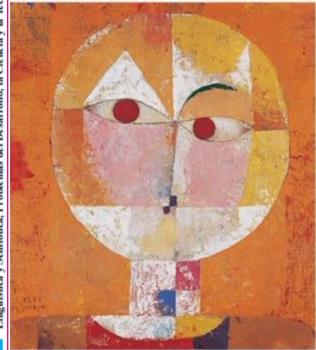
R evista de Antropología, Ciencias de la Comunicación y de la Información, Filosofía, Lingüística y Semiótica, Problemas del Desarrollo, la Ciencia y la Tecnología

Año 35, 2019, Especial Nº

23

Revista de Ciencias Humanas y Sociales ISSN 1012-1587/ ISSNe: 2477-9385 Depósito Legal pp 198402ZU45



Universidad del Zulia Facultad Experimental de Ciencias Departamento de Ciencias Humanas Maracaibo - Venezuela

# The effect of the strategy of questions in developing the thinking skills

Raida Hussein Hamid<sup>1</sup>

<sup>1</sup>Al-Forat Al-Awsat Technical University Technical College Musayyib <u>raida.almusawy@mail.uc</u>

> **Ibtisam Sahib Mousa Al-Zwaini<sup>2</sup>** <sup>2</sup>University of Babylon/ College of Basic Education Ebtisam6589@mail.uc

# Abstract

The study aims to investigate the effect of the strategy of cluster questions in developing the thinking skills of the scientific fourth grade of female students in literature and text material via statistical boot (SPSS). As a result, teaching according to the strategy of the cluster influenced the development of intelligent thinking among the students of the experimental group. In conclusion, the strategy of the cluster helped to increase the students' effectiveness and their love for the material. The strategy of the cluster helped to develop the intelligent thinking of students through a lot of thinking, discussion, research and interpretation.

Keywords: Effect, Strategy, Questions, Developing, Thinking.

# El efecto de la estrategia de preguntas en el desarrollo de las habilidades de pensamiento

# Resumen

El estudio tiene como objetivo investigar el efecto de la estrategia de preguntas grupales en el desarrollo de las habilidades de pensamiento de las estudiantes científicas de cuarto grado en literatura y material de texto a través de arranque estadístico (SPSS). Como resultado, la enseñanza de acuerdo con la estrategia del grupo influyó en el desarrollo del pensamiento inteligente entre los estudiantes del grupo experimental. En conclusión, la estrategia del grupo ayudó a

aumentar la efectividad de los estudiantes y su amor por el material. La estrategia del grupo ayudó a desarrollar el pensamiento inteligente de los estudiantes a través de mucho pensamiento, discusión, investigación e interpretación.

**Palabras clave:** Efecto, Estrategia, Preguntas, Desarrollo, Pensamiento.

#### **1. INTRODUCTION**

One of the most important challenges facing the reader today is his inability to understand reading and comprehension, understanding reading and deepening it is missing in our educational institutions, especially in the preparatory stage. The reader thinks about the text and uses it to solve the individual's problems.

Most cases of students' aversion to Arabic language materials may be the teacher's lack of skill in following the successful method to connect those rules to the minds of learners, the teacher successful. It is he who can make grammar as a living material in the world of the student. This is a very difficult work that requires a special personality that combines to the abundance of material, digestion and methods of submission flexibility and tactfulness, the level of skill teacher is the ones that determine the students' understanding of the grammar of the language, their turn to it or their aversion to it.

The method of teaching the literature and text material currently practiced in most schools is a cause of boredom and traditionalism

1093

because it is devoid of any artistic aspect. The teacher may give a general idea of the literary text or poetic poem. The students begin to read one after the other, where the mechanism and the full comfort of the teacher, and rarely taught by the student any interest, and there is no doubt that this manifestation of the lack of our students among the most prominent reasons of complaint, which are exposed by our schools these days.

Based on this, the two researchers decided to use a strategy in the teaching of modern strategies, namely the strategy of cluster questions to contribute to the development of intelligent thinking among fourth-grade students in the literature and texts.

The current research aims at identifying (the impact of the strategy of cluster questions in developing the thinking skills of the fourth-grade students in literature and texts).

