Volume 13, No. 2, 2022, p. 2648 - 2656

https://publishoa.com ISSN: 1309-3452

# Evaluation of a Book on Modern and Contemporary History of Europe and America for the Fifth Literary Grade According to the American Association for the Advancement of Science Standards

# <sup>1</sup>Dr. Samera Mahmoud Hussein Al-Nadawy, <sup>2</sup>Sami Mutashar Zidan Al-Karkhi

<sup>1</sup>Prof .Diyala University, College of Basic Education, Sameras854@gmail <sup>2</sup>Researcher, Diyala University, College of Basic Education, Samimtsher@gmail Diyala University, College of Basic Education, specializing in methods of teaching history

#### **ABSTRACT**

The current research aims to evaluate the modern and contemporary history of Europe and American books for the fifth literary grade according to the standards of the American Association for the Advancement of Science AAAS. Thus, the researcher adopted the descriptive approach, and the survey method (content analysis) to achieve the research objective. The current research community is determined by the content of the modern and contemporary history of Europe and America book for the fifth literary grade twelfth (1443 AH - 2021 AD), the number of its chapters (7), and the number of pages (112). The introduction, the index, and the chapter questions were excluded from the sample, so the number of pages subject to analysis became (107), which represents a percentage of (95.5%) as a sample for the research. To complete the research requirements, the researcher prepared a questionnaire that includes the standards of the American Association for the Advancement of Science, consisting of two groups. The first (content analysis) includes five sub-standards, while the second (the book's support for the teaching process), includes seven sub-standards, the questionnaire consisted of (98) indicators distributed among the two groups. The researcher presented the questionnaire to experts in teaching methods of history to extract the face validity, then the questionnaire was modified to its final form after taking the recommendations. Subsequently, the model was analyzed to extract reliability by analysts and time using the (Holsti) equation. Moreover, the researcher analyzed the book after confirming the validity and reliability of the tool and adopted the idea as a unit of analysis, frequency, and a unit enumeration implementing the percentage with frequency and the arithmetic mean as statistical means. The results of the statistical analysis resulted in the book's inclusion of (697) ideas, and the group (the book's support for the teaching process) ranked the first, while the group (content analysis) ranked the second.

Keywords: evaluation, standards of the American Association for the Advancement of Science AAAS.

# Chapter One: Introduction to the Research Research problem:

The world is witnessing tremendous development in various sciences in a continuous manner in all its parts, as this great and rapid development has affected science and scientific knowledge as well as the development in information and technology and openness of knowledge. Since school curricula represent one of the main pillars in bringing about change, building an educated society, and preparing a conscious generation capable of understanding the requirements of its time. It was necessary to subject it to evaluation on an ongoing basis, as it bears the largest part in achieving the goals of society. The school curricula are the first step in enriching the students' information to benefit them in their lives and solving the problems they face, and an essential element in the educational systems (Al-Suhaimi, 2015: 15). Meanwhile, the textbook represents one of the curricula tools and the most important elements of the educational process because of the content it contains knowledge, concepts, and principles. It is the link between the teacher and students and the path adopted by educational systems to translate their objectives and achieve good learning (Usailan, 2011: 6). Therefore, the textbook should be subject to a continuous evaluation process, where the evaluation is the safety valve and the key to prevention in the educational process (Muhammad, 1983: 291). Numerous literature and studies have emphasized the necessity of evaluating the textbook in the light of the standards of the American Association for the Advancement of Science, as shown by (Al-Shammari, 2014) findings. Accordingly, the research problem was represented in the following question:

Volume 13, No. 2, 2022, p. 2648 - 2656

https://publishoa.com ISSN: 1309-3452

To what extent does the content of the book "Modern and Contemporary History of Europe and America for the fifth literary grade in Iraq agree with international standards, as defined by the American Association for the Advancement of Science?"

