

Evaluating the questions and activities of geography books for the preparatory stage according to Bloom's modified classification

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Abstract

This research aims to (evaluating the questions and activities of geography books for the preparatory stage according to Bloom's modified classification), and to achieve the goal of the research, the researchers adopted the descriptive analytical approach, a research approach and style, and represented the community in geography books for the preparatory stage. Junior high. In order to answer the research questions, the researchers prepared the research tool represented in preparing a list of the cognitive levels for the modified Bloom classification in its initial form, which included a number of indicators, which numbered (52) indicators distributed on (6) levels, and the validity was confirmed by presenting them to the arbitrators, and then the researcher analyzed the questions and the activities, which numbered (123) questions and (154) activities, and the researchers extracted the stability of the analysis in two ways: stability through time, and stability between analysts, as the stability coefficient through time reached (90%) for questions and (91%) for activities, and the stability coefficient was between The researcher and the other analyst for the standard of questions (89%) and activities (87%), and to analyze the data, the researcher used the statistical methods and methods represented by: Cooper's equation to calculate the reliability coefficient, frequencies, percentages and chi-square. The research results showed that the questions and activities included in the geography books for the preparatory stage It does not take into account the levels of Bloom's classification average, and that some levels of classification were not achieved and were low for these books, as the rates of verification differed between the three books.

Keywords: geography, Bloom's modified classification, Cooper's equation.

INTRODUCTION

Research problem :

The questions and activities of the book are one of the important assessment tools that help students to employ their information, consolidate and integrate it, which facilitates the process of retaining and mastering this information, which are the main goals of learning, as the quality of these questions and activities and their different levels of knowledge, emotional and skill are of great importance, as the Well-chosen questions generate ideas or a perceptive mind in the

student, while questions that emphasize only memorizing and recalling information without (understanding) will lead the student to success without understanding and applying what he has learned in new situations. It is up to them, as it is the basis for evaluating students and the teaching process, as well as for activities. In addition to being questions, they develop the skill and emotional side of the learner. Many studies and conferences that dealt with the level of questions prepared, whether by teachers or questions contained in textbooks, according to Bloom's classification of the field of knowledge, in which questions focus on the

level of remembering, and the percentage of questions decreases in the level of absorption until the fourth level (analysis), and the lack of Questions at the level of installation and evaluation, including the study (Al-Qahtani, 1996), the study (Al-Emadi, 1998), and the study (Sulaiman, 2009), as most of the results of these studies concluded that the focus is on the lower levels of mentality represented in remembering and understanding and neglecting the higher mental levels Such as analysis, application and evaluation There were several justifications that prompted the researchers to do this study, including the void in what is known about the problem of the study in relation to the geography curriculum for the preparatory stage, as no previous study (to the knowledge of the researchers) was conducted that dealt with questions and activities in geography books in Iraq, and thus a problem search by: To what extent are the levels of the knowledge domain available for the educational objectives of Bloom's modified classification in the questions and activities of the geography books for the preparatory stage?

research importance :

Today, at the global level, no one doubts the importance of teaching (geography) due to the nature of this subject, its composition and its place in the study plan, and the capabilities that can be developed through teaching it, especially in the preparatory stage, as it helps students to glimpse the facts and realize the images of the environment with its multiple aspects and different levels with Deepening the understanding of relationships, explaining phenomena and linking causes and results, and that teaching them opens the way for practicing different types of scientific activities and useful applications in our daily lives, which helps to give students a lot of tendencies and experiences. (Mahmoud, 2005: 55)

The preparatory stage for society is an important and decisive stage in the educational ladder, based on its nature, objectives, requirements, and society's expectations of its outputs. The aim of this is to prepare and qualify them to continue education in colleges and universities in various disciplines, and it

may be the end of an educational stage for some students who then go to the labor market and contribute to community service (Al-Hawi, 2011: 34).

