



The Extent to Which the Fields of Sustainable Development are Included in the Science Book for the Fourth Primary Class

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environmental dimension represented the lowest percentage (19.44%) with a frequency of (7). In light of the research results . The researcher submitted a number of recommendations and suggestions

I. INTRODUCTION TO RESEARCH

First: The research problem

The problem of the current research lies in the researcher's sense of the great challenges that invaded the structures, infrastructure , resources and institutions during the last four decades of Iraq's history, leaving a legacy of wars, destruction, violence, poverty, instability and the loss of many foundations of societal peace, in addition to the aggravation of corruption and economic mismanagement. Since the education constitutes one of the important pillars in preparing an empowered generation capable of facing crises and challenges, especially the current challenges witnessed by the world in general and Iraq in particular, such as the (COVID-19) pandemic and the weakness of the economy due to low oil prices and environmental pollution. And in order for the curricula of the stages to keep pace with all future trends in a way in general and the primary stage in particular . As it is regarded the corner stone in building the mind of the learner, especially we are in the era of the spread of scientific knowledge and the space race . So the starting point begins with reforming the curricula . Which lies in analyzing the content of the existing curricula and identifying the extent to which they are compatible with educational developments of the sustainable development or others of contemporary issues to arm learners with such important issues that serve the environment, society and the economy by including them in the study course content

ABSTRACT

The aim of the research is to find out the extent to which the fields of sustainable development are included in the science book for the fourth primary class for the academic year (2021-2022). And to achieve the goal, the research tool was prepared represented by a list includes the main and sub-issues of the three dimensions of sustainable development (Economic, social and environmental) that must be included in the current research content book with (13) main issues, (57) sub-issues are distributed among the three dimensions . The validity of the tool was verified by presenting it to a group of arbitrators, specialists in curricula and teaching methods. The researcher analyzed the content of the science book in the light of the list that was prepared . And the content analysis included the book at (117) pages after excluding pictures, drawings and questions . The idea adopted of a unit for registration , repetition and a unit for census.

The validity of the analysis was verified by presenting it to a group of arbitrators in agreement with external analysts and with the researcher herself . As well as extracting the stability of the analysis by analyzing (20%) of the research sample to be intended analyze it . Which were (21) pages and after applying the (Holsti) equation . The stability reached (89.0) (88,0) respectively. Among the most important findings of the researcher as following :

The science book for the fourth primary class included the dimensions of sustainable development at a rate of (23.52%) at (36) recurrences . And in terms of dimensions, the social dimension got the highest percentage (55.55 %) at a repetition rate of (20) out of the total of (36) recurrences.

As for the economic dimension, a percentage of (25%) was obtained with a recurrence of (9), the



sustainability of the change (Al-Salq and Maitham , 2014 , 3). Sustainable development also aims to eradicate illiteracy, generalize education and vocational training, provide public education capabilities for all members of society, ensure the right of individuals to work and participation in construction. Such as to ensure the elimination of unemployment, raise employment levels in all rural and urban areas, advance at the level of health, eradicating poverty , hunger, raising living standards , nutrition, providing security, eliminating the causes of crime , juvenile delinquency, encouraging rapid expansion in the field of industrialization, combating the forces of underdevelopment , mobilizing members of society to involve to fight in the battle of development. So sustainable development is a societal process in which all groups, sectors and groups must contribute in a harmonious manner . And it is not permissible to rely on a small group and single resource. (Al-Noor, 1433 A.H. , 57)

Education , teaching are considered of the most influential effective that contribute to the development of society and its development. Rather, the two represent a major component of the development guide . Because the educational , teaching sector as a whole has the task of preparing generations of leaders, thinkers, future scientists , researchers who will lead change , hold the forefront of science and progress towards a project of comprehensive sustainable development . Which it is one of the languages of this era. (Dwekat , 2000,2-4)

