

The Effect of Using the Little Teacher Strategy Among Fourth Grade Pupils on Their Mathematical Tendencies

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ABSTRACT

The aim of the research is to identify the effect of using the strategy of the young teacher among fourth grade primary pupils on their mathematical tendencies, and in order to achieve the aim of the research, the researcher adopted the experimental approach, and applied the experiment on a sample of (61) students of the fourth grade of elementary school in Al-Shahid Jumah Al-Sudani School for the academic year (2020 - 2021), as it was distributed into two groups, one of them is an experimental that was studied according to the strategy of the young teacher by (30) students and the other was a control that studied according to the usual method by (31) students, the two groups were equivalent in variables (parental achievement, intelligence, previous achievement in mathematics Prior knowledge in mathematics), and the research tools represented in the mathematical tendency scale were prepared, so the mathematical tendency scale consisted of (20) items, and the validity, consistency and discriminatory strength of the scale were verified and were acceptable, and after the end of the experiment, the mathematical tendency scale was applied to the two groups (experimental and control), by using appropriate statistical means, the results showed that there is a statistically significant difference between the experimental and control groups in the mathematical tendency scale in favor of the experimental group.

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Research problem

The researcher viewed the study of (Al-Quraishi, 2017), which indicates the teachers 'lack of interest in teaching methods that deliver the academic material to the minds of students.

This was reinforced by a survey conducted by the researcher of the opinions of a random sample of mathematics teachers for the fourth grade of primary school for the academic year (2020-2021) by sending them an open questionnaire about the teaching method that is used in teaching mathematics. The researcher concluded that most of the female teachers from the sample do not use modern strategies in teaching due to lack of knowledge of them and focus on teaching on the usual methods and strategies, which focus on abstract education, which makes students feel difficult to learn mathematics, and this negatively reflected on the tendency towards mathematics, and from this point the researcher is trying to use modern teaching methods and strategies that achieve educational goals.

The researcher's acquaintance with previous studies and their recommendations made about the tendency towards mathematics, so that the study of (Al-Hayali, 2004)., (Al-Naimi, 2009). and (Hassan, 2013). has recommended that there should be an attention on the elementary school student and emphasize the

development of his tendencies towards mathematics to not to be a way of studying mathematics in the future.

By conducting this research, the researcher sheds light on the effect of using the little teacher strategy of fourth-grade primary pupils with their mathematical tendencies.

The importance of the research

The importance of the current research can be clarified as follows:

1. The current research is considered a response to what educators advocate regarding the necessity of using various methods and strategies in teaching as a result of the development witnessed by the educational fields.
2. The current research derives its importance from the dependent variable represented by mathematical tendencies.
3. This research may provide important information about the young teacher's strategy and its impact on teaching.
4. The research includes a scale to measure mathematical tendencies, which may be useful to researchers in other researches.

5. The importance of research is determined by the importance of the primary stage in preparing learners, which is one of the most important stages in the educational system, as it provides students with the essentials necessary for their continuation in the following stages.

6. The importance of mathematics, its teaching, the advancement of its requirements and needs.

Determining research terms

Little Teacher's Strategy

The researcher defines the little teacher's strategy procedurally as: an interactive method in which pupils of the fourth elementary class cooperate in implementing learning tasks together, so that one of the pupils, after mastering the educational goal, plays the role of the little teacher, so that he can teach the student who has not mastered the goal yet, and other pupils play the role of the learners. The pupils are divided into small groups of varying degrees of achievement, and they participate together to achieve learning for all pupils, as this method creates the desire of peers to help their colleagues in the educational process under the direct supervision and direction of the teacher, taking into account that the young teacher is of the same age group for the members of his group.

Mathematical tendencies

The researcher defines mathematical tendencies procedurally as: the amount of desire of the fourth primary pupils towards the subjects of mathematics, their feeling of satisfaction and enjoyment during the study, their interest in its activities, and their love for its teacher, and it is quantitatively expressed in this research by the degree that the student obtains in the scale of mathematical tendencies prepared by the researcher for this purpose.

