## Dimensions of Environmental for Sustainable Development in the Science Book for the Second Grade of Primary School

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#### Abstract

Research aims to find knowledge of the environmental education dimensions for sustainable development included in the science book for the second grade of primary school, and the descriptive analytical method was used, to analyze the content of the science book for the second grade of primary school, 1st Edition / 2017. for the year (2018/2019) of the dimensions of environmental education for sustainable development after excluding the chapter questions, introduction, and list of contents from the analysis.

The research tool included building a list of environmental education dimensions for sustainable development that should be provided in the science book in light of which the book's analysis process could be completed.

The list included (17) sub-cases distributed among (5) major issues related to the environmental dimensions. The researcher approved the apparent honesty, and it was presented to a group of arbitrators, and the agreement

was 80%, and thus it is considered valid and usable. The explicit idea as the unit of frequency analysis is adopted as the unit of census.

The researcher presented the sample of the analyzed material to a number of arbitrators, and they unanimously agreed on the validity of the analysis process, which contained the subject of the members in the human body from chapter one, included heart, lungs and stomach from the science book for the second grade of primary school.

The researchers used two types of analysis consistency:

1- Agreement over time.

2- Agreement between analysts.

They used external analysts with experience in the analysis process, and to calculate the stability, a sample was chosen from the analyzed material representing 20% of the total content of (33) pages represented in the first unit / the human body and health / chapters 1 and 2.

The stability coefficients were from the standard, and the researchers used frequencies, percentage, and the Holste equation statistically.

It was found through the results that the environmental dimension came with (7) frequencies and a percentage of 13.73% of the total number of (51) frequencies.

The book received (51) frequencies distributed to the (3) main issues, the issue of human body and his health In first place (17) frequency with a percentage of 33.3333%, followed by the water environment in second place with (13) frequency and a percentage of 25.4901%, the percentage of land with (11) frequency and a percentage of 21.5686% The material and its states got (8) frequencies , with a percentage of 13.7254%. As for the Earth and the universe, it did not get many frequencies, and it was (3) frequencies and a percentage of 5.8823%.

This indicates an interest in aspects and neglect of others, which makes it necessary to pay attention to neglected aspects and include them in science books

Key words: Dimensions of environmental education, sustainable development.

#### Chapter One

#### **Research Problem**

During the twentieth century, countries gave most attention to development projects, by considered them as a strategy develop societies from Backward society to progress state, so schools and sociological trends flourished Expressed by a certain ideology, which varies between structural and functional theories balanced and revolutionary?

Stumbled upon formulating a realistic strategy that achieves development for the vast majority,

It considers development an integrated natural and environmental view, as the application of these trends had environmental effects and problems.

Such as pollution, poverty, depletion of natural resources, and other environmental problems that still exist and are exacerbating, with the different degree of their effect on the ecosystem under the prevalence of the mechanisms of globalization, as a result of the absence of moral and humane controls in the applied development methods, which prompted many international conferences and symposia, such as the Stockholm and Jahansburg conferences, recognition in need for change, and making comprehensive theoretical and critical reviews of all the prevailing developmental theoretical ideas and give an alternative that looks at development from an environmental perspective, by preserving the fundamentals of life on the globe for present and future generations (Al-Taweel, 2012: 9)

(Tawil, Fatiha (2012) Environmental Education and its Role in Sustainable Development, Unpublished PhD thesis, University of Mohamed Khaider-Biskra, College of Human and Social Sciences, Algeria)sustainable development has emerged as a new means and vision to overcome environmental problems, and a stage that rejects modernity with its faltering decades with development and calls for a return to harmony once again with nature,Based on the historical peculiarity of each society, which it acquires its true connotation of progress based on an ethical and humanitarian case towards present and future generations?

It requires a new era of economic growth that involves more than financing. Seeking a change in the content of growth, which makes it less intensive in the use of environmental resources, and expanding people's choices in obtaining the resources that guarantee them a decent standard of living, and they will have a more caring and safer life from crime and violence, by allowing them the freedom to participate in decisions that affect their lives and their freedoms, and to benefit from their acquired capabilities in the personal, productive and cultural fields, with the need for new technology that is cleaner, more efficient, and more capable of saving environmental resources, to reduce pollution and environmental degradation, In order not to create social and environmental debts for future generations, and for this reason, sustainable development has been proposed as a means of life, and a theory based on thinking in a holistic, integrated and linked manner, within a set of relationships and interactions between social considerations, economic and technological methods and the natural environment, so that it leads to the participation of all people voluntarily, involuntarily and in a responsible manner, this requires finding the application of certain ethical frameworks, based on a process of change and modification in human behavior, the primary cause of these environmental problems to understand the relationships and laws governing the environment (Arab Parliamentary Union (2010)

Therefore, it is of utmost importance for a self-deterrent that stems from within the human being, and the development of this internal abilities and this self-conviction to protect the environment, To develop capabilities and provide individuals with the necessary expertise, knowledge and skills, and behaviors based on a sense of responsibility for the environment in all its natural, social and economic aspects,

This makes environmental education a major tool for disseminating knowledge about local, national and global environmental problems.