McQueen (2009) considered education as one of the most important supporting means for achieving sustainable development . As it is based on the dissemination and promotion of a number of key concepts such as: participatory, interactive, participatory learning, investigation-based learning, verifying , experiential learning, innovation, creativity, creative thinking, the exchange of ideas and critical thinking . Which in essence depends on the use of the educational learning process in bringing about a qualitative shift in education that aims to achieve a change in knowledge, awareness, behavior, attitudes and responsibility of individuals towards the environment and its issues . And it has shown that these five characteristics must be included in the curricula . They are redirected to achieve sustainability, therefore, the knowledge included in the curricula must address sustainable development from the economic, social and environmental aspects. But the challenges facing educational institutions in building new curricula that include in their content the requirements of

After obtaining a book to facilitating the task of research . Annex (1), an exploratory questionnaire was directed in annex (2), to a group of females or males teachers who teach science subject for the fourth primary class are distributed in primary schools affiliated to the directorates of education in the province of Baghdad in annex (3) . Where the results of the exploratory questionnaire led to:

Rate 100% of teachers confirm that the content of the science book for the fourth primary class did not include the three dimensions and issues of sustainable development, social, economic and environmental . And because of the significance of the science curriculum . Which takes a cornerstone in primary education curricula . So science textbooks come at the fore in the list of analysis . This prompted the two researchers to analyze the science book for the fourth primary class . Which may contribute to improving the content of this book by identifying the strength points to be supported and weaknesses points to be removed . In the light of these . We can identify the problem of this research in the following question :

To what extent does the science book for the fourth primary class include the dimensions of sustainable development?

Second: The importance of research

The concept of sustainable development appeared in the modern era. Where the modern countries paid great attention to it due to the positivity that it entails in all areas of life , its sensitive and direct impact on the lives of members of society. This concept has witnessed a continuous phase development as a result of the concerns are raised by the famous studies and reports of the Club of Rome in the seventies decade about the necessity of preserving the depletable natural resources, the environment and the essential balances in the ecosystems. (Al – Sunbul , 2001 , 7).

And sustainable development is a reform-development process that depends on changing in the basic social, economic and environmental infrastructure from the level of their original state to a better one. It is a dynamic process, not static, multi-directional and not one-way . It aims at change that includes all the levels are aforementioned mentioned . Therefore this change must be distinguished with good flexible to keep pace with these requirements . And this requires that the desired change be always continuous and in harmony with the requirements of the times. It means that the development bears the character of permanence . It is to be (sustainable) to ensure the



The primary stage is regarded the first building block of the educational ladder . As the education is of great importance . Because it provides students with the necessary basics, from which they acquire various skills , information , develop in them abilities , mental preparations that enable them to acquire knowledge with the aim of raising their scientific and social level to be able to see their responsibilities towards society in which they live. (Mohammed and Shaker, 2009, 138)

Based on the foregoing . The importance of the research can be summarized as follows:

- 1) Providing an objective tool in light of the dimensions of sustainable development to analyze the content of the science textbook (under current research) for the fourth primary class .
- 2) Analysis of the science textbook for the fourth primary class . As it is one of the books that were recently written and that no previous analysis was conducted in the light of the dimensions of sustainable development (according to the knowledge of the two researchers).
- 3) The method of content analysis is one of the descriptive research methods that describes and treats the phenomenon . As the process of analyzing the textbook is a diagnostic , remedial process that leads to the development and improvement of the book. The analysis process includes objectives, content, activities, teaching aids and assessment patterns included in the textbook.
- 4) An invitation to draw the attention of the authors and organizers of the science book for the fourth primary class in Iraq. To what extent it includes sustainable development and its main issues.
- 5) The importance of primary education as the real beginning of the comprehensive development process for students' perceptions and providing them with everything that would achieve the comprehensive and balanced growth of their personalities spiritually, socially, mentally, emotionally and physically
- 6 - The research is considered as a response to global trends , recommendations of conferences that recommend to analyze , evaluate and to develop school curricula in general and science curricula in particular, to include the dimensions of sustainable development.

