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The Impact of Electronic Technology for Maps and Graphs in the Collection of Geographical Material With the Second Grade Students Average and Their Motivation to Learn

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Faculty of Education / University of Mustansiriya electronic technology for maps and graphs in the collect

Abstrac

The impact of geographical material with the second grade students average and their motivation to learn, The sample of the research consisted of (98) students divided into three groups respectively, the first experimental group (34), and the second experimental group (31) Student, and the control group (33) student, the researchers adopted the experimental approach, As for the research tools, the test is composed of (36) a paragraph of multiple choice, the researchers used the following statistical methods in analyzing the results of the research (Analysis of variance, and Sheffeh test), The results showed the following:

First: The first and second experimental group is superior to the control group.

Second, the first and second experimental groups outweigh the control group in a driving measure towards learning.

El impacto de la tecnología electrónica para mapas y gráficos en la colección de material geográfico con el segundo grado promedio de estudiantes y su motivación para aprender Preparación de los investigadores.

Resumen

El impacto del material geográfico con el promedio de estudiantes de segundo grado y su motivación para aprender. La muestra de la investigación consistió en (98) estudiantes divididos en tres grupos respectivamente, el primer grupo experimental (34) y el segundo grupo experimental (31) Estudiante, y el grupo de control (33) estudiante, los investigadores adoptaron el enfoque experimental. En cuanto a las herramientas de investigación, la prueba se compone de (36) un párrafo de opción múltiple, los investigadores utilizaron los siguientes métodos estadísticos para analizar los resultados de La investigación (análisis de varianza y prueba de Sheffeh), los resultados mostraron lo siguiente:
Primero: el primer y segundo grupo experimental es superior al grupo de control.
En segundo lugar, el primer y segundo grupos experimentales superan al grupo de control en una medida conducente hacia el aprendizaje.

Introduction:
1 - The need to benefit from the services of the World Wide Web through electronic technology in the process of teaching and learning.
2 - The necessity of activating the role of the Internet in education away to raise the level of motivation to learn>

Research problem:
Geographic maps and graphs are the main focus of effective teaching. They reflect the field of geography by representing the different phenomena of the universe and showing the different relationships between them. They represent the essence of the geography of the environment in which the process of education and learning revolves. Geography is the reading of maps and data analysis before To be reading information from a reference or book, so it can

not be dispensed with in the teaching of geography, because it contributes to the clarification of the features of nature and humanity. (Sulaiman, 2015, 77), but despite the importance of the map of the teacher of geography, there is a clear weakness in the use of teachers of geography, and this is confirmed by many of the study study (Saadi: 2008) and study (deposit: 2009).

The work of drawings of forms, whether by hand or computer programs do not stimulate the mental activity of students and does not work to develop their scientific imagination and that this method works to identify the imagination of the student rather than expand and stimulate.

Although the modern trend tends to use the electronic technique of maps and graphic formats, most teachers, if not all of them did not go to this modern technique, but this technique has not received enough studies to determine the impact in the achievement and motivation to learn in geography, which are a requirement The basic methods of teaching and teaching methods to develop in students, and the geography is limited in the process of teaching mainly on the process of information retention and receive, which reflected negatively on the low level of academic achievement and motivation towards learning, and this Many of the chart to him as a study studies (professionals: 2010) study (Al_huso: 2008).

Therefore, the problem of research is determined by answering the following question:

Is the use of electronic technology for maps and graphic forms impact on the achievement of second-grade students average in geography and their motivation to learn?

research importance:

Many countries are racing to reform their educational systems so that they can face the challenges of the times and the revolution of ICT. Computerization and the Internet in the process of teaching and learning is no longer a luxury but has become a necessity for developments in e-learning and employment (Amoud 2012, p. 10) The Internet has become a huge source of resources and reference information needed in all educational activities associated with the process of teaching and direct learning (Thuodari, 2003, 20)

The technological revolution of information and means of communication has turned science today into an electronic village where temporal and spatial barriers disappear. This change requires educational institutions to provide solutions to benefit from this technology and employ it in the educational process in accordance with its objectives and community goals. Quality of learning outcomes (Ramoud, 2012, 15).

Technology has contributed to the development of the geospatial imagery of Landsat and the Landsat satellite collection and linking it directly to the Internet (Google Erth), giving a new picture in the field of data collection, mapping related to the Earth's surface and its natural resources, land use and management Environmental resources, and this has contributed to the breadth of the means of geographical and environmental research (Abdel-Elah, 185,2006).

The most prominent technological contribution in geography is the presentation of the electronic maps of the Earth and the graphic forms, and is a renewed source of information, knowledge and geographical experiences related to the environment of the learner and other environments. It is a basic geographical tool to help learners learn geographical concepts such as distances, distances, spaces, shapes and perceptions. And electronic maps contribute to the development of the cognitive aspect of the learner and develop his abilities for analysis and installation and then access to the provisions in general and geographical distribution

Teaching the use of electronic maps provides the opportunity to develop the skills of the learners by activating the learning activities of the skills, the most important of which is to identify some geographical locations on the electronic map and determine the geographic distribution of some of the geographical phenomena studied and determine the geographical distribution expected in the future In the light of the existence of their own geographical characteristics, and the drawing of the framework of some maps and the signing of geographical phenomena on the map of the deaf and measuring distances on the map as well as the determination of distances on the basis of the scale or using the technique Tkb Scale and calculate the local and global time difference and also determine trends on the map or on the map using the map.

