
The effectiveness of an educational program according to visual thinking networks in the achievement of English language among fourth grade preparatory students

Abdul Muttalib Khalaf Ali Ahmed Al Jumaili
Salah al-Din Education Directorate
Abdulmuttlib74zraij@gmail.com

Abstract

Improving the level of academic achievement by raising the levels of thinking. The educational program is a fundamental and necessary pillar to develop the educational process and improve its outputs. The quality of educational outputs depends on the quality of educational programs based on organized scientific foundations, aimed at selecting experiences that meet the needs of learners, satisfy their interest and scientific tendencies, and address their problems. The current research aims to identify the effectiveness of an educational program according to visual thinking networks in the collection of English language among students in the fourth preparatory grade. The researcher assumed the following hypothesis: There is no statistically significant difference at probability level ($p=0.05$) between the average grades of students of the experimental group, who study English according to the educational program, and the average grades of preparatory students, the researcher prepared the educational plans for the current research according to visual thinking networks, and the researcher used the statistical package (spss25) to analyze the data. The researcher reached the following conclusions: The experimental group studied using an educational program according to visual thinking networks excelled in the achievement of English language material. The effectiveness of the educational program prepared by the researcher according to visual thinking networks.

Introduction:

Events at their speed are so that the wave of global news overlaps (COVID-19), as it has affected various areas of life in the general framework. Every day,

modern variables and data appear on the stage of life that need new experiences, renewed thought and new skills to deal with them effectively and successfully. These transformations have cast a shadow on the structure and structure of the educational system. However, the teaching methods and methods commonly used in the educational field pay great attention to memorization and memorization and are rarely paid attention to the practice of higher mental processes by learners. This was reflected at the level of academic achievement in general, in addition to the obvious lack of achievement and prompted the focus on the cognitive skills and methods of students in dealing with study information (Al-Zagul, 2012:22). So the researcher asked an open question: “Are there difficulties in teaching English.”, “Do you have previous knowledge of visual thinking networks.”

The questionnaire was presented to a group of English language teachers prepared by the researcher to obtain the basic rules of the problem and the available solution methods from their point of view, because those in charge of the educational process are the most aware of the strength and weaknesses in a system. Hence, the researcher proposed to establish a study based on a basic type of thinking, visual thinking, which are visual thinking networks So the researcher raised a question: “Is the educational program _ Learning according to visual thinking networks effective in collecting English language among fourth grade preparatory students?”.

Improving visual thinking skills has become one of the goals of teaching that should be achieved by the learner, because it is an interactive knowledge system. In order to achieve this, it is necessary to help learners acquire the scientific method of thinking and focus on the methods and processes of science through the use of strategies that work to develop thinking skills that positively affect raising the level of achievement. (Najdi, 2005, 4)

Another important type of thinking is formal thinking, and here the importance of formal thinking among undergraduate students is highlighted as it represents the age stage in which formal thinking skills grow in their logical form and students can think abstract thinking away from the properties of sensory stimuli, as Piaget studies indicate that formal thinking skills begin to appear in their abstract logical form at this age stage (Piaguer, 1986, 101). The results of the studies indicate a correlation between formal thinking and other cognitive variables. Tobin & Capie (1982) suggested that there is a function relationship between formal reasoning and the acquisition of cognitive process skills, and that complex thinking involves multiple cognitive skills. Identify the effectiveness of the educational program in collecting English material among students of the fourth preparatory grade.

Educational-learning program:

Improving the level of academic achievement by raising levels of thinking. The educational program is a fundamental and necessary pillar to develop the educational process and improve its outputs. The quality of educational outputs depends on the quality of educational programs based on organized scientific foundations, aimed at selecting experiences that meet the needs of learners, saturate their scientific interest and tendencies, and address their problems (Al-Shahrey, 2021:19).

Features of the educational program:

The educational program has several advantages, including:

1. To take into account in its planning and design:
 - A. The reality of society and its philosophy, the nature of the learner and the characteristics of his growth, in light of the findings of the studies of specialists in these fields.