Third: Aim of the Research

The current research aims to identify:

(The extent to which the fields of sustainable development are included in the science textbook for the fourth primary class)

sustainable development lies in the selection of knowledge that supports the goals of sustainability in these societies . Such as abandoning many of the topics included in the curricula previously . Which become now inappropriate for sustainability issues, constitutes another challenge. The study conducted by the World Bank (2002), in addition to the Arab Human Development Report (2002) indicated the low level of Arab countries on the sustainable development index. This report stated that the most significant causes in this decrease due to knowledge disability . This shortage basically caused by underdevelopment of education and scientific research systems . And their inability to renew and modernize that accommodate recent developments in the field of knowledge (UNDP , 2002 , 46) .

Science curricula are regarded among the curricula that need to be reviewed, development and continuous change . As they are closely related to the massive and rapid changes in the field of science and technology (Abu Athera , 2019, page no. 412) . In addition to being closely linked to the fields of sustainable development . Where through which it can be instilled and strengthening those areas (Al-Shuaibi, 2018, page no. 24) . As the book is an educational tool rich in information, facts, concepts, principles, drawings, images, shapes and activities that facilitate the process of teaching and learning at different academic levels. Therefore, it represents the most important educational resource in educational institutions . Because it contains the largest possible amount of the prescribed , decreed and textbook curriculum. . It provides high levels of educational experiences are directed to achieving the educational goals that are intended to be implemented (Atiya, 2009, 315)

Content analysis is of great importance, especially since we live in an age in which knowledge has accumulated . It is an era witnessing a massive revolution in informatics. The matter which requires judging the content , identifying the extent to which it observes the principles, standards and components in the light of which it is placed . The ruling requires analyzing the content into its components and elements. And describe it quantitatively and qualitatively. (Mohammed and Reem, 2012, 15) . And the method of content analysis is considered one of the methods of scientific research for the descriptive researches . As it depends on the objective, logical and quantitative description of the apparent content in light of the unit of analysis used. As researchers in this approach analyze laws and regulations outcomes , topics and subjects (Dawood , 2011, 22)



The two researchers did not find in the light of a research sample, but they found two local studies . One of them , which is according to the knowledge of the researchers is the only study that aimed to analyze the content of science books for the first three classes in the primary school in the light of the dimensions of sustainable development . And the others dealt with a sample of Arabic language books and they are as follows:

1) Study (Al-Mandalawi , 2015)

This study was conducted in Iraq . It aimed to analyze the Arabic language books for the sixth primary class in the light of the dimensions of sustainable educational development. The researcher took the analytical descriptive method . Where the researcher chose research sample which are Arabic language textbooks for sixth primary class (Reading – Grammar) . And prepared a questionnaire tool represented by the sub-indicators of the main dimensions of sustainable development, and the percentage . The study found out the following :

The Arabic Reading Book: It occupied the social dimension of first place with a frequency of (72) with a rate of (83.33%), while the economic dimension was in the second place with a frequency of (20) and with a percentage of (61.11%) . Whereas the environmental dimension was in the third place with a frequency of (7) and a percentage (21.42%)

The Arabic Grammar Book: It occupied the social dimension first place with a frequency of (22), at a rate of (54.16%), while the economic dimension was taken in the second place with a frequency of (12) and with a percentage (50%), while the environmental dimension was in the third place with a frequency (6) and percentage (14.28%).

2) Al – Raziqi Study (2020) :

This study was made in Iraq . It aimed to analyze the content of science textbooks for (first - second - third) primary classes in the light of the dimensions of sustainable educational development (2015 - 2016). A list of the dimensions of sustainable development that should be included in science books at the primary stage was built. It included the three social, economic and environmental dimensions in its initial form. It consisted of (55) sub-issues are distributed among the three dimensions. Then the researcher analyzed the content of science books in the primary stage in light of the list that was made. The content analysis included three books of (478) pages . The idea was adopted as a unit for recording, repetition and a unit for census . The validity of the analysis was conducted by presenting a random sample of it to

In order to verify the goal of the research . The following question must be answered :

To what extent are the fields of sustainable development included in the science book for the fourth primary class ?

Fourth: Research Limitations

The search was limited to:

1) Knowledge and scientific limits: analysis of the content of the science textbook for the fourth class to be taught by the Iraqi Ministry of Education, fourth edition / 2019.

