights a regional disparity in environmental engagement, with affirmative responses on the environmental content and its role in enhancing environmental culture among learners in both urban and rural schools at 91%, compared to a dissenting 9%.

In urban schools, the affirmation of environmental content's role in enhancing environmental culture was at 93%, against a 7% disagreement. Conversely, in rural schools, the affirmative responses were slightly lower at 90%, with a 10% disagreement.

From this, we conclude that environmental content plays a significant positive role in enhancing the environmental culture among learners in both urban and rural schools, with closely matched percentages. This underscores the quality of the environmental education program and the effectiveness of curriculum planning from the perspective of the state's public

policy, emphasizing the importance of environmental protection.

Therefore, we conclude that the environmental content in the curriculum increases the learner's acquisition of scientific information about the natural environment in both urban and rural schools at similar rates. This emphasizes the scientific value of the information about the environmental education program and the effectiveness of curriculum planning from the perspective of the state's public policy, giving great importance to environmental protection.

4.The Role of School in Environmental Protection:

In this context, one might wonder how we can cultivate a generation of learners capable of confronting and addressing all types of climatic changes through both family and school institutions in a communicative and non-communicative way, achieving the desired harmony between them. (<https://alkhadraasy.com>, 2019).

This research investigates the role of schools in systematically inculcating environmental knowledge and values within learners. The focus lies on the ethical development of sound environmental concepts, aiming to equip students with a strong foundation for responsible behavior both within the school environment and beyond. This study seeks to understand how schools can effectively contribute to the shaping of a future generation committed to environmental stewardship. (Boutraa, 2012, p: 68).

It is insufficient to include environmental education merely within the science subjects, as addressing environmental topics should be integrated across all subjects. The curriculum at the kindergarten and primary levels lacks

proper environmental concepts, focusing solely on cognitive objectives. Official schools, in their early stages, teach accurate sciences that include topics related to personal hygiene, nutrition, disease prevention, and environmental cleanliness.

5.The Role of Integrative Situations in Acquiring Skills and Solving Natural Environmental Problems

According to the integrative approach(Al-Saud, 2004, p. 69.), the integration of environmental education topics into academic subjects is achieved by introducing environmental data and knowledge. This can be through examples of the natural environment or linking lesson content with relevant environmental issues.

Table (3) relates to the sample characteristics according to integrative situations directed at learners to enable them to acquire skills and find solutions to natural environmental problems:

Table (3): Integrative Situations Directed at Learners for Skill Acquisition and Environmental Problem-Solving

Variable	School Environment					
	Urban	Percentage (%)	Rural	Percentage (%)	Total	Percentage (%)
Yes	60	90	116	88	176	88
No	07	10	16	12	23	12
Total	67	100	132	100	199	100

➤ **Commentary on Table (3):**

This table illustrates the role of integrative situations directed at learners, enabling them to acquire skills and find solutions to natural environmental problems. The responses

from educational actors in both rural and urban schools demonstrate a regional disparity in environmental engagement.

The findings show that 88% of participants in both urban and semi-urban schools responded affirmatively to the effectiveness of these integrative situations in enabling skill acquisition and problem-solving related to natural environmental issues, compared to 12% who did not find them effective.

In urban schools, 89% of responses were affirmative, indicating a high rate of agreement on the effectiveness of these integrative situations, versus an 11% dissent rate. In rural schools, the affirmative rate was slightly lower at 86%, with a dissent rate of 14%.

From these observations, we conclude that integrative situations directed at learners significantly contribute to their ability to acquire skills and solve natural environmental problems in both urban and rural schools with closely matched percentages. This emphasizes the scientific value of integrative situations within the environmental curriculum and the effectiveness of curriculum planning from the perspective of state public policy, highlighting the critical importance of environmental protection.

This alignment underscores the necessity of incorporating environmental issues into educational strategies to foster a comprehensive understanding and proactive engagement with environmental challenges among learners.

6. The Importance of Environmental Activities for Learners:

Learner participation in various activities related to the natural environment aims to achieve environmental education goals through exemplary participation. Among the

participatory activities children can engage in are neighborhood and city cleanliness campaigns, tree-planting campaigns, environmental celebrations and events, photo exhibitions, competitions, environmental educational games, environmental camps, and contributing to associative movements through awareness and sensitization, among others. These activities help students acquire a wealth of information and knowledge about the different activities they undertake and participate in.

Beyond knowledge acquisition, environmental education programs foster the development of valuable skills and positive environmental attitudes in learners. These programs not only enhance manual skills but also cultivate critical thinking and decision-making abilities. Furthermore, they instill positive values and habits that encourage responsible environmental behavior. This includes fostering appreciation for the efforts of various social actors working to protect and conserve the natural environment.

Table (4) delves deeper into this aspect, exploring the importance that learners place on environmental activities related to various natural elements. (<https://mail.almerja.com/reading.php?idm=215840>).

Table (4): Importance and Attitude of Learners Towards Natural Environmental Elements Through Environmental Activities

Variable	School Environment					
	Urban	Percentage (%)	Rural	Percentage (%)	Total	Percentage (%)
Positive Reaction	42	55	69	56	111	56

Negative Reaction	08	11	29	23	37	19
Indifferen t	26	34	25	20	51	26
Total	76	100	123	≈ 100	199	101

➤ **Comment on Table (4):**

This table highlights the importance and attitudes of learners towards environmental activities in relation to natural environmental elements. The responses from educational actors in both rural and urban schools reflect a regional environmental engagement disparity.