-
- B. Interaction between the learner, the teacher, the environment and the culture of society. Activities of various types performed by learners are under the supervision and guidance of teachers.
 - C. Select educational experiences within the limits of existing and expected material and human resources.
 - D. Emphasize the importance of teamwork and its effectiveness and the need for the learner to relate to it.
 - E. Consistency and integration of its elements.
2. Help learners to accept changes taking place in society and adapt themselves to their requirements.
 - 3 . Diversification in teaching methods, as the teacher chooses the most suitable for the nature of learners and the individual differences between them, which raises their enthusiasm for work and pushes them to learn.
 - 4 . Focuses on sensible learning more than abstract learning, which makes learning more stable.
 5. Trust learners' abilities to participate and choose on the basis that he is an active positive being.
 6. Seeks to develop the learner's personality in all its aspects to meet present and future challenges, develop his ability to self-learn and employ what he has learned in the affairs of his life (Hammadat, 2009, 38-39).

Visual Thinking Networks:

Visual thinking networks are one of the modern strategies developed by Palma Longo (2001), whose content is based on visual thinking. Visual thinking networks are defined as conceptual networks "used to represent conceptual relationships symbolically, figuratively, or verbally; in order to improve student learning, and to build meaningful knowledge, based on clarifying the

relationships between concepts, principles, and theories, and learner perception of the overall picture of concept contents in the conceptual network as a whole, through interreciprocal.

It is also defined as; “building conceptual scientific networks on paper, through verbal or pictological elements, used by the learner to represent, organize, and review scientific knowledge.” (Longo et al, 2002, p4).

Advantages of using visual thinking networks:

1. Develops visual language skills in learners.
2. Develops problem-solving ability by selecting and defining visual concepts.
3. It helps students understand, organize and synthesize information in subjects, and also helps them develop the ability to innovate and produce new ideas.
4. It attracts students towards subjects that include visual forms alongside verbal texts.
5. Contribute indirectly to the formation of positive attitudes towards reading in general, and texts with visual forms in particular.
6. It connects objects, ideas, and information with visual images, shapes, and symbols, making them easier to understand and understand.
7. Help students make visual comparisons, easily retrieve information from memory, and then reach conclusions easily and conveniently.
8. It makes it easier for students to make constructive summaries and conceptual maps that help them organize the scientific material in an easy and fun way.

In conclusion, it can be said that visual thinking networks integrate a number of ways of thinking that help the student form concepts in their proper form.

Previous studies:

Studies on educational programs Visual Thinking Networks, table (1).

Table (1): Shows studies on educational programs.

Name of researcher	Place	Grade	Aim of study	Number of specimens	Gender	Results
Al-Saidi	Jordan	Teachers	It aimed to build a program to teach vegetarianism among the students of the fourth session, Department of Life Sciences, Yarmouk University, Irbid.	120 students	Males Females	The researcher concluded that the educational program was effective in achievement, scientific awareness, critical thinking and compared to the usual way. The researcher recommended the need to use educational programs to teach university students because of its impact on the development of thinking and scientific awareness of students.
Al-Obeidi	Iraq	First grade of middle school	It aimed to identify the effectiveness of the educational-learning program in achievement, and to develop evidentiary thinking skills in English language among middle first grade students.	60 students	Females	The results showed that the experimental group studied according to the program outperformed the control group, which was studied in the usual way in the achievement test and the evidentiary thinking test.
Al-Osaimi	Saudi Arabia	primary sixth grade	The study aimed to reveal the effectiveness of using visual thinking networks in developing sports communication skills among sixth	62 students	Females	The results of the study showed statistically significant differences between the average scores of the experimental and control groups in the dimensional measurement of each of the mathematical

			graders in the holy city of Mecca.			communication skills (reading, writing, acting, speaking, listening), and the overall skills of sports communication and were in favor of the experimental group.
--	--	--	------------------------------------	--	--	---

Methodology:

Experimental design:

Experimental design is the plan developed by the researcher in order to answer research questions, and this plan includes procedures to determine how the researcher carries out his study. Good design enables the researcher to access answers to research questions objectively and away from bias and reduce the sources of error in the experiment procedures, so the design of the research should be seen as a guide and guide to the implementation of each step of the study, in order to avoid randomness, improvisation and confusion in the implementation procedures and thus influence the results of the study, (Al-Jadri and Abu Helou, 2009: 249).