2) Time limit: The study was conducted in the first semester of the academic year (2021-2022) .

3) A list of sustainable development dimensions and its environmental, social and economic issues

Fifth : Determination of Terms

- Sustainable development: defined by each of the following :

- They are those that respond to the needs of the present time without harming the special needs of future generations . And then there are many points of view to clarify this concept, given that it is a modern term, but the definitions agreed on common concepts that hardly depart from it (Yahi , 2012, page no. 24)

"The constant quest to appreciate the quality of human life with taking into consideration the capabilities and potentials of the natural system that embraces life" (Taher, 2013, 51)

A procedural definition of sustainable development :

- Concepts that express their concern for the current and future generation of human beings in all human, social, economic and environmental dimensions in order to provide them with decent livelihoods. It will be known how well the science book for the fourth primary class fulfills it after analyzing its content.

The Science Textbook : It is the book which is prepared to achieve the objectives of the science courses . Which were decided by the Ministry of Education . And it is the main reference for learners to draw from the collection of the content of the science course.(Khatateba , 2018 , Page no. 9)

Procedural definition: It is a science textbook to be taught to students of the fifth primary class for the academic year 2021-2022) issued by the Ministry of Education \ General Directorate of Curricula in the Republic of Iraq.

- The primary studies is the first stage of public education . And it is usually from the age of six to the age of twelve" (Shahata and Zainab, 2003, 115)

II. PREVIOUS STUDIES



the analysis . Because it is necessary in content analysis studies.

The third chapter is the research methodology and its procedures

First: Research Methodology

The current research adopted the method of content analysis . Which is one of the methods of the descriptive approach to achieve the goal of the research . Because it is characterized by the characteristics of systematic scientific research, such as objectivity, impartiality, regularity and ability to generalize the results that it reaches . And it is the appropriate method for this research. (Atiya, 2008, 198) . It is considered one of the most appropriate research methods for the educational reality because it is characterized by its connection to the study of topics are related to human fields, in addition to its prevalence among researchers at the present time. (Al-Omrani, 2013, page no. 66)

Second: Research procedures

1) Research community: Defining and determining the research community is one of the methodological steps in the educational researches . As it depends on conducting the research, its design and the efficiency of its results. The research community was restricted in science book which is edited in modern time that is decided to be taught to pupils of fourth primary class (Edition No. 4 , 2019) in Iraqi schools for the academic year 2021/2022.

2) Research Sample: The current research sample is represented by the content of the science book for the fourth primary class , 4th edition , 2019 . Which includes (6) units by (12) chapters as a sample to be discussed . After excluding the questions are founded at the end of each chapter , the introduction of the book and the list of contents of the analysis , drawings and images . Where the number of pages of the book were (213) pages, the number of pages subject to analysis is (117) pages, which represents (51%) of the total content of the pages of the book.

Fifth: The Research Tool

A tool has been prepared according to which the content of the fourth primary science book is analyzed that is represented by the list of dimensions of sustainable development that must be available in the content of the research sample, in the light of which the process of analyzing books is carried out . And the researcher followed the points as below :

1) Examining a set of literature and research that dealt with the topic of sustainable development.

the arbitrators . They agreed on the validity of the analysis, by using the Holsti equation, the stability of the analysis was calculated in agreement with external analysts and with the researcher herself. Among the most important findings of the researcher is that the science book for the third primary class is the book that most deals with the dimensions of sustainable development . As it obtained a percentage (42.04%) with (66) recurrences . The science book for the second primary class came in second place with a rate of (32.48%) by (51) repeatedly . While the science book for the first primary class was the least concerned with the dimensions of sustainable development , as it got (25.48%) at (40) iterations.

In light of the research results . The researcher presented a number of recommendations as following :

1) Paying attention to neglected sub-issues and working to include them in science books for the primary stage.

2) Building a program according to the dimensions of sustainable development for primary school pupils .

