



A Study of Some Global Sustainable Development Issues in Social Studies Curriculum for the Fourth Grade of Primary School according to Egypt Vision 2030

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Abstract

The current research aims to study the content of the social studies course book that was developed according to the Egypt Vision 2030 for the fourth grade of primary school and the extent to which sustainable development issues were included in the curriculum. A content analysis of the course book and an achievement test were conducted on 1000 pupils in schools in Port Said, Egypt. The results of the research showed that issues of sustainable development in the developed social studies curriculum were 34.8% although the curriculum explained the global issues of sustainable development except for the elimination of global famines. Additionally, the results of the achievement test medium for pupils are considered a medium for most issues, so it could be concluded that it is necessary to increase the time of social studies classes in schools and add ways of eliminating global famine issues to the curriculum.

Keywords

Sustainable development, Egypt Vision 2030, Social Studies Curriculum, Descriptive approach, Survey study.

Introduction

The United Nations General Assembly adopted a resolution on September 25, 2015 which entered into force on 1st January 2016 to preserve the environment for future generations with sustainable development and to show that education is not only limited to setting plans and presenting goals, especially for young people. The pupils' activity is used to work on the implementation of sustainable, creative and innovative development projects among them (Kyle, 2020). The United Nations adopted 17 new goals include eradicating poverty and hunger, providing quality education for lifelong children, promoting gender equality and promoting healthy, inclusive and sustainable societies (Samuelsson & Park, 2017).

Many countries endeavored to develop their curricula in accordance with the fourth goal of the sustainable development goals defined by the United Nations in order to achieve a just and comprehensive education that provides lifelong learning opportunities for all children. Such endeavors target developing curricula and providing high-quality training for researchers and teachers to empower them with the knowledge and innovative methods of teaching that facilitate incorporating sustainability development in education and provide opportunities for fostering children creativity (Boereen, 2019).

In Norway, many curriculum goals, particularly in geography, have been changed to achieve the sustainable development goals (Sætre, 2016). Additionally, Turkey has developed the scientific content of primary school curricula to achieve global sustainable development goals (Haktanır et al., 2016). Germany has integrated the principles, values, and practices of sustainable development into its curriculum (Bormann & Nickel, 2017). In Sweden, content in academic subjects such as geography has been developed to work towards achieving the goals of sustainable development at the primary, preparatory, and secondary levels (Biström, & Lundström, 2021).

In China, the government incorporated sustainable development goals and issues into the content of school subjects in different educational stages to work on linking them with the environment and its problems (Guo et al., 2018). In Vietnam, curriculum developers targeted developing teachers' knowledge of the global sustainable development goals (Nguyen, 2018). Furthermore, the Maldives' education has been modified to achieve sustainable development by stressing the importance of linking theory and practice to achieve the sustainable development goals by utilizing activities through which schools collaborate with the community to apply the most important content of the developed curriculum, such as the Solar Play Project, which promotes problem-based learning for sustainable development (Di Biase et al., 2021). Moreover, (Al-Kuwari et al. 2021) confirmed that the development of education has a strong relationship with achieving sustainable development, but the incompatibility between assessment methods and the goals of developed education and sustainable development goals makes achieving sustainable development far from attainable in Qatar.

In Africa, the agenda of most countries focuses on fostering education for sustainable development by working to achieve the goals of the United Nations to eradicate poverty and inequality, support sustainable livelihoods, avoid environmental disasters, and deal with epidemics and regional conflicts, This can only be eliminated through the development of curricula and the upbringing of a new generation that respects the rights of the others and works to implement the global sustainable development goals (Tikly, 2019). In Egypt, a plan has been defined to achieve education for global sustainable development (2020 – 2030), with the objective of fully developing curricula at all academic levels and subjects (Singer, 2020).

Also, (Lange , 2012) studied the need to develop curricula for different sciences, taking into account the goals of sustainable development to be achieved in an integrated manner between the human and applied sciences, while preserving the values of society and clarifying

future scenarios for the problems facing our planet in order to identify the most important solutions based on studied scientific ideas.

The global trend in most countries of the world now focuses on working with standards, indicators, and targets to increase knowledge of how to implement the fourth goal of the United Nations, which is the quality of education. To achieve good planning, it is necessary to implement and train to make the educational system a foundation for sustainable development (Boeren, 2019).

Despite the efforts made globally to achieve the goals of sustainable development, some countries are not interested in sustainable development and are concerned with the continuation of their civilization at the expense of the world and human life. There are also economic obstacles, demographic and infrastructure problems, and a decline in investment activities that prevent the implementation of sustainable development. The importance of education and development work lies in its curriculum, which serves as an important starting point for achieving sustainable development globally and changing human behaviour to preserve the earth (Salikhov, 2021).

