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EFFECTIVENESS OF TEACHING SOCIAL STUDIES SUBJECT USING INFOGRAPHIC TECHNIQUES AND ITS EFFECT ON ACHIEVEMENT AND VISUAL INTELLIGENCE

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ABSTRACT

The researcher used the experimental design with partial control with two equal experimental and control groups, and according to this design, the research sample was randomly selected from the research community that represented (governmental middle and secondary schools in the Karbala Governorate Center affiliated to the General Directorate of Education of Karbala) and was (medium Thuraya for girls), was rewarded The researcher between the two groups in the following variables: chronological age calculated in months, intelligence, a test of previous information, the achievement of parents, previous achievement in the subject of social studies, and the scientific article identified the first three chapters (the first: the geography of the Arab world, the second: the Arab world (population and economic activity), Third: The conditions of the Arabian peninsula before Islam) from the book of Sociology for the second intermediate grade. The behavioral goals of these chapters were formulated, as their number reached in their final form (160) behavioral goals, and with regard to the two research tools, the researcher intentionally constructed the research tools that were represented by an achievement test in the subject of social studies consisting of (50) substantive paragraphs of the type of multiple-choice of four Alternatives As for the second tool, it consisted of the measure of visual intelligence towards the social matter, which is ultimate of (34) items. After applying the research tools and analyzing the results obtained statistically by using Microsoft Excel and SPSS, the results showed that the experimental group students who studied according to the infographic technique were superior to the control group students who studied according to the usual method of achievement and the visual intelligence scale.

CHAPTER ONE: DEFINITION OF RESEARCH

First: The Problem of the Research

In the developments taking place in the world today, the Arab student must ask himself where he is in the midst of these scientific and industrial revolutions. The Arab world continues to adopt traditional teaching methods that are not compatible with modern life and the thinking of the student and teacher in the era of technology and development. In addition, traditional education at the present time did not add new to the educational content for generations because it alone cannot keep pace with modern thought, and the Arab world needs a quantum and gender shift for students of the twenty-first century, as the level of education is very low compared to global countries.

The problem of the current research lies in the fact that many of the sociology teachers still follow specific educational methods and means (blackboard, pen, map) that are not developed in thinking, so that the teacher and the student have a limited thinking, and thus his role becomes negative, which leads to his feeling of boredom and lack of interest in the lesson, all this leads To forgetting what the student learned after possessing an outcome of information without investing it or interlinking between them, which does not contribute to benefiting from it in a good way in his daily life. From the above, it can be said that there is an educational problem related to the teaching of social studies, which negatively affects the students' low levels of achievement, so the researcher seeks to use modern technological means and techniques in teaching the subject of socialism, which is (infographic technique), as this technique is considered one of the modern technological techniques. It is used in the delivery of information and knowledge faster and easier on the minds of students, as this technique (transforms unfamiliar narrative information and knowledge, especially in social studies, into models). Somat, charts and figures) facilitate the student's study of information, understanding it, retaining it and storing it in a long-term memory, which may contribute to raising the level of students 'academic achievement, thus leading to an increase in their visual intelligence towards the material and helps in addressing some of the difficulties and problems facing teachers or female and male students alike. And in light of the above, the current research problem can be formulated with the following question:

Second: The importance of research

The most prominent characteristic of our current era is the rapid growth of various scientific information as a result of the spread of technologies and the multiplicity of means of information transmission. This great development of science and the complexity in society and the environment has become necessary to obtain the basics of science, types of skills and knowledge in dealing and investment, and to acquire the scientific method of thinking, especially a. We live man in the cosmic era with thinking, global science and knowledge, global crises, achievements, rights, duties, global aspirations and human values, and this requires generational awareness and learning how to think and act, which confirms the need for science so that the individual can take responsibility for the problems and variables he faces. And crises in order to adapt and continue life (Abu Al-Wafa and Salama, 2008: 17)