It can also be said that questions and activities in the field of teaching and learning occupy a leading place in our curricula, as they have a great impact in shaping the learner's experiences and modifying his behavior, and because they are a means of achieving learning goals, and that they are full of opportunities that allow learners to express themselves, as they It describes and clarifies the content of the book and helps in the learning process, and the practice of activities moves the student from a culture of memory, where mere memorization and indoctrination to a culture of creativity and the ability to produce new ideas and the emergence of intellectual and mental improvement and launch to deeper and comprehensive intellectual horizons. (Shehata, 1994: 90-91)

Research goal : This research aims to evaluate the questions and activities of geography books for the preparatory stage, by answering the following questions :

To what extent are the levels of the knowledge domain available for educational goals in the questions and activities of the Geography book for the preparatory stage?

search limits

The current search is limited to

- Questions and activities for the book "The Foundations of Geography and its Techniques" for the fourth literary grade to be taught in Iraq for the academic year (2021-2022 AD), authored by a committee in the Ministry of Education, the tenth / revised edition, 2018.
- Questions and activities of the physical geography book for the fifth literary grade, which is scheduled to be taught in Iraq for the academic year (2021-2022 AD), authored by a committee in the Ministry of Education, the tenth edition / revised 2018 AD.
- Questions and activities for the sixth-grade literary human geography book, which is

scheduled to be taught in Iraq for the academic year 2021-2022 AD, authored by a committee in the Ministry of Education, tenth edition/ revised 2018.

Define terms :

1. Questions: know them

-The Great and the Dry (2018): "It is an stimulus that calls for a reaction and response, and requires the learner to think and diagnose the educational material in his hands, to retrieve the information stored in his memory, in a way that helps him to answer the correct one." (Al-Azami and the Dry, 2018: 148)

The researcher defines it procedurally : A test tool used to find out the level of middle school students in geography and the knowledge they have acquired from the content of the course and the extent to which they achieve the educational objectives of the textbook.

2. Activities: Know Her

-Attia (2013) : "The mental and physical efforts made by the learners, the teachers, or both in order to achieve the objectives of the curriculum, and to achieve the comprehensive and integrated growth of learning." (Atiya, 2013: 79)

The researcher defines it procedurally : They are those exercises that include a set of questions distributed on the six mental levels (remember _ understand _ apply _ analyze _ do _ create), and are contained in the geography books for the middle stage.

Theoretical Background and Studies:

First

Bloom's Rating Rating

The classification has gone through many developments and modifications, including what was published by Anderson, Loren and others, which detailed the skills at each level of thinking that it included, in addition to that the modification included changing the name of the structure to creativity and replacing the calendar, as it became the top of the modified

classification, while The evaluation level, which was ranked sixth in the old classification, comes to be its fifth in the modified classification, and some modifications were also made to the nomenclature of the levels of the old classification from nouns to verbs, so the word (knowledge) was replaced by the act (remember), and the word (understanding) was replaced by the act (understand). And the words, application, analysis, and evaluation were replaced with verbs: apply, analyze, perform, and the level (composition) was replaced by a verb (innovate), and it became next to the level of evaluation in the modern hierarchical arrangement. (Allam, 2007: 103), and this modification tried In the classification, the distinction between knowing what thinking is, and how the procedures that are used mentally to solve the problem, and from this basis the modern modification referred to categories after the process of knowledge, which included six categories, namely (remember, understand, apply, analyze, do, create), and categories The cognitive dimension, which includes :

- Factual knowledge: It is based on certain controls, which experts use in communicating in the fields of knowledge and also includes the main elements that students must learn in the cognitive field, as it is used to solve problems.

Conceptual knowledge: It is specific to categories, classifications, rules and relationships among them. It is knowledge in an organized manner that includes theories and models that help the learner to organize the structure of a particular subject, how the different parts of information are linked and intertwined and intertwine to form a coherent system whose parts work regularly.

Procedural knowledge: which includes knowing how to do a specific thing, and it becomes clear when the learner is able to use a strategy or algorithm. Actions in fact.

- Knowledge of metacognition: it is awareness and knowledge about self-awareness, and cognitive processes. It also includes contemplation of knowledge for awareness of how to solve problems, and cognitive tasks. It

also includes conditional knowledge, knowledge about self, and self-regulation. (Mohammed and Abdel Azim, 2011: 171)

Second: Previous studies:

Study (2016: Upahi, mutaheer) : Evaluation of end-of-semester questions in chemistry textbooks in secondary schools according to Bloom's average level .This study was conducted in Nigeria, and the study aimed to classify and analyze the questions that were received at the end of the textbook chapters, which are three books in chemistry for secondary school students in Nigeria, and the study sample consisted of (1750) questions that were analyzed and classified using content analysis, and the study tool was used according to Bloom's modified classification. The study showed the following results:

1 - At the level of cognitive processes, (24%) of the questions require high cognitive skills, while the low level of cognitive skills represented (76%) of the questions.