The findings indicate that environmental activities directed towards natural environmental elements enable skill acquisition and the development of solutions for environmental problems, with a positive reaction in urban and rural schools at 56%, compared to a negative reaction at 19%, while 26% showed indifference.

In urban schools, the positive reaction towards environmental activities was at 55%, against a negative reaction of 11%, with 34% showing indifference. In rural schools, the positive reaction was slightly higher at 56%, against a negative reaction of 23%, while 20% were indifferent.

These findings suggest that environmental activities play a crucial role in raising awareness and fostering a proactive approach towards environmental issues among learners, highlighting the need for continued emphasis on environmental education across all educational settings.

7.The Importance of School Environmental Content in Spreading Environmental Awareness:

**7.1.The Importance of School Environmental Content in
Spreading Environmental Awareness Among Learners:
(Wehbe, 2003, p. 23):**

Table (5) illustrates the importance of school environmental content and its role in spreading environmental awareness among learners through their daily environmental interactions and learning in the classroom.

**Table (5): Importance of School Environmental Content in
Spreading Environmental Awareness among Learners:**

Variable	School Environment					
	Urban	Percentage (%)	Rural	Percentage (%)	Total	Percentage (%)
Yes	50	69	87	68	137	69
No	22	31	40	31	62	31
Total	72	100	127	≈ 100	199	100

➤ **Commentary on Table (5):**

This table shows cases the significance of environmental content within school curricula and its role in fostering environmental awareness among learners, as evidenced by their daily environmental interactions and classroom learning. The collected responses from educators in both rural and urban schools highlight a notable variation in environmental engagement across different settings.

The data reveals that 69% of participants, encompassing both urban and rural schools, recognize the importance of environmental content in the curriculum for promoting environmental awareness among learners through their daily interactions, and learning activities in the classroom. This

agreement underscores the role of environmental education in enhancing learners' understanding and engagement with environmental issues, irrespective of their geographical location.

7.2. Evaluating Environmental Education: A Content Analysis of School Curricula:

This research employs content analysis to assess the effectiveness of environmental education within school curricula. By scrutinizing the content of these curricula, the study aims to identify the depth and breadth of environmental topics covered. This analysis will provide valuable insights into whether current curricula are adequately equipping students with the knowledge, skills, and values necessary to address environmental challenges and promote a sustainable future.

Table (6): Sample Characteristics According to Environmental Content in School Curricula

➤ A Commentary on Table (6):

This table explores the impact of environmental content within school curriculums on fostering environmental awareness and character development among learners. It analyzes data collected from educational practitioners in both rural and urban schools. The findings suggest a regional variation in environmental engagement, with schools that integrate environmental content into their curricula demonstrating a significant positive effect on students' environmental consciousness and ethical behavior towards the natural world.

The findings presented in Table 6 highlight that environmental education extends beyond the mere transmission of knowledge. It plays a crucial role in shaping positive attitudes and responsible behaviors towards the

environment. This underscores the importance of incorporating comprehensive environmental content within school curriculums. Such an approach serves as a key strategy for nurturing environmentally aware and responsible citizens, equipped to address the challenges of a sustainable future.

This approach aligns with broader public policy objectives aimed at environmental sustainability and protection, showcasing the crucial role of education in achieving these goals (Gharbi, 2009, p. 65).

Conclusion:

To conclude with the initial phase of the research laid a strong theoretical foundation for understanding environmental education. This involved a conceptualization phase, which delved into the core definition of environmental education and the underlying philosophies and values that shape its practices. This analysis likely explored the multifaceted nature of environmental education's concept. The research then examined the objectives and significance of environmental education, highlighting the specific goals it aims to achieve in learners and its overall importance in fostering environmental awareness. By establishing this theoretical framework, the study positioned itself to investigate the practical aspects of environmental education within a specific context.

The research explored factors influencing the successful implementation of environmental education, within the Algerian school system. These factors encompassed fostering social engagement, promoting environmental protection, and cultivating an environmental culture among students. This

approach contributes to spreading environmental awareness, ultimately aiming to build responsible citizens. By integrating environmental education within a purposeful civic education framework, the study emphasizes its potential to achieve and contribute to environmental protection efforts.

Bibliography:

- 1-Adnan Muslim, Social Theories, out of print.
- 2- Jamil, Muhammad Al-Sayed. (2008). The role of the basic education school in achieving the principles of global development. Sustainable:Arab League Educational, Cultural and Scientific Organization. Tunisia: Association for Preaching and Islam.
- 3 - Samir Mahmoud, (2008); Scientific media: environmental media, medical media and advertising, specialized media. Dar Al-Fajr for Publishing and Distribution, 01st edition, Egypt.
- 4-<https://alkhadraasy.com/2019/12/16/> L'heure: 20.05 du 10.02.2024.
- 5-Boutraa Bilal, Women and Environmental Protection, Sakhri Design and Printing Press, 1st edition, Al-Wadi. 2012,
- 6- Ratib Al-Saud, (2004), Man and the Environment: A Study in Environmental Education. Dar Al-Hamid for Publishing and Distribution, Amman, Jordan, p. 69.
- 7- <https://mail.almerja.com/reading.php?idm=2158401> L'heure 10 :38 du 11.02.2024.

8- Ibtisam Darwish and Saleh Wehbe; (2003);
Environmental education and its future prospects, Dar Al-Fikr,
Damascus, p. 23

9- Saeeda Appendix (2003): Environmental Education,
Your Educational Appointment Series, No. 13, National Center
for Educational Documents, Algeria.

10- Abla Gharbi 2008/2009: Environmental education in
primary schools from the teachers' point of view, published
master's thesis, Mentouri University of Constantine.

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