#### Research importance:

The effects of scientific progress, discoveries, inventions, theories, and scientific principles were not derived from a particular nation or civilization. So, the natural sciences were, are, and will remain one of the most important aspects of human life. Rather, it is the practical and applied aspect of history. However, several standards were used for addressing the history of any country or people, where the most important of which is a criterion that measures its scientific progress and what it has provided to humanity in this field (Al-Khazraji, 2011: 20). Education is the people's way of preserving their sciences and transmitting them from one generation to another because of its key role in the lives of advanced and developing peoples. Besides, it has its importance in the development of peoples and their social and economic development and in increasing their own ability to face civilizational challenges (Al-Titi et al., 2002: 23). The textbook is one of the main pillars on which the curriculum is based, as it constitutes the container that contains the educational material, which is the tool that can make students able to achieve the objectives of the curriculum specified in advance. The curriculum must have goals derived from its sources when it is adopted, and these goals are only directives for those who address the construction of the curriculum. Through them, the content of the curriculum can be determined from the subject through which the teacher can direct the students to achieve those goals (Khater, Sbitan, 2010: 97). The subject analysis procedure for Project 2061 has been developed over several years with funding from the National Science Foundation and in consultation with hundreds of teachers, curriculum developers, scientists, and research supervisors around the world. The standards of the American Association for the Advancement of Science are based on research focused on student learning (Kesidou, Roseman, 2002:34), and this confirms the project's documentation (Kulma and Grier, 1998, p.115).

# Research objective:

The current research aims to evaluate the content of the modern and contemporary history of Europe and America book for the fifth literary grade according to the standards of the American Association for the Advancement of Science.

# • Research limits:

- The content of the modern and contemporary history of Europe and America book for the fifth literary grade, edition 12 for the year 2021;that is scheduled to be taught for the academic year (2021-2022), authored by (a committee in the Iraqi Ministry of Education).
- Standards of the American Association for the Advancement of Science.
- The academic year (2021-2022).

#### • Terms definition

#### **Evaluation:**

Idiomatically: (Ramadan, 2019) defined it as the process by which a judgment is made on the extent to which the process has achieved its goals, the extent to which it achieves its goals, and work to uncover the shortcomings in the educational process during its progress (Ramadan, 2019: 559).

Procedural definition: It is a set of scientific steps that the researcher followed to issue a judgment on the Modern and Contemporary History of Europe and Americabook for the fifth literary grade, based on the standards of the American Association for the Advancement of Science, and analyzed the book accordingly.

# • Modern and Contemporary History of Europe and America:

It is a book that provides a new opportunity to learn about people in building their institutions, values, and systems of governance, and is an important resource of knowledge to build new political experience in Iraq (Iraqi Ministry of Education).

# • Fifth literary grade:

Of the three preparatory classes (second year) of the literary branch, which follows the middle school stage at the Iraqi Ministry of Education, the age of students in it is approximately seventeen years (Ministry of Education, 2015 AD).

Volume 13, No. 2, 2022, p. 2648 - 2656

https://publishoa.com ISSN: 1309-3452

#### Standards of the American Association for the Advancement of Science:

(Abdul Salam, 2003) define it as an integrated set of controls or bases that are used to judge the quality or method of teaching social sciences (Abdul Salam, 2003: 250).

#### • Procedural definition

They are all the standards with their two groups and main and sub-standards of the American Association for the Advancement of Science. These percentages appear as frequencies and percentages, after analyzing them and identifying the extent of their availability in the Modern and Contemporary History of Europe and Americabook for the fifth literary grade.

# The second chapter: theoretical aspects and previous studies

#### • Evaluation:

Its concept:

The Almighty said in the court of his dear book: "We have certainly created man in the best of stature (4)" (Surah Al-Tin). This means that He, Glory be to Him, has formed man in a good way and distinguished him with reason and thinking and best of his creation in a straight manner, that is, sound without warping or defects (Abu Al-Haijaa, 2001: 156). The concept of evaluation is one of the concepts whose definition has received wide controversy in the literature and educational studies, due to its interaction with the concepts close to it, such as measurement, evaluation, and tests. For this, it is necessary to define the concept of evaluation in a procedural specification for the teacher by using it consciously and insightfully (Al-Ghamdi, 2019: 7).