2- As for the knowledge dimension, the results showed that (46%) of the questions were designed to measure conceptual knowledge, while (32%) and (22%) of the questions measured procedural knowledge and factual knowledge by extension. (90-102: 2016, Upahi, mutaheer)

Study (2017: Mizbani, Chalak):Analysis of listening and speaking activities from the perspective of an EFL textbook through Bloom's Modified Taxonomy.The study was conducted in the Islamic Republic of Iran, and the study aimed to analyze the listening and speaking activities in the text book in school for young people and to know the levels of

classification of learning objectives according to Bloom's modified classification in the cognitive domain. The modified classification was used as a tool for collecting study data, which included (57) activities in The text book is divided into (30) listening activities and (27) speaking activities. The results showed the following:

1 - There are only three cells that belong to the lower levels of the Modified Bloom's Taxonomy for listening activities, ranked as follows: remembering factual knowledge (60%), understanding conceptual knowledge (33.3%), understanding factual knowledge (6.6%).

2 - There were also three categories of speech activities arranged in a row: applying conceptual knowledge (55.5%), understanding conceptual knowledge (37%), remembering conceptual knowledge (7.4%), while the activities of text writers were devoid of the higher levels of Bloom's classification. Study(2017,Mizbani,Chalak:38-43)

Research Methodology and Procedures

The researchers used the descriptive analytical method (content analysis method), as it is one of the most appropriate scientific research methods for this study:

Research community and sample :

The community of this research consisted of questions and activities of geography books for the preparatory stage, which are scheduled to be taught in Iraq for the academic year (2021-2022). Distributed on geography books as shown in Table (1)

Table (1)

T	Book	Grade	Number of Questions	Percentage	Number of Activities	Percentage	Number of Chapters	Edition	Year of Publication
1	Geographical foundations and techniques	Literary fourth	31	25%	34	22%	5	eleventh	2019

2	natural geography	Literary fifth	40	33%	59	40%	6	eleventh	2019
3	human geography	Literary sixth	52	42%	61	38%	7	eleventh	2019
Total	-	-	123	100%	154	100%	18	-	-

search tool :

Due to the lack of a ready-made and appropriate tool for collecting data and the objectives and purposes of this research, the researchers prepared a tool to evaluate the questions and activities included in the geography books in the preparatory stage in a way that suits this research, and in a manner that suits the nature of the stage and the nature of the book prepared for it. For this purpose, the researchers followed the following procedures:

1. Examining the specialized educational literature represented by the previous studies that evaluated the book questions, including the study of Abdul Redha (1996), the study of Al-Qahtani (1996), the study of the Sheikh (2015), and the study (2016: Upahi, mutaheer), And a study (2017: Mizbani, Chalak).

2. Seeking the assistance and guidance of the opinions of arbitrators from specialists and experts, for the purpose of formulating and preparing a research tool suitable to achieve the objective of the current research.

3. The researcher presented a list (in its initial form) that organizes the levels of Bloom's classification average and its criteria to a group of experts and specialists in teaching methods, measurement and evaluation, numbering (20) experts and arbitrators to express their opinions on the importance of including this classification and its ratios in evaluating the questions and activities of the geographical books for the stage middle school and to delete inappropriate cases and amend what they deem appropriate.

The researchers made the necessary adjustments based on the opinions of arbitrators from specialists and experts with competence (teaching methods, measurement and evaluation), so that the research tool would be

ready in its final form to achieve the goal of the current research.

Honesty :

The researchers presented the tool that he prepared to a group of experts and arbitrators, and through their opinions and observations, the researchers adopted the criteria and indicators that obtain an agreement percentage (80%) as an indicator of its powers, and excluded the indicator that did not obtain this percentage, and accordingly the researchers adopted the paragraphs that got The percentage of (80%) and since the number of specialized experts has reached (20) experts, so the indicators that obtained approval of (18) experts were approved, and this represents a percentage of (80%) of them. The researchers took all the observations, whether related to linguistic reformulation, or changing some words, merging repetitions with each other, deleting and adding in proportion to the research objective.

Tool application :

The current research tool is a list of the levels of the modified classification prepared by the researchers, which means the means adopted by the researchers to access data and information from the sources concerned with its study, as the tool consisted of (6) main levels, and (52) sub-indicators, and the researchers used Content analysis to find out Bloom's average levels of cognitive objectives in the questions and activities of geography books for the preparatory stage.

The stability of the analysis :

To ensure the objectivity of the tool, the researchers used two types of stability:

1. Constancy over time:

The two researchers completed the first analysis on 3/15/2022 for two criteria for

questions and activities. As for the second analysis on 6/4/2022, that is, a time difference of (21) days and for the same sample that the researchers adopted for the study with a percentage of (100%). (90%), using Cooper's equation.