To complement this study . The researcher suggested several proposals , including:

1) The necessity of having a teacher's guide that includes the dimensions of sustainable development that he must seek to support among pupils.

2) Training the teacher on the methods and manners of promotion the dimensions of sustainable development for students.

Second: Some evidence and indicators about previous studies and their relationship to the current research :

1) The previous two studies analyzed the content of written textbooks and this is consistent with the current research.

2) The research agreed with the previous two studies in their use of the descriptive research method and their adoption of the content analysis method.

3) The previous two studies agreed with the current research in its handling of the science book for the fourth grade of primary school.

4) The size of the samples are analyzed in the two different previous studies . We note the study of Al-Raziqi and this study consisted of three books . While Al-Mandalawi's study consisted of two books.

5) The current study agreed with the two previous studies using the idea (theme) as a unit for analysis and repetition as a unit for enumeration.

6 - The current study agreed with the two previous studies that extracted the validity and reliability of



included the dimensions of sustainable development, as in Table No. 1

2) Reviewing studies that discussed the dimensions of sustainable development.

The review process resulted in the preparation of a list of the search tool in its initial form . Which

Table No. (1) : The main and sub-issues of the dimensions of sustainable development

Dimensions of sustainable development	Main issues	Sub- issues
Economic	2	12
Social	7	29
Environmental	4	16
Total	13	57

3) Comparing the idea with the items of the tool (dimensions of sustainable development) to determine the idea's affiliation with the main issues and sub-issues according to the congruence between the content of the idea with the content of the issue in the tool

4) After that, the type of idea is determined in the phrases in the light of the tool, the type of case is determined and its number is determined . Which determines the type of phrase

5 - Emptying the results of the analysis into the analysis tables by giving one repetition for each phrase, to monitor the frequencies of each unit of analysis and then converting them into percentages to be interpreted later.

Eighth: Psychometric properties of the analysis

1) Validity Analysis

To verify the validity of the analysis . The “ researcher presented a sample of the analyzed material. The fourth chapter of the science book before a number of arbitrators in teaching methods . They agreed on the validity of the analysis process . Which the researcher considered to be true to the analysis process

2) Analysis Reliability

Stability means that the results will be the same if the analysis is repeated again, even if the analyzer and time differ (Al-Nemer , 2008, 77). The researcher used two types of stability analysis through :

1- Agreement during time: It means agreement through time is the concord between the results are obtained by the researcher upon re-analysis after thirty days of her first analysis

2) Agreement between Analysts: The researcher used external analysts with experience in the analysis process

To calculate the two types of stability of the analysis, a sample of the analyzed material was

Sixth : Validity tool :

To verify the validity of the tool . It was presented to a group of arbitrators with expertise in teaching methods and curricula construction , annex (4), to express their observations about the items of the list and its fields. The researcher took them . Where there were no addition or amendment or deletion . The researcher depended ratio (80 %) of the agreement between the arbitrators to keep or delete or modify the item . And thus the tool was valid and usable, as in Appendix (5).

Seventh: Analysis of the content of the science book for the fifth primary class

For the purpose of adjusting the process of analyzing the content of the science book for the fourth primary class . The following steps were taken :

1) The objective of the analysis: It is to determine the extent to which the content of the science book for the fourth class of primary school includes the dimensions of sustainable development according to the pre-prepared tool

2) Unit of analysis: The researcher relied on the explicit idea as a unit of analysis. Because the science book comes with most of its expressions in an explicit , clear manner that does not require much interpretation and illustrations as compared to the books of other specializations . The researcher relied on repetition as a unit of the census

3) The analysis does not include the introduction to the book, pictures, figures, and evaluation questions at the end of any of the book's units or chapters

3 - Content analysis steps: The following steps were followed in the analysis process and they can be summarized

1) Read the subject as a whole well, so that the picture becomes clear in the mind of the analyst

2) Carefully read the same subject again to determine the idea that includes sustainable development issues



small (a few hundred). This percentage decreases until it is (5%) in very large societies (tens of thousands). (Odah and Khalil, 1988, 178). By applying the (Holsti) equation, the reliability coefficient was reached. As in Table No. 2

selected representing (20%) of the total content of (117) means (21) pages. Therefore, the first five chapters of the science book for the fourth class of primary school were selected. Statisticians recommend that the minimum sample for descriptive studies be (20%) if the population is