On the level of the emotional side, the use of electronic maps in the teaching of geography is important in the development of social sense and geographical imagination of learners, by activating the process of communication and dynamism within the classroom, whether among the learners themselves or between learners and teachers and stimulate learners, and increase motivation to learn and participate positively in In the context of the social interaction (Sulaiman, 2015, 78-76), the learners prepared an electronic map that helps to learn the lesson content and achieve the desired goals in a cooperative manner.

From the above it is clear that teaching using electronic maps and graphic forms has educational and educational importance that helps the learner to reach the abstract geographical facts of the concept of time and place, and to understand the relations between natural and human phenomena studied and others.

The field of teaching geography is not limited to the concept or geographical term, but contains a lot of information and data that are difficult to deal by students in the form of rigid, and designed in a mysterious way difficult for students to

understand, and also to identify the location and location and trends and representation is the graphic spirit of geographical statistics and Access to the information they hide, and work to connect the different and different factors that control the development of geographical phenomena (Abu Radhi, 2004: 32). Graphs represent a second language that explains and explains the geographical topics without the student trying to draw facts from the numbers and tables. The representation of the graph of the data of geographical phenomena gives a quick idea of the viewer at first sight, while this effect does not appear if we look at statistical tables. (Khuraisha and Khalifa, 1997: 14)

The teaching process needs to diversify into cognitive techniques in order to attract students' attention, sharpen their motivation, focus on the learner as well as focus, prepare and prepare classroom tests. (Massoud, et al, 2014: 81)

The modern methods of teaching call for the use of sound and image to attract the attention of the recipient by stimulating the senses of hearing and sight to interact with the outside world, and the understanding of the mind, which works on the analysis of information and acquisition of concepts and memory storage, as neither teacher and student need to make a multiplier compared to traditional methods and rely On the descriptive description as the recipients work to visualize the subject or lesson in their imagination in a manner that may be different from the truth, each according to his ability, capabilities and background, which is directly related to the level of perception and individual abilities (Sherbini, 1996: 53).

The use of electronic techniques contributes to motivate students, motivate them and satisfy their need for learning, overcoming verbalism and its shortcomings, and consolidating and disseminating information (Karni, 2016, 25). Qatami and Naifah (2000) argue that students are driven by learning attitudes and activities while being challenged to be personally and effectively integrated into the learning process and motivated to learn and succeed, thereby learning in the following situations and increasing their motivation to learn. (Qatami and Naifah, 2000, 274-275).

Motivation is an important element of teaching, especially as it works to increase its effectiveness and contribute to a large extent in achieving the desired goals of the learner. As motivation is a means to achieve educational goals, it is one of the most important factors that help to collect information, skills and other goals that seek to achieve , Students who are highly motivated have a higher academic score, while students who do not have high motivation may become rude and cynical in class. (Shahin, 2009, 226)

The researchers believe that the existence of motivation is fundamental to the occurrence of learning and lack of it leads to the individual's cessation of the prac

tice of the wave of activity that enables him to control the educational situation and reduce the opportunity to learn, because it is the most important factors that help in the acquisition of knowledge and understanding with the teacher taking into account the tendencies and interests of students.

The current research can be summed up as follows:

1 - the importance of geography as the only material that can give a clear picture of the parameters of the earth by land, sea and air, and it explains the various natural phenomena.

2 - The use of electronic techniques for maps and graphs in the teaching of geography of the pillars and the task of the basis of modern education, as it supports the educational process in schools through the use of examples and forms and multimedia files available in those worlds.

3 - The research is a scientific attempt to raise the level of achievement and motivation to learn in the second grade applications are two intermediate goals of the basic objectives of teaching geography.

4 - create the element of suspense and excitement in the lesson that makes the student deals with the world as a unit of environmental and geographical multiple

Search Goal:

The aim of the research is to find out (the effect of the electronic technique of maps and graphs in the achievement of second grade students in geography and their motivation to learn). To achieve the research objective, the researchers formulated the following hypotheses:

1- There are no statistically significant differences at (0.05) between the average scores of the students of the three research groups in the collection of geography.

2 - There are no statistically significant differences at (0.05) between the average scores of students of the three research groups in their motivation to learn.

search limits

- Second grade students in middle and high school day for girls in Baghdad governorate.

2. The first semester of the academic year (2016-2017).

3 - Teaching the first three chapters of the book (geography of the Arab world for the second grade average)

Terminology:

1 - Technique: known, International Conference: "is the method of performance of work, movement or technology in education"

(International Conference on Education, 2017)

The researchers know the procedural technique: the forms, drawings, charts,

curves and electronic columns available or extracted from the information available on the Internet (Internet) and related to research topics

2 - Electronic maps: know them. A sketch is provided in a form that shows the features of the earth's surface or part of it through a specific hometown, a specific scale and symbols, which may be prepared by specialized bodies or by specialized or non-specialized personnel, including maps and geographical maps available through the network International Information (Suleiman, 2015, 76)

The two researchers define it as geographical maps, geographic information, and geographic information available on the Gogol Earth search engine.

(2017) is a way to convert data into more explicit and interpretable data, which is used to manipulate information, thus representing tabular values in forms, diagrams, curves, graphs, relative circles, etc. (Beck, 2017: 10)

Procedural definition of electronic graphs

Are the forms, drawings, charts, curves and electronic data columns available or extracted from the information available on the Internet (Internet) related to research topics.

