

The contribution of modern media to environmental education

Analytical study on Facebook

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Received: 28/12/2024

Accepted: 12/03/2025

Abstract:

The modern media and the environmental education in the light of environment protection and sustainable development. In this regard, we shall shed light on the main environmental issues raised on Facebook, and on Facebook's role in the environmental education, mainly that it is the most used and influential thanks to its communication features. Besides, we shall discuss its employment for the environmental education that must be promoted by all societies using the most wide This study aims at analyzing and describing the relation between reaching media outlets. Findings show that Facebook has a vital role in spreading the environmental information and correcting the wrong behaviors towards the environment, as it turned into an informative space with complementary dimensions that help promote the environment protection.

Keywords: environmental education; environmental issues; Facebook.

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I. INTRODUCTION

The expression “environmental media” has gained different definitions, concepts, and uses since the 1970s after the deterioration of the international environmental situations, as we witnessed pollution, loss of biological diversity, desertification, and climate change. The latter marks the biggest challenge that leads to water shortage, drought, and other changes in the sea. Thus, the UN held Stockholm Conference in 1972 to insist on setting environmental awareness policies, and Earth Summit in 1992, which called for increasing awareness of population. The UN launched its call to all the media agencies to promote the environmental issues and problems, and to contribute to awareness raising and environmental culture spread, as the media outlets are the main mechanisms for the environmental policy in all the states, including Algeria, which aims at establishing an environmental culture and equipping the citizens with skills that help participate in solving the environmental problems.

Today, the technological development in ICTs, which witnessed the creation of applications, established the new media that draw a big number of users and paved the way for the establishment of a space for culture promotion, awareness raising, and behavior orientation towards environment protection. Thus, the electronic environmental media gained more importance and became an important tool in the environmental education, culture, and awareness, as these media provide communicative content and messages on the internet, and allow interaction and creation of common interests among the users. In this context, the environmental media with an electronic nature represent an infinite scope that paves the way for change, mainly that they have a wide audience. In addition, they brought about a revolution in economy, politics, culture, environment, and sustainable development. The new communication development gave rise to the environment and sustainable development actors, mainly the ministries and environmental organizations, and helped them exercise activities to raise the environmental awareness. Based on what was said, this paper focuses on the role of the electronic environmental media, mainly Facebook, in the environmental education.

1. Problematic and questions of the study

Media collect, processes, and publish information. Therefore, they are a powerful tool to build knowledge, guide behaviors, and incite the individuals for the active and positive participation in their issues for the public interest. Besides, media are used to shape citizens that respond to the local and international issues through active participation. The media outlets are dominant in all the fields, mainly the environmental, as they serve the environmental specificity through raising awareness and providing information. In this regard, studies show that the media interest in the environmental issues has started since the UN Conference on the Human Environment in Stockholm in 1972, where an international declaration was issued and provided for the right of everyone, without segregation, to knowing the environmental news and information in a realistic and valid way.

The new media platforms have a role in introducing the environmental and developmental issues, and provide equal chances to individuals to interact with each other, build common interests, and exchange environmental ideas and information. Therefore, the environmental activists used the modern media for communication to raise the environmental awareness and foster the environmental education, mainly that these media attract a wide audience. Thus, the environmental information took advantage of this technological revolution, and the expressions “electronic environmental media” and “green media” emerged. The latter has several features, such as the rapid spread, interaction, and use of multimedia.

We must tackle the electronic environmental media and their role in equipping the individuals with the environmental awareness and knowledge about the environment problems, and in the behavioral education of individuals to focus on their environment. In addition, these media provide information on the environmental concepts to build public opinion and promote a renewable culture about the climate changes and about how to deal with the environment. In this context, social media play a key role in changing the negative behaviors towards the environment to protect it, and confirm the role of the environmental education in sustainably protecting the environment.

Based on what was said, we raise the following problematic, “what is the role of Facebook as one of the social media platforms in the environmental education?” From this question, sub-questions arise as follows:

1. What is the concept of environmental education, and what are its goals for protecting the environment?
2. Is Facebook one of the environmental education tools?
3. How does Facebook contribute to the environmental education?