To achieve the research objective, the researchers formulated the following hypotheses:

The first hypothesis: There is no significant statistical difference at the level of significance (0.05) between the average score of students of the experimental group who study literature and texts according to cluster strategy and the average grades of students control group who study the same article in the usual way in the test of smart thinking. The second hypothesis: There is no statistically significant difference at the level of significance (0.05) between the average score of intelligent thinking test tribal and remote experimental group students who study literature and texts according to cluster strategy.

1. Human Dimension: Fourth Grade Students, for the academic year (2017-2018).

2. The temporal aspect: the first semester of the academic year (2017 - 2018).

3. The Spatial aspect: one of the secondary schools or dayschool preparatory for girls in the center of Babil province.

4. The Knowledge aspect: A number of topics in the book of literature and texts scheduled by the Ministry of Education for the fourth-grade scientific year (2017 - 2018): (The topics included literature and texts.

# 2. LITERATURE REVIEW

Hammadi is a pot of good literary heritage old, and modern poetry and prose, where the beauty of art, and its material through which the development of literary language skills development based on the depth and attention and development, and reflect on the knowledge of the citizens of beauty in the idea and imagination and emotion and style (HAMMADI, 2014). The text of the hadeeth brings you up, the text of the hadeeth is provided by a text. It is lifted up and all that is shown is a text, and the text of the man is a text, if he asks him about it until he inquires about what he has, and the text of everything is finished (IBN MASUR, 2004). Alani and others: These are selected literary pieces that have a lot of artistic beauty that carry students to literary taste. They aim at refining the conscience, filtering out the feeling, refining the taste, and fluttering the senses.

It has mentioned in ElEin Bok in the article (thought): Thought: Name of thinking. He mainly thinks of matter; he thinks of it. a meditative man, thought and one thought Farahidi, article. Terminology: (Saadah) is a complex concept consisting of three elements consists of complex cognitive processes, especially problem solving, and less complex as understanding and application in addition to knowledge of the content of the substance or subject with the availability of preparations and tendencies and trends (SAADAH, 2003). Thoughtful thinking: knew by:

- Referring it as the ability of the individual to use clear and specific concepts and terms and has evidence of the validity of his ideas and the conclusions reached.

- Rodriguez: It is the awakening of the mind based on the work of my arithmetic and on the wit and trick.

The concept of literature and texts:

It is not possible for the Arabic language to include among its heritage historical dictionaries that take the history of the meaning of the words and their meanings through different ages. If these historical lexicons are available, it is easier for us to have a history of the life, development, and use of words. The objects as living beings have their own lives that adapt and change their meanings by changing the ages and environments. Evidence of this has been affected by some of the evolution in the significance and difference in the inspection across the different ages until the word has become at the present time expresses.

As for the texts, what is only a selection of poetry and prose is to recite, understand, taste, and preserve the beauty of its beauty, the splendor of its ideas and the need for it in life, and to preserve it as an immortal heritage. It is understood from the texts to define the students' knowledge of their Arab and Islamic history from literary, scientific and cultural heritage and bright images of values, ideals, and types of knowledge. The student starts from this bright niche to improve his senses and improve his taste and sense of purpose. And the speed of understanding and to increase their linguistic expertise and raise their artistic and literary tastes (ABU MOGHLI, 1986)

- The basic question: is the question of the basic umbrella, which is known as an explanatory question that raises the issue and has a relatively large field. - The sequential questions: These are questions that explain the evolution of the issue or subject of study and these questions are grouped together (KHATIBAH, 2005).

The teacher can use this strategy according to the following steps:

First: start the discussion with some questions about the facts of the subject to give students a background on the material.

Second: Asking the main question to focus the discussion and stimulate reactions.

Third: Start asking questions related to a subject.

Fourth: Discuss the questions related to the subject.

Fifth: Re-submit the main question that is about follow-up questions in the subject.

The smart thinking of modern concepts in cognitive psychology is Arthur Costa and Bina Kalek, the founders of the theory of intelligent thinking, and the first to introduce this concept as a result of their work in education. Both believe that to make students intelligent thinkers we should offer them a mental adventure through educational procedures and processes, especially strengthen the willingness to think and skills by encouraging curiosity and exploration and encourage them to believe that the area before their thinking will be available and welcome and produced.