In the current research, the researcher used experimental design with two equal groups with two dimensional tests, as this design contains two groups equal in the number of variables, one of which takes an experimental study of English according to visual thinking networks, while the other takes an officer who studies the subject of English according to the usual way, and then fixes the factors and conditions in the two groups.

Research community and its sample:

The community and sample were defined as follows:

1. The research community: Society includes all the elements and vocabulary of the problem or phenomenon under study (Olan and others, 2008: 25).

2. A community is a group of people or elements targeted by the study, to whom you want to generalize the results of the study. (The Duna and the Pasha, 2013: 20).
3. The research community, which consisted of all the students of the fourth preparatory grade in the preparatory school (Al-Elm) in the center of the city of Tikrit for the academic year (2021-2022), which number (64) distributed to schools, was obtained from the Department of Glory Preparatory Department.

Selection of the research sample :

The sample represents the group of individuals from the community chosen to obtain the required data or information, and each individual or view from the sample. The size of the sample means the number of vocabulary or views that will be chosen to represent the research community, and the data is collected from them (Al-Maani and others, 2012: 88). After determining the research community represented by fourth grade preparatory students and the researcher obtaining information from the school administration, the research sample was intentionally selected from preparatory students (science for boys and Ibn al-Atheer for boys) for boys for the following reasons:

1. The school administration and the teachers of the English language in the two schools expressed their readiness to cooperate with the researcher and provide the necessary facilities to conduct the research experiment and implement it by the teacher of the subject.
2. Most of the school's students are from one geographical area, which ensures that the cultural and social level of the sample is very close.
3. It is located near the researcher's residence, which makes it easier for him to be present.

4. The researcher chose one school to carry out the experiment because there is more than one classroom in it as well to ensure that the two groups are taken on the same day.

After the researcher visited the school that was determined to apply the research experience and the required to create the appropriate conditions, and in a simple random manner, the researcher distributed the two divisions to the two research groups. Division (B) represents the experimental group that will be taught on visual thinking networks of (32) students, and Division A to represent the control group of (32) students, which will be studied according to the usual method of the same school. Table (2) shows the distribution of sample members.

Table (2) showing the members of the research sample .

Group	Class	Subclass	Number of students	%
Control	4 th	A	32	50
Experimental	4 th	B	32	50
Total			64	100

Equivalence of the two research groups :

In order to achieve parity for the members of the experimental and control groups in a number of variables, the researcher conducted the process of parity between the two research groups in a number of variables that may have an impact on the results of the search at the expense of the independent variable, so the two research groups were equalized with the following variables:

A. Sample parity

1. The chronological age of students calculated in months:

The ages of the students were obtained from the school card of each student and from the students themselves through a form distributed to them. After calculating the age of each student in months, they were statistically processed using the T-test for two independent samples. It was found that there are no statistically significant differences between the average age of the students in the two groups (experimental and control) at the level of ($p=0.05$), and the degree of freedom (62). This means the equality of the two research groups in this variable as shown in Table (3).

Table (3): Shows the results of the T-test for the chronological age calculated in months for the two search groups.