Chapter Two: The First Axis Theoretical Background.

The Role of the World Wide Web in Teaching Geography:

The scientific network of information contains many techniques, including electronic maps, drawing or graphic forms, which are employed in the teaching of geography, Calla T.

First: Google software.

- Google Maps.
- Google Earth

Google Sky "sky" and Google Moon "moon" and Google Mars "Mars"

The difference between Google Earth Maps program is that Google Earth (Maps) allows the student to view the cities of the world and Google Maps is used as a guide to guide students to those cities such as places and roads or rivers, dams, mountains and others. These programs are free provided by the site Google Web View maps of the cities of the world by satellite.

Google Maps.

Google programs are one of the most common and used on the World Wide Web. These programs are: 1 - Google Maps "Maps".

It is easy to use a computer mouse to change its location on the map by dragging and dropping it, or to switch between the map display, shapes or graphics of any kind for the site, zoom in or out, etc.

Using the local search it is possible to find a title or place name in any country in the world to go directly to him and if the search results appear on the right side of the map page and next to each result a symbol resembling the balloon

in orange and inside the character of the English language hybrids in order. Or the code displays information about it such as address and phone number on the map displayed. Either for the driving destinations section is for the United States and Canada or the United Kingdom and East Asia only. It uses a table containing information about the destinations and ways that the user must follow In order to get to a particular place from a particular place look the Google Maps look

2 - Jogol Earth "Earth"

The program allows you to discover places on the Earth's surface from several angles, such as looking vertically to the bottom or at a perverted angle similar to the perspective seen by the bird Appendix . You can also through the site "Google Earth" from the independence of the aircraft and then roam through control of the keyboard or mouse and the discovery of the globe, where you can travel to new places and identify the topography and cities and the most important features therein. To discover the deep sea and oceans, only the Butt on the Btairtk area to be explored and go down from there to learn about marine life and coral formations and diverse terrain in Amag (slaves 2: 2011). The characteristic feature of the program is to allow the selection of the quality of the map to be used to identify the parameters through the "layer", there is a border layer, the picture appears with a clear border in yellow and international borders and the color of the purple border between the states and the sky between the provinces. The most important areas of shopping, toys, entertainment, cafes, theaters, schools, hospitals and other places, where the Panoramio layer displays pictures of the desired places, the road layer shows the places and shows the network of roads they serve, including the highway network linking the The three-dimensional buildings layer displays the maps and the buildings with their real three-dimensional image. In some countries, Google offers the land of service to display the streets so that the teacher and the student can see the streets in their true form. It is also possible to choose the weather layer that exhibits continuous images derived from industrial meteorological satellites showing the motion of clouds, temperatures, rain, wind, and weather forecasts. The student can choose the ocean layer as the student can identify the terraces and marine life and know the places of marine protected areas, diving sites and water sports

www. Almarefh.net/show_content_sub.php?cuv=389...m...

The site offers other services including an old photo gallery of ancient Rome and other from NASA, National Geographic and Discovery Channel, and displays old historical maps and illustrated information of the world's greatest tourist potential. Google Earth presents itself as an important and enriching

tool for the teacher in the classroom. It is useful in many areas beyond simply identifying maps and places of countries to include many geographical and environmental concepts (Slaves 2: 2011).

Google Earth's GoogI Eath and other geo-search programs have made the geographical map a mere blank sheet containing only vague symbols that are difficult to understand by the student and often zigzag lines that are often incomprehensible and sometimes cause alienation and stereotyping, To a fun and educational tool characterized by innovation and modernity and difficult for the teacher or student to be left open
(www.aIjazeera.net/opiniousbldsfo046).

The electronic programs are easy to use. They are web pages that contain miniature images of the geographical, urban and cultural phenomena on the surface of the earth. In addition, the student can follow the course of the Tigris River from the upstream and the fierce areas on both sides of the river. Moreover, the student can identify the surface features in the Kurdistan region of valleys, mountains and plains, and determine the highest peak in addition to calculating distances between cities and lengths of borders. The use of these sites helps to update and renew geographic information continuously, enriching the educational process as a source of knowledge and means Educational material may not be included in the textbooks (Shahrani, 1431, 120)

One of the advantages of these electronic maps is that it is constantly evolving and its data is continuously updated, as the student can through the site Google Earth

In the opinion of the researchers there is an urgent need to use modern technology, which provided a lot of tools and tools that had an important role and a bar in the development of teaching. And contributed to the improvement of the teaching process, as the entry of computer and the Internet and the subsequent teaching methods, including electronic maps and images and the use of space in the teaching of the impact of great, and led to the emergence of change in teaching methods

Graphs:

It is a visual representation of numerical, quantitative or statistical relationships. It is a brief visual means of the data presented. It is also a symbolic means that is preferred to be drawn and used in the context of the lesson or summarized after the student has obtained the basis of geographical information that helps to read and understand its symbols (Martorella, 1991: 89).

Graphs help:

1 - Highlight the important relationships contained in the data you offer quickly and simply.