And learning is one of the tools of science and one of the basic elements in the progress of mankind, its learning (the process of organization that includes actions and actions that occur in rotation and interaction between the teacher or teacher and the learner and it does not happen a randomly studied process, rather it needs a scientifically organized planning, and this planning is in the highest forms of organization. In educational institutions (Al-Qaisi, 2001: 2)

As the concept of a comprehensive educational civilization, Z transforms the human development and promotion to reach the degree of perfection possible mentally and socially (Al-Hariri, 2010: 19), in addition to that it helps the individual to know technology and its secrets by teaching individuals to each other because their education is reflected in the development and progress of society, and education The emphasis on transferring knowledge from one generation to another through the acquisition of individual information, knowledge and experience in all these things is done by education because without knowledge it no longer exists (Al-Khazali 2012: 14)

Here there was a need to use teaching methods away from the traditional roles of the teacher, so be more familiar with the information age and modern technology that accompanies it, which is the infographic technique of the most contemporary means, and studies have education and research has shown that the percentage that the individual remembers what he learns or practices differs in The meaning or senses he reached and that the individual can (remember 10% of what he read, 20% of what he heard, 30% of what he read saw, and 50% of what he heard and saw at the same time), and this percentage increases if the person interacts with what he learns through this The senses (Alyan, 2010: 136), as the infographic technique deals with more than one of the different senses of the learner, and therefore it is more effective and better than if it was presented in one way only. Therefore, the transmission of information by more than one means serves to communicate it at its best. The mental and psychological activity of the learners remove themselves from the daily traditional classroom that lacks educational aids for the environment in which the learner works in a positive way, if the workers of such methods make pain science able to distinguish between what is traditional and what is modern in the curriculum as the method The traditional view of the learner is only the mind in which the information is a receiver, so it was based on the science of pain and the book. Infographic technology is closely related to visual intelligence, and the educational process organizers have been interested in using learning approaches based on visual intelligence in light of the information flow and the visual role in using visual images to provide and explain information, so the learner by practicing learning processes such as pain operations is not a moment for comparison and to clarify, interpret and develop relationships The conclusion of this visual information and the use of its generation and in the production of many ideas that do not exist in teaching new situations are modernity and not hallowed and thus will lead to an increase in the student's academic achievement (Al-Mufti, 2004: 146)

Third : Objectives of the Research

The research aims to identify:

1. The effectiveness of using infographic technology in the achievement of second-grade intermediate students in the subject of social science .
2. The effectiveness of using infographic technique in visual intelligence ,second grade intermediate students in the subject of social studies.

Fourth: Hypotheses of the Research

For the purpose of verifying the two objectives of the research, the following two null hypotheses were formulated:

First:

There is no statistically significant difference at a level of significance (0.05) between the average scores of the students of the experimental group who study the social subject according to the infographic technique and the average scores of the students of the control group who study the same subject according to the usual method of achievement test.

Second :

There is no statistically significant difference at the level of significance (0.05) between the average scores of the students of the experimental group who study the social subject according to the infographic technique and the average scores of the students of the control group who study the same subject according to the usual method in the scale of visual intelligence.

Fifth: Limitation of the Research

The current research was limited to:

1. The human limit :a sample of the second intermediate grade female students.
2. Spatial boundary :one of the intermediate or secondary schools (government - day) affiliated with the General Directorate of Education in Karbala Governorate.
3. Limit Temporal :the first semester of the academic year (2020 20- 19)
4. Reduction of knowledge :Chapters of the three first) the first :Geography of the Arab World ,Second :Arab world (population and economic activity ,(Third: the conditions of the Arabian Peninsula before Islam (from the Book of Social Studies second grade average, i 39 14 ,1 AH / 201 8 m.