Group	Sample	Average	Standard division	Calculated T- value	Tabular T-value	P=value
Control	32	183.422	2.466	0.713	2.000	0.078
Experimental	32	183.011	183.011			

2. Educational level of parents:

The researcher obtained information related to the educational level of parents in the same way, as the educational level of the parents of the sample members was distributed in the two groups (experimental and controller) between five educational levels (primary and below, intermediate, preparatory, institute, college). Table (4) shows the distribution of fathers between the five educational levels, and after merging the educational level (college with the institute and higher certificates under the name of institute and college and above) and integrating the educational level (preparatory with intermediate under the secondary label) because of insufficient preparation of elements in cells under each educational level. The Ki square (χ^2) was used in analyzing these data to test the significance of differences between the two groups and showed no

differences. Statistically significant between the two groups at the probability level of ($p=0.05$) and with a degree of freedom (2) and thus the two groups are equal in the variable of the educational level of parents as shown in Table (4).

Table (4): Shows the results of the Ki square analysis of the level of achievement of the parents of the sample members in the two groups.

Group	Samples	Primary grades	High school	Institutions and colleges	Calculated Ki square (X2)	Tabular Ki square (X2)
Control	32	4	9	19	0.084	5.99
Experimental	32	4	8	20		

3. Educational level of mothers:

The researcher obtained information related to the educational level of mothers in the same way. The educational level of the mothers of the sample members was distributed in the two groups (experimental and the officer) between five educational levels (primary and below, intermediate, preparatory, institute, college). Table (5) shows the distribution of mothers between the five educational levels, and after the integration of the educational level Statistically significant between the two groups at a probability level of ($p=0.05$) and with a degree of freedom (2) and thus the two groups are equal in the variable of the educational level of parents as shown in Table (5).

Table (5): The results of the Ki square analysis of the level of achievement of mothers of the sample members of the two groups.

Group	Samples	Primary grades	High school	Institutions and colleges	Calculated Ki square (X ²)	Tabular Ki square (X ²)
Control	32	13	11	8	0.310	5.99
Experimental	32	12	10	10		

4. IQ test scores:

Intelligence is defined as: a general innate ability, or a general factor that affect all types of mental activity, regardless of the subject and form of this activity. To obtain accurate results on the level of intelligence of the two groups, the researcher used the illustrated intelligence test prepared by Ahmed Zaki. This test is one of the non-verbal tests, and includes (60) paragraphs of pictures and shapes, each paragraph includes (5) pictures in one of these pictures a picture that is different from the rest of the pictures, and requires the respondent to refer to it with a sign (x), as this test measures mental abilities from the age of (8-17) years.

The data were then statistically treated using the T-test for two independent samples, and it was found that there are no statistically significant differences between the average student IQ scores between the two groups at ($p=0.05$) and a freedom score (62). This means that the two research groups are equal in this variable as shown in Table (6).

Table (6): Shows the results of the IQ test for the two groups

Group	Sample	Average	Standard division	Calculated T- value	Tabular T-value
Control	32	39.310	7.372	1.269	2.000
Experimental	32	38.896	6.483		

Internal and external safety of the experimental design

Intrusive variables have effects on experimental research designs and results, and this effect is shown on what is known as the sincerity of experimental research, which is of two types: the internal honesty of experimental research and the external honesty of experimental research (Al-Jadri and Abu Al-Hallou, 2009 :243). Abu Allam, 2004 believes that internal variables affect the design of the search and change its results, and this effect appears on what is known as internal and external honesty of the search, and internal honesty means the degree of absence of the search from external (internal) variables, and the internal honesty of the research design increases whenever we adjust external (internal) variables because we reduce the error factors that affect the construction of the research. External honesty means that we can generalize the results to the larger society, and the external honesty of the research increases as our confidence in the results and our ability to generalize them to the society from which we obtained the sample. (Abu Allam, 2004: 195). These factors are:

1.Experience conditions and accompanying accidents:

Intent to the accompanying accidents, natural disasters, and other accidents that can occur during the experiment, and others that hinder the course of the experiment, and the experiment was not exposed to any of these conditions throughout its course, so this variable did not affect the course of the experiment.