And an integral element within the contributions of the part to the whole, and one of the strategies to achieve sustainable development,

It was also initiated by many conferences and organizations, such as the UNESCO, which raised the slogan (Education for Sustainable Development). (United Nations, 2013, 7-8)

So, this interest translated by reorienting education in an integrated manner and as a sustainable process,

It starts from the pre-school stage, then all stages of formal and non-formal education, by choosing local and global environmental, social and economic subjects as appropriate cultural pattern, and its inclusion in the different curricula and curricula at each level of study, and it may appear as a unit or chapter on the environment in one of the school subjects or as environmental awareness programs as an independent curriculum,

To emphasize that environmental education within the framework of school educational systems helps, as a subformat, to understand the best human, social and economic aspects of life.

Emphasizing the sense of responsibility towards the state of the environment according to the requirements of the need for the cognitive, emotional and skill characteristics of building the student's personality, so that he learns to observe, protect and control the environment.

By providing the students with appropriate information to understand and realized their natural, social, and economic environment and its resources, so that the student acquires positive values and trends, and the interest in rationalizing their behavior and developing their skills, and determining their relationships with the practical application of building a citizen capable of integrating with the elements of the environment and protecting it in order to achieve sustainable development. (Al-Nawashi, 2010, 11)

The goals of environmental education for sustainable development could only be achieved through well-planned educational situations in which the various effective constructive roles interact and complement.

For the parts of the format of the environmental dimensions that are interconnected with each other as an instructional format, by analyzing and describing the content of science books for the elementary stage,

As the most important input to the environmental dimensions for sustainable development, which should be based on an integration between the development of the starting points of need for the learner's cognitive characteristics, Sentimental, skill, and development of value orientations for the social, environmental and economic aspects of sustainable development at the different levels of the same subject, and the detection of new relationships between the various academic subjects. (United Nations Educational, Scientific and Cultural Organization, 2013: 7)

The science book is one of the important subjects in any educational system at the global level. The importance of science and its teaching come from the fact that it contributes significantly to the progress and development of nations. (Saidi & Soliman, 2009, 75)

In order to deepen the practical aspects related to the reform of the environmental dimensions for sustainable development, especially science curricula, which is the main pillar of primary education curricula,

Updating and enriching them from time to time is considered essential for developing the curriculum, as the researcher has analyzed the science book for the second grade of primary school.

By identifying strengths points, enhancing them and removing weaknesses, and in light of this, the research problem can be identified in the following question: (To what extent does the science book for the second grade of primary school include environmental dimensions for sustainable development?)

#### The Importance of the Research

Depending on the dimensions of environmental education for sustainable development, as a strategy that summarizes an educational vision that seeks to find a balance between economic human prosperity and cultural traditions, and environmental natural resource sustainability, to provide people with knowledge and skill, for continuous learning to help him find new solutions to his environmental, social and economic issues.

In order to make the world livable of this generation and future generations, to activate sustainability and work to be a goal, and it is not just awareness and theories, it is incorporated in the school curricula that accommodate environmental issues in the contents of educational resources

In the various academic stages, which began to pay attention to environmental problems within the framework of school educational systems, to provide students with advanced environmental insight and help them better understand the social and natural aspects, and it gives students an interactive link with the environment, when they learn to protect the environment in their educational institutions and societies, this will produce important human energy in promoting creative cooperation between them, fulfilling the sociological imagination that will push their environment to sustainability. This is what prompted the researcher to adopt an analysis and description of the content of the science book as the most important inputs to environmental education and sustainable development, which have been integrated into the content of the science book based on the school's openness to life,

So that this knowledge is transformed into behavioral skills, translated into reality through expectations of the student's role in treating environmental problems to reach the goals of environmental education to achieve sustainable development. (Al-Taweel, 2012,9)

The idea of sustainable development in the environmental dimension supports the ability and control over the continuation of natural resources, and preservation of it at use through the preservation of agriculture and animals and the importance of ecosystem integration and development in the world. (Al-Halbous, 2002, 122)

The importance of the concept of sustainable development lies in identifying the interrelationships between dimensions and fields, mainly on environmental resources, and preserving the stock of resources and human wealth over time. (Muharib, 2011, 169).

Educational, Scientific and Cultural Organization, ISESCO: 2002, 138-139)

It is clear from studying and understanding the mutual relationship between man and his various activities, which cause living harm to the environment.

It uses the resources of the present, consumes the resources of the future, pollutes the environment and destabilizes it, with all kinds of waste that are of short and long term danger to life on this planet, we have no home except it until the present time. (Jamil, 2008, 74) and supports the continuity of development, with preserving the environment to meet the needs of the present, without compromising the ability to meet the needs of the future. In order to achieve this, it is necessary to work on activating the self-effort of community members through human industry, and the formation of human capital to preserve the environment to achieve sustainable development, by upgrading their knowledge and skills and shaping their attitudes to help them find new solutions to their environmental, social and economic issues, motivate them to earn their livelihood, improve their lifestyles, lead a sustainable lifestyle, through learning and education for the environment that carries a vision of integration between the environment, the economy and society,

Which reflects the key to the society's move towards sustainability? (The Islamic

This prompted the researcher to analyze the environmental concepts and dimensions for sustainable development, which were integrated into the content of science books, besides the need for environmental concepts that the student will adopt through socialization, and he makes it part of his self-concept, and understanding of the Prominent meanings of their interactions and the expectations that define their mutual roles, inside and outside the classroom. (Borden & Francois, 2007, 436-437)