#### • The evaluation importance:

Evaluation has prominent and great importance that appears through the important results achieved by this evaluation, whose effects are reflected on the curriculum and the educational process. Indeed, evaluation is important for society as a whole, and here the importance of evaluation will be mentioned as follows:

- It is useful in making important decisions related to the curriculum, as evaluation is an integral part of the educational process, but rather of the curriculum (Afaneh, 1996: 355).
- Evaluating the curriculum is important for teachers, as it is a means of diagnosing the strengths and weaknesses in the teaching and learning activities that are used, and the teaching aids that are used. It is also possible to identify the levels of students and the strengths and weaknesses in their learning and interaction with the curriculum, and it helps teachers to identify social and psychological problems and adaptation problems that the students may face and guide them to the appropriate solutions (Amira, 1997 AD: 263).

#### • Textbook evaluation:

The book has the importance of identifying the standardsaccording to which the contents and vocabulary of the book were developed. Besides, it is necessary to identifyits basics, elements, regulations, and stages of development evaluate the book. In addition to keeping pace with knowledge developments, successive technical developments, and tremendous technological progress that led to knowledge development. The textbook is one of the foundations of the curriculum, so its specifications, origin, concept, and its importance must achieve the objectives of the curriculum and the role it plays. The countries that have advanced were interested in human development, which is based on reforming the education system, its plans, objectives, and approach. The curricula are the means of education to achieve its goals and plans, and the actual translation of education goals and plans (Abdul Salam, 2006: 60).

### • Standards:

- Concept:
  - 1. The standards movement in the United States of America escalated at the beginning of the seventies, and spread from it to the countries of the developed world, as the seventies became known as the era of standards (Al-Bilawiet al., 2008: 216).
  - 2. Standards in the language: the word plural is a singular standard, which is what others are measured by, and the model achieved as the thing should be (Ibn Manzur, 2003: 255).

Volume 13, No. 2, 2022, p. 2648 - 2656

https://publishoa.com ISSN: 1309-3452

3. It means a model or a conception of what a thing should be, and they are standards by which a person's actions and behavior are judged (Anis, 1982 AD: 639).

#### Is Project 2061 specific to the USA environment or could it be generalized?

Project 2061 sought to identify goals and topics that were characterized by their global character, while the implementation of these goals through curricula can be achieved and accessed using activities, phenomena, and experiences at the localism. So that when implementation takes into account the medium and environment in which the learner lives. So that the contents and topics of the curricula revolve around everything that happens in this medium and then move from this level to another level of scientific culture at the nationalism, and therefore the curricula must focus on the issues, topics, and phenomena that revolve at this level. Thus, the goals can be achieved at a third level, which is internationalism, and then the scientific culture of the citizen is achieved at all levels (Al-Hudhaifi, 2002 AD: 26).

#### The second axis: previous studies:

(Al-Shamry, Hana Khudair et al., 2014) studied the Evaluation of the history book for the fifth literary grade from the point of view of teachers and educational specialists, Iraq, 2014 using the descriptive-analytical method. The study sample size was (84) teachers constituting (20%) of the study population. As for specialists and educators, their number reached (16) specializations in the six districts of the Baghdad governorate. The study tool was The questionnaire consisted of 70 items distributed over six areas using the statically means represent by Weight percentage, Weighted mean Cronbach's alpha equation (a), and Kai square. The study reached the strengths and weaknesses of the history book. One of the strengths is that the introduction to the book gives a brief idea of each of its chapters, the number of pages is proportional to the time allotted for its teaching, the educational aids are linked to the educational objectives of the subject, and they are free of typographical errors, and the end of each chapter is a sufficient number of assessment questions. As for the weaknesses, including the introduction to the book, it did not contain general directions and suggested methods for teaching it. The book did not vary, as the maps did not contain their basic elements, and the book did not contain a list of maps and images used. Finally, the Aspects of benefit from previous studies are:choosing the study curriculum and taking advantage of previous studies in the theoretical framework. Take advantage of the appropriate procedures for the current study. Plus, take advantage of the mechanism for displaying and interpreting the results.