Theoretical background

The Young Teacher Strategy

It is confirmed by the educational literature that the strategy of peer education has many forms, the most prominent and most important of which is the young teacher strategy, which is one of the strategies that the learner deals with his peer in the classroom and develops his skill. The strategy is based on teaching a capable learner and another learner under the supervision of the teacher, which can achieve other goals such as: self-confidence and the formation of positive trends and tendencies, etc. They will directly

integrate into their learning (Al-Harathi and Al-Otaibi, p. 83 2008).

The importance of the young teacher strategy

The importance of the young teacher's strategy lies in giving learners a wide freedom in the field of identity achievement and self-discovery. The learners' group is often viewed as amusing and entertaining groups for learners, but sociologists stress the importance of these groups and the importance of the educational role they play in Intellectual and social preparation and upbringing of them, and they began to view it as an educational system that seeks to achieve various educational functions (Al-Otaibi, p.18, 2018).

Young Teacher Strategy Procedures

(Al-Otaibi, 2018). indicates the steps that a teacher should take to implement the young teacher strategy that can be summarized as follows:

1. Creating a learning environment to use the young teacher strategy by clarifying what it is and the goals to be achieved.
2. Dividing the scientific material into a set of tasks to be presented to the young teacher to be able to implement it for peer learners.
3. Determine the appropriate time to complete each of the tasks.
4. Divide the learners into groups. The number of members of each group ranges from (4-5) learners with different educational levels.
5. Defining the tasks and responsibilities of each learner in the group so that one group includes: the young teacher, the reader, the writer, the observer, and the one in charge of the tools.
6. The young teacher introduces the learning tasks and discusses them with his fellow learners.
7. The teacher follows up the work of the young teacher and the groups to verify the progress of the learning process according to what was planned and to implement the educational tasks correctly, by discussing each group with its results.
8. Exchanging roles between young teachers and their fellow peer learners to allow each learner to play the role of the young teacher.
9. Determine the class teacher to meet with the young teachers and their fellow learners to discuss the subject and its elements, summarize the ideas mentioned in this lesson, and identify the strengths and weaknesses in the performance of the young teacher (Al-Otaibi, 2018: 108).

The role of the teacher in the strategy of the young teacher

The teacher's role in the strategy of the young teacher differs from his role in the usual education, so the teacher here is the organizer of groups, the guide and the appointment of the learner at the time of need, and peer learning provides positive education to the learners through their participation together in the completion of the tasks specified and required of them. This strategy may leave its impact on learners, whether on the cognitive or emotional dimension towards learning materials like their relationships with their colleagues (Al-Atwani, p.9 2013).

Mathematical tendencies

Psychological studies are concerned with tendencies, as they are closely related to the demand for aspects of activity in different fields, and it is also related to what individuals head towards in the types of activity in their spare time, and the tendencies of the characteristics that mainly affect the educational and professional adaptation of the individual and his interpersonal relationships. so it is considered as an important variable in personality (Chalabi, p.377 2005).

When the two components of cognitive and emotional tendencies are combined, the following dimensions are produced

The nature of the material: The nature of the mathematics subject affects the learner's inclination towards it, and the nature of the subject means the extent of difficulty or ease and the type of activities and topics it contains, in terms of depth, accuracy, complexity and clarity. How the learner perceives the nature of mathematics is what determines the extent of his acceptance of the material and his readiness to learn it.

The importance of the subject: The importance of the material is represented in the goals and objectives that mathematics can achieve for the learner in his school life, such as increasing the level of achievement, making use of it in other scientific subjects, developing intelligence, and opening the way for the study of scientific disciplines.

The enjoyment of the material: is the emotional state of the learner during the study of mathematics and the exercise of its activities, and the emotional state varies from joy or pleasure to boredom or distress.