2 - to raise interest in the data presented as if these data were presented in

statistical tables.
3 - Enter the atmosphere of quality of supply and ease of classification and speed of change. (Masoudi, 2013: 77).
Characteristics of geographical shapes or diagrams
1 - characterized by simple forms or graphs highlighting one or two ideas at the most.
2 - is clear and interpretation of the data contained.
3. All data are represented on a single scale.
4. The graph shows relationships and comparisons between geographical topics. (Massoudi and Al Ajrash, 2012: 46)
Considerations that should be taken into consideration when using shapes or graphs
1. Choose the address that contains the data in the graph with the least number of words.
2. Define the goals and objectives achieved by the graph. (Ibrahim, 2006: 43).
3 - the use of attractive colors consistent in the graph.
4. Identify the sources on which the data used in the graph are based.
5. Present the chart in time to be more exciting and interesting.
6. Encouraging and encouraging students to collect and translate statistical data. (Masoudi, 2013).
Shapes and graphs
(Al-Asadi, Al-Masoudi, 2014: 82). Electronic data formats are more efficient for analyzing environmental data in the form of graphs and are in three stages:
1. To verify the quality of the data and highlight the characteristics of the data and generally suggest what statistical analysis should be done.
2. Quantitative analyzes in ways that make the student interested and interacting with them.
3. Provide complete and easily understandable summaries of the main findings (Hunter, 1988: 112)
Here, the first step in data analysis should be data drawing and graphical information to be interactive (Chatfield, 1988: 54). For data attention, make a variety of shapes and graphs to display in different ways
The second axis: Previous studies After the researchers studied the previous studies did not find studies on electronic technology and electronic forms. The researchers from the previous studies identified the electronic programs that can be used in the teaching of geography and studied the methodology and tools suitable research and the most appropriate reliance on experimental design and statistical means to suit the conditions of the research as well as identify some sources related to the subject of research.

First: Studies dealing with electronic maps

- Shahrani Study (2011). The study was conducted in the Kingdom of Saudi Arabia. The purpose of this study was to study the impact of electronic maps on the web in teaching geography on the achievement and attitudes of second grade students.

The sample consisted of (50) students and they were divided into two groups (25). One of them was a pilot who studied the unit of Islam in Africa using electronic maps and the other one studied the same unit in the usual way.

The researcher prepared a collection test as well as prepared a measure of the trend towards electronic maps.

The researchers used the statistical methods of the statistical treatments (Ancova) and the study reached the following results:

There were statistically significant differences at (0.05) between the mean scores of the experimental and control groups in the achievement test and the trend in favor of the experimental group (Shahrani, 2011: 104).

Second: Studies on the motivation to learn

The Study of Doudin and Jarwan (2012) was conducted in Jordan. The study aimed at identifying the effect of the implementation of acceleration and enrichment programs on the motivation of learning and achievement, and the self-esteem among the students of the upper elementary stage. The study sample consisted of 180 students divided into two groups: 90 students The researcher used the measure of motivation to learn, and the self-assessment scale adopted the measure of the Khatib. The results showed that the experimental group studied the program to accelerate and enrich the control group in the motivation to learn and collect (Dodin and Jarwan, 2012: 106)

Third: Studies on achievement.

Study of Jassim (02016). The study was conducted in Iraq and aims to know the effectiveness of the educational program according to the theory of information processing in the collection of geography and the development of the skills of the knowledge of the fifth grade students literary The sample of the study consisted of (60) students divided into two groups each group (30) The results of the first research were based on the achievement test consisting of (49) paragraphs and the second tool was adopted by the researcher to measure Sacher and Denson (1994) to measure the skills of knowledge of the experience lasted a full year of study either the statistical means used (t test test)

- The students of the experimental group who studied geography in the educational program according to the theory of information processing surpassed the students of the control group in the achievement test and the skill level of knowledge (Jassim, 2016: J).

sSemantics and indicators from previous studies
1- The variation of the previous studies in terms of objectives. We find the Shahrani study (2012) aimed at finding out the impact of electronic maps via the web in teaching geography on the achievement of second grade students and their attitudes towards them. The study of Doudin and Jarwan (2012) aimed at finding out the effect of the acceleration and enrichment program on the motivation of learning, achievement and self-esteem among the students of the basic stage. The current study aims to explain the impact of electronic techniques for maps and graphs in the achievement of second-grade students and their average motivation to learn.
2 - Studies that adopted the descriptive approach, the study of Doudin and Jarwan (2012) The studies that adopted the experimental method is the study Shahwani (2011) and the study of Jassim (2106). These are consistent with the present study.
3 - The sample of previous studies ranged between (50-180) students or students, the current study, the sample reached (90) students.
4. The Shahrani Study (2011) was conducted in the intermediate stage, while the Jasmine study (2016) was conducted in the primary stage, while the study of Doudin and Grouan (2012) was conducted in the upper elementary stage. The current study was conducted in the intermediate stage.
5 - Sex of the sample: Study of Dodin and Jarwan (2012) The sample was composed of male and female students while the study sample Jassim (2016) on females. While the Shahrani study sample on males. The current study was conducted on females.
The study was conducted in Saudi Arabia and the study of Doudin and Jarwan (2012) was conducted in Jordan while Jassim study was conducted in Iraq. This study is consistent with the current study.
7 - Statistical methods varied statistical means used in previous studies, Shahrani (2011) used the analysis of the accompanying variance Ancova of differences while the study of Jassim test T.est The study of Doudin and Jarwan (2012) used the analysis of the variance mono and this study consistent with the current study