2. The measuring instrument:

The two measurement tools were standardized for the experimental and officer research groups (the English language achievement test). The researcher corrected the students' answers in the test.

3.Selection of sample members:

The researcher tried - as much as possible - to avoid the impact of the overlap of this variable in the results of the research, by choosing the appropriate sample and distributing it randomly to the two research groups, and conducting statistical equivalences between the members of the two research groups as well as belonging to a similar social, economic and cultural environment.

Research Supplies

To carry out the research experience, this required the preparation of a set of study plans and some requirements, as the researcher prepared and prepared them, as follows:

1. Defining the scientific material:

After determining the chapters of the English language book scheduled for the fourth preparatory grade in terms of the number of pages and questions for all chapters as well as extracting concepts in the basic and sub-English subject.

2. Formulation of behavioral purposes:

In light of the analysis of the content, the behavioral purposes of the content of the chapters of the book were formulated according to the levels of the Bloom field of knowledge (remember, understand, apply), numbering (80) purposes. It was presented to the committee of arbitrators with experience and specialization in the field of teaching methods, educational and psychological sciences and social specialists Annex (1) for the purpose of ensuring the formulation of behavioral goals and formulating the behavioral purpose, and the level it measures and in the light of the opinions of experts. Some amendments have been made, an agreement rate (80%) and the most standard

3. Preparing teaching plans:

In the light of the analysis of the scientific material and the formulation of behavioral purposes and what the preparatory referred to, as well as reviewing the preparatory and previous studies on which they were relied upon, the researcher developed teaching plans according to the visual thinking networks, for the experimental group and commensurate with the behavioral purposes of each lesson.

4. Preparation of the specification table:

The specification table helps provide the researcher or test designer with an outline to build a particular test, it shows us how many questions the test should consist of in general and shows how many questions measure each type of goal within each aspect of content in particular. (Ali, 2009: 243).

The specification table is defined as a matrix or two-dimensional table, the first dimension is horizontal that includes educational or behavioral objectives, and the second dimension is vertical and includes a chart of the content of the course and its topics, as well as the relative importance of both objectives and content. (Omar et al, 2010: 411). So the researcher prepared a table of specifications and as in table (7)

Table (7): Specification table (test map).

Content	Number of lessons	%	Behavioral purposes			Total
			Knowledge	Understanding	Application	
			40%	30%	30%	
1 st	6	30	8	6	6	20
2 nd	6	40	6	8	8	22
3 rd	6	30	8	6	6	20
Total	20	100	22	20	20	62

Research Tool

In order to achieve the goal of research and test its hypotheses, there were two subjects, the first is the achievement test of the subject of the English language and the second is the measure of the trend towards the English language as follows.

I. Statistical analysis of the achievement test paragraph:

The process of analyzing the paragraphs of the test questions is one of the effective and distinctive ways to improve the adequacy and quality of the questions, as it reveals the appropriateness of the academic content and educational goals for learners, highlights the most important weaknesses and tries to correct errors in them, so it is the basis for improving education, as well as increasing the sincerity and stability

The goal of analyzing test questions is to extract the so-called difficulty, ease and discrimination coefficient, and identify the camouflages, and then use the results of this analysis to evaluate the test questions and judge whether or not they are appropriate to achieve the test goal. (Al-Kubaisi and Rabie, 2008: 135-136), on this basis, the test was applied to an exploratory sample consisting of

180 students from the fourth preparatory grade other than the research sample to confirm the psychometric characteristics. The test was corrected by the researcher and the grades were ranked descending from the highest grade (53) to the lowest grade and it was (7), then (27%) of the highest and lowest grades were taken as the best ratio for comparison between two different groups from the total group to study the characteristics of vertebrae, thus the values of the grades of the upper group ranged between (73-28) degrees, and the values of the grades of the lower group between (22-8) degrees.