2. Consistency with other analysts:

In order to achieve this stability, the two researchers used another analyst of specialists, and they provided him with lists of analysis of questions, activities and geography books for the preparatory stage. The researchers used the stability coefficient between them and the second analyzer using Cooper's equation, and Table No. (2) illustrates this.

Table (2) *The values of the stability coefficient between the analyst and himself and between the researcher and the second analyst*

Analyst	agreement ratio
researcher through time	90%
Researcher with another analyst	87%

Statistical means :

1. Cooper's equation to calculate the stability of the analysis

Stability coefficient = number of times of agreement / (number of times of agreement + number of times of disagreement) x 100 (cooper, 1974: p27)

2. Frequencies, percentages (relative importance) and chi-square.

Research Results

This chapter includes a presentation and explanation of the results reached by the researchers, and since the research consists of two standards, the standard of questions, and the standard of activities, so it will present and interpret the results of each standard, the first questions for all three books, and then address the standard of activities and the interpretation of its results, respectively.

First - What are the levels of knowledge available for Bloom's modified classification in the questions of geography books for the preparatory stage? As Table No. (3) shows the frequencies and percentages obtained by the questions included in the three geography books for the preparatory stage.

Table (3)

classification pedigree Modified Bloom	The fourth literary book		The fifth literary book			The sixth literary book		Total Repetitions
	Repetition	The ratio	Repetition	The ratio	Repetition	The ratio	Repetition	The ratio
remember	71	%46	96	%49	74	%49	241	%48
understand	48	%31	56	%29	38	%25	142	%28
apply	12	%8	13	%7	14	%8	39	%8
Analyse	22	%14	22	%11	15	%10	59	%12
get up	-	-	5	%3	6	%4	11	%2
Creates	2	%1	2	%1	6	%4	10	%2
Total	155	%46	194	%100	153	%100	502	%100

It is evident from the above table that the level of (understands and remembers) came in the

first places, while the level of (analyses) ranked third, and the level of (applies) ranked fourth,

while the levels of (does and creates) ranked fifth and sixth, respectively.

Second: To what extent are the levels of knowledge available for Bloom's modified classification in the activities of geography books?

As Table No. (4) shows the frequencies and percentages obtained by the activities included in the three geography books for the preparatory stage.

Table (4)

classification pedigree Modified Bloom	The fourth literary book		The fifth literary book			The sixth literary book		Total Repetitions
	Repetition	The ratio	Repetition	The ratio	Repetition	The ratio	Repetition	The ratio
remember	13	%12	3	%2	5	%4	21	%5
understand	40	%38	67	%39	39	%32	146	%37
apply	20	%19	42	%25	28	%23	90	%23
Analyse	20	%19	53	%31	39	%32	112	%28
get up	10	%10	4	%2	7	%6	21	%5
Creates	2	%2	2	%1	3	%3	7	%2
Total	105	%100	171	%100	123	%100	397	%100

It is evident from the above table that the (understanding) level came in the first place, followed by the (analyses) level in the second place, and the (apply) level came in the third place, while the (remembers, performs) levels occupied the fourth and fifth positions, respectively, and the (does) level came in.

Conclusions, Recommendations and Suggestions

Conclusions:

In light of the research results, the researchers concluded the following:

_ The questions of the three geography books focused on the lowest levels of knowledge of the modified Bloom classification, in particular (remember, understand). The levels (analyses, performs, creates) are in the last positions.

_ The focus of questions in geography books on the lower levels (remembers, understands) of the levels of the modified classification, the

students return to one type of questions, as whenever this type of questions changes, the students fail to answer and thus fail to achieve the required success rates.

Recommendations:

_ Adopting the higher levels of knowledge of Bloom's modified classification when developing questions and activities for the book, and using them accurately with the ideas and content of the study material.

Inviting the Ministry of Education to strengthen cooperation between specialists in curricula and teaching methods and specialists from book authors, especially geography books for the preparatory stage, to the need to develop questions and book activities.

Suggestions:

_ Conducting more descriptive and analytical studies of the questions and activities of the preparatory stage books to determine the extent to which the formulation of the questions corresponds to higher levels of thinking.

_ The need to reconsider the number of questions and book activities for the fourth, fifth and sixth grades of middle school to include all levels of the modified classification and rely on it.

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