- The location of the components of intelligent thinking in the two halves of the brain:

Roger Spiery was able to know the specialty of the brain hemispheres when he and a group of surgeons at the California Institute performed a series of surgeries that made the brain hemispheres possible in the brain. Arthur Costa has shown that the components of intelligent thinking are distributed on both sides of the brain, whether the left or right brain, as follows: The right side includes: First: knowledge, which includes three components:

- Application of previous knowledge to new situations (previous experiences)

- Thinking beyond knowledge (thinking).

- Asking and probing problems.

Second: Accuracy includes precision in thinking.

Third: soft and obedient: It includes (flexibility in thinking, creativity (flexibility, originality, fluency).

Fourth: naive: It includes humor (SABITAN, 2010).

• The left side of the brain contains three basic processes are as follows:

A - Control and control: It includes three components: (Perseverance, the risk of responsible (adventurous), control of delay (reduce stress).

B - Understanding: includes: (listening to others with understanding and sympathy, mutual thinking).

The senses include: (lifelong learning, use of all senses). It is known that the areas of the brain that are involved in learning become known and defined by scientists, which is called the brain map.

The two researchers dealt with a number of studies related to the subject of the research and were arranged according to their chronological sequence and as follows: A study of intelligent thinking. First: the study of AL-SHAMMARI (1998) smart thinking among students in the preparatory stage.

The study was conducted at the University of Baghdad College of Education for Girls, aimed to know the intelligent thinking among students in middle school, the two researchers followed the descriptive approach and adopted the measure of intelligent thinking which was applied to a sample of (500) students from the middle school students, using the appropriate statistical means. They found that females enjoyed with more intelligent thinking than males, and that the students of the scientific branch enjoy the smart thinking on the literary branch, and recommended the researchers need to develop the curriculum by adding vocabulary to students to develop intelligent thinking.

Second: the study of the fight, and praise God. The study was conducted at the University of Baghdad College of Education for Pure Sciences, it aims to build a training program according to the productive thinking of biology teachers, to verify its effect on the intelligent thinking of their students, the researchers adopted experimental design with partial control of two equal groups.

The research community includes the biology teachers of the preparatory stage of the General Directorate of Karbala Education. The sample size (42) teachers and schools and the number of students (420) students, the training program was built in three phases (planning, implementation, evaluation), 10 training days were identified by two sessions per day, at the time of the three-hour sessions, the tool was built to measure the thinking clever, consisting of (80) paragraph, the results showed that the experimental group surpassed the biology students, to the students of the control group (AL-TAHER, 1984).

THE STUDY OF AL-KHAFAJI (2002). The study was conducted at the University of Baghdad / College of Education Ibn al-Haytham, and aims to know the effect of both cluster questions and questions classified according to Bloom's cognitive levels in achievement and the scientific thinking of second-grade students Institute of Teacher Education, the researchers adopted a partial experimental design, the research sample (30) students for both the experimental group and the control group, the researchers prepared a collection test with a total of (60) paragraphs, and reached the superiority of the experimental group on the control group (AL-KHAFAJI, 2002).

The study was conducted at the University of Diyala / college of Education for Human Sciences which aims to know the effectiveness of cluster strategy in the development of the intelligent thinking in the fourth literary grade female students in history, the researchers adopted a partial experimental design, the sample of the research (66) students (33) students in each division, the researchers used the Eisenberg scale to measure thinking, (30) paragraphs, the researchers reached the superiority of the experimental group on the control group and recommended the need to use the strategy in teaching (IBRAHIM, 1989).

What the two researchers noted from the previous studies is that they dealt with the strategy of cluster questions, or what is called an independent variable, in different places where studies were conducted at the University of Baghdad and at the University of Diyala. The present study agreed with the studies conducted in Iraq. The experimental group that used the cluster strategy on the group that used the usual method, which prompted the researchers to encourage them to study the impact of the strategy of cluster questions in the development of intelligent thinking skills of students in the fourth science grade in section B and texts (Taib et al, 2018: Nnamani et al, 2019).

# **3. THE METHODOLOGY**

Research Methodology: The two researchers chose the experimental approach to achieve their research objectives, because it is a suitable method for research procedures and to achieve accurate results. Experimental Design: The experimental design was adopted by the two experimental researchers with partial control, for the experimental and remote control groups, because they are more suitable for their research procedures, Figure (1).