2. The concept of environmental education and the goals it targets to protect the environment

The modern societies understood the importance of environmental education in general, and focused on it. Besides, experts in the field appeared and gave the environmental education an important position, mainly with the increase of the environmental issues all over the world, pushing the individuals to participate in finding solutions, limiting the dangers, and building future generations equipped with ethical and social concepts that incite for protecting the environment.

2.1. The concept of environmental education

It can be defined as the set of information, trends, and values needed to understand the mutual relation between the learner and environment where he lives. This environment manages his behaviors and triggers his attention; therefore, he has to protect and preserve it. In addition, Islam defines the environmental education as one of the comprehensive education aspects that draws its principles from Quran and Sunnah, and aims at strengthening the relation of the human with his environment and at introducing the human to its elements. Moreover, it exactly regulates this relation to shape a generation that respects its environment (mechaan, 2007) and understands its circumstances, risks, and problems to help overcome them and invest the available resources and experiences.

Furthermore, UNESCO Conference of 1977 defines it as the process of orienting and linking the different branches of knowledge and the educational experiences to facilitate the complementary comprehension of the problems. It adds that it allows making rational works to solve the environmental problems and upgrade the environment quality. In addition, Belgrade Conference defines it as that type of education that aims at shaping a reality that focuses on the environment and its related issues, with knowledge, mental abilities, and sense of commitment that allow the individuals and communities to solve the problems and prevent their reappearance. (tantawi, 2001)

2.2. The aims of the environmental education

According to Belgrade Charter of 1977, the aims of the environmental education manifest in the frame of the environmental work that basically aims at improving the ecological relations, including the human relation with his environment and with the other

humans. This education aims at introducing people to the size, scope, nature, causes, and the methods of preventing the environmental problems, and at showing the behavioral alternatives that mitigate them. It is based on the assumption that it shall lead to growth and awareness that target a better environment.

Based on what was said, we can say that the environmental education aims at:

- Introducing the individuals and communities to their environment and its systems.
- Helping individuals and communities acquire awareness about their environment through explaining the environmental concepts.
- Understanding the mutual relation between the human and his environment, and developing comprehension of its components.
- Showing the negative effects of misusing the natural resources. (University of Farhat Abbas in Setif, 2009)

Besides, the International Environmental Education Program launched by UNESCO and UN Environment Program identified the environmental education as follows:

- Guidelines: Helping individuals and communities acquire the necessary skills and get motivated for active participation.
- Skills: Helping individuals and communities acquire the necessary skills to identify and define the environmental problems and find the suitable solutions.
- Participation: Helping develop the abilities for active participation in solving the different environmental problems.
- Assistance: Helping the individuals and communities acquire the necessary environmental skills and principles for active participation in improving and developing the environment protection. (Machaa, 2007)

2.3. The international interest in the environmental education

The international meetings and congresses on the environmental issues and sustainable development helped develop awareness about the environmental protection from all aspects of deterioration. Besides, these meetings and congresses gained important dimensions, as they promoted for ethics, starting from Stockholm Congress, passing by the Earth Summit, until the current conventions and declarations.

2.3.1 Stockholm Conference 1972

This international environment declaration was made in Stockholm to insist on drawing environmental awareness policies under the International Environmental Education Program, which relies on the inclusive vision in the formal and informal environmental education programs. It recognized the role of environmental education in protecting the environment and the natural resources. In addition, the Conference confirmed that the environmental regulations are not sufficient for protecting the environment from degradation, as it is necessary to raise awareness about the environment. In this regard, UNESCO identified the goals of the International Environmental Education Program as follows:

- Developing the environmental researches and studies, including those that lead to a better understanding of the environmental goals.
- Encouraging the exchange of environmental information and results of studies on the environmental education.
- Setting and evaluating programs and curricula in the field of environmental education.