The distinct role that the environmental education dimensions play for sustainable development and the security of educational institutions by a set of recurring or acquired patterns. In the classroom and extra-curricular interactive processes, and in helping pupils acquire various capabilities, knowledge and experiences to understand the environment and its problems, and determine its dimensions within the active participation of students. (Al-Jban, 2000, 19)

In order to achieve the goal of the dimensions of environmental education for sustainable development, the teaching must focus on a set of concepts, and beginning with the human being as a thinker has cooperative capabilities to change ecosystems, And making harmful environmental changes, May be harmful, as a pollution, which damaged human health, and reduced the ability of ecosystems to create a useful life

and awareness of the effects of future problems of the environment,

and the method of solving them by developing the skills of searching for evidence and critical thinking of the student. (Mutawa, 2001, 24-27)

The researcher believes that there is an increase in the ability to find balance, and to enhance the social, economic, biological and interacting components in the environment, and increase awareness of environmental factors and their relevance to human health and safety, and providing students with scientific knowledge that allows him to contribute to achieving sustainable development and prepare him as a good citizens in his society, and to equip students with knowledge and skills for continuing education, which is closely related to sustainable development.

The importance of the research comes through its discussion of one of the contemporary and important topics, in light of the interest of the countries of the world on the different objectives, Which requires the creation and application of certain ethical frameworks, based on a process of change and modification in human behavior that is the first cause of environmental problems, according to the environmental education strategy for sustainable development, To give an alternative that looks at the environment from an environmental perspective,

By improving the conditions of ecosystems and their consistency with the future and with the needs of the present alike. (Wahibi and Ibtisam, 2003, 51-52)

The importance of research also comes in analyzing environmental concepts and sustainable development variables, and shedding light on the reality of education and the preparing of primary school pupils, and design lessons in light of the goals of environmental education and sustainable development, which are reflected in the various behavior and actions of students, promote and directed by environmental knowledge and concepts that determined their relationship with the environment and that give meaning to their actions, This meaning

indicates the imperative to preserve the environmental resources, and the need to properly exploit them for the benefit of people, In order to preserve his dignified life and raise his standard of living, present and future.

The importance of the research comes through its treatment of an important and serious topic, In analyzing environmental concepts and dimensions in the science book to achieve sustainable development as the primary goal of environmental education.

Whereas, UNESCO emphasized the need for the content of environmental education to grow in a sustainable manner. (Al-Halbous, 2002, 119- 121)

Therefore, the importance of research can be according to the following: -

1. Providing an objective tool for analyzing environmental education phrases and ideas with environmental dimensions commensurate with the students' needs in preserving their environment.

2. Include the science textbooks in the dimensions of environmental education for sustainable development to be used in the preparing of books.

3. Dimensional analysis Environmental education in science books leads to improving student behavior and adjusting goals on sound scientific foundations to bring science books to a better position in order to create generations aware of the problems of their environment and to develop solutions to them.

#### **Research Aim:**

Analysis of education dimensions included in the science book for the second grade of primary school, 1st Edition, 2016. For sustainable development.

#### Search limits:

The search was limited to the science book for the second grade of primary school, 1st Edition, 2017.

#### **Defining terms:**

1. Dimensions: Define it:

Abdel-Khaleq (1983): A mathematical concept that means extension can be measured

(Abdel-Khaleq, 1983, 201)

#### 2. Environmental dimensions: defined by:

• Mutawa (2005): A style of education that regulates man's relationship with his natural, social and psychological environment, aiming at providing students with an educational experience of facts, concepts, and way of thinking, towards certain values related to environmental problems such as pollution, energy and depletion of natural resources. (Mutawa, 2005, 29)

Defined by Qamar and Sahar (2005): They are educational efforts directed or intended, towards the definition and formation of perceptions to understand the complex relationships between man and his environment, with their environmental, biological and natural dimensions, so that he is aware of their problems, and is able to make decisions towards formulating them, and contribute to solving their problems, in order to Improve the quality of life for himself, his surroundings and the world. (Qamar and Sahar, 2005, 29)

• Ghanayem (2003): is the educational process that aims to develop citizens' awareness of the environment and the problems related to it, provide them with knowledge, skills and trends, and assume individual and collective responsibility towards solving contemporary problems, and working to prevent the emergence of new environmental problems. (Ghanayem, 2003, 52)

• Al-Taie (2010): It is the process of forming the skills, attitudes and values necessary to understand and appreciate the complex relationships that link man and his civilization with his vital environment, and clarify the imperative of preserving environmental resources, and the need to properly exploit them for the interests of mankind, preserve his dignified life and raise his standard of living. (Al-Taie, 2010, 38-39)

Bin Faris (2009): It is an educational program that aims to clarify the human relationship and interaction with his natural environment, and the resources it contains to achieve students' acquisition of educational experiences that include facts, concepts and environmental trends. (Bin Faris, 2009, 47)

Jameel (2008): A directed educational process that seeks to form perceptions, trends and values, to understand the complex relationships between man and his civilized environment, on the one hand, and his natural environment in its various dimensions on the other hand, so that he is able to be by himself or in association with others, to make decisions Towards achieving sustainable development goals in order to improve the quality of his life. (Jameel, 2008, 60)