Table (2) values of the stability coefficient of the analysis

Agreement over time	Between the researcher and herself after passing 30 days	0.88
Agreement between analysts	Between the researcher and first analyst	0.88
	Between the researcher and second analyst	0.87
	Between first analyst and second analyst	0.89

A) Dimensions: The special results of analyzing the content of the science book for the fourth class of primary school showed (117) pages , shown that dimensions of sustainable development are available in the Science Book for the Fourth Primary Class . The social dimension represented the first place with (20) recurrences with a percentage (55.55%) of the total number of recurrences of (36) recurrences, while it appeared that the economic dimension took the second place with (9) recurrences with a percentage of (25%) of the total for (36) recurrences, the environmental dimension came in third place with (7) recurrences with a percentage (19.44%) of the total number of recurrences of (36) recurrences . Table (3).

Eighth: Statistical Means

The researcher used the following statistical methods

*The two arithmetic methods (frequencies and percentage)

* Holsti equation: to extract the stability of the analysis as stated in (Holsti, 1969, page 140) Al-Rikabi, 2015, 80) (

Chapter Four: Presenting the results and recommendations

First: Presentation of the results: The science book for the fourth class of primary school

1) The Extent to Which the Fields of Sustainable Development are Included in the Science Book for the Fourth Primary Class

Table (3).Percentages of the dimensions of sustainable development in the science book for the fourth primary class

No.	Dimension	Iteration	Percentage
1	Social dimension	20	55.55 %
2	Economic dimension	9	25 %
3	Environmental dimension	7	19.44 %
Total		36	100 %

The results showed that the book got (20) recurrences are distributed between two main issues. Attention is focused on the issue of (teaching) with (15) recurrences with a percentage of (75 %). Followed by the issue of (health) at a rate of (5) recurring with a percentage of (25 %). While neglecting issues (social justice), population, housing and security. Their shares were zero. That is, you did not get any repetition .

Table No. 4

In the aforementioned details to be shown imbalance of percentages for dimensions in the analyzed school textbook . Where paying attention was focused on social dimension , then economic dimension and the environmental dimension with low rate in comparison with significance of dimension

B) indicators

1) The social dimension:

Table No. 4

Frequencies and percentages of social dimension issues in the science book for the fourth primary class

No.	Issue	Iteration	Percentage
1	Social justice	0	0 %
2	Health	5	25 %
3	Teaching	15	75 %



4	Inhabitants	0	0 %
5	Housing	0	0 %
6	Security	0	0 %
Total		20	100 %

This dimension included (32) sub-issue. The number of sub-cases achieved (2) cases with recurrence amounted to (20) recurrences. The issue of (the spirit of intimacy and teamwork among classmates) was the most frequent issue. It reached (15) recurrences with a percentage of (75%) of the total number of recurrences in the social dimension. The researcher thinks that the cause is due to care in teaching pupils about the ways of cooperation between each other to face before problems besides to suggest suitable solutions. While the issues of (hygiene and its role in maintaining health) in the second place with occurrences amounted (5) times with percentage (25%) of the total of recurrences in the social dimension. The researcher considers that caused by significance of human beings life by keeping it by cleaning, because it is the single way that leads to safe health. Number of non fulfilled sub – issues reached (30) issues. Because it is the path that leads to sound health, and the number of unrealized sub-issues is (30), meaning that it did not get any repetition, and the researcher believes that the lack of representation of these sub-issues is a negative indicator of the book, so she hopes that the Textbook Preparation Committee will review them, because Issues of great importance as aiming at the complete construction of the pupil's personality, annex (6).

2) The economic dimension :

The results showed that the book got (9) recurrences are distributed between two main issues, as attention focused on the issue of (economic development) by (7) recurrences with a percentage of (77.77%), followed by the issue of (production and consumption patterns) with (2) recurrences with a percentage (22.22%), table (5).