Sixth :Definition of the Terms A not :the effectiveness of :Arafa (Attia 2008)

It is the achievement of the goal and the ability to achieve it, and it is the measure by which we perceive the performance of the teacher and the learner for his role in the learning and teaching process (Attia, 2008: 61)

Second: Infographic technology

They are visual representations of presenting data, information or knowledge, and they aim to present complex information in a quick and clear manner and have the ability to improve perception through the use of graphics in enhancing

the ability of the visual system of the individual to know patterns and trends (Abdel-Basit, 2015: 50)

Third: Collection

(Al-Sulaikhi 2013): The student's acquisition of educational facts, concepts and theories in an academic stage, semester, or a specific course, and the extent of his ability to do so. 2013: 26)

Fourth: Visual Intelligence

Al-Sabbagh, known as: the ability to think visually, the ability to visualize the absence of ideas and spatial vision yes accurately, and to understand the relationships between neither the Shiites nor McCain (Al-Sabbagh, 2007 AD, 248)

Fifth: The second intermediate grade

It is the second grade in the preparatory stage, followed by the first intermediate grade, and preceded by the third intermediate grade, that is, it is parallel to the eighth grade in basic schools (Ministry of Education 2010: 18).

The theoretical background and previous studies

This chapter deals with the first two basic interactions with the Raya graphic technology system and the dependent variables (achievement and visual intelligence), either the other axis for understanding previous studies and research that dealt with the independent variable (informatics technology). And studies on two variables (group affiliation and visual intelligence) .

The first axis: theoretical background, theoretical background Infographic Technology

The word infographic consists of two parts, the first section is information means information, and the second section is drawing means drawing, hence, infographic is the art of converting data, information and complex concepts into images and graphics that can be clearly understood, fun and interesting in a smooth, easy and clear way (Rees, 2013, P. 13)

Smikiclas defined it as: an acronym for visual information through which the process of mixing data with design is implemented, helping individuals to communicate clearly (Smiciklas, 2012, p3). The A to Anfujravek is a form of visual communication which helps to simplify the information, and has the effect of an optical attractive and has a great reaction by the people and are used extensively in marketing operations and sites communicate different, where helps transform information and complex data into images visible to connect the main points are easy And more effective.

Infographic is used by people who have a lot of information and statistics and want to communicate it to people in a simple and attractive way through the creation of comics .The most popular use is usually by marketers, news sites

and pages that provide medical advice on the Internet, because the comics are easy to share on the means Social networking and websites with just one click, and it becomes easier for the eye to translate information and know its purpose faster and some studies indicate that there are about 90% of buyers prefer visual content instead of written and traditional content .(Al-Fakhoury, 2016: 8)

Infographic Benefits

1. Infographic is more eye-catching than texts and regular images, as it combines images, colors and content that naturally attract the eye towards it.
2. Stimulates others Alanfujravek to see the details and attention to the idea presented within Alanfujravek for a long period of time.
3. Ease of participation on social media. Create the Infographic It is not difficult as many people think, but it needs you to have the idea in the content that you will present through your illustration, and you can rely on any tool in the work required. There are some tools that give you ready-made templates for editing, of code that allows others to scan it through phones so that it can be easily shared on social networks.
4. Alanfujravek provides space because one of the Alanfujravek picture is worth a thousand words, and thus will be able to shortcut what you want to display in the panel graphical one.
5. A wonderful and attractive way to help create a unique connection between you and your audience, because most companies add their logo and information within the infographic (Abu Oreban, 2017: 25)

How to design the infographic?

Typically, these sites offer a portion of the service for free and partly for a fee that gives you more features than the free plan. There is no standard design or specific sizes for graphics; you can create an infographic without being bound by anything that just needs the creativity of the content owner to work with the designer to produce the information needed to illustrate it through the infographic. Some designers focus on one type of design but not the other, thus you will find people who focus on providing graphic design services. (Whether you are a designer or content owner and want to rely on infographics mainly or secondary, you can be creative in this type of content, as it is one of the most influential types of content in the web world (Al Fakhoury, 2016)

Infographic types

There are two types of graphic designs, they are static or animated, but static infographic: it is intended to be a diagram explaining something continuously without giving any interaction with the reader (Darwish Military 2015, 13). It is animation, which means video and animation, and this is the most common in customer requests, and it is also considered that sucking is a pleasant and not easy act, but it gives you the opportunity and a sense of creativity to transform data and information into interactive video in a smart and beautiful way (Shaltout, 2016: 114).