Groups	Pro-test	Independent variable	The dependent variable	Post-test							
First experiment	Intelligent thinking test	Strategy cluster traditional way	development skills smart thinking	A test of smart thinking							

Figure 1: Experimental Design for Research

The Research community: The research community determines the fourth-grade students in the preparatory and secondary schools in the center of Babil province for the academic year 2017/2018. The Sample of the research: The sample of the research (76) students by (38) students in the experimental group, and (38) students in the control group, from the school of junior high school for girls for the fourth grade scientific, after the exclusion of (5) female students.

The Research tools: Before starting the experiment, the two researchers were keen to equate the members of the two research groups statistically with some variables that they believe may affect the safety of the experiment. These variables are the academic achievement of parents, age and grades of Arabic language for the previous year, Table (1) and (2).

Table 1: Frequency of academic achievement of the parents of the two research groups and calculated and tabulated Ka2 values.

-		0	- T							
dn	chievement		c write	school	te school	tute	above level	ı degree	KA2 value	ince level at )5)
group	Academic achievement	No.	Read & write	Primary school	Intermediate school	Institute	College and above level	Freedom degree		The significance level at (0.05)
Experiment	lers	38	7	8	7	4	12		1.72	ot statistically significant
Control	Fathers	38	6	6	5	10	11			Not statistically significant

Raida Hussein Hamid et al. Opción, Año 35, Especial No.23 (2019): 1092-1111

ıt		38	12	6	4	10	6		
imer									
Experiment	rs								
ш	he								
	Mothers	38	12	5	6	11	4		
	2								
rol									
Control									
С									

Table 2: Frequency of academic achievement of the parents of the tworesearch groups and calculated and tabulated Ka2 values.

Group	Variable	No. of sample		Arithmetic mean		Differences	Degree of freedom	⊢ Ac ed	Value	Sc ed	hedul	The significance level at (0.05)
Expert.	Tim e age	38	1	87.22		29 5.7 4	7 4	1.0	)85	2		Not statistic ally signific ant
Contro.		38	1	88.72		39. 82						un
Expert.	Score of Arabi langu	c	38	67.4 22	1 4	01.3	74		0.577		2	Not statistic ally signific

Contro.	e materia 1	38	188. 72	39.82				ant
Expert.	intellig ent test	38	19.2 1	6.535	74	0.558	2	Not statistic ally signific ant
Contro.		38	18.3 9	6.197				an
Expert.	Smart intellig ent pro- test	38	13.0 5	3.571	74	0.497	2	Not statistic ally signific ant
Contro.		38	12.6	2.822				ant

Control of Exotic Variables: Although the two researchers verified the equivalence of the two sets of research in some variables that they think to affect the course of the experiment, they tried to avoid the effect of some extraneous variables in the course of the experiment. Some of these variables and how to control them:

1. Experimental and Incident Accidents The experience in the current research did not accompany any incident that impeded its progress.

2. Experimental Exhaustion Throughout the duration of the experiment, the experiment did not leave, interrupt or transfer one of its students from one class to another or from one school to another, except for some cases of individual absence experienced by some research groups (experimental and control) in relatively low proportions.

3. The Measurement Tool The two researchers used a standardized tool with students of the experimental groups (experimental-control), which is the test of intelligent thinking.

4. Maturity This factor did not have any effect in this study, because the duration of the experiment was uniform for the two research groups, the first semester.

5. Course material: The specific subject matter for the experiment was one for the two research groups.

6. Teacher: The two researchers studied the two research groups.

The first hypothesis: There is no significant statistical difference at the level of significance (0.05) between the average score of students of the experimental group who study literature and texts according to cluster strategy and the average grades of students control group who study the same article in the usual way in the test of smart thinking. The effect of the strategy of questions in developing the thinking skills

After the application of the smart thinking test, the researchers calculated the scores of the students of the two research groups. The average score of the students in the experimental group was 25.95 with a standard deviation (3.479), while the average score of the control group (20.45) was a standard deviation (4.74). The results showed that the calculated T value (5.766) was greater than the numerical value of (2). This means that the experimental group of students who studied according to the cluster question strategy exceeded the control group studied according to the usual method. Table (3).