Table No. 5

Frequencies and percentages of economic issues in the science book for the fourth primary class

No.	Issue	Iteration	Percentage
1	Economic development	7	77.77 %
2	production and consumption patterns	2	22.22 %
Total		9	100 %

This dimension included (14) sub-issues, the number of fulfilled sub-issues in this dimension was (5) cases and its recurrences amounted to (9) recurrences. So the issue of (agriculture and its role in achieving economic development) was the highest recurring. As it amounted to (4) recurrences with a percentage. It amounted to (44.44%) of the total iterations in the economic dimension. While the issue of (renewable energy use) came in second place with (3) recurrences with a percentage of (33.33%) of the total iterations in the economic dimension, (Economic development and work on it), third place with (2) recurrences with a percentage of 22.22% of the total repetitions in the economic dimension. The researcher believes that the reason is due to the nature of the subjects of the science book. Which its subjects dealt with energy, its forms, classification and diversity of living creatures. The number of non fulfilled sub-issues is (11) cases, that is, they did not get any repetition, and the researcher believes that the lack of representation of these issues is a negative indicator of the book, so the authors of textbooks should stand in front of these issues and try to include them in books because of its important to help pupils, to enable them to contribute a useful and effective role in society in the future, annex (6).

3) Environmental dimension :

The results showed that the book focused attention on issue of atmosphere with (7) recurrences in percentage (100%). While it neglected lands, biodiversity, seas, oceans and pure waters which their share were zero. It means that did not get any repetition. Table No. 6

Table No. 6

Frequencies and percentages of environmental dimension issues in the science book for the fourth class of primary school

No.	Issue	Iteration	Percentage
1	Atmosphere cover	7	100 %



2	Lands	0	0 %
3	Biodiversity	0	0 %
4	Seas & oceans	0	0 %
5	Pure waters	0	0 %
Total		7	100 %

IV. RECOMMENDATIONS

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

- 1) Inviting decision-makers in the Ministry of Education to develop the content of science books (under current research) in line with the requirements of the times for the concept of sustainable development and its dimensions
- 2) Preparing a guide for the teacher that includes the dimensions of sustainable development that he should seek to support among students
- 3) Inviting officials, media and communications to pay attention to sustainable development issues in order to build generations aware of the requirements of the social, economic and environmental dimensions of sustainable development, such as maintaining cleanliness and urging the prevention of infectious and non-communicable diseases (especially in light of the Corona pandemic). Recycling waste and investing it in energy production

V. SUGGESTIONS

The two researchers proposes to complement the results of the current research :

- 1) Recognizing the extent to which science books for other study stages include the dimensions of sustainable development
- 2) Inclusion of sustainable development in the curricula of science teaching methods in the faculties of education and basic education
- 3) Evaluation of the teaching performance of science teachers for the primary study
- 4) Conducting a study of content analysis of images and graphics for the science book for the primary school
- 5) Organizing programs, seminars and workshops to familiarize teachers with science subject for the primary stage of the concept of sustainable development

REFERENCES:

- [1]. Abu Athra Sanaa Muhammad (2019). Evaluating the content of Saudi and Jordanian science books for the fourth class in the light of international standards (a comparative study), Journal of Educational and Psychological Sciences, Arab Journal of

This dimension included (17) sub-issue. The number of sub-cases are achieved in this dimension is one case . Which it is (Kinds of environmental pollution) with (7) recurrences with percentage amounted (100 %) . The non fulfilled sub-cases (16) cases. That is, it did not get any repetition. The researcher thinks that the cause beyond the gaining book on decrease ratio due to not study cases environmental dimension in good way . Where it discussed one case and neglected most of issues as in annex no. 6

III. CONCLUSIONS:

* In the first place , the science book for the sixth class of primary school included the dimensions of sustainable development. Which it got a rate of (41. 83%) at (64) recurrences

* In the second place , the science book for the fifth class of primary which it got a rate of (34. 64%) at (53) recurrences