In 2018, Egypt developed a vision 2030 that includes the implementation of sustainable development goals, through the creation of primary school curricula, modification of the behavior of future generations, and a good understanding of environmental and social issues. An understanding of how to solve those problems was done in partnership with many international organizations such as UNICEF, UNISCO, International Bank for Education Discovery, and the National Geographic organization. (Singer, 2020).

When applying the developed content of the social studies subject, the researcher observed the parents' reactions about the developed curriculum, accusing it of being difficult, not being suitable for the students' mental comprehension level, and containing information

that has nothing to do with the student's life, This prompted the researcher to search for the appropriateness of the developed curriculum to accommodate students. The course's content, the extent of development, and the inclusion of global issues and developments, such as global sustainable development. For this reason, the current research aims to analyze the content of the social studies subject developed in accordance with the global sustainable development goals, by designing a content analysis card and measuring the extent of the fourth graders' knowledge of some sustainable development issues.

Research Problem

The research problem emerged from the continuous complaints from parents about the content of the developed social studies curriculum, the spread of the term sustainable development around the world. many previous studies that have emphasized the importance of developing curricula in the light of global sustainable development issue such as Al-Kuwari et al., (2021), Bhavani et al., (2017), Biström, (2021), and Boeren, (2019).

Research Questions

The present study attempts to answer the following questions:

1. What are the most important issues related to sustainable development globally?
2. What is the extent to which global sustainable development issues are included in the social studies subject in the fourth grade of primary school?
3. What is the level of understanding of some sustainable development issues among the fourth-grade pupils?

The purpose of the research was twofold:

- Analyzing the content of social studies for the fourth grade of primary school.
- Measuring the achievement and knowledge of students from the developed curriculum.

Significance of the Research

The significance of the research stems from the following considerations:

- Helping teachers understand the content of social studies.
- Helping parents understand the curriculum content.
- Helping researchers develop learners' skills in different activities around the social studies curriculum.

Limitations of the Research

- The human limits are a sample of 1,000 male and female pupils who use a stratified random sampling method.
- The time limits were applied in the second semester of 2022.
- The spatial limits were applied in primary schools in the Sharq Educational Administration in Port Said Governorate.
- The objective limits were that the content analysis was limited to the most important requirements for global sustainable development.

The Research Tools

- The content analysis form for the social studies curriculum in the light of some issues related to sustainable development.
- An achievement test for fourth- grade primary school pupils.

The procedural Research Terms:

Global Sustainable Development Issues: This means a complex concept that encompasses a wide range of issues, including economic growth, social equity, and environmental protection. It is a challenging goal to achieve, but it is essential for the long-

term well-being of the planet and its people and must be included in the social studies curriculum for fourth-grade pupils.

Egypt Vision 2030: is a national agenda launched in February 2016 that reflects the long-term strategic plan of the Egyptian government to achieve the principles and goals of sustainable development in all fields, and to consolidate them in the various Egyptian state agencies.

The vision is based on six pillars: quality of life, social justice and inclusion, a competitive and diversified economy, knowledge, innovation, and research, and an integrated and sustainable environment.

Materials and Methods

The research used the descriptive analytical method through content analysis and a survey study to answer the first research question (What are the most important issues related to sustainable development globally?). Based on the review of the most important studies, the research has addressed the global sustainable development goals and reviewed the most important issues identified by the United Nations for sustainable development issues, including wild life, aquatic environment problem, global warming, sustainable production, individual health, clean energy, poverty problems, world peace, global famine, child rights, gender equality, work specialization, respect for the disabled, building sustainable cities, and sustainable development.

To answer on the second research question (What is the extent to which global sustainable development issues are included in the social studies subject in the fourth grade of primary school?), the researcher does as follows:

1- Analyzing the content of the social studies subject.

The content was analyzed through the following steps:

A. Designing a tool for analyzing the content of social studies in the fourth grade of primary school in the light of the list of global sustainable development issues, and this was done as follows:

- *Determining the purpose of the tool:* The objective is to analyze the content of social studies for the fourth grade of primary school in the light of a list of some global sustainable development issues.
- *Preparing the tool in its initial form:* This was done in the light of a list of some global sustainable development issues, and was presented to a group of arbitrators specialized in curricula and methods of teaching social studies, who decided its validity and suitability for analysis.
- *The final form of the tool:* The tool has become suitable for analysis in its final form based on some global sustainable development issues.