# Chapter Three: Research Methodology and Procedures Research Methodology:

The researcher used the descriptive-analytical method because it fits with the nature of the current research. Though the researcher took the idea of the content analysis unit, which is a sentence or phrase that includes the idea around which the subject of analysis revolves, and this unit is one of the most important units of analysis and is characterized by unity and homogeneity.

#### • Research community:

The current research community consists of the content of the Modern and Contemporary History of Europe and America book for the fifth literarygrade in the Republic of Iraq, which is taught in the preparatory stage for the academic year (2021-2022). This content was written by a committee composed by the Directorate of General Curricula of the Ministry of Education, twelfth edition for the year 2021 AD. The book consists of (112) pages divided into (7) chapters, as shown in Table (1).

Table (1 )The research community in the modern and contemporary history of Europe and America book

Book name	Classroom	Edition and year of	Total	number of	Number of chapters
		writing	pages		
Modern and	Literary fifth	Twelfth, 2021 AD	112		7
Contemporary					
History of Europe					
and America					

Volume 13, No. 2, 2022, p. 2648 - 2656

https://publishoa.com ISSN: 1309-3452

# • The research sample:

It is a model that includes and reflects a part of the units of the original community concerned with the research and is representative of it so that it bears its common characteristics. This model or part enables the researcher to study all the units and vocabulary of the original community, especially in the event of the difficulty or impossibility of studying all the units of the community concerned with the research (Abu Moghli and Salama, 2019: 186). The research sample consisted of the content of the Modern and Contemporary History of Europe and America book for the fifth literary grade, after excluding (the introduction and index). Also, the number of pages subject to analysis became (107) pages, which is (95.5%) of the total number of book pages as shown in Table 2.

#### • Research tool:

The appropriate tool for the current research is the content analysis form, which is a form used to collect data and monitor the frequencies of the analysis units. The design of the analysis tool is one of the important procedures in analyzing the content because it helps the researcher to collect the elements of analysis, not neglect any of the frequencies, and follow a unified method in the analysis process. It also helps in reducing time and effort in the analysis process and data quantification in order that the analysis process is not improvisational, influenced by the subjectivity of the analyst (Atiya, 2009: 202).

Table (3)The content of the book is arranged according to chapters with the relative importance of each chapter of the research sample

Seq.	Chapters	Title of the chapter	Number of analysis	%
			pages	
1	Part one	French Revolution	31	28.97%
	Chapter one	1789AD		
2	Chapter two	The independence of		
		the United States of		
		America from	11	10.28%
		British colonialism		
		and the nature of its		
		political system		
		(1775-1865 AD)		
3	Chapter three	European		
		revolutions (during	15	14.02%
		the nineteenth	13	
		century)		
4	Chapter four	The unification of		
		Italy and the German	15	14.02%
		Confederation and		
		the emergence of the		
		colonial system		
5	Part two	World War I 1914-	10	9.35%
	Chapter five	1918AD		
6	Chapter six	The international	13	12.15%
		situation between		12.13 /0
		the two world wars		
7	Chapter seven	World War II 1939-	12	11.21%
		1945 AD		
Total			107	100%