A. Difficulty coefficient:

Mmm The difficulty coefficient of test paragraphs is defined as: The percentage of examinees who answered the wrong answer to the paragraph to the total number of examinees who tried to answer the paragraph (Esalm, 2010: 234). The difficulty factor for each of the test paragraphs was found according to the difficulty equation, which ranged from (0.78-0.5) and as shown in Appendix (2), indicating that all test paragraphs are acceptable and applicable, if the test is good and valid if the difficulty factor is between 0.2-0.8 (Allam, 2013: 307).

B. Discriminatory power of paragraphs:

Distinatory power means: its ability to distinguish between the upper and lower groups (Abu Allam, 2005: 330), and in order to determine the validity of the test and the clarity of its paragraphs with regard to students, the answers were corrected. They were divided into two groups (27%) upper group and (27%) minimum group. The discriminatory strength of each of the test paragraphs was calculated by using the distinction equation. After the researcher calculated the distinction of each of the test paragraphs, he found that it ranged from (0.12 -0.48). This indicates that 60 of the test paragraphs are acceptable and distinctive, that is, they distinguish between the upper group and the lower group except for the paragraphs (7.18) are not distinguished. It was excluded

because its characterization coefficient is less than (0.30). Alam (2013) indicates that a paragraph whose distinctive strength is greater than (0.3) is good (Alam, 2013: 306).

C. The effectiveness of the wrong alternatives to paragraphs: The effectiveness of the wrong alternatives refers to the fact that the camouflaged is able to attract learners so that some of them choose it, that is, misleading the learners and distracting them from the right answer. These camouflaged or wrong alternatives are effective if the number of people who attracted them in the lower group is greater than the number of those who attracted them in the higher group, (Al-Mehna, 2015: 140). In light of this, the researcher extracted the effectiveness of the alternatives (disguised) to the test paragraphs of the type of multiple choice only (60) paragraphs, through the application of the equation of effectiveness of alternatives, as the alternative is considered effective if it is negative and less than (0.05) (Al-Nahban, 2004: 203). All alternatives were negative and acceptable ratio.

D. Test stability:

Consistency is defined as the degree of consistency in measuring the attribute that is the subject of the measurement from time to time if we reapply the instrument a number of times, or in short it is the "measurement accuracy". (Al-Shayeb, 2008: 102) The test was applied to a sample of (30) students from the target sample and it was applied, then after unloading the data, the researcher applied the Corder Richardson-20 equation because it deals with grades (zero - one) as well as ease and difficulty, it was shown that the degree of stability reached (0.866)

Implementation of the experiment:

The researcher applied the experiment to the students of the fourth preparatory school in Ibn Al-Atheer School and the high school of science.

28/10/22, at the beginning of the first semester of the academic year, 2021-2022, after the weekly lesson schedule for geography was organized in cooperation with the school administration, the researcher taught both groups (controller, experimental), the experimental group is taught according to the educational program, while the control group is taught according to the usual way, as follows:

Correction of the test tests:

After the completion of the application of the experiment and the conduct of the post-test, the process of correcting the answer to the paragraphs of the post-test and grading begins. The correction of the test depends mainly on the type of test used and the actions taken for the purposes of correction.

The statistical means used:

The SPSS statistical bag was used to find the following-:

1. T-test equation for two independent samples (Allam, 2005:202).
2. The equation of the difficulty of the paragraph.
3. The equation of distinguishing the paragraph (Kuafha, 2010:150).
4. Equivalence of the effectiveness of alternatives (textiles) (Al-Dulaimi, 2005:93).
5. Kuder equation _ Richardson.

$$(KR_{20}) = \frac{n}{n-1} \left(1 - \frac{\sum P_i Q_i}{S^2 X} \right)$$

6. Chi-square (χ^2)

View the results:

1. The results related to the first hypothesis, which states the following:

There is no statistically significant difference at the significance level ($p=0.05$) between the average grades of experimental group students, who study English according to the educational program, and the average grades of

students of the control group, who study the same subject according to (traditional method) in the achievement test in English.