B. Content Analysis Procedures.

The content of social studies for the fourth grade of primary school in the Arab Republic of Egypt was analyzed according to the following steps:

- *Determining the purpose of content analysis:* The objective of the analysis process was to determine the availability of particular issues related to sustainable development globally.
- *Determining the sample for analysis:* The sample of the analysis was the content of the social studies subject, which was scheduled for the fourth graders of primary school for the academic year 2021/2022 AD, as shown in table 1.

- *Determining units of analysis:* The paragraph was determined as a unit of analysis in the content. The researcher took into account the exclusion of the introduction and index pages, and limited the analysis to the pages that only contained the content. The content was divided into paragraphs, and the issues included in the paragraphs were calculated from issues related to sustainable development. The number of paragraphs in the book as a whole was divided in to the first and second semesters into 247 paragraphs.
- *Identifying the categories of analysis:* The content analysis relied on global sustainable development issues. The issues were derived from the global sustainable development goals defined by the United Nations, A total of 15 issues were analyzed in relation to sustainable development.
- *Application of the tool of analysis:* In the light of the units and categories of analysis, the content of the developed social studies subject for the fourth grade of primary school was analyzed and the results were compiled. The calculation was done based on the statistical parameters in the SPSS program.
- *Ensure the objectivity of the analysis:* Re-analysis confirmed the analysis's objectivity in the fourth week after the first analysis.
- *Analytical reliability:* The stability of the analysis was calculated by calculating the percentage of agreement between the first analysis which was done on March 5, 2022 AD, and the second analysis on April 3, 2022 AD with the same analysis tool. The researcher used the SPSS program.

Table 1*The Content of Social Studies for the Fourth Grade of Primary School*

Content		semester
Lesson title	Units' title	
1-GPS tools. 2-Primary and secondary sources. 3-Egypt's position in relation to the world. 4-The governorates of Egypt. 5-The flag of Egypt. 6-National holidays in our governorates and their slogans.	Unit one : Our country and our national symbols.	first
1-The beauty of our land. 2-Weather and climate. 3-Egyptian environments. 4-Natural resources in our Egyptian environments. 5-Environmental problems in our country. 6-Influential Egyptian personalities (Gamal Hamdan and Sayed Darwish).	Unit Two: Natural manifestations in our country.	
1- Sustainable life. 2- Traditional crafts. 3-Together for a better life. 4- Children's rights. 5- Future professions and skills. 6-The small investor. 7-Influential Egyptian personalities (Taha Hussein and Talaat Harb).	Unit Three: Resources and Services in Our Country.	
1-The patterns of the population of our country. 2-The cultural heritage of the people of our country. 3-Models of social problems in our country. 4-The system of government in our country. 5-Who governs my province?	Unit one: the population and the system of government in our country.	second
1- Our national heritage. 2-Heritage places in our country. 3-Tourist and archaeological sites in our country. 4-Tourism and the economy of our country. 5-Our responsibility towards the heritage of our country. 6-Influential organizations in Egyptian society (the Central Agency for Mobilization and Statistics, and the World Organization of UNESCO).	Unit Two: Tourist and heritage places in our country.	
1-The development of transportation and its impact on society. 2- Types of transportation in my life. 3-The rules and ethics of using means of transportation. 4-The development of means of communication and its impact on society. 5-Influential Egyptian personalities (King Khufu, Queen Hatshepsut).	Unit three: Means of transportation and communication in our country.	

2- The achievement test for the fourth graders in primary school on global sustainable development issues.

The Answer to the third research question: (What is the level of understanding of some sustainable development issues among the fourth-grade pupils?) was done as follows:

- *The aim of the test:* The test aims to measure the achievement of fourth-grade students in global sustainable development issues after applying the developed content for social studies in 2021/2022.
- *Determining the type of test questions:* True and false questions were used, amounting to (16) questions, due to their relevance to the cognitive content developed in the social studies subject and their relevance to the age of students in the primary stage.
- *Formulating test questions:* Creating test questions that
 - Questions measure the objectives for which they are designed.
 - It should be connected to the subject matter.
 - The statements are grammatically clear and as equal as possible
- *Initial form of the test:* The test was presented to a group of arbitrators specialized in curricula and social teaching methods. There were 20 questions. The judges agreed on the form of the initial achievement test. The test became 16 question. The test was ready to conduct the exploratory experiment.
- *Piloting the test:* The test was conducted on a random sample of (60) pupils in the fourth grade of primary school to determine the following:
 - The exam will take place in 15 minutes. By calculating the average time of the first student who finished the answer and the last student, the test time appeared to be 15 minutes.