Volume 13, No. 2, 2022, p. 2648 - 2656

https://publishoa.com ISSN: 1309-3452

### • Validity of a tool:

In order to achieve the face validity of the tool, it was presented in its initial form to a group of specialists in measurement, evaluation, and teaching methods, whose number reached (20) experts to express their views on the compatibility of the standards shown in Appendix one. However, their indicators are included in the form in its initial form and its relation to each of the standards of the American Association for the Advancement of Science, the integrity of its language, and the clarity of its meaning. The arbitrators expressed their opinions and observations about the tool, and the researcher took all of them and interviewed most experts to see directly their opinions and answer their inquiries. There were some suggestions and opinions to modify some words and paragraphs linguistically. To ensure that the reliability coefficient of the research tool was calculated, the researcher adopted two methods for analyzing the content:

- Temporal consistency (analysis through time): meaning that the researcher must reach the same results by applying the same categories and units of analysis to the same content if the analysis was conducted at different times (Rasheed, 2017: 32). The researcher analyzed a sample of the book's content represented by the study community amounted to (10) pages and at a rate of (9.35%) of the analyzed content. Then, re-analysis of the content after (21) days from the end of the first analysis on the same sample to verify the results of the content analysis that he did, and this is what most content analysis studies have followed. The researcher used the Holsti equation, and the reliability value between the two analyzes was (0.84), and if the reliability was less than (0.70), then this is a decrease from the reliability level, and if the level of reliability becomes (0.85), this indicates a high level of reliability (Odah, 2010: 363).
- The agreement between the researcher and external analysts in the sense that each of them should reach the same results by applying the same categories and units of analysis to the same content (Rasheed, 2017: 32). The researcher, with the help of analysts(Hana Ibrahim Muhammad, Haider Hussein Abd / Methods of teaching history), agreed on the procedures, foundations, and rules of the analysis. Then each one analyzed a sample of the book, which amounted to (9.35%), and then calculated the percentage of the agreement reached by the researcher with the first analyst and the researcher and the second analyst by applying the Holsti equation to calculate the reliability of the analysis. So the reliability coefficient between the researcher and the first analyst reached (0.82) and between the researcher and the second analyst (0.81), this reliability is considered acceptable.

#### • Statistical means

The researcher used the following statistical and computational methods:

1. Holsti equation for finding and calculating reliability:

$$R = \frac{2(C1,C2)}{C1+C2}$$

Where (R) is the reliability coefficient

C1: the number of answers of the first analyst.

C2: the number of answers of the second analyst. (Fath Allah and Ibrahim, 2018 AD: 98)

2. Frequency and percentage, which is an arithmetic method:

$$Percentage = \frac{Part}{Whole \ x \ 100}$$

(Al-Fartousi et al., 2015: 118).

3. Arithmetic mean:

Arithmetic Mean = Sum of all values / Total number of values

(Abu Allam, 2006: 526)

# Chapter Four: Presentation and interpretation of the results

# • View results:

The number of the analyzed pages of the book was (107) pages that were subjected to analysis after the researcher excluded the introduction and the index. Theanalysis results showed that the total number of main ideas was (697) ideas, where the number of ideas in the first group reached (421) frequencies, and the arithmetic mean (60.14), with a

Volume 13, No. 2, 2022, p. 2648 - 2656

https://publishoa.com ISSN: 1309-3452

percentage of (60.40%) higher than the first group, However, the first group (content analysis group) included (276) frequencies, arithmetic mean (53.4), and a percentage of (39.60%) as listed in Table 3.

Table (3) study results

Group	Main Standard	Frequencies	Arithmetic mean	Percentage
Textbook support for the teaching	Develop and use scientific ideas	113	28.25	%26.84
process	Arousing a scientific sense of educational purpose	107	35.67	%25.42
	Inclusion of students and their participation in related phenomena	106	53	%25.18
	Take students' ideas into account	33	8.25	%7.84
	Encourage students to think about phenomena, experiences, and knowledge	29	9.67	%6.89
	Promote and support the learning environment	28	9.33	%6.65
	Student learning evaluation	5	1.67	%1.19
	Total	421	%100	
Content Analysis	Alignment between the main ideas of the objectives and content	109	36.33	%39.49
	build a case	61	30.5	%22.10
	Precision	44	44	%15.94
	Consistency between ideas	41	41	%14.86
	Features and objectives of scientific culture in understanding texts and vocabulary	21	21	%7.61
	the total	276	%100	