Chapter Three: Methodology and Procedures
Research Methodology: - Adopted the experimental approach for being suitable for achieving the research objective.
First: Experimental Design: - Each experimental research has its own experimental design. It depends on the nature of the problem and the conditions of the sample. In the current research, the design of the static random groups was

hosen in three groups. The first one is studied using electronic mapping technique, the second is the study using the electronic technique of graphs and the third is control It is taught in the traditional way, with a post-achievement test and a measure of motivation, as shown in Figure (1).

the tool	The dependent variable	Independent variable	the group
Post-achievement test, and driving scale	Achievement and motivation	Electronic mapping technique	The first pilot
		Electronic technique for graphic formats	The second trial
		_____	Control

Shape (1)
Experimental Design for Research
Second: Research Society: - The research community consists of students of the second grade intermediate in the middle and secondary schools day of the Directorate of Education Rusafa II, which number (25) schools.
Third: The sample of the research: - Al Samoud secondary school was selected randomly. This school includes four people for the second grade. Three people were selected to represent the sample of the research. 105 students were excluded. 8 students were excluded due to absenteeism and absence. The number (98) (1)
Table (1)
The research sample is distributed among the research groups

Number of female students after exclusion	Number of female students before exclusion	Division	the group
34	36	b	The first pilot
31	33	d	The second trial
33	37	a	Control
98	106		Total

IV / Equality of the three research groups:
The experimental search requires that the search groups be equal in all the characteristics that can affect the dependent variable. Therefore, the search groups were equalized in the following variables:
1. The IQ test: To ascertain the equivalence of the students of the research sample, the successive matrices of Raven were used. It was one of the standardized tests on the Iraqi environment and after its application and correction and analysis of results statistically the results showed the equivalence of the three groups as shown in Table (2)
Table (2) Results of the analysis of the single variance of the scores of the students of the research groups in the IQ test.

Number of female students after exclusion	Number of female students before exclusion	Division	the group
34	36	b	The first pilot
31	33	d	The second trial
33	37	a	Control
98	106		Total

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Table (2) Results of the analysis of the single variance of the scores of the students of the research groups in the IQ test.

Statistical significance at level 0.05	Value f		Average square	Degree of free	Group squares (S,S)	Source of Contrast
	table	Calculated				
Not statistically significant	3.07	1.035	27.998	2	55.101	Between groups
			40.815	95	389.203	Within groups
				97	3945.304	Total

2. The previous knowledge: A test was carried out to determine the extent of the students' knowledge of the material. The test consists of 20 test pieces of multi-type testing. (3).

Table (3) Results of the analysis of the single variance of the scores of the students of the three research groups in the previous knowledge test

Statistical significance at level 0.05	Value f		Average square	Degree of free	Group squares (S,S)	Source of Contrast
	table	Calculated				
Not statistically significant	3.07	1.974	5.284	2	12.982	Between groups
			5.010	95	570.541	Within groups
				97	583.523	Total

3. Age in months: For the equivalence of this variable, the age of female students was calculated until 1/10/2016. After the data were processed statistically, the results showed the equivalence of the research groups as shown in Table (4).

Table (4) Results of the analysis of the single variance of the ages of the three research groups calculated in months.

Statistical significance at level 0.05	Value f		Average square	Degree of free	Group squares (S,S)	Source of Contrast
	table	Calculated				
Not statistically significant	3.07	1.240	16.689	2	32.920	Between groups
			57.811	95	5481.011	Within groups
				97	5513.931	Total

In addition to the statistical equivalence in some extraneous variables, the researchers are keen to avoid the effects that accompany the experimental procedures such as accidents. The application of the experiment was not accompanied by any natural accidents, nor was the experiment subjected to leaving or discontinuing or transferring the student. The experiment took place in one time for the three groups. The same tools, namely the achievement test and the measure of motivation and applied to the research groups at the same time after the end of the experiment and was agreed with the management of the school on the confidentiality of research and not to inform students of the nature of research and objectives as well as the use of the same teaching aids.
Fifth: Research requirements: - The research requirements are determined as follows:
1. Scientific Article: The scientific material has been determined in the first three chapters of the geography book of the Arab World to be taught to the second grade students for the academic year (2016-2017).
2. Behavioral Goals Behavioral objectives aim at accurately defining educational outcomes. In order to achieve this goal, behavioral goals have been formulated based on the scientific material and general objectives. They reached (75) behavioral goals according to the first three levels of Bloom's classification , And was presented to a group of arbitrators. In light of their views, some of them were modified and redrafted without deleting any of them, divided into (38) goals in the level of knowledge (26) in understanding level and (11) in application level.

Sixth: Preparation of teaching plans:

Preparation of the teaching plans for the content of the subject to be taught during the period of the experiment in light of the content of the article and the behavioral goals and according to the steps of the electronic technology of the maps of the first experimental group and the electronic technique of the experimental group of the second experimental group and according to the traditional method of the control group The number of plans (19) Models of plans on a group of experienced and competent in light of their views and proposals have been modified and became the plans are ready for implementation during the duration of the experiment, which lasted one semester.

Seventh Research Report

1. The achievement test: To measure the extent of change in the level of student achievement, a post-achievement test has been prepared. The preparation of this test has been carried out by the following steps:

a. Preparing the specification table (test map)

The specification table is a schema that links the scientific content of the material to the behavioral goals, determines the relative weight of each subject and each level of cognitive objectives. (Abbadi, 2006: p. 137).