- Identifying the test’s reliability, by applying it again to the pupils a week after the first application. The test reliability coefficient was 0.8, which indicates a high level of test reliability.
- To validate the test, it can be presented to a group of arbitrators who specialize in curriculum and methods of teaching social studies.
- *Final form of the test:* After confirming the test's reliability and validity, the test in its final form included 16 questions, the final degree was determined to be 16, the correction key was prepared, and thus the test became valid for application.

Results

The content analysis resulted in the following data presented in figure 1 and table 2. In the first semester, the book included 247 paragraphs, with 55 of them being related to sustainable development issues. Whereas In the second semester, the curriculum as a whole consisted of 31 paragraphs of content. The percentage of global Sustainable Development reached 34.8% for the curriculum.

Figure 1

The proportion of Some Issues of Sustainable Development Globally in the Content of Social Studies

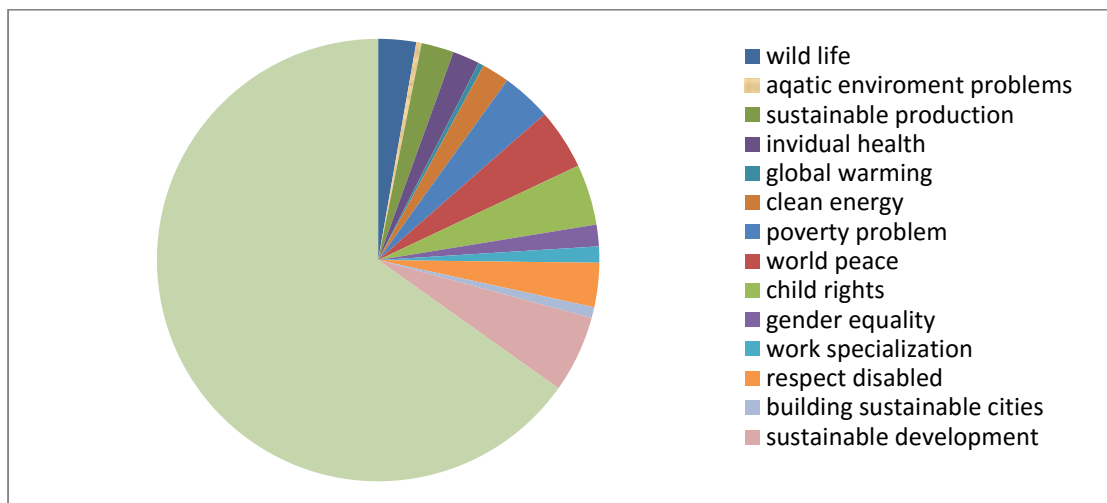


Table 2

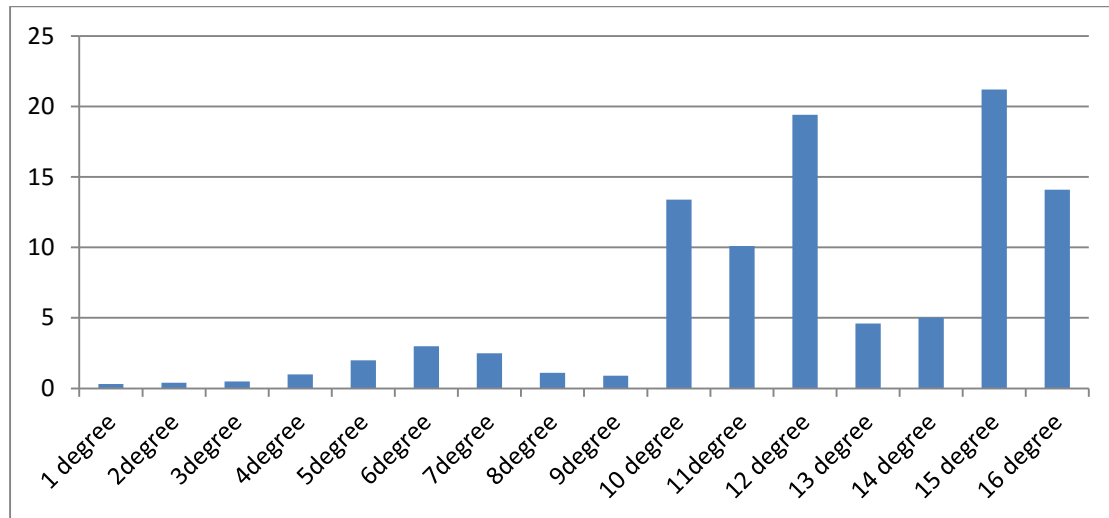
Percentages of Some Global Sustainable Development Issues Mentioned in the Subject of Social Studies according to Content Analysis