The teacher's style: The teacher's style affects the learner's inclination towards the material, and the teacher's style includes the behaviors issued by him in the classroom, how he deals with his students and gives them an opportunity for discussion and dialogue, and his teaching competence (Yusef, p. 910-911, 2018).

The researcher also reviewed a study (Abu Hilal, 2012). which dealt with the measure of propensity towards mathematics, and the dimensions of the measure of propensity toward mathematics were determined as follows:

- A Tendency towards the nature of mathematics.
- A Tendency towards learning mathematics.
- A tendency to enjoy mathematics.
- An Inclination towards a math teacher.

The tendency towards mathematics

(Abu Hilal, 2012). believes that for the teacher to develop the learner's tendencies towards mathematics, he must take into account the following matters:

1. Take into account the needs of the learner and his motives towards learning mathematics.
2. Create a comfortable mathematics learning environment for the learner.
3. Diversify methods of learning mathematics to include all types of learners.
4. Whenever the learner participates in accessing knowledge, this gives a positive impression on the learner.
5. Whenever the learner can express his thoughts appropriately to communicate with others, this leaves comfort to the learner.

It appears that recognizing the learners' tendencies during the learning process has a great impact on using the best methods for teaching mathematics, and it needs to stimulate motivation among students to show tendencies towards it, because if the drought remains in presenting mathematical ideas and concepts, without taking into account the understanding of the learners, and resorting to memorization in a lot of Sometimes, like other literary subjects, it will diminish the tendencies towards mathematics, and it is known that mathematics represents the sport of minds (Abu Hilal, p.52, 2012).

Previous studies

Table (1): previous studies that dealt with the young teacher strategy

The name of the researcher, the year and the place of study	the purpose of the study	the curriculum of the study	the stage of study	the size and sex of the sample	the research tools	the results of the study
Al- Farhoud 2013 Bahrain	The effect of teaching using both the presentation and the young teacher style on the attitudes of fifth-grade students towards mathematics in the Kingdom of Bahrain	Experimental	fifth-grade primary	44) students distributed evenly over the two research groups.	measure of tendency towards mathematics.	The results indicated that the trends were positive towards mathematics
Al-Otaibi 2018 Saudi Arabia	The effectiveness of teaching Science Using the young teacher Strategy in Developing Achievement and Motivation for Learning among Primary School pupils	Experimental	Female students Sixth-grade primary	(50) female students Distributed evenly over the two group Research	Achievement test And Motivation to learn scale	There is a statistically significant difference between the two arithmetic averages of the scores of the students of the experimental and control groups for the achievement test and the measure of motivation to learn in favor of the experimental group.
Mohammed 2019 Egypt	The effect of applying the young teacher strategy as an effective tool to meet the diverse academic needs of learners	experimental And descriptive	students First prep	(55) Student	Performance Test and a questionnaire	It was evident through the results of the experiment that the young teacher strategy helps to a high degree in meeting the diverse academic needs of students

Table (2): Previous studies that dealt with mathematical tendencies

The name of the researcher , the year and the place of study	the purpose of the study	the curriculum of the study	the stage of study	the size and sex of the sample	the research tools	the results of the study
Al-Hayali 2004 Iraq	The effect of using the laboratory model on achievement and development of tendencies towards mathematics	Experimental	fifth-grade students	(123) Male and female students divided between two schools: Two divisions for males (61) students, and two divisions for females (62) for his student	Achievement test And the A measure of tendencies towards mathematics	It was evident through the results of the experiment that there is a statistically significant difference between the mean scores of the two research groups in the achievement test and the measure of propensity towards mathematics for the benefit of the experimental group students.
Al-Nuaimi 2009 Iraq	The effect of using mental arithmetic strategies on the achievement and creative thinking of elementary school students and their tendency towards mathematics	experimental	Fifth-grade girls of primary school student	(81) A female student divided between two groups: (40) experimental student, and control (41)	Achievement test And the Test the ability to think creatively And the A measure of inclination towards mathematics	It was evident through the results of the experiment that there is a statistically significant difference between the mean scores of the students of the two research groups in the achievement test, the creative thinking test, and the measure of tendencies towards mathematics in favor of the students of the experimental group