**1. Dimensions of environmental education:** Ali defined it (2012): It means environmentally sustainable development: it is development with the ability to continue and communicate its use of natural resources, especially agricultural, animal and watery resources, and to maintain the integrity of the environmental framework in the regulation of environmental resources, and work to develop them in the world, which Lead to the doubling of green areas on the land. (Ali, 2012, 229)

#### 2. Sustainable development: defined by: -

• Abbas (2010): is the maintenance and sustainability of multiple resources in the environment, meeting the social and economic needs of the current human beings, and managing them with the finest available technology and science , with ensuring the continuity of resources for the well-being of the next generations. (Abbas, 2010, 17)

#### Chapter two

#### Theoretical framework and previous studies

#### First: the theoretical framework

The emergence, dimensions and development of environmental education:

Environmental education is not recent, but rather has its ancient origins that extend throughout history in cultures and religions of peoples that have placed the responsibility on the human being to invest in the environment, to take care of it and not to abuse it, and make between man and nature harmony, intimacy and affection. As an ethical virtue that prepares man to face life in ancient societies, and to improve his relationship with what surrounds him, in order to achieve a decent life and for generations after him, which is a fundamental goal of environmental education. (Bin Hafeez: 2005, 25-26)

As a result of the increasing interest in the environment and the emergence of awareness of its problems, its concept is developing, and the development of its concept, which has come to include the economic, social and cultural aspects as well as the physical and biological sides:

1. The first stage: during which a great book tried to awaken the consciousness of many people between the years (1860-1890), So that they realize that man is not a single and unique being who transcends all the elements that make up the systems of living and non-living things, but rather that he is an integral part of the system of the universe. Twenty years after the first stage, The National Preservation Committee of the United States of America was established, whereby the value of forests is no longer limited to their products only, but rather as a resort for recreation and relaxation, and a site for various research and studies in all fields.

1. **The second stage**: is the stage of studying nature from (1910-1932) or shortly before, when the American Society for the Study of Nature was founded in (1908) during this period, efforts were made to develop an understanding of nature and an appreciation of its beauty, greatness and mysteries, valuable materials have been prepared for use by teachers and nature lovers as tools and methods of guidance.

In (1922) Al-Dawlibold explained his concept of conservation ethics, and showed that accepting and formulating ethical principles constitutes, in fact, an ecological development process.

**2. The education stage:** The Civil Society for Preservation was established in 1937, which gave many young people the opportunity to learn the value of nature

and carrying out many activities, to educate people about the importance of learning mutual relationships, efforts to train teachers indicate, and publish educational subjects related to forest conservation and all areas of the environment, This contributed to the development of the curriculum stage, which began to take shape after the fifties.

With the increasing risks of environmental problems in the modern era, the disasters created by human hands in pursuit of progress and development, in a way he couldn't recognize them. Because of the dangers it carried, he lost his humanity before his environment and threatened his life in the present and future, the growth of environmental awareness increased, as a beginning , in many warnings, I cautioned about the danger of the increase in chemical pesticides on human health and his environment, and in (1962) in Raphael Carson's Silent Spring book, who began to play an effective role in inducing governments to make fundamental changes in their policies towards the environment, He also played a role in launching movements to protect the environment and preserve it from pollution and extinction. (Carson, 2000, 6-9)

The solution of environmental crisis requires international research and work on the issue of environmental education and the introduction of environmental concepts in school subjects, defining the concept of environmental education and its dimensions, and the economic foundations upon which the environmental education curriculum is based in the programs and curricula. (Al-Sharrah, 1986, 78)

and helping individuals to understand environmental problems, and use knowledge to explain phenomena and suggest solutions to their problems, to deepen human national awareness of the importance of the environment and the requirements of sustainable development, this requires the inclusion of environmental education issues in education for all ages, by providing them with knowledge, skills and attitudes to contribute to solving the environmental issue. (Ahmad and Muhammad, 1992, 183)

The concept of environmental education:

There have been many opinions regarding the concept of environmental education and its meaning, considering it a relatively recent educational concept that resulted from the interaction of the meaning of education and the environment. Therefore, the meanings of this concept varied due to the multiplicity of the educational process and its objectives on the one hand, and the meanings of the environment from other hand.

studying the environment in itself is a guarantee for achieving environmental education, while others believe that environmental education is more comprehensive and deeper,

Where the concept of environmental education evolved to include the economic and social aspects, after it was limited to the biological and physical aspects, and modern educational systems have introduced topics with environmental implications in their curricula

With priority given to problems related to how to protect natural resources, interest in the concept of environmental education may expand and develop. (Whippy, 2003, 52-53)

Environmental education seeks to form the individual in all its aspects and cognitive, emotional and skill characteristics, and to make him aware of the importance of participating in solving environmental problems and preventing their occurrence.

The relationship between different knowledge and the acquisition of an environmental awareness leads to participation in the improvement and upgrading of the environment. (Qamar and Sahar, 2004, 28).

This environmental awareness is a starting point for environmental education in solving environmental problems individually and collectively, Environmental education is an educational and educational effort directed at all sectors of society, and all aspects of the various natural, social and economic environment.