For the purpose of verifying this hypothesis, the researcher extracted the arithmetic average and the standard deviation of the two collection research groups and then applied the T-test for two independent samples (t-test) and after correcting the answers of the students in the two groups (experimental and control) to the achievement test, as shown in Table (8).

Table (8): Shows the arithmetic mean, standard deviation, and the T-value of the two collection research groups.

Group	Sample	Average	Standard division	Calculated T- value	Tabular T-value	P= value
Control	32	54.355	5.841	7.197	1.997	0.001
Experimental	32	44.388	5.221			0.071

It is clear from Table (8) that the calculated T value was (7.197), which is greater than the T-T table value of (1.997) at the significance level (0.05) and the degree of freedom (62), which means that there is an individual D statistically between the experimental and control groups and for the benefit of the experimental group.

The researcher attributes the reason for the appearance of moral differences in the achievement test to the use of modern educational programs in teaching, as it is a factor conducive to the superiority of students who studied according to visual thinking networks compared to the control group that studied according to the usual way because they are more receptive and inclined to teaching steps in these modern models, because changing the style of teaching from the usual method to visual thinking networks may prompt students to investigate aspects of the new strategy and are eager to follow the lesson, which increases their understanding better than the usual method. Working in groups and dividing the

steps of the lesson into sequential parts makes the lesson more enjoyable. This activates their thinking about obtaining information and ideas that will elevate them in all aspects (knowledgefully, skillsfully, and emotionally).

The researcher believes that the advantage of the experimental group may be due to several reasons, including:

1. Networks help remember and retrieve necessary past information, Identifies key concepts, distinguishing between important and less important information.
2. It also stimulates the learner's motivation, and encourages him to employ what he has learned effectively, as the learner who organizes his information within a broad conceptual framework can collect coherent information, no matter how many, and thus the ability to employ it in appropriate educational situations. Increases commitment and discipline among learners.
3. Facilitates the management of educational situations.
4. Supports new ways to exchange ideas.
5. Improve the quality and quality of learning, and increase interaction among learners. Longo, 2001 (Blair *et al*, 2002; Al-Khaznadar & Ribhey, 2006, 627).

Conclusions:

Through the results of the research, the researcher reached the following conclusions:

- 1- The experimental group studied using an educational program according to visual thinking networks excelled in the achievement of English language material.
- 2- The effectiveness of the educational program prepared by the researcher according to visual thinking networks.

فاعلية برنامج تعليمي على وفق شبكات التفكير البصري في تحصيل مادة اللغة الانكليزية

لدى طلبة الصف الرابع الاعدادي

عبدالمطلب خلف علي أحمد الجميلي

مديرية تربية صلاح الدين

الملخص

يهدف البحث الحالي الى التعرف على فاعلية برنامج تعليمي على وفق شبكات التفكير البصري في تحصيل مادة اللغة الانكليزية لدى طلبة الصف الرابع الاعدادي وافترض الباحث الفرضية الاتية :

- لا يوجد فرق ذو دلالة احصائية عند مستوى دلالة (٠,٠٥) بين متوسط درجات طلبة المجموعة التجريبية، الذين يدرسون مادة اللغة الانكليزية على وفق البرنامج التعليمي، ومتوسط درجات طلبة المجموعة الضابطة، الذين يدرسون المادة نفسها على وفق (الطريقة التقليدية) في الاختبار التحصيلي في مادة اللغة الانكليزية.

واستخدم الباحث المنهج التجريبي لملائمته طبيعة البحث الحالي ، واشتملت عينة البحث طلبة الصف الرابع الاعدادي ، وقام الباحث بأعداد اختبار التحصيل لمادة اللغة الإنكليزية للصف الرابع الاعدادي ، وقام الباحث باعداد الخطط التعليمية للبحث الحالي على وفق شبكات التفكير البصري ، واستخدم الباحث الحزمة الإحصائية (spss25) لتحليل البيانات .