Hassan 2013 Iraq	The effectiveness of the scientific stations in solving mathematical problems and the tendency towards matter among fifth-grade primary students	experimental	fifth-grade female students	(56) Schoolgirl They were divided into two groups: the group Experimenta l (30) student and the control group (26) student	Mathematical problem-solving test And the A measure of inclination towards mathematics	It was evident through the results of the experiment that there is a statistically significant difference between the mean scores of the two research groups in the test of solving mathematical problems and the scale of propensity towards mathematics for the benefit of the experimental group students.
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research procedures

First: Experimental Design

Table (3): The experimental design adopted in the research

group	Parity variables	Independent variable	Dependent variable	search tools
Experimenta l	Parental collection. - IQ test. Previous achievement in mathematics. Examining previous knowledge in mathematics.	Little Teacher Strategy	Mathematical tendencies	Propensity Scale

Second: The research community and its sample

The current research community was identified in the morning primary schools of the General Directorate of Education in Baghdad / Rusafa II in the New Baghdad sector/municipalities for the academic year (2020-2021) AD, and the researcher chose the Martyr Jumah Al-Sudani Primary School for Boys intentionally, to represent a sample Search to apply the current research experience.

Third: Control Procedures

Table (4): parity of the two research groups (experimental and control) in the variable of the educational level of the parents

Academic group	Achievement level	tota	$^2\chi$	Deg	Ta	Statistical
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achievement variable		Elementary or lower level	intermediate	preparatory	diploma	Bachelor's degree or higher	l	v	Significance	ree of freedom	bu	significance at (0.05)
father	Experimental	5	8	6	6	5	30	0.518	0.972	4	9.49	Not function
	control	6	7	8	5	5	31					
mother	experimental	5	6	8	5	6	30	0.360	0.986			
	control	5	5	8	5	8	31					

Table (5): The statistical results of the two research groups (experimental and control) regarding equivalence variables

Variables	Group	Arithmetic mean	standard deviation	Levine test	Significance level	T-test	Significance level	Df	Statistical significance at (0.05) level
Intelligence	Experimental	12.40	5.250	0.149	0.701	0.936	0.353	59	Not a function
	control	11.10	5.612						
Previous achievement	Experimental	8.37	1.752	0.046	0.830	0.744	0.460		Not a function
	control	8.03	1.760						
Previous knowledge	Experimental	7.47	2.460	0.099	0.755	0.074	0.941		Not a function
	Control	7.42	2.540						

Fourth: Preparation of research supplies

1-Identifying the scientific subject: The researcher identified the scientific subject with the topics within the three chapters, namely: (numbers, addition, subtraction) from the mathematics book scheduled for the fourth grade of primary school.

2- Deriving and formulating behavioral goals: The behavioral goals were derived from the fourth-grade mathematics textbook, based on Bloom's classification of the cognitive domain.

3- Preparing teaching plans: The researcher prepared teaching plans for each of the two research groups.

4- Preparation of research tools: To achieve research purposes, the researcher prepared the scale of mathematical tendencies, according to the following steps:

A- Determining the objective of the scale: measuring the mathematical tendencies of the fourth grade of primary students, through their responses in terms of

acceptance or rejection of the phrases contained in the scale.

B-Determining the scale dimensions: The scale dimensions were determined in the light of a study (Abu Hilal, 2012).

C- Psychometric properties of scale:

The apparent validity of the scale: The scale was presented to many experts in the field of education, methods of teaching mathematics, and educational psychology, and the acceptance of the items that had more agreement was taken.