* In the third place , the science book for the fourth class of primary school . Which it is less attention in the dimensions of sustainable development. Which it got a rate of (23. 52%) at (36) recurrences out of total recurrences amounted (153) recurrences

In terms of dimensions . The social dimension obtained the highest percentage of (56.20 %) with a frequency of (86) out of the total number of (153) iterations. As for the environmental dimension . It obtained a percentage of (24. 83 percent) with a frequency of (38) . The economic dimension represented the lowest percentage (18.95%) with a frequency of (29)

1) The results indicate that the science book for the fourth class of primary school neglects many of the main issues and what it contains of sub-issues for each of the dimensions. This means that there is a weakness in the arrangement of the book and its subjects

A) The social dimension: The absence of four important issues in the science book for the fourth class of primary school . Which are social justice, population, housing and security

B) The environmental dimension: The absence of four issues in the science book for for the fourth class of primary school which are the (Land, biodiversity , seas , oceans and fresh water)



- of historical information, Journal of Educational and Psychological Research, No. 32, page no. 145-187
- [12]. Mohammad, Wael Abdullah and Reem Ahmed Abduladheem , 2012, Analysis of Curriculum Content in the Humanities, publication no. 1, Dar Al - Masirah, Amman
- [13]. Al-Mandalawi, Alaa Abdulkhalik , 2015, evaluating Arabic language books for the sixth class in the light of the dimensions of sustainable educational development, Master's thesis, College of Education \ Ibn Rushd, University of Baghdad
- [14]. Al – Noor , Maamoon Ahmed Mohammed , (1433 A.H.) sustainable development , journal of security & life , publication no. 361 , page no. 57 – 72
- [15]. Holsti , O.R. 1969 , Content analysis for the social science and humanities , Addison – Westey publishing , New York . Quoted from Al – Rikabi (2015)
- [16]. UNDP , 2002 , Arab Human Development Report - UNDP , New York
- Science, Publishing and Research, Volume 20, Number 3, Page no. 409-437
- [2]. Khatatebah , Muhammad Ibrahim (2018), Evaluating the Content of the Science Book for the Fourth class in the Light of 2015 Requirements – TIMSS in Jordan, Unpublished Master's Thesis, College of Educational Sciences - Al Al-Bayt University, Jordan
- [3]. Dawood , Aziz, (2011), Methods of Scientific and Educational Research, Dar Osama, Amman
- [4]. Dwekat, Khaled Abduljalil , (2000), The Role of Postgraduate Studies and Scientific Research in Achieving Sustainable Development in Palestine, Al-Quds Open University, Palestine
- [5]. Al – Salaq , Ghada Musa Rzoki & Maitham Hasan Mahdi Al – Saffar , (2014) " Sustanable reconstruction development at Al – Karkh historical center " , journal of college of engineering , volume no. 20 , publication no. 11 , page no. 1 – 28
- [6]. Al – Sonbol Abdulazeez Abdullah (2001) , " Role of Arabian organizations in the sustainable development " , paper work presented to development conference and security in the Arab homeland (Security is responsibility for all) , Al – Riyadh
- [7]. Al – Shaabi , Waleed Bin Abdullah Bin Ghazi (2018) " The Extent to Which the Fields of Sustainable Development are Included in the Science Book for the Second Secondary Class in Kingdom of Arabia Saudi , journal of college of education , Al-Azhar university , volume no. 37 , publication no. 177 , part no. 2 , page no. 13 – 45
- [8]. Al – Raziqi , Wasan Mohan (2017) , analysis content of books of science for (first , second , third) primary classes according to dimensions of sustainable development , Master Thesis , College of education for pure sciences , Baghdad University
- [9]. Ateya , Mohsen Ali, 2009 , Modern curricula and teaching methods , Curriculum House, Amman
- [10]. Al-Omrani, Abdulghani Mohammad Ismail, 2013, Scientific Research Methods, 2nd Edition, University of Science and Technology, Sana'a
- [11]. Mohammad, Ahmed Jasim and Shaker Jasim Mohammad, 2009, The effect of using teaching means for textbooks , teacher illustrations on the acquisition and retention