It focuses on avoiding environmental problems and solving what may occur from them through effective participation and good use of various means that contribute to preserving the environment and people.

#### The importance of environmental education and its dimensions: -

The importance of environmental education appears by integrating its dimensions in the different stages of education for the sake of human education in a sound and rational environment. Enrich his knowledge, sharpen his skills, and make its goals enlightenment for present and future generations of the potentials and the degree of endurance of the environment

To apply human thought in order to give them directed directions, that would preserve the human environment's tolerance level, and prepare a person who understands his environment, is aware of its conditions, and aware of the problems he faces and the dangers that threaten it, he is able to contribute positively to overcoming these problems and reducing these dangers, according to social dimensions and values to improve the conditions of this environment, in a way that is better with awareness from the human being, and working to implement it with awareness of it, by raising a person who can protect legislation and laws, Implementing and developing them aimed at protecting and preserving the environment, in order to achieve the desired goals in a more effective manner. (El-Demerdash, 1988, 58-60).

The role and importance of environmental education and its dimensions are not limited to teaching information and knowledge about some environmental problems. Such as pollution, the degradation of the biosphere and the depletion of resources, but it faces an ambition more than that, represented by awaken a critical awareness of economic, technological, social, political and ethical factors, The comprehensive approach to the roots of environmental problems, and the development of moral values that improve the nature of the relationship between humans and the environment. (Qamar and Sahar, 2004, 55-56).

That is why the environmental dimensions in our schools must choose from the environmental elements that are most relevant to the student's life and most influencing them and in proportion to their level of maturity.

The environmental dimensions are characterized by the nature of continuity and an aspiration to the future. (El-Demerdash, 1988, 63-67)

And that the students are well-educated and prepared to carry out the task of preserving the environment inside and outside the school, It remains the factor that depends on achieving the goals. Therefore, the environmental education strategy and its dimensions are necessary, It seeks to develop environmental capabilities in the field of education with the aim of preserving the elements of the environment and dealing with it rationally, To achieve sustainable development that contributes to improving the quality of life for the citizen and the well-being of the present and future generations. (Jamil, 2008, 78)

And that the real challenge of environmental education emerges in creating an educational system that helps the pupil to discover complex rational multi-dimensional issues According to philosophical foundations of environmental education, it is far from indoctrination or imposing an opinion on environmental issues. (Whippy, 2003, 62-64)

**Environmental Education Dimensions Philosophy:** 

The philosophy of the dimensions of environmental education is the intellectual map, which includes the theories of thinkers about the environment and its relationship with man, and various ideological concepts of the environment, and the philosophy of assisted and complementarity between the multidisciplinary branches of knowledge, and their reflection on environmental education and the beliefs from which ethical principles are derived, And the environmental values that guide the goals of environmental education to fill the gap in education based on science and knowledge, and the desire of educators to form an appropriate response to new needs, also the formation of behavioral patterns that preserve life in its entirety in the environment and preserve it in present and future, for the sustainable development.

It includes studying decision-making methods and their effect on the environment, studying environmental problems and how to find solutions to them, the concepts of ethics and environmental behavior, and what they contain in terms of explaining the ethical principles and values, and the patterns of positive behavior that must be followed in dealing with the components of the ecosystem, these concepts are based on several dimensions, Through environmental education, it looks at the environment in its natural entirety, which it is found on and which is man-made, With its biological, political, economic, technological, social, legislative and cultural aspects, (Ganyme, 2003: 60-63).

It deals with major issues from a positive global point of view, as a result of the opportunity for the teacher to gain the opportunity to look at the environmental conditions in number of regions, within an integrated curricular framework that combines several systems, in order to strengthening the various school curricula and vaccinating them with environmental education by a functional way from the pre-primary level and continuing to the remaining stages, as well as activating the role of citizens in protecting the environment, working to improve it, and positive participation in avoiding problems, contributing to solving them, making decisions and accepting their results in an atmosphere of local, regional and international cooperation, as the most important dimensions that contribute to form and constitute of a philosophical framework in environmental education. (United Nations Educational, Scientific and Cultural Organization (2006))

#### Environmental Dimensions and sustainable development

The right to freedom from poverty, environmental degradation and hunger, the right to education, health, equality, security and peace, the right to advance, develop and preserve the environment and its resources, in the present and in the future, all rights emerged in the past decades, in which the idea of sustainable development prevailed and captured the attention of environmental, developmental work worldwide.

When we talk about sustainable development, it is related to a process of change, it includes the exploitation and formulation of environmental resources, directing investments, adaptation of development, and institutional development in a way that guarantees for generations an inheritance that is at least equal in kind, Those obtained by previous generations, and prevents their deterioration or decline. (Faris, 1999, 14).

Where sustainable development is based on understanding the integrated and continuous relationship

between development and the environment to satisfy the needs of the population on the one hand, taking into account the environmental dimensions, on the other hand, the land resources are sufficient to meet the needs of all living things, If it is managed efficiently, wisely, and distributed between generations, now and in the future, in a fair manner, which is known as sustainability. (Al-Ajami, 1992, 23)

If we want to achieve continuous development, we must adhere to the ethics of the natural and social environment and its development by society and the state, ask it and punishing those who deviate from it, by developing individuals' awareness, positive attitudes and social behavior towards preserving the environment, decrease consumption and take into account public interests before private, by the dimensions of environmental education, the dissemination of the aesthetic, human and moral values that can be learned from schools, the development of skills and capacities for communication and critical thinking As well as the social skills needed to apply knowledge in reality and explore environmental issues at all levels to achieve sustainable development. (Rein fried: 2009, p: 231)

Sustainable development consists of three important elements: human and financial wealth that uses modern technology, and natural wealth interacting with each other, the problem of development that brings people to prosperity and the improvement of the standard of life.