Academic achievement constitutes a major role in the learning process and its definition, as academic achievement is the first area for assessing the learner, rather it is the main subject of it, and this achievement in its modern sense represents the acquisition of correct scientific methods through school skills that can be accessed in an organized scientific way, so it is concerned with Two main aspects among the learning outcomes are the "cognitive-skill" aspect, and the interest in defining the cognitive and skill side means an implicit concern for the emotional aspect. There is no doubt that the process of cognitive achievement is not a purely mechanical process, but rather an art of mental arts, with its origins, rules and methods, and cognitive achievement is based on perception, perception, understanding, analysis and synthesis. And comparison, application, generalization, distinction, and linking materials with each other and between aspects of life, and obtaining an academic is the final result that shows the level of the student and the degree of progress in learning what he is expected to learn. (Jamil 2000: 113).

Benefits of measuring achievement:

Educators and psychologists believe that the benefits of measuring achievement are as follows:

1. Teachers' bias in grading and favoring some students over others is prohibited.
2. Help to show the strengths and weaknesses of the curriculum that the teacher applies, which leads to modification.
3. It is useful for explaining the defects of the different teaching methods and for comparing the work of teachers with each other.
4. It helps to diagnose the strengths and weaknesses of each student in the school subjects, which may be used in guiding and assisting him.
5. Some schools use it to guide students in the areas of specialization in which they excel.
6. It aims to know the extent to which students' goals are achieved in the course.
7. It aims to classify students within specific academic majors or divisions according to their rates in different subjects, in order to create a relatively homogeneous population in terms of achievement (Al-Zahir et al. 1999: 51)

Therefore ,the researcher believes that the results of the achievement measurement are important factors in determining the fate of the individuals who are given to them ,so it was necessary for these measures to measure what they were intended to measure with a high degree of efficiency and for their results to be fully indicative of the level of the capabilities of the examined person.

Third :Defining visual, visual or spatial intelligence

That it is that kind of intelligence in which the degree of sensitivity to shapes, nature, beauty and coordination relations between these elements is required, as well as the analytical vision, the power of observation, and the imagination sufficient to produce and reproduce shapes (Saadeh, 2018: 574)

Distinguishing characteristics of the owner of visual intelligence

1. Draw accurate and detailed graphs.
2. Exhibits mechanical skills by disassembling and installing composite objects.
3. He should explain the ideas in a visual way(.Al-Saffar, 2016: 155)

How can you acquire and develop visual intelligence on your own?

Visual intelligence is one of the things you can acquire if you don't have it, or you can develop it if it exists in the first place. It depends on your choice of methods that can help you do this. There are some games that focus mainly on developing visual intelligence, whether in children or even adults. It doesn't depend on a specific category, but everyone can play these games. The thing that also helps in acquiring or developing visual intelligence is seeing different images, depending on the person's job of course, and this will give him better ideas. There is also a common way for everyone to try to learn and practice drawing. Most people often need to draw in jobs associated with visual intelligence due to the nature of these jobs, and they need to draw continuously, even if on a non-professional level. Even if a person is unable to draw, there are many ready-made drawings that you just need to color, and this is not easy or underestimated for example, but your success in coloring and choosing the right colors will give you the skill of dealing with colors in your life without a problem. Visual intelligence is one of the types of intelligence that we use in our daily life permanently. Its presence is necessary for us, and it helps us to coexist with those around us easily, and it may be linked to the main source of profit for us. Some people, as we talked about in the article, because with him they can achieve great progress in work, and achieve unparalleled success. In my opinion, acquiring and developing this type of intelligence is a necessity in everyone's life, whether for those who need it in his personal life, or for those who need it at work. Doing so is not so much a difficult effort that it needs to be constantly trying. If you think you need visual intelligence in your life, start now on the journey to acquire it. (MA, 2015: 50)