وتوصل الباحث الى الاستنتاجات الاتية :

- تفوق المجموعة التجريبية التي درست باستخدام برنامج تعليمي على وفق شبكات التفكير البصري في تحصيل مادة اللغة الانكليزية.

- فاعلية البرنامج التعليمي المعد من قبل الباحث على وفق شبكات التفكير البصري. وأوصى الباحث مايلي :

- اعتماد البرنامج التعليمي المعد على وفق شبكات التفكير البصري في تدريس مادة اللغة الإنكليزية في المرحلة الإعدادية .

- إطلاع مدرسي ومدرسات مادة اللغة الإنكليزية ، على أسس وخطوات تطبيق البرنامج التعليمي المعد وفق شبكات التفكير البصري ، وذلك عن طريق الدورات، أو الندوات التربوية، أو المنشورات الخاصة التي تشرح كيفية تحسين التحصيل لدى الطلبة .

- جعل الطلبة المحور الرئيسي في العملية التعليمية وإعطاؤه الدور الأكبر في المناقشة والاستفسار وفي البحث عن الإجابات والحلول واستنباط الأفكار الأكثر إبداعية وتوظيفها بنحو صحيح.

References:

Abu Allam, Raja Mahmoud (2005). Education Calendar, 1st Edition, Dar Al-Masirah Publishing and Distribution, Amman, Jordan.

Bahi Mostafa Hussein (1999). Scientific Transactions Between Theory and Practice Persistence, Honesty, Objectivity, Standards (Cairo, Book Center for Publishing, Egypt.

Al-Bayati, Abdul Jabbar Tawfiq and Zakaria Athanasios (1977). Descriptive and Inference Statistics in Education and Psychology, Mustansiriya University, Culture Foundation Press/Baghdad.

Al-Jadri, Adnan Hussein, Waabhoulu, Yacoub Abdullah (2009). Methodological Foundations and Statistical Uses in Educational and Human Sciences Research, University Library, Ithraa Publishing and Distribution, Amman _ Jordan.

Al-Dulaimi, Ihsan Aliwi, and Adnan Mahmoud Al-Mahdawi (2005). Measurement and Evaluation in the Educational Process, 2nd, Department of Information, Baghdad.

Al-Shayeb, Abdul Hafez (2009). Basics of Educational Research, 1st Edition, Wael Publishing, Printing and Distribution House, Amman, Jordan

Allam, Salahuddin Mahmoud (2013). Mastering Modern Psychometrics Theories and Methods, 1st Edition, Dar Al-Fikr Publishing and Distribution, Amman, Jordan.

Allawi, Mohamed Hassan and Mohamed Nasreddine Radwan (1998). Measurement and Evaluation in Physical Education and Sports Psychology, Cairo, Dar Al-Fikr Al-Arabi, Egypt.

Olayan, Rebbi Mustafa and Ghoneim Othman Mohammed (2010). Methods of Scientific Research, Theoretical Foundations and Scientific Application, 4th, Dar Safaa Publishing and Distribution, Amman, Jordan.

Farhat, Leila El Sayed, (2001). Measurement and Testing in Physical Education, 1st, Book Publishing Center, Cairo, Egypt.

Kazem, Ali Mahdi (1990). Building a codified measure of self-concept among middle school students, unpublished master's thesis, College of First Education, University of Baghdad, Baghdad, Iraq.

Al-Kubaisi, Waheeb Majid (2010). Applied Statistics in the Social Sciences, 1st Edition, United World, Beirut, Lebanon.

Al-Kubaisi, Abdul Wahid and Rabie, Hadi (2008). School Conductive Tests, 1st Edition, Arab Society Office, Amman, Jordan.

Kwafaha, Tayseer Mufleh (2010). Measurement, Evaluation, Measurement and Diagnosis in Special Education, 3rd Edition, Dar Al-Maseira for Publishing and Distribution, Amman, Jordan.