Any defect in these three components will no longer develop. This requires coordination of capabilities and high efficiency to lead the three components. (Al-Surugi, 2009, 214-215)

In order for a person to play his full role in the economic, social and political life of his society, by fully participating in the development effort and in planning appropriate decision-making structures, this helps to achieve sustainable development, provide opportunities for all, and equitably distribute the product of economic growth that concerns everyone. (Guarana, 2009, 54)

Reliance has increased in the decades when environmental problems arose, The necessity of preserving the environment and optimal use that contributes to the survival of human, animal and plant life, To prevent their depletion or pollution, to achieve a sustainable environmental balance, and to predict what might happen to the ecosystems as a result of development as a precaution and prevention, and the need to eradicate poverty and improve the level of income, not only from a social justice perspective, but from an environmental protection perspective through the following environmental dimensions:

1. The wealth and materials discovered and stored of energy of all kinds, and various mature and multi-sources, In addition to biological diversity, the environmental problem such as waste disposal and environmental degradation, and the problem of pollution to which the environment is exposed with all its components such as water, land and air. (Al-Ghamdi, 2007, 10-11).

2. Test clean technology that does not cause harm to the environment, and use alternatives, decreasing the consumption of resources, recycling of waste, production and preservation of food, and providing safe drinking water, and disaster control and industries that reduce pollution, and improve lifestyles. (Mustafa and Wahsan, 2005, 196).

In general, it can be said that the strategy of the dimensions of environmental education as a partial coordination performs functions through the integration of sub-parts that work to balance and achieve sustainable development in the face of environmental problems and environmental protection in the present and future,

Reaching a reasonable philosophical basis is considered a model for the dimensions of environmental education, which is included in the Prevailing education programs, and a kind of agreement about the goals and objectives of the dimensions of environmental education for sustainable development.

#### Second previous studies

1. Yakhlef study, Najat (2007): Dimensions of environmental education in the Algerian school environment, a field study in Guelma.

The study aims to clarify and explain the issue of the environment and its problems, an issue and everyone's responsibility. It is a behavioral issue based on raising the individual from a young age and getting used to him, through the education process, to deal well with the environment, By directing the call to popularize the subject of environmental education, as an approach and a course in all educational levels, Across the entire country, an attempt to answer the central question of this study: -

What are the dimensions of environmental education in the Algerian school environment, under which the following sub-questions fall: -

1) What are the dimensions of environmental education in school curricula?

2) What are the dimensions of education in school activities?

3) To what extent does the school environment respond to the dimensions of environmental education?

4) What are the obstacles of environmental education in the Algerian school environment?

5) What are the prospects for environmental education in the Algerian school environment?

To answer these questions, the study relied on the descriptive method, to study the current facts related to the dimensions of environmental education. In the Algerian school milieu and its interconnected relationship, to present an interpretive analytical study, and provide designs on the dimensions of environmental education in the Algerian school environment.

It also used the content analysis method for scientific inquiry about the level of written materials, and transferring it from its qualitative to quantitative character, with the aim of describing, analyzing and explaining its explicit meaning in the textbooks for the second stage of basic education, Such as civic education books, middle school textbooks, and Islamic education books, according three dimensions: the cognitive dimension, the emotional dimension, and the skill dimension.

It also included the human field of study,

A group of officials in the Environmental Protection Association of Guelma state, In addition to managers and teachers of the two primary schools that the researcher identified in the spatial field of study, There is also a group of students in the school environment, estimated at about (100) students, who represent the study sample,

On which the questionnaire form was applied, in addition to the interview, the observation, and the researcher obtained these results: -

The dimensions of environmental education in the second-phase curricula came in a classic, informative way based on indoctrination, and on analysis at times. It tried to help students become familiar with the environmental concepts, elements and elementary components of the natural environment While there was a small amount of environmental problems and their effects, Partially away from the social and cultural aspects of society and its various needs, and the creation and crystallization of positive values that allow to decrease his relationship and interaction with its elements and components in its simple form, and his acquisition of the mental skills that allow him to think about ways to protect and formulate them without manual skills.

1)The environmental education dimensions of school activities, they focused on developing the value and emotional aspects, and then they acquire the skills to deal with some simple environmental elements and components available in their local environment, at the finally, they acquire some simple and superficial knowledge of some environmental elements.

2) about the extent of the students' response with the dimensions of environmental education in the school environment, The results reflected the pupils' inability and inactivate cognitive acquisitions and perceptions in translating environmental knowledge and information. (Yakhfil, 2007: 16)

#### 2. Al-Razaki Study (2016):

The study aimed to analyze the content of science books in primary school according to the dimensions of sustainable development for the academic year (2015-2016 To achieve this goal, a list of sustainable development dimensions has been built that should be included in primary school science books. A list of the three social, economic and environmental dimensions of sustainable development, in its initial form, was included (55) sub-issues, The content of science books in the elementary stage was analyzed in the light of the list that was built, and the idea was adopted as a unit for recording and repetition and a unit for enumeration, The validity of the analysis was conducted by presenting a random sample to the arbitrators.