# **Interpretation of the results:**

The researcher concluded through analyzing the book that there is a discrepancy between the chapters in the number of ideas (frequencies) and their percentage. This discrepancy is attributed to several reasons: that the chapters were not equal in their proportions in the research sample as shown in Table (2) in the third chapter. That is: they were not in the same size in the research sample, as well as the topics contained in the chapters of book, each of which has its ideas that fit its scientific and historical material. In addition to that, there are maps, figures, and pictures that occupy space in varying proportions in the chapters of the book, as shown Table(4)

Table (5)Number of ideas and percentage within chapters of the book

Number of Ideas	Chapters	Percentage
255	Chapter one	% 36.58
91	Chapter two	%13.06
98	Chapter three	%14.06
78	Chapter four	%11.19
56	Chapter five	%8.03

Volume 13, No. 2, 2022, p. 2648 - 2656

https://publishoa.com ISSN: 1309-3452

54	Chapter six	%7.75
65	Chapter seven	%9,33
697	Total	%100

## Chapter Five: Conclusions, Recommendations, and Suggestions

#### The most important conclusions:

- 1. The standards of the American Association for the Advancement of Science in its main and sub-groups are available in the book in varying proportions.
- 2. There are indicators within the standards of the American Association for the Advancement of Science that were not included in the book, and some of them are included in a very small way.
- 3. Including the standards of the American Association for the Advancement of Science in the history book for the fifth literary grade requires people with experience, knowledge, and familiarity with the standards, and how to employ them in the textbook appropriately and consider their contemporary educational goals.

#### The most important recommendations:

- 1. The Ministry of Education should develop history books for the preparatory stage in accordance with the standards of the American Association for the Advancement of Science.
- The Directorate of General Curricula should implement workshops for authors of textbooks in general and history books, in particular, to inform them of the most important international standards, and the standards of the American Association for the Advancement of Science in particular, to be taken into account when writing history books.
- 3. It is an ecessity of reviewing the content of history books and evaluating them periodically, and then develop them to conform to international standards and scientific developments.

#### The most important suggestions:

- 1. Conducting a similar study in which the content of the history book for the intermediate stage is addressed.
- 2. Conducting a study that investigates the extent to which curricula authors follow international standards.

#### References:

- 1. The Holy Ouran
- 2. Ibn Manzur, Abu Al-Fadl Jamal Al-Din Bin Makram, (2003 AD), Lisan Al-Arab, Volume 9, investigated by Amer Ahmed Haider, Dar Al-Kutub Al-Ilmia, Beirut Lebanon.
- 3. Abu Al-Haijaa, Fouad, (2001 AD), methods of teaching the Qur'anic and Islamic studies, and preparing them with behavioral objectives, 1st edition, Dar Al-Mahajjud for Publishing and Distribution, Amman.
- 4. Anis, Ibrahim, (1982 AD), Al-Mujam Al-Wasit, Volume 2, 2nd floor, Arab Heritage Revival House, Beirut.
- 5. Al-Beblawi, Hassan Hussein et al., 2008 AD, Quality in Education between Indicators of Discrimination and Adoption of Foundations and Applications, 2nd Edition, Dar Al Masirah for Printing, Publishing and Distribution, Amman Jordan. Jawarna, Tahani Ahmed, (2015 AD), the Islamic rooting of skill goals, Cultural Book House.
- 6. Al-Hudhaifi, Khaled, (2002 AD), the integrated project to include scientific culture in general education curricula in the Kingdom of Saudi Arabia, a plan submitted to the Ministry of Education, Educational Development Center, College of Education, King Saud University.
- 7. Khater, Nasri Diab and Sbaitan, Fathi Diab, (2010 AD), methods of teaching social studies, Janadriyah for publication and distribution.
- 8. Al-Khazraji, Salim Ibrahim, (2011 AD), Contemporary Methods in Teaching Science, Al-Manhal Library, Palestine.
- 9. Ramadan, Hani Ismail et al., 2019 AD, the research of the first international conference: Arabic for non-native speakers, present and future.
- 10. Al-Suhaimi, Mashael Marzouk, (2015 AD), Contemporary Global Trends in Science Curricula and Teaching, 1st Edition, Dar Al-Shorouk for Publishing and Distribution, Amman Jordan.
- 11. Al-Shamry, Hana Khudair and Lahib, Abdul-Wahhab Mustafa, (2014 AD), evaluating the history book for the fifth literary grade from the point of view of teachers and educational specialists, Al-Ustadhmagazine, issue (211).