Global Sustainable development issues	Number of paragraphs of the first semester	Number of paragraphs of the second semester	Total Number of paragraphs	Percent 100%
Wildlife	3	4	7	2.8%
Aquatic environment problem	1	-	1	0.4%
Global warming	-	1	1	0.4%
Sustainable production	6	-	6	2.4%
individual health	4	1	5	2%
Clean energy	4	1	5	2%
Poverty problem	3	6	9	3.7%
World peace	9	2	11	4.5%
Global famine	-	-	-	-
Child rights	6	5	11	4.5%
Gender equality	2	2	4	1.6%
Work specialization	3	-	3	1.2%
Respect for the disabled	5	2	7	2.8%
Building sustainable cities	2	-	2	0.8%
Sustainable development	7	7	14	5.7%
Total	55	31	86/247	34.8%

The achievement results also varied after applying the achievement test to 1000 pupils of in the fourth grade of primary school for some sustainable development issues, and the illustration presents this.

Figure 2

The percentage of students' scores on the achievement test for sustainable development issues



Discussion

To answer the first question in the research, which addressed the most important issues related to sustainable development globally, the researcher identified the most important issues after reviewing various studies and research such as Yishin, (2015), Riess et al., (2018), Sharma, (2020), Günther et al., (2022), Kazakova, (2020), The issues related to sustainable development included the importance of wildlife and its habitats, solving the problems of the aquatic environment to preserve sea creatures, understanding climate problems such as global warming, interest in sustainable production and conscious consumption, paying attention to the general share of individuals, paying attention to the use of clean energy, working to eradicate poverty, spreading world peace and rejecting wars, eliminating Global famines, attention to children's rights, gender equality, attention to decent work in the field of scientific specialization, respect for people with special needs, building sustainable cities, and interest in spreading the culture of sustainable development.

Pertaining to the second question which examined the extent to which global sustainable development issues are included in the social studies subject in the fourth grade of

primary school, it was answered by doing a content analysis of the entire book. The researcher proved that the content aims to achieve good knowledge among pupils related to some of the previously identified topics of global sustainable development issues, except for the issue of eliminating global famines.

As to the third question which investigated the level of some sustainable development issues among the fourth grade pupils, the researcher concluded that more than 140 male and female pupils can fully understand sustainable development issues using reflective thinking skills, and more than 200 male and female pupils can understand sustainable development issues, except for the issue of global famines and how to eliminate them.

Furthermore, findings revealed that more than 190 male and female pupils could not understand the issues of global famine, global warming, gender equality, and the right to work according to their field of educational specialization.

Moreover, the researcher found more than 130 male and female pupils who could not realize the issues of global famine, global warming, equality between females and males, the right to work according to their educational specialization, in addition to respecting the rights of people with special needs and the general health of the individual which are important to society.

Based on the aforementioned findings, it can be concluded that the social studies curriculum developed for the fourth grade of primary school was in alignment with Egypt's Vision 2030 and stood out as one of the most exemplary curricula globally, adhering closely to the principles of global sustainable development goals.

The pupils' knowledge of sustainable development issues globally demonstrates satisfactory levels, even though some pupils surveyed were unaware of certain aspects of sustainable development.

Conclusion

1- The issue of global famine and the food crisis is conspicuously absent from the social studies curriculum.

2-The short duration of the actual semester in Egypt is due to the fact that the first semester begins in mid-September and ends in mid-December, and pupils drop out of school, The second semester begins in mid-February and ends at the beginning of May, and the number of weekly classes for social studies for the fourth grade of primary school is not sufficient for three lessons a week, with 45 minutes in each lesson, for a total of 135 minutes per week. Accordingly, the time constraints prevent us from effectively presenting the developed content and the accompanying activities that adequately assess pupil knowledge

The previously presented result findings agrees with Guo et al. (2018) study which found a shortcoming in the presentation of the problem of global warming in the curricula. Bazm (2021) also agreed with the current research on analyzing social studies courses in Iran to clarify the extent to which the curriculum include the goals of sustainable development globally. Bhavani et al. (2017) disagree with the current research on analyzing the reason for the low results of students in understanding sustainable development issues and attributing it to the necessity of training mothers to life skills and explaining the concepts of sustainable development to them in accordance with the clarification to the students. This is because those mothers are the ones who raise children at home first before school, thereby ensuring the success of international efforts to achieve sustainable development globally.

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