2.3.2 Belgrade Conference 1975

It was held in Belgrade from 13 to 22 October 1975, when the concept of environmental education and culture gained other dimensions. The Conference defined this education as that one that aims at shaping a generation aware about the environment and equipped with knowledge, mental abilities, and sense of commitment that help solve the problems. The Conference studied the trends of the environment education issues as a main point of the social values system to mentally, spiritually, and behaviorally support this education.(tantawi, 2001)

2.3.3 Tbilisi Congress 1977

The world's 1st intergovernmental congress on the environmental education was held in the USSR between 14 and 26 October 1977, and was culminated by Tbilisi Declaration on the environment education, which aimed at:

- Clarifying the nature of the environmental education through identifying its role, aims, characteristics, and strategies.
- Confirming that the environmental education must contribute to orienting the educational systems towards more efficiency and reality to achieve more interaction between the natural, human, and social environments.
- Confirming that the environmental education cannot contribute to solving the environmental problems, but can contribute to suggesting solutions and paving the way for the environmental dialogue.
- Continuing the interest in the environmental education in the 1980s through different congresses, such as those in Washington and New Delhi 1985, which provided for integrating the environmental education in the school curricula.

2.3.4 The Earth Summit 1992

It incited for orienting education towards the sustainable development, developing and promoting the educational programs, and increasing the audience's awareness about the environment and its issues. In 1992, UNESCO issued a statement about the environmental education for a better future showing that education is one of the most influential tools that helps societies face the future challenges and shape the future world.(tantawi, 2001)

3. The role of Facebook in the environmental education

3.1. The concept and genesis of Facebook

It is one of the social media platforms that allow the natural and moral persons to appear and strengthen their positions through communication (moqdadi, 2013). It started on 28 October 2003, when Mark Zuckerberg was a 2nd year student at Harvard University, and in collaboration with his colleague and Hughes used pictures of the students in the university campus and called people to choose the most attractive person. Zuckerberg hacked protected zones of Harvard University computers and copied pictures of the university campus to use them in his website. Then, he directed the website towards many units of the university. Later, he was fired from University due to hacking its site. However, he was then acquitted from the accusations.(jerrar, 2012)

On 04 November 2004, Zuckerberg founded Facebook at Harvard University. The membership covered more than half of the students who did not graduate. Then, in March 2004, Facebook spread to cover different local universities, until reaching Canadian and US ones.(jerrar, 2012)

3.2. The main characteristics of Facebook as one of the new media applications

- **Interactivity:** It allows the users to communicate and be influential. The users can exchange communication, giving rise to the concept of interactivity.
- **Audience less:** This means that the message can be sent to one person or a given group, not to wide audience as in the past.
- **Asynchronous:** It means the possibility of sending and receiving messages in due time, and requires the users to use the website in one time.
- **The movability:** There are different communication tools that can be used in different places, such as the smartphones.
- **The conversion:** It is about the ability of the media outlets to convert the information from one form to another, such as from audio to printed format.
- **The diffusivity:** It is about the methodological spread of communication tools worldwide and inside the communities. Every tool appears in the beginning as luxury; then, turns into a necessity.
- **The internationalization:** The main environment of the information technology is an international environment thanks to the exchange of information from any place in the world.(abd al karim&ghazali, 2018)

3.3. The characteristics of Facebook and its contribution to the environmental education

3.3.1 The wide spread

Facebook has a wide popularity and use all over the world. It is widely used in the Algerian society, and people who do not use it seem underdeveloped because it is a necessary tool for all the life aspects. Therefore, Facebook Company gained the highest attraction rates, as around 70% of the Algerian population used it on 2011, showing the Algerians' interest in such communication types. In this regard, Facebook is one of the main tools for the environmental education, as it has pages of associations, parties, and institutions that work in the field of environment and development and contribute to the environmental education through providing information on the environmental education and protection.

3.3.2 The different applications

Facebook is one of the most social media that can connect with Twitter, YouTube and chat applications. It allows its users to create applications they want and helps the awareness campaign organizers link Facebook to their websites and contact channels.

3.3.3 The multimedia

The use of the electronic tools, such as pictures, paintings, videos, and music fosters the environmental education, as it equips the individual with environmental information, shapes trends, rationalizes behavior towards the environment, and encourages participation in the environmental campaigns.

3.3.4 The interactivity

Facebook creates spaces for dialogue, where the users exchange information on the environmental problems, identify the main sources of pollution, and predict the environmental problems. Besides, the Use of Facebook in the organization and meetings needed for the campaigns and meetings is one of the best tools to reach the target audience.