Volume 13, No. 2, 2022, p. 2648 - 2656

https://publishoa.com ISSN: 1309-3452

- 12. Al-Titi, Muhammad e tal., 2002 AD, Introduction to Education, Dar Al-Masira, Amman Jordan.
- 13. Abdel Salam, Mustafa, (2006 AD), developing educational curricula to meet the requirements of development and face the challenges of globalization. www.mans.edu.eg/facse/arabic/moklamar/first.
- 14. Abd al-Salam, Rabie, Salem, (2003 AD), evaluating the use of information technology in teaching geography on the development of research skills and achievement among first-year secondary students, a master's thesis (published), Faculty of Education, Minia University.
- 15. Usailan, Bandar bin Khalid, (2011 AD), Evaluation of the Developed Science Book for the First Intermediate Class in the Light of Total Quality Standards (Unpublished Master's Thesis), Umm Al-Qura University, Saudi Arabia.
- 16. Attia, Mohsen Ali, (2009), Scientific Research in Education, its curricula, tools and statistical methods, Curriculum House for Publishing and Distribution, Amman Jordan.
- 17. Afana, Ezzo, (1996 AD), Curriculum Planning and Evaluation, 3rd Edition, Miqdad Press, Gaza.
- 18. Amira, Ibrahim, (1997 AD), The Curriculum and Its Elements, 2nd Edition, Dar Al Maaref, Cairo.
- 19. Al-Ghamdi, Abdul Rahman bin Muhammad, (2019 AD), The Alternative Calendar, Dar Wael for Publishing and Distribution, Amman.
- 20. Muhammad, Ahmad, (1983 AD), Principles of Psychometrics and Educational Evaluation, 2nd Edition, Amman: University of Jordan.
- 21. Abu Moghli, Samir and Salama, Abdel Hafez, (2019 AD), measurement and diagnosis in special education, Al-Yazuri Scientific House.
- 22. Ministry of Education, Republic of Iraq, (2015 AD), General Directorate of Curricula, Educational Objectives.
- 23. Odeh, Ahmed, (2010 AD), Measurement and Evaluation in the Teaching Process, 4th Edition, Dar Al-Amal for Publishing and Distribution, Jordan.
- 24. Rasheed, Ibtihal Jassem, (2017 AD), Press Arts and Civil Society, Al-Manhal Library, Gaza.
- 25. Fathallah, Ahmed and Ibrahim, Saeed, (2018 AD), academic insights into media issues, Al-Manhal Library.
- 26. Al-Fartousi, Ali Sumoom and others, (2015 AD), Measurement, Testing and Evaluation in the Sports Field, Baghdad, Al Muhaimin Press, Books and Documents House, Baghdad.
- 27. Abu Allam, Raja Mahmoud, (2006 AD), Research Methods in Psychological and Educational Sciences, 5th edition, Universities Publishing House, Cairo Egypt.
- 28. Kulm, G., & Grier, L. (1998). Mathematics curriculum materials reliability study. Washington, DC: Project, (2061).