Exploratory application of the trend scale:

1- The first exploratory application (information sample): The scale was applied to a random sample of fourth-grade primary students, to ensure the clarity of the scale instructions previously prepared, and to

determine the time required for students to respond to all the scale items.

2- The second exploratory application (statistical analysis sample): The scale was applied to a second exploratory sample of fourth-grade primary students, to identify the characteristics of the scale and the statistical analysis of its items, by applying the following steps:

Constructive validity

This type of validity was achieved by finding the correlational relationship between each of the following:

1- The scores of each item by the degrees of the overall scale: It Shows that all the scale items are statistically significant, as the values of the correlation coefficients ranged between (0.227 - 0.608), which is a good indication of the validity of the construction of the tendency scale, as shown in Table (6).

Table (6): The correlation coefficient of the scores of each paragraph with the scores of the overall scale

Item no	The Correlation Value Coefficient	Item no	The Correlation Coefficient Value
1	0.227	11	0.481
2	0.576	12	0.589
3	0.351	13	0.337
4	0.273	14	0.591
5	0.494	15	0.349
6	0.505	16	0.548
7	0.341	17	0.299
8	0.608	18	0.424
9	0.519	19	0.459
10	0.461	20	0.405

*Statistical function at a significance level of 0.05 *Statistically significant at a significance level of 0.01

2- The grades of each item by the degrees of the dimension belonging to it: Show that all the scale items are statistically significant, as the values of the

correlation coefficients ranged between (0.376 - 0.748), which is a good indicator of the validity of the

construction on the tendency scale, as shown in Table (9).

Table (9): The correlation coefficient of the scores of each of the scale items with the scores for the dimension related to it

dimension	Item no	The Correlation Value Coefficient	dimension	Item no	The Correlation Value Coefficient
The tendency towards learning mathematics	1	0.427	The tendency towards math teacher	11	0.669
	2	0.748		12	0.735
	3	0.452		13	0.548
	4	0.376		14	0.624
	5	0.682		15	0.520
	6	0.658		16	0.698
	7	0.539		17	0.431
	8	0.627		18	0.531
	9	0.622		19	0.461
	10	0.511		20	0.611

Statistical function at the level of significance 0.01

3- The grades of each dimension by the degrees of the overall scale: Show that all the items of the scale are statistically significant, as the values of the correlation coefficients ranged between (0.726 - 0.824),

which is a good indication of the validity of the construction of the tendency scale, as shown in Table (10).

Table (10): The correlation coefficient of the scores of each dimension with the degrees of the total scale

dimensions	The Correlation Value Coefficient
The tendency towards the nature of mathematics	0.726
The tendency to learn mathematics	0.824
The tendency to enjoy mathematics	0.765
Tendency toward a mathematics teacher	0.780

Statistical function at the level of significance 0.01

The discriminatory strength of the scale items

It was found that the calculated T value ranged between (2.228 - 7.385), which is smaller than the level of significance (0.05) with a degree of freedom (52), and this indicates the existence of a statistically significant difference between the mean scores of the two groups, and thus the scale items are good.

Stability of the scale

The researcher adopted the (Alpha-Cronbach) equation to extract the stability of the scale of mathematical

tendencies, so the value of the reliability coefficient was (0,792), which is a good value.

Sixth: Statistical methods: The statistical program (SPSS) was used in treating the data statistically, as the researcher used the following statistical methods: (t-test) for two independent samples, Levine's test for two independent samples, Chi-square test (χ^2) The alpha - Cronbach equation, Pearson correlation coefficient, Eta square).

Seventh: The application of the experience: Apply the experiment in the first semester of the academic year (2020-2021) with the official time schedule set by the Ministry of Education, and in implementation of the recommendations of the Supreme Committee for Health and Safety as a result of the Coronavirus pandemic (COVID-19) it was decided to keep school attendance for a day Only one per week for each academic stage, as the researcher agreed with the school administration to

prepare the weekly lesson schedule for the two research groups at close times for the two research groups at the rate of two sessions per week for each group.