The test paragraphs were identified with (30) objective test paragraphs of the multi-type test distributed to the cells of the specification table as in Table (5).

Table (5) Specification table (test map) for the post-test test paragraphs

Total of items	no. of items test			total	Levels of behavioral goals			Relative importance of classes	Number of behavioral goals	the classroom
	Implementation	Understanding	knowledge		Implementation	Understanding	knowledge			
14	2	5	7	19	2	7	10	49.3	19	*the first*
11	2	4	5	26	4	9	13	36	26	*The second*
5	1	1	3	30	5	10	15	14.7	30	*the third*
30	5	10	15	75	11	26	38	%100	75	*Total*
				%100	14.6	34.6	50.8	The relative importance of the level		

B. The veracity of the test: To verify the validity of the test, ie to know whether the test actually measures what is supposed to be measured, was presented to a group of experienced and competent, and in the light of their observations have been modified the wording of some, and all paragraphs have been approved by more than (80%), Of the arbitrators and therefore did not delete any paragraph, this is a longer indicator of the virtual honesty of the test.
C. For the purpose of knowing the time required for the answer and the clarity of the test instructions, the test was applied on a sample sample that was selected in a descriptive manner. The number of female students was (30) students at the secondary school of Iskenderun, and by setting the answer time of the fastest student and the slowest student and dividing it on (2) The test paragraphs were clear to all students.
Dr.. Statistical analysis of the differences: For the purpose of knowing the difficulty and ease of the paragraphs and their ability to discriminate, the test was applied to a sample of (100) randomly selected students from the Fatima Al - Zahraa Girls' School. The test was corrected and the grades were ranked in descending order. The following indicators were extracted:
- The difficulty of the test paragraphs: - The difficulty coefficients ranged between (0.30 - 0.69) and we find that the test paragraphs are all acceptable, as Bloom points out that the test is good if the levels of difficulty between 0.20 - 0.80, (Bloom, 1971, 66).
- The strength of discrimination: - The strength of the discrimination of paragraphs ranged between (0.34 - 0.68) All paragraphs are of good discriminating power, Eble indicates that the test paragraphs are a good discriminating force if it reached 0.30 and more (Eble, 1972, p: 90).
- Test stability: -
The results of the test were divided into two parts, single paragraphs and double paragraphs for the grades of the second sample. The Pearson correlation coefficient was obtained (70%) and corrected using Spearman Brown equation (0.81) , As the test is good as the coefficient of stability (60) and more (Levine, 1981, p271).
2 - a measure of motivation towards learning:
In order to measure the motivation of the students towards the material, a measure of motivation was adopted (Qatami, 1992). The measure includes in its initial form 60 words and then its qatalami. It withdrew 24 words, and the scale remained, and (36) The judges are professors of psychology at the University of Jordan and the validity of the measure to measure the motivation of learning. The researchers presented it to a group of arbitrators from the professors of psychology, methods of teaching, measurement and evaluation for the purpose of verifying the veracity of the scale. The percentage of experts' agreement on the validity of paragraphs (80%), Maximum degree. Positive

levels of (1, 2, 3, 4, 5) and negative (5, 4, 3, 2, 1) are included.

Stability of the scale

Stability refers to the accuracy and consistency of an individual's performance and also means the stability of results over time

To calculate consistency, the researchers used the Vaccronbach equation because it indicates the degree of each paragraph of the test, as well as the consistency of paragraphs and paragraphs as a whole

The stability of the scale was calculated according to the following steps:

1 - The application of the scale on the sample of statistical analysis mentioned above and the number (100) students

2 - correct the paragraphs of the scale according to the correction key and give each paragraph a certain degree and then calculate the total score.

3 - Calculating the stability of the scale by applying the equation of Vkronbach. The coefficient of stability (0.94%). This is a good coefficient of stability of the scale, the scale is good if the coefficient of stability (0.67%) and more (Nabhan, 2004, 237).

Apply the experiment:

1 - The experiment began on 11/10/2016, where the research was applied and began teaching the three research groups according to plans prepared after the preparation of the requirements of the experiment.

2 - The process of parity between the research groups in a number of variables

3 - Arranging the schedule of weekly lessons to teach the subject of geography at the rate of two weeks per week for each group.

4 - The researchers completed the application of their experience on 20/12/2016.

5. At the end of the experiment, the achievement test and the motivation measure for learning were applied to the three research groups.

6. Statistical means

The researchers adopted their research and analyzed the results on the SPSS program.

Chapter Four: Presentation and Interpretation of Results

- View results

First, to verify the first zero hypothesis, which states that there are no statistically significant differences at (0.05) between the average scores of the students of the three research groups in the collection of geography. The average score of the first experimental group was 23,183 and the standard deviation was (4,008). The experimental mean for the second experimental group was 24,421 and the standard deviation was (3,254). The mean of the control group (19,101) (3,145).

The results showed that there was a statistically significant difference at the level of significance (0.05) and the degree of freedom (2-95). The calculated alpha ratio was (9.317) 3,07). Thus, the null hypothesis is rejected, ie there is a statistically significant difference between the three groups as shown in Table (6).