*The second axis: previous studies previous studies
First :Studies dealing with infographic technology
Tawfiq Study (2019)*

(The effect of using the infographic pattern on developing visual thinking skills in the computer subject for first year middle school students in Minya)

The aim of the current research is to develop visual thinking skills in the computer subject for first-grade middle school students through the pattern of only static infographic and mental maps (and the use of the quasi-experimental research method in applying the research experiment, and the formation of the research group). The number of first-grade middle school students reached 50 students who were divided into two experimental groups, each group (25) students, and the experimental therapeutic material was a multimedia program designed according to the Muhammad al-Desouky (2015) model with two growths only, fixed novographic, mental maps, while the measurement is to test visual thinking skills in measuring the skillful aspect of the research group's tools. The experimental group used, but the pattern only exceeded the difficult nographic graphic, while the experimental group used the second mental. The mapping pattern where the research results reached an improvement in the level of knowledge of the first unit Z of the computer and in the managed decision technique, and the thinking skills flow in favor of the experimental group, but I used the pattern only the hard nographic, the second experimental group that used the mind map style.

***Second :Studies of visual intelligence:
Abu Shairah Study (2018)***

The study aimed to uncover the effectiveness of a proposed program based on visual intelligence for developing artistic design skills among students of the Art Education Department of the Faculty of Fine Arts at Al-Aqsa University. The study problem was identified in the main question: What is the effectiveness of a proposed program based on visual intelligence in developing artistic design skills among students of the Art Education Department of the Faculty of Fine Arts at Al-Aqsa University? It is divided into the following sub-questions:

- 1- What are the artistic design skills required to be developed by female students of the Art Education Department at the Faculty of Fine Arts at Al-Aqsa University?
- 2- What is the general picture of the proposed program based on the theory of visual intelligence used in developing artistic design skills among female students of the Art Education Department at the Faculty of Fine Arts at Al-Aqsa University?
- 3- Are there statistically significant differences in the machine at a significance level of 0.05 between the mean scores of the experimental group students and the average scores of the control group students in evaluating the product card for technical design skills? In this study the researcher used the experimental method, and the study sample consisted of (30) students from the Department of Art Education in Mali in one of the universities, and registered for Design Course 2 for students. Midyear. For the second year 2017 AD, it was distributed randomly to two groups, one officer, (15) students, one

experimental, and the number (15) male and female students based on building the program and the study tool marked with the mark from the evaluation of the Card Skills product, the program was applied to an experimental group, and non-experimental group transactions were conducted. And the average scores of the control group students in the product evaluation card for technical design skills for the benefit of the experimental group, and the researcher recommended the following: Visual.

Beneficial aspects of previous studies

The current research has benefited from several previous studies, including:

1. Establishing research objectives and hypotheses .
2. Determine the research problem and indicate its importance.
3. Choosing the appropriate experimental design for the research, how to choose the sample, and determining its size and sex.
4. Preparing and building a research tool, including the achievement test and the propensity scale.
5. Choosing the statistical means by which the data were processed in finding the search results .