The presentation of the results

To verify the validity of the null hypothesis, which states that: There is no statistically significant difference at the level of significance (0.05) between the mean scores of the experimental group students who will study mathematics according to the young teacher's strategy and the scores of the control group students who will study the same subject according to The usual method for measuring mathematical tendencies, and with the help of the statistical program (SPSS), the statistical description of the raw data for the two research groups (experimental and control) was obtained in the variable of the mathematical tendencies scale, and this shows in Table (11).

Table (11): The statistical results of the two research groups (experimental and control) in the variable of mathematical tendencies

Group	Number of pupils	SMA	standard deviation	Levine's test to equal the two variances		t-test to equal the two averages		Degree of freedom	Statistical function at (0.05) level
				(F) value	indication	(T) value	indication		
Experimental	30	50.50	6.532	0.866	0.356	3.504	0.001	59	function
Control	31	43.81	8.256						

It appears from the above table that the average scores of the experimental group students reached (50.50) with a standard deviation of (6.532), while the average scores of the control group students reached (43.81) with a standard deviation of (8.256), and the calculated T value (t) reached (3.504). At a level of significance (0.001), which is smaller than the approved level of significance (0.05) and with a degree of freedom (59), this indicates the superiority of the experimental group students who studied mathematics according to the strategy of the young teacher over the control group students who studied the same subject according to the usual method in Propensity scale.

Thus, the null hypothesis was rejected and the alternative hypothesis accepted, which states that: There is a statistically significant difference at the level of significance (0.05) between the mean scores of the experimental group students who will study mathematics according to the young teacher's strategy and the degrees of the control group students who will study the same subject according to the method. Usual in the propensity scale and favor of the experimental group. To know the extent of the effect of the independent variable (the small teacher strategy) on the dependent variable (tendencies), the eta square test (η^2) was used to determine the size of the effect of the independent variable, and Table (12) illustrates this.

Table (12): The value of (η^2) for the two research groups (experimental and control) in the variable of orientation

The independent variable	The dependent variable	The value of (t)	Degree of freedom	The value of (r^2)	the amount of the effect size
Young Teacher Strategy	Leanings	3.504	59	0.17	big

It is evident from the above table, that the size of the effect of the young teacher's strategy on the variable of inclinations is large (Kiess, p. 445-446, 1989). And this indicates that the effect of the independent variable on the tendencies of the fourth primary students was large and for the benefit of the experimental group who studied according to the strategy of the young teacher.

Interpretation of results: The results obtained in the current research are consistent with the results of previous studies, in terms of the superiority of the experimental group that was studied according to the strategy of the young teacher over the control group that studied according to the usual method.

Conclusions

The adoption of the strategy of the young teacher in teaching helped to increase the level of participation and interaction of the pupils with the educational situation, given the unfamiliar method that they are accustomed to, and the increase in the tendency towards mathematics for the fourth primary pupils.

Recommendations

The researcher recommends encouraging teachers to use educational experiences that would develop students' personalities and raise their level of confidence.

Suggestions

In continuation of the current research and its development, the researcher proposes to conduct a

6. *Laboratory Model on Achievement*
7. *and Development of Attitudes Toward Mathematics*. Baghdad: Ibn Al-Haytham College of Education, University of Baghdad.
9. Al-Farhoud, S. (2013). *The impact of teaching using both presentations and the style of the young teacher on the attitudes of fifth-grade students towards mathematics in the Kingdom of Bahrain*. Saudi Arabia.

study on the obstacles of using the strategy of the young teacher in the elementary stage in mathematics from the viewpoint of its teachers and ways to treat them.

References

1. Abu Hilal, M. (2012). *The effect of using mathematical representations on the acquisition of concepts and the tendency towards mathematics among sixth-grade students*. Gaza: Islamic University.
2. Al-Atwani, R. (2013). *The Impact of Peer Strategy by Audio-visual Means on Learning Some Skills in