Table (6)

Results of the analysis of the single variance of the grades of the students of the three research groups in the post-achievement test

The statistical significance at the level of 0.05	Value f table	Value f calculate	S.M	D.F	S.S	Source of contrast
D. Statistically	3,07	9,317	212,289	2	415,071	Between groups
			18,430	95	1827,126	Within groups
				97	2242,196	Total

B. The veracity of the test: To verify the validity of the test, ie to know whether the test actually measures what is supposed to be measured, was presented to a group of experienced and competent, and in the light of their observations have been modified the wording of some, and all paragraphs have been approved by more than (80%), Of the arbitrators and therefore did not delete any paragraph, this is a longer indicator of the virtual honesty of the test.

C. For the purpose of knowing the time required for the answer and the clarity of the test instructions, the test was applied on a sample sample that was selected in a descriptive manner. The number of female students was (30) students at the secondary school of Iskenderun, and by setting the answer time of the fastest student and the slowest student and dividing it on (2) The test paragraphs were clear to all students.

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difficulty and ease of the paragraphs and their ability to discriminate, the test was applied to a sample of (100) randomly selected students from the Fatima Al - Zahraa Girls' School. The test was corrected and the grades were ranked in descending order. The following indicators were extracted:

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- Test stability: -

The results of the test were divided into two parts, single paragraphs and double paragraphs for the grades of the second sample. The Pearson correlation coefficient was obtained (70%) and corrected using Spearman Brown equation (0.81) , As the test is good as the coefficient of stability (60) and more (Levine, 1981, p271).

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In order to measure the motivation of the students towards the material, a measure of motivation was adopted (Qatami, 1992). The measure includes in its initial form 60 words and then its qatalami. It withdrew 24 words, and the scale remained, and (36) The judges are professors of psychology at the University of Jordan and the validity of the measure to measure the motivation of learning. The researchers presented it to a group of arbitrators from the professors of psychology, methods of teaching, measurement and evaluation for the purpose of verifying the veracity of the scale. The percentage of experts' agreement on the validity of paragraphs (80%), Maximum degree. Positive levels of (1, 2, 3, 4, 5) and negative (5, 4, 3, 2, 1) are included.

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Stability refers to the accuracy and consistency of an individual's performance and also means the stability of results over time

To calculate consistency, the researchers used the Vaccronbach equation because it indicates the degree of each paragraph of the test, as well as the consistency of paragraphs and paragraphs as a whole

The stability of the scale was calculated according to the following steps:

1 - The application of the scale on the sample of statistical analysis mentioned above and the number (100) students

2 - correct the paragraphs of the scale according to the correction key and give each paragraph a certain degree and then calculate the total score.

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Apply the experiment:

1 - The experiment began on 11/10/2016, where the research was applied and began teaching the three research groups according to plans prepared after the preparation of the requirements of the experiment.

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Chapter Four: Presentation and Interpretation of Results

- View results

First, to verify the first zero hypothesis, which states that there are no statistically significant differences at (0.05) between the average scores of the students of the three research groups in the collection of geography. The average score of the first experimental group was 23,183 and the standard deviation was (4,008). The experimental mean for the second experimental group was 24,421 and the standard deviation was (3,254). The mean of the control group (19,101) (3,145).

The results showed that there was a statistically significant difference at the level of significance (0.05) and the degree of freedom (2-95). The calculated alpha ratio was (9.317) 3,07). Thus, the null hypothesis is rejected, ie there is a statistically significant difference between the three groups as shown in Table (6).

Table (6)

Results of the analysis of the single variance of the grades of the students of the three research groups in the post-achievement test

The statistical significance at the level of 0.05	Value f table	Value f calculate	S.M	D.F	S.S	Source of contrast
D. Statistically	3,07	9,317	212,289	2	415,071	Between groups
			18,430	95	1827,126	Within groups
				97	2242,196	Total

To determine the direction of differences between the three groups, the Schiffe test was used to make comparisons between the average scores of the students of the three groups in the achievement test. The results were shown in Table (7)

Table (7) The value of Schiffe to compare the averages of students of research groups in the post-achievement test

The statistical significance at the level of 0.05	Value sh table	Value sh calculate	Compare groups
D. Statistically	2,80	12,53	Comparison between the first experimental group and the control group
		8,24	Comparison between the second experimental group and the control group
		0,87	Comparison between the first experimental group and the second experimental group

. When comparing the average scores of the students of the first experimental group with the average score of the students of the control group in the post-achievement test, it was found that the difference between them is statistically significant for the benefit of the first experimental group which studied using the electronic mapping technique. Which is larger than the value of the table-cloth of 2,80.

2. When comparing the average scores of the second experimental group with the average score of the students of the control group in the post-achievement test, the difference between them is statistically significant and for the benefit of the second experimental group which was studied using the electronic technique of the graphs. Larger than the value of the Schweizer table scale (2,80).

3. When comparing the mean scores of the students of the first experimental group, which was studied using the electronic technique of maps with the average score of the students of the second experimental group in the post-achievement test, the difference is not statistically significant. The value of the calculated value is 0.87, (12.8).

Second, verify the second zero hypothesis, which states that there are no statistically significant differences at (0.05) between the average scores of the students of the three research groups in their motivation to learn.