They unanimously agreed on the validity of the analysis and the reliability of the analysis was calculated using (Holisti) and in agreement with external analysts and the researcher herself. One of the most important findings of the researcher is that the science book for the third grade of primary school is the book that deals with the most dimensions of sustainable development. As it got (42.04%), (66frequencies,

The science book for the second grade of elementary school in second level, at a rate of (32.48%), (51) frequencies Whereas, the first elementary science book was the least interested in the dimensions of sustainable development, as it got (25.48%) by (40) iterations.

In light of the research results, the researcher recommended a number of recommendations, including:

1) The need for a teacher's guide that includes the dimensions of sustainable development that he should seek to support among students.

2) Teacher training on methods and means of developing students' dimensions of sustainable development. (Al-Razaki, 2016, c)

The researcher suggested completing this study several proposals, including: -

1) Paying attention to neglected sub-issues and working on including them in the science books for the elementary stage.

2) Building a program in accordance with the dimensions of sustainable development for primary school students.

#### **Chapter Three**

#### Research procedures

#### First: Research Approach:

Researcher follow the descriptive-analytical approach to analyze the content of the second grade science book, according to the environmental dimensions for sustainable development.

The researcher adopted the content analysis method to achieve the research goal.

Second: Research community and its sample:

**1. The research community:** The community is all the elements that make up the subject of the research problem. The research community has been defined by the science textbook for the second grade of primary school scheduled for the year (2018/2019), defining the research community is one of the methodological steps on which the research procedures, design and efficiency of its results depend.

**2. Research sample:** The research community is the content of the science book for the second grade of primary school, after excluding the class questions, the introduction to the book, and the list of contents from the analysis. (Table 1)

book of scheduled Science for the second grade of primary school							
Seq.	Title of book	Grade	Published no.	No. of Chapter	No. of Pub.	No. of Pages	No. of analysis
							page
1	Science	Second	1	10	2017	200	155

### Table (1) Book of scheduled Science for the second grade of primary school

#### Third: Research Tool:

In order for the research to have a tool by which to analyze the content of the science textbook for the second grade of primary school and for the purpose of reaching the research goal, It required building a list of environmental dimensions for sustainable development that should be provided in the science book, in light of which the book was analyzed, and a research tool was prepared in Appendix (1) for the dimensions of environmental education. It included (17) sub-cases distributed among (5) major issues related to the dimensions of environmental education.

#### Fourth: Validity of the tool:

The researcher relied on apparent validity, and it was presented to a group of specialized arbitrators, and the agreement percentage was (80%). Thus, the tool is considered valid and usable. Table (2)

# Table (2) Dimensions of environmental education for sustainable development of arbitrators' agreement and its percentage

	1	percentage	
Seq.	Main Case	Sub. Case	Percentage
1	Earth and Universal	4	23.529411
2	The land environment	3	17.640058
3	Human body and his health	3	17.647058
4	Water environment	3	17.647058
5	Material	4	23.529411
	Total	17	100.00

#### Fifth: Content Analysis:

In nalyzing the content, the researcher relied on the following steps:

1. The aim of the analysis: to determine the extent to which the content of the science book for the second grade of primary school includes the dimensions of environmental education for sustainable development. According to the tool.

**2- Unit of analysis**: Adopted the explicit idea as the unit of analysis, and the repetition as the unit of enumeration.

3. Steps for content analysis: followed up next steps in the analysis process:

A- Reading the subject as a whole is a good reading so that the image becomes clear in the mind of the analyst.

B- Read the same subject a second time to define the idea that includes the dimensions of environmental education.

C- Comparing the idea with the items of the tool to determine the belonging of the idea to the main and secondary issues according to the corresponded between the content of the idea and the content of the issue in the tool.

D- The subject of idea is determined in the phrases under the light of the tool and the type of case and number is determined, which determines the type of phrase.

C- The results of the analysis are transcribed into the analysis table, giving one iteration for each statement, then converting them into percentages to be interpreted later.

Sixth: Validity of the analysis:

The researcher show a model from the analysis material, on the number of arbitrates in teaching methods, and they agreed on analysis process which considered as a validity of process analysis.

