



## Research Article

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## The Extent of the Geography Teachers for the Preparatory Stage Practice Visual Thinking Skills and Their Students' Achievement of Them

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**Abstract:** The current research aims to find out the extent to which geography teachers of the preparatory stage practice the skills of visual thinking and the achievement of their students determines the research community teachers of the center of Karbala province and students of the middle stage in the center of Karbala province. To achieve the goal of the research, a note card was prepared consisting of (20) items to observe teachers, and an achievement test was prepared consisting of (30) items of the type of multiple choice for students of the fourth, fifth and sixth preparatory stages, the final application of the research was on a randomly selected sample of students of schools in Karbala province, and their number (600) students for the three stages. The results showed that the results of the teachers practicing visual thinking skills well, and the students' achievement of visual thinking skills was good. In light of the results of the research, some recommendations and suggestions were developed.

**Keywords:** Visual Thinking, Achievement, Visual Thinking Skills.

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## DEFINITION OF RESEARCH

### Research Problem

As visual thinking skills represent an important basis in the process of teaching and learning social subjects, through the teaching of geographical subjects can develop many skills, especially visual thinking skills, maps of all kinds, graphs, shapes and real images of visual tools reduce in their content many written information and provoke the learner to discover relationships and the ability to predict what may happen in the future, and draw his attention and help him in many of the coding work in memory and perception, and closely connects the learner with the world around him. (Saleh, 2013, 56).

After researching the educational literature, it was found that there is a close relationship between geography and visual thinking, and several studies have reported this, such as: (Campbell, 2010), and a study: (Al-Malaoth & Al-Qahtani, 2020) and the results of those studies proved that there is a noticeable weakness and low level of students' performance of visual thinking skills in general, especially in geography for the intermediate and preparatory stages, and the need to include visual thinking skills in geography books. Based on this, the research problem can be identified in the answer to the following question:

- To what extent do geography teachers in the preparatory school practice visual thinking skills and their students' achievement of them?

### The Importance of research

Scientific and technological development and the profound changes it has brought about have led to a major change in the field of education, including all components of education, its activities, means and objectives, as education has become more organized, more diverse in its functions and objectives, broader in its operations and stronger impact on its children and society. (Mohammed, 2003: 109).

As the role of the teacher emerges as a planner, leader and executor of the educational process, and on this basis his role is evident in the industry of life and its formation and drawing its future, and since learning and teaching is a human need, the presence of the teacher is a social educational need required by life, as no society can do without it, because it is the key to guidance and guide to the way to adapt to life and keep pace with everything new. (Attia & Rahman, 2007, 21).

Visual thinking includes several processes, occurring in the human brain, from comparisons and analyzes, down to the survival of the impact of this interaction in memory. Various skills, and from these processes derived visual thinking skills such as the skill of recognizing, describing, analyzing and determining its dimensions, clarifying relationships and interdependence within the form, or with others, determining its characteristics, interpreting ambiguity in it, explaining its symbols, clarifying gaps and fallacies in it, extracting meanings from it, explaining its symbols, clarifying gaps and fallacies in it and

extracting meanings from it, and reaching new meanings, concepts and principles from during it. (Mahdi, 2006, 44).

### **The Research Objective**

- The extent to which geography teachers in the middle school practice visual thinking skills.
- The level of achievement of preparatory school students for visual thinking skills

### **Research Limitations**

The limits of the current research were limited to:

- Geography teachers for the preparatory school
- Fourth, fifth and sixth literary students in the center of Karbala governorate for the academic year (20 22-20 23)

### **Geography, It Is Defining As**

- Al-Titi "what concerns the detection of human contact with his natural environment and the interaction that will occur as a result of this contact is represented in the many letters that man does and the impact it will leave on them" (Al-Titi, 2002: 24).

### **Second: Visual Thinking Skills**

- Jean, "The process of processing information should be done through images rather than words and phrases" (Jean, 2004, p.5).

### **Third: Achievement:**

- Al-Najjar as: "the knowledge and skills acquired by students as a result of studying a particular subject or educational unit" (Al-Najjar: 2010, 85).

## **THEORETICAL BACKGROUND**

### **Visual Thinking**

It is a pattern of thinking patterns that excites the student's mind using theoretical visual stimuli in order to realize the relationship between knowledge and sports information, absorb, represent and organize them, then integrate them into his cognitive structure and harmonize them with his previous experiences to correct a meaningful acquired experience for him, and it also represents the ability of Aqila to use images, geometric shapes and charts, interpret them and transform them from the language of visual vision and drawn language to verbal, spoken or written language and draw conclusions and meanings in order to communicate with Others (Amer & Masri, 2016: 50).

### **Visual Thinking Skills**

Visual thinking requires the necessary skills that develop students using different activities, and most of the literature agrees that visual thinking skills are a set of processes under which several skills include that encourage students to think and reflect by integrating visual perceptions with cognitive experiences and translating images into understandable written or spoken

language, although they differ in determining the number of key skills according to the desired goal, the target group and the nature of the content through which it is developed. (Al-Hasani, 2020: 8). (Grandin, 2006: 16) mentioned three main skills of visual thinking, namely sight, imagination and drawing, and sub-skills branch out of them, and that the main skills are the origin of all sub-skills, which change according to the nature of the study, and the type of science that you develop for.

### **Achievement**

Academic achievement is the performance carried out by students in academic subjects, which is subject to the measurement process through the teacher's estimate or test scores, and the achievement gives the amount of progress made by students by making a judgment about the success of the teaching patterns used by the teacher in the educational process by identifying and enhancing the positive aspects and diagnosing and addressing weaknesses. (Jado, 2003: 41).