Chapter Three: Research Methodology and Procedures

First: Experimental Design: experimental design

The researcher adopted the experimental approach to the research, which is one of the research methods that used the experiment to test the imposition of detection in the relationship between the two variables (dependent and independent) by studying the opposite directions and physiotherapists and therapists. Adjusting all variables except for the T Me variable and studying it for its effect on the dependent variable, so an experimental design and a plan that clarifies the work and how to implement the experiment must be chosen, meaning the planning conditions surrounding the phenomenon and the factors studied in a certain way and then note what the limits (Abd al-Rahman Adnan 0.487: 2007), and what was the goal From the research, Thayer was identified by teaching the technique of infographic as an independent variable in student achievement as a dependent variable in visual intelligence as a dependent variable. Finally, the experimental design of the researcher was adopted with the second partial semester ts asymmetric (experimental taught according to infographic technique and control taught according to the normal method) y and post-achievement test And a visual intelligence scale, and a graph (1) shows that:

the test	Dependent variable	Independent variable	Parity	the group
1- Achievement test 2- Visual Intelligence Scale	1- Achievement 2- Visual intelligence	Infographic technology	1. Chronological age calculated in months 2. Intelligence 3. Parents' academic achievement 4. Previous achievement in social studies 5. Previous test information	Experimental
		The usual method		Control

Scheme (1) Experimental Design for Research

Second: Research procedures :Procedures of the Research

Research community: Research Population

The current research community consists of all second-grade intermediate students in government day schools (intermediate and secondary) in Karbala governorate for the academic year (2019-2020) distributed over (23) schools according to the statistics obtained by the researcher from the Statistics Department of the Karbala Education Directorate.

Research sample: Research Sample

The researcher selects from an important sample of the research steps and stages. The popular researcher from the family community according to the topic, phenomenon or problem, and since the size of academic societies is often large, so the researcher resorted to selecting a sample from that. To genuinely represent the community, a sample was to define the research according to the following steps:

A. Schools sample:

After identifying the schools affiliated to Karbala Governorate, the researcher randomly selected (Al-Thuraya Intermediate School for Girls)

B. An external sample is not eligible:

After choosing the school, the researcher visited according to the book to facilitate the task of the General Directorate for Education of Karbala and found four people in the second intermediate grade (A, B, C, and D) and chose them randomly [1] * sections (A) to represent the experimental group Until I got the number of students (38), a student, and (C) to represent the control group, which amounted to (39) students, and thus the total research sample (No. 77) was a student, and the external sediment data was excluded from the two groups statistically , Where the number n (5) i baht (2) of n in the experimental group and (3) in the control group to ensure that n remained in the ranks n in order to maintain the school system and the continuation of teaching n, and return the reason for exclusion n in possession of n previous experience In the subjects taught during the period, the experiment may have an impact of empa ct on the

variables so that the final sample number became (72) by 36 students from the experimental group and (36) students in the control group, as shown in **Table (1)**:

Table (1): Distribution of the research sample students before and after exclusion

total summation	The final number Baht	Excluded	Number of external Baht	the group	Division	T
72	63	3	39	Female officer	C	1
	36	2	38	Experimental	A	2

Equivalence of the two research groups Equivalent of the Groups Research

Although the two groups are chosen randomly, the probability of their equivalence is not possible, as achieving parity of two groups of research is crucial before the experiment, so the researcher is keen before starting the application of the experiment on the equivalence of the two groups of research statistically in some variables that may affect The results of the experiment and these variables are: chronological age calculated in months, intelligence, previous information, educational attainment of the parents, previous academic achievement in the subject. For social studies.

Control of extraneous variables Control of the Internal Variables

By extraneous variables, we mean those variables that affect the dependent variable and the independent variable contributing to the creation of changes whose effects are isolated from the dependent variable by fixing or neutralizing them (Aziz et al., 1991: 275) (therefore, the researcher) adjusting some extraneous variables that affect irrigation in the course of the experiment.

Research Requirements Research Requirements

For the purpose of applying the research, the researcher has prepared some requirements thereof

Determine the scientific material Determine the scientific material:

The first three chapters (the first: the geography of the Arab world, the second: the Arab world (population and economic activity), third: the conditions of the Arabian Peninsula before Islam) from the book on social studies for the second intermediate grade, ed 1, 14 39 AH / 201 8AD.