Table 3: Mathematical averages and standard deviations test results (T) and the magnitude of the effect (ETA) of the differences in the post-test between the two research groups:

	test between the two research groups.										
		mean	ce	egree	Two T	values	f Ice	ze x)			
Group	No.	Arithmetic mean	Difference	Freedom degree	Accounted	Scheduled	Level of significance	Effect size (ETA box)			
		Ar		Fr	Ac	Sci	51				
Expert.	38	28.97	1.078	74	16.284	2	Not significant	0.782			
Contro.	8	1.92	.443								

#### 4. RESULTS

The results of the hypotheses showed that teaching according to the strategy of the cluster influenced the development of intelligent thinking among the students of the experimental group. The reason may be due to one of the following reasons:

1. Cluster strategy helps to provide an appropriate learning environment through the questions that are raised and that stimulate students to think.

2. The cluster strategy provided the opportunity for students to participate actively in the lesson, and to allow students to express their views freely without concern or tension.

3. The strategy helped the students to draw their attention to the lesson, the good listening, and the accuracy of the answer.

4. The strategy of the cluster stimulated the curiosity of the students and the abundance of discussion.

# 5. CONCLUSIONS

1) The strategy of the cluster helped to increase the students' effectiveness and their love for the material.

2) The strategy of the cluster helped to develop the intelligent thinking of students through a lot of thinking, discussion, research and interpretation.

#### REFERENCES

- ABU MOGHLI, S. 1986. "Modern methods of teaching Arabic language". Vol. 2. Amman, Jordan.
- AL-KHAFAJI, Z. 2002. Definition of the effect of both cluster questions and questions classified according to Bloom's cognitive levels in the achievement and scientific thinking of second-grade students is defined by the Institute of Teacher Education. Baghdad University, College of Education (Ibn Al-Haytham Master Thesis unpublished). Baghdad. Iraq.
- AL-SHAMMARI, Z. 1998. The Effect of Using Two Tribal Strategies for Teaching Literature and Texts in the Achievement of Fourth Year Students. Educational and Psychological Sciences Blog. Bayt al-Hikma, Baghdad. Iraq.
- AL-TAHER, A. 1984. "Principles of Arabic Language Teaching". Dar Al-Raed Al-Arabi. Vol. 2. Jordan.
- HAMMADI, H. 2014. "Curricula of Arabic Language and Methods of Teaching between Theory and Practice". Dar Al-Farahidi Publishing and Distribution. Vol. 1. Baghdad. Iraq.
- IBN MASUR, M. 2004. **The Arabs, c1, c6.** The Literary Foundation for Publications. Beirut, Lebanon.
- IBRAHIM, A. 1989. "The Technical Wave of the Teachers of Arabic Language". Dar Al Ma'aref for Printing and Publishing. Vol. 16. Cairo, Egypt.
- KHATIBAH, A. 2005. Learning Science for All, printing 1, Dar Al-Masirah. Publishing and Distribution. Amman, Jordan.
- NNAMANI, K. E., ENYIAZU, C., NWOKE, I. S., OCHIAKA, E. D., AGBO, J. N., & OVAGA, O. A. 2019. "Beyond the Conventional Development Approaches: Evolving and Institutionalizing the Strategic Framework for Sustainable

Wealth Creation and Development in Odukpani Local Government Area of Cross River State, Nigeria". Journal of Educational and Social Research, 9(1), 53.

- SAADAH, J. 2003. **Teaching Thinking Skills (with hundreds of applied examples)**. Dar Al Shorouk Publishing and Distribution. Amman, Jordan.
- SABITAN, F. 2010. Weakness of Student Achievement, Reasons and Solutions for the Arabic Language and its Different Branches, Islamic Religious Education, Sociology I. Al-Janadriyah for Publishing and Distribution. Saudi Arabia.
- TAIB, C. A., ITENG, R., & LAZIM, H. M. 2018. "Assessing and Developing Public Libraries Performance: Kano's Model Approach". Int. J Sup. Chain. Mgt Vol, 7(4), 77.





Revista de Ciencias Humanas y Sociales Año 35, Especial No. 23 (2019)

Esta revista fue editada en formato digital por el personal de la Oficina de Publicaciones Científicas de la Facultad Experimental de Ciencias, Universidad del Zulia. Maracaibo - Venezuela

www.luz.edu.ve

www.serbi.luz.edu.ve

produccioncientifica.luz.edu.ve