### **Geography**

#### **Objectives of Teaching Geography**

The teaching of geography has several objectives, including the following:

- Providing students with geographical knowledge, represented by facts, generalizations, theories, and laws.
- Developing students' geographical thinking, through observation, deduction, analysis, and comparison.
- Developing students' basic geographical skills, such as reading and drawing maps, identifying places, directions, understanding symbols, and geographical connotations. (Mahmoud, 2005: 63).

## **RESEARCH METHODOLOGY**

The researchers used the observation card to measure the extent of teachers' practice, and the achievement test to find out the students' achievement of visual thinking skills.

### **Research Community**

The research community consists of geography teachers for the preparatory stage in Karbala province and fourth, fifth and sixth grade literary students in Karbala province in day preparatory schools during the academic year (2022, 2023).

### **Research Sample**

The current research sample consisted of teachers of geography for the day preparatory stage in the center of Karbala province and a sample of middle school students for the fourth, fifth and sixth literary grades in the center of Karbala province for the academic year (20 22, 2023).

## **PREPARATION OF RESEARCH TOOLS**

### **Preparing the note card**

- Identify the visual thinking skills that geography teachers must possess and then practice, by preparing a note card that includes these skills.
- The observation card consisted of (20) paragraphs related to visual thinking skills, through which the extent to which the geography teacher practiced these skills during the lesson is known

### **Validity of the Note Card**

To achieve the apparent validity of the observation card, the card was presented to a group of experts and arbitrators. To express their opinions and proposed amendments to the items of the observation card, and in the light of the observations, the card was ready to be applied to the survey sample

### **Reliability of the Observation Card**

The researchers used the method of agreement of observers in calculating the stability of the observation card through the training of an observer of colleagues on the observation card as well as the researchers, the researchers and his colleague observed the teaching performance of ten teachers and this was done according to the following procedures:

After completing the observation of all ten teachers, the researchers used the Cooper agreement coefficient to find the percentage of agreement between the observer and the researchers and the percentage of agreement was (85%). This ratio indicates a good stability of the observation card.

### **Observation Card Exploratory Research Sample**

The researchers applied the observation card to a sample of teachers numbering (10) teachers randomly selected from the same research community of geography teachers in the center of Karbala Governorate and was excluded from the research sample, in order to identify the obstacles that stand towards the application of the observation card and the time it takes for the observation process by the researchers and the mechanism by which the observation will be made as it became clear through the application the clarity of instructions and paragraphs of the researcher), and the average time taken to answer the observation card is (28) minutes, according to the equation for extracting time.

### **Application of the Note Card tool**

After making sure of the authenticity and reliability of the tool, the researchers began to apply the observation card, as he performed the following procedures:

- The researchers began to apply the actual observation of the sample members himself in their schools on Wednesday, 19/10/2022 until Thursday, 29-12-2022.

### **Contracting Achievement Tool**

The researchers followed the following steps in preparing the test:

Formulation of test items:

- The number of items of the achievement test for the fourth grade literary (30) item, and the number of item of the fifth grade literary test (30), either paragraphs of the test for the sixth grade literary (20) distributed to the topics of the preparatory stage specified for the experiment according to visual forms, the researchers have prepared the paragraphs of the test in the form of a questionnaire to be presented to experts and specialists to extract their truthfulness.

### **Validity of the Test**

For the purpose of verifying the validity of the virtual test, the paragraphs of the achievement test were presented to a group of experts and specialists in the methods of teaching sociology, measurement, evaluation and geography, to explore their opinions, observations and suggestions to improve the formulation of the test, and 80% was adopted to accept the paragraphs.

### **Exploratory Application of the Achievement Test**

The researchers of the exploratory application of the test aim to verify the clarity of its paragraphs, and to know the time it takes for students to answer them, and to calculate the stability coefficient, and the statistical analysis of its paragraphs in terms of the level of difficulty of the paragraphs, and their discriminatory forces, and the effectiveness of their non-wrong alternatives, so the researchers applied the achievement test to an exploratory sample from the same research community consisting of (150) students from the middle school students for the fourth, fifth and sixth literary grades, and after application it turned out that the test paragraphs are clear, and that the time it took Students to answer them (40).

### **Final Application of the Test**

The test was applied to the basic sample (600) students from Karbala Center schools, which are (6) preparatory schools. Starting from (9/1/2023), the process of conducting tests lasted for three days.

## **PRESENTATION AND INTERPRETATION OF RESULTS**

The results related to the first question: To what extent do teachers of geography for the middle school practice visual thinking skills?

To answer this question, the researchers applied the observation card form, to find out the extent to which geography teachers in the middle school practice visual thinking skills. To achieve this goal, the researchers observed the practice of geography teachers of visual thinking skills for the preparatory stage, which numbered (40) teachers. The results showed that geography

teachers have a good practice of visual thinking skills in teaching.

The results related to the second question: To what extent do middle school students achieve visual thinking skills? To achieve this goal, the researchers applied the achievement test for visual thinking skills for the geography book for the fourth, fifth literary and sixth literary grades on the research sample consisting of (600) students. The results of the research showed that the research sample has a good achievement of visual thinking skills.

## CONCLUSIONS

- Most geography teachers practice visual thinking skills while teaching.
- The achievement of visual thinking skills by middle school students varied with the use of teaching methods for teachers.

### Recommendations

- Conducting seminars and training courses for geography teachers and informing them of modern strategies and modern teaching aids and developing their teaching skills
- Training teachers for the preparatory stage to develop students' visual thinking skills and holding training courses and workshops for them.

### Propositions

- Conducting a study of the extent to which geography teachers practice the intermediate stage
- Using modern and advanced teaching methods that develop students' visual thinking skills

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