B -Formulating behavioral goals Formulation of behavioral objectives

Behavioral goals refer to “an activity practiced by the teacher and the learners, a behavior that can be observed, measured, and evaluated” (Al-Darij, 2004: p. 81). The researcher believes that formulating behavioral goals is a necessary step in choosing educational activities and determining teaching methods and evaluating them in the success of the process. Educational.

T - Preparation of teaching plans :Preparing daily instructional plans

It is a set of procedures that plan the study in order to achieve the educational success of the process - learning and achieving its objectives, and procedural planning includes a series of operational elements that define educational objectives and the content of the material, the method in teaching and methods of measurement and evaluation), planning means a lesson ready for pain from position x which He faces him, which makes me ask him a distant look through his knowledge of the relevant school that will be taught, and this means that the logical planning subject of the series presents the student with sequential situations away from randomness and the first speculation (Jaber, 2005: 298).

Third: the two search tools

- 1. Building the achievement test.**
- 2. Visual Intelligence Scale**

Fourth: the application of the two search tools

Achievement test

The two groups of experimental research media and control conducted the date of application of the test a week before the vote, and it was applied after completing the teaching of a scientific subject for the two research groups simultaneously on Sunday, briefly briefly (2/16) (20/20 AD).

Applying the visual intelligence scale

The researcher applied the visual intelligence test on Monday (2/17/2020 AD) on the two groups simultaneously.

Fifth: statistical methods

The results were analyzed and processed statistically using (Microsoft Excel 2010 (And system) Spss).

Sixth: Procedures for applying the experiment

- 1.** The schedule of lessons in the subject of social studies was organized for the two groups in agreement with the school administration. The two groups (experimental and control) were taught in the first and second lessons in order to ensure equal time allocated for that. The academic session for both groups in a (periodic - reciprocal) manner.

2. The experimental group was taught according to the infographic technique and according to the daily teaching plans prepared with this technique.
3. The control group was taught during the same period of time and in the usual way, according to the teaching plans prepared for that.
4. Applied experience at the beginning of the first semester of the academic year 2019-2020, specifically (10/28/2020 AD) on the research sample consisting of two groups (experimental and control) and ended with the application of an experiment on Tuesday (2/18/2020 AD) That is, the experiment lasted a whole semester (11) weeks and two sessions per week for each experimental and control group.

Chapter Four :Presentation and interpretation of results ***First :Results :of the Results Presentation***

To verify the validity of the first hypothesis ,the researcher proceeded to calculate the arithmetic mean and the T-value using the T-test (T-test) for two independent samples to compare the average scores of the students of the experimental group and the average scores of the students of the control group in the achievement test, as shown in **Table:(2)**

Table (2) above shows the arithmetic mean of the experimental group students by (37.5) a variance of (30.42) and the deviation of the irrigation water by (5.51), while the mean of the arithmetic of the female students equals (). The control group (32. 72), on the other hand, was (46, 26) and a standard deviation (6.80), and that the calculated value of T reached (2.44), which is greater than the value of the scheduled sum (2).) At the degree of freedom (70) and the level of significance (0. 05), and therefore rejects the first null hypothesis and accepts the alternative. This means that there is a statistically significant difference between the mean scores of the two research groups in an achievement test and in favor of the experimental group.

To verify this hypothesis, the researcher calculated the arithmetic mean and the T value using the T-test (T-test) of two independent samples to compare the mean scores of the experimental group students and the average scores of the experimental group students. The control group on the scale of visual intelligence, as shown in **Table (3)**.

Table (3) above shows the arithmetic mean of the students in the experimental classes of (71.19) variance of (96.24) and a standard deviation (9.81), while the arithmetic mean of the control group is equal to (64.31) in contrast it amounted to (72.76) and a standard deviation of (8.53) And a calculated value of (3.180), which is greater than the tabular value of (2) at the degree of freedom (70) and the level of significance. (0. 05), and thus rejects the second hypothesis of zero and accepts the alternative, meaning that there is a statistically significant difference between the mean scores of the two research groups in the visual intelligence scale towards the subject of social studies and in favor of the experimental group.