The average number of students in the first experimental group was (124,104), with a standard deviation (10,126). The average score of the second experimental group was (121,578) and the standard deviation was (9,267), while the control of the control group was 106,453) And by standard deviation (11,286). The results showed statistically significant differences at the significance level (0,05) with a calculated value of (18,246), which is greater than the tabular value of (3.07) and two degrees of freedom 95.2). Thus, the null hypothesis is rejected. There are statistically significant differences between the three groups as shown in Table (8)

Table (8) Results of the analysis of the single variance of the scores of the students of the three research groups in the motivation scale

The statistical significance at the level of 0.05	Value f		S.M	d.f	S.S	*Source of Contrast*
	table	calculate				
D. Statistically	3,07	18,246	195,426	2	3691,982	*Between groups*
			97,253	95	9212,845	*Within groups*
				97	12471,667	*Total*

In order to determine the direction of the differences between the three groups, the Schiffe test was used to perform distance comparisons between the mean scores of the students of the three groups in the motivation scale. Results were shown in Table (9)

Table (9) Schiffe values to compare the mean of the students of the three research groups in the motivation scale

Statistical significance at significance level	Value sh		Compare groups
	table	calculate	
D. Statistically	2.80	14.270	Comparison between the first experimental groups and the control group
D. Statistically		11.251	Comparison between the second group and the control group
Not D. Statistically		2.104	Comparison between the first experimental group and the second experimental group

The following table shows the following:

1. When comparing the average scores of the students of the first experimental group with the average score of the students of the control group on the momentum scale, it was found that the difference between them is statistically significant for the first experimental group that studied using the electronic technique of maps. The value of the calculated chefs is (14,270) The value of the table chevrolet (2,80).
2. When comparing the average scores of the students of the second experimental group with the average score of the students of the control group on the momentum scale, it was found that the difference between them is statistically significant for the second experimental group which studied using the electronic technique of the graphs, with a value of 11,251, The value of the table chevrolet (2,80).
3. When comparing the average scores of the students of the first experimental group with the average score of the second experimental group on the motivation scale, it was found that the difference between them is not statistically significant, with a calculated value of 2.104.

- Interpretation of the results: In light of the interpretation of the results of the

research appeared the following:
1. The first experimental group studied using electronic maps and the second experimental group, which studied using electronic forms and data, exceeded the control group studied in the normal way in the collection of the geographically. This can be attributed to:
- The tools and methods of learning used by the researchers, which related to electronic maps through the websites worked to raise the senses audio visual as well as stir the minds and sense of the reality of geographical phenomena as they are in nature, which is a geographic information base, maps and electronic forms can be called when needed.
- Making the student the focus of the educational process in the course of learning represented in the research and analysis and carry out the survey activities to achieve the desired result, and the role of the teacher directed and guided.
- The way in which the content is presented electronically to the scientific material in a logical, realistic way, not as virtual as in the paper geographic maps through which the student can access the information as easily and as quickly as possible.
- The characteristics of geography teaching focused on the use of maps and graphs in the representation and interpretation and analysis of geographical phenomena, which won the students of the first experimental group using electronic maps over the World's ability to describe and explain the analysis of the content of the geographical material for the second grade average students in the second group that used the shapes The ability to clarify the relationship between geo-topics and to highlight important relationships in the data you present quickly and simply.
- The establishment of student learning activities required by the search for elements of the components of geographical phenomena and the ability to analyze and structure and access to the provisions and generalizations of geography.
- Teaching the use of maps and electronic graphs in the development of the knowledge of the students by reading and understanding the map and the nature of relations between the phenomena represented.
This result is consistent with the results of previous studies Shahrani study (2011).
2. The first experimental group studied using electronic maps and the second experimental group studied using electronic forms and data surpassed the control group, which was studied in the usual way in their motivation to learn. This can be attributed to:
-

The use of electronic techniques for maps and graphic forms created a collaborative learning environment that helped students to access the different sources of knowledge in a stimulating and exciting, which increased their motivation to learn.

- The use of electronic technology for maps and graphic formats addresses many of the educational problems in the present time, such as increasing the number of students in the classroom and the drop and boredom, and makes learning more interesting and exciting, and the thought that the geo-material is dry and boring.
- This finding is in support of the theoretical and cognitive assumptions about motivation to learn that cognitive processes, information acquisition, comprehension, understanding, and integration into the cognitive structure of the student strengthens their motivation to learn.

This result is consistent with the outcome of the study of Dodin and Jurwan (2012).

Chapter 5: This chapter includes the conclusions, recommendations and suggestions reached by the researchers in light of the results of the research

1. Conclusions

- The use of electronic techniques for maps and graphic formats has helped to increase the achievement of students in the second grade the average of geography and their motivation to learn.
- The use of electronic technology for maps and graphic formats requires the availability of computers and communications for the Internet.
- The subjects studied in the research during the duration of the experiment of topics that fit the teaching using electronic techniques for maps and graphic formats, and that the results came in conformity with this description.

Recommendations: The need to benefit from the services of the global network through electronic technology in the process of teaching and learning, including the use of maps and formats

- The use of tools and methods of e-learning in education and learning geography is one of the basic competencies of teachers of geography
- The need to activate the role of the Internet in education and look after it as a means to raise the level of motivation to learn.

Proposals: In the light of the results achieved, the researchers propose the following:

- Conduct a similar study in other dependent variables such as the development of creative thinking, critical thinking, geographical concepts, tendencies.
- Conduct a similar study in other stages, such as antibody or medium
- Conducting a study aimed at evaluating websites for maps and graphs

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