4. The environmental issues raised on Facebook

4.1. The garbage pollution

The development in Algeria, mainly in the industrial field and the lifestyles, and the rising consumption increased the size of garbage. For instance, the house garbage causes

different consequences with time. The economic openness affected the consumption habits and the household garbage, mainly in the big cities. In addition, the size of pollution increases with the increase of population. In this regard, Algeria suffers the spread of random landfills, as the Algerian citizen produces 0.5 Kg of garbage daily (charaf, 2013) This rate increases in the urban regions and exceeds 0.65 Kg per capita daily. In addition, the landfills receive around 22287.423 tons per day, without counting the burned garbage. This method costs 1500 USD to process the one ton. A report on the environment state and future in 2000 showed that the air pollution caused 3536000 cases of respiratory disease, 1522 cases of lungs cancer, and 54400 cases of asthma.(zarouti& ben othmen, 2004)

4.2. Desertification and land degradation

The move ment of the desert towards the arid and humid regions is an automatic process caused by the ecological unbalance. Algeria faces the risk of desertification due to natural and human factors, and a big share of the state is under risk. Around 09 million of plantations are threatened by partial or complete desertification, making Algeria lose 7000 hectares per year.(the UN Development Progra, 2009) Besides, it suffers the land degradation due to trees felling, overgrazing, fossil fuels, forest fires, agricultural mismanagement, and the rural expansion.

4.3. The problems of drinkable and sanitation waters

Algeria suffers the lack of drinkable water, as 95% of the state has an arid climate. Despite the water reserves, estimated at 19 billion meter cube per year, the share of the individual of the renewable water witnessed a remarkable decrease from 689 m³ in 1990 to 332 m³ in 2025(charaf, 2013). On the other hand, the sewage water is estimated at 600 million m³ per year. In addition, there is a terrific flow of urban and industrial liquids in the sea without preprocessing; causing bacterial and biological pollution.

The water and aquatic surfaces are polluted by oil, as 100 million tons of hydrocarbons pass by the sea annually, where 10000 tons are leaked during loading or unloading. In this regard, one ton of oil can cover a surface of 1200 hectares of the seawater, and the heavy particles that go to the bottom harm the maritime animalistic and vegetal wealth.(loulou, 2020)

4.4. Global warming

Its risks arise from the increase of the Earth temperature in the long term. A number of gases in the atmosphere naturally help the Earth maintain part of the solar heat through maintaining the radiations and banning them from reaching the atmosphere. After the increase of industrialization, oil extraction from coal, use of natural gas, and trees felling, the solar temperature increased and the climate changed; leading to an imbalance in the natural system.(ali raboh.etal, 2000)

5. The use of Facebook in the environmental education

The interactive advantages of Facebook provide solutions to the educational institutions and civil society to participate in the environmental education, mainly that the environmental problems still threaten the societies. These solutions manifest in:

- Establishing specialized newspapers, magazines, and TV channels on the environment using modern techniques.
- Raising the citizens and governments' environmental awareness through seminars and scientific meetings.
- Publishing the environmental laws online to be accessed by everyone.
- Publishing the international reports on the environment and informing the civil society organizations about them.

- Creating a space for dialogue to exchange information about the environmental problems.
- Using the educational and documentary environmental films.
- Using the specialized electronic applications to foster the environmental knowledge.
- Using the different electronic formats, such as images, paintings, videos, and music to raise awareness and encourage individuals to participate in the environmental awareness campaigns.

II. Conclusion:

The environmental education turned into a social necessity after the environmental problems increased in the modern life and threatened the living organisms. Therefore, active participation from every party is needed. The environmental education is one of the effective tools in raising good generations with good values and ethics. Despite that the family is the first party assigned with the process, the environmental education is a process that needs collaboration of the different formal and informal socialization institutions. Besides, the traditional and modern media, such as Facebook, play a vital role in the environmental education.

The modern media in general, and Facebook in particular, have an important informative and guiding role with different dimensions that help promote culture, principles, and behaviors that incite for protecting the environment. Besides, they are a space for discussing the environment issues and insisting on the necessity of environmental education for all the social categories. Thus, the environment education is a necessity to protect the environment.

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