Effect size: To find out the effect of the independent variables on the one hand on the dependent variables, on the other hand, use the effect size, which is the amount of the effect of the independent variable on the dependent variable. Optical) as shown in **Table (4)**.

By extracting the value of (D) that reflects the amount of the effect size (0.70) in the proportions of a variable group, the visual intelligence variable reached the amount of the effect size (0.75) For social workers

Explanation of the results of the visual intelligence variable

That the students of the experimental group who studied the social subject according to the infographic technique outperform the control group students who studied according to the usual method in the visual intelligence scale.

- 1- This technology contains some activities that in its role involve all students in-class activities and give them the freedom to express their opinions as well as encourage them to support their ideas and give more examples that develop their visual intelligence, and this in turn pushes the student to transcend stereotypes and imitation of what they are exposed to in the usual way Which leads to increase their visual intelligence in the subject of social studies.
- 2- Infographic technology provides an educational environment that makes the student in an atmosphere of fun, enjoyment, and happiness away from complexity and boredom leading to an increase in her visual intelligence in the subject of social studies.
- 3- Teaching according to this technology greatly encourages the students to ask questions and raise them, and their positive participation during the lesson is a good indicator of increasing visual intelligence.

Third: Conclusions

In light of the results of the current research, the researcher reached a set of conclusions, as follows:

- 1- The use of the infographic technique as a teaching method had a positive effect in increasing the academic achievement of the second-grade female students, in comparison to the regular method.
- 2- The positive effect of infographic technology as a teaching method in increasing the visual intelligence of second-grade students, average towards the subject of social studies compared to the usual method.
- 3- Teaching according to the infographic technique, making the students livelier and interacting with the social subject until the end of the lesson than teaching in the usual way.

Table (2) test results (T-test) for two independent samples for the two research groups in the achievement test

Statistical significance at (0.05)level	T-value		Degree of freedom	standard deviation	variance	SMA	Number of female students	the group
	Tabular	Calculated						
Function	2	2.94	70	5.51	30,42	37,5	36	Experimental
				6.80	46,26	32,72	36	Control

Table (3) T-test results for two independent samples for the two research groups in the Visual Intelligence Scale

Statistical significance at (0.05)level	T-value		Degree of freedom	standard deviation	variance	M arithmetic mean	Number of female students	the group
	Tabular	Calculated						
Function	2.000	3,180	70	9.81	96,24	71,19	36	Experimental
				8.53	72,76	64,31	36	Control

Table (4) the size of the effect of the independent variable on achievement and visual intelligence

The amount of the effect size	Values d Impact size	Dependent	Independent variable
Average	0.70	Attainment	Teaching by infographic technique
	0.75	The visual intelligence	

Fourth: Recommendations

In light of the research results and its conclusions that have been reached, the researcher can recommend the following:

- 1- The use of infographic technology in teaching the teaching of social science because of its positive impact on achievement and visual intelligence towards the subject of social studies
- 2- The necessity of creating effective and active teaching supplies, including modern classrooms, laboratories, furniture, equipment, and educational aids (smart boards, screens, data) that help the success of the teaching process according to modern technologies.
- 3- The necessity of providing the necessary time to teach according to modern technological techniques, because the subject of social studies is a difficult subject that contains concepts, facts, and principles that require a great deal of time for the information to reach the minds of students.

Fifth: Propositions

To complement the findings of this research, the researcher suggests the following:

- 1- Conducting research on the effectiveness of infographic techniques in other dependent variables such as (attitude, motivation, visual thinking, and reflective thinking).
- 2- Conducting research on the effectiveness of infographic technology in other school stages, such as the elementary stage and the preparatory stage.
- 3- Conducting similar research to the current research in other academic subjects.
- 4- Conducting research similar to the current research on students.

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