The following is a sample analysis of the subject (Organs in the human body) in the chapter one, which includes the heart, lungs, and stomach. From the science book for the second grade of primary school. Table (3)

Seq.	Idea	No. of page	Main case	Sub. case	The title of sub. case
1 Turkis	Heart is one human organs b Journal of Computer and Ma	26 athematics Edu	Human body and his cation health	Preservation Vol.12 No.10 (202) on human body Res	What is the 1), 4822-4839 function of the equedit(Article
2	The heart pumps blood to different parts of the body	26	Human body and his health	The work of various body organs	
3	Put two sides of Headphone in my ears	27	Human body and his health	Preservation on human body	
4	The member who makes the sound in the speaker	27	Human body and his health	Preservation on human body	
5	When I play with my friends, I feel tired sometimes	28	Human body and his health	Preservation on human body	What is the heart
6	The heart makes a sound called a pulse	29	The work of various body parts	Preservation on human body	What is the function of the heart
7	The heart pumps blood to the body's organs	29	Human body and his health	Preservation on human body	
8	Blood is a red liquid that transports oxygen and food to parts of the body and removes waste from them	29	Human body and his health	Preservation on human body	
9	The pulse indicates the human activity and state of health	30	Human body and his health	Preservation on human body	How to measure pulse
10	The lungs are two organs of the human body	32	Human body and his health	The work of various body organs	Two lungs
11	Compare the speed of breathing while at rest and the speed of breathing while training directly	33	Human body and his health	The work of various body organs	How do the lungs work
12	The lung is organ like a bag It is pink in color and as a sponge in texture	34	Human body and his health	Preservation on human body	What the lungs
13	The lungs are inside the rib cage	34	Human body and his health	Preservation on human body	What the lungs
14	The lungs get rid of carbon dioxide from the body during exhalation	35	Human body and his health	The work of various body organs	What is the function of the lungs?
15	The lungs supply air (oxygen) to the body during inhalation	36	Human body and his health	The work of various body organs	How the lungs work
16	The stomach is an organ of the body	38	Human body and his health	Preservation on human body	Stomach
17	The stomach helps digest food	38	Human body and his health	The work of various body organs	What is the function of the stomach?
18	The process of converting food into simple substances that the body benefits from to obtain the energy needed to carry out	41	Human body and his health	The work of various body organs	What is the function of the stomach?

	various activities				
19	Doing regular exercises to	42	Human body and his	Preservation	How do I keep
	keep the Agility of the		health	on human body	the stomach
	body				healthy
20	Obesity makes people	44	Human body and his	Preservation	Obesity
	inactive and inactive		health	on human body	

#### Seventh: Stability of Analysis:

Two types of constancy analysis are used by:

1. Agreement over time: It is intended to agree the results obtained by the researcher upon re-analysis thirty days after its first analysis.

2. Agreement between analysts: The researcher has used external analysts with experience in the analysis process.

To calculate the two types of stability of the analysis, a sample was selected from the analyzed material representing (20%) of the total content of 33 pages, represented by the first unit, the human body and health, Chapter 1, 2

By applying the (Holsti) equation, the reliability coefficients are reached, Table (4)

Analysis constancy coefficients				
Agreement through time	Between the researcher and	0.98		
	themselves after 30 days			
Agreement between analysts	Between the researcher and the	95%		
	first analyst			
	Between the researcher and the	94%		
	second analyst			
	Between the first analyzer and	90%		
	the second analyzer			

Table (4)

 Analysis constancy coefficients

It's clear that the stability coefficients obtained by the researcher are within the standard, Thus the stability factor is good, Some literature indicates that the stability rate of more than (70%) is considered good. (Al-Sudani and Abbas, 2011: 123)

Eighth: statistical means:

The researcher used the following statistical methods:

1. Frequencies, and percentage.

2. (Holsti equation): to extract the stability of the analysis.

#### **Chapter Four**

#### View and interpret results

#### **Dimensions of environmental education**

The 155 pages of the science textbook analysis for the second grade of primary school showed that the dimensions of environmental education are (7) frequencies and a percentage (13.73%) of the total number of (51) frequencies. Table (5)

## Table (5) The percentage of environmental dimensions in the science book for the second grade of primary school

Seq.	Dimensions of environmental education for one unit	Total frequencies of the book	Percentage %
	7	51	13.73

It showed that the book received (51) frequencies distributed among (3) major important issues. The issue of the human body and health came first, with (17) frequencies and a percentage (33.3333%). It is followed by the water environment in the second time by (13) frequencies by a percentage (25,4901%), the land environment by (11) times and by a percentage (21,5686%)

As for the Earth and the universe, it did not get many occurrences, and there were (3frequencies with a percentage (5,8823%), Table (6)

requirieres una referinages of Dimensions of Differential Datacations issues				
Seq.	Issues	Frequencies	Percentage	
1	Human body and his	17	33.3333	
	health			
2	Water environment	13	25.4901	
3	Land environment	11	21.5686	
4	Material	8	3.7254	
5	Earth and Universe	3	5.8823	
	Total	51	100%	

 Table (6)

 Frequencies and Percentages of Dimensions of Environmental Educations Issues

This indicates their interest in aspects and neglect of others.

Conclusions:

1. The results indicate the neglect of the science book for the second grade of primary school to many of the main issues and their sub-issues in the environmental dimensions.

2. Through the results, it was found that the book's interest in the dimensions of environmental education is first and foremost, the human body, its health, water environment, the land environment, and its weakness in making sure of material, land and the universe.

#### **Recommendations:**

In light of the results of the research, the researcher recommends:

1. Balance in the ratios of including the dimensions of environmental education in the science book for the second grade of primary school, so that it is balanced with the science books for the other grades.

2. Paying attention to neglected sub-issues and including them in science books.

#### The suggestions:

1. The need for a teacher's guide that includes an appropriate environment and support for students.

2. Training the teacher on the methods and means of developing the dimensions of environmental education among students.

3. Analyzing the content of science books for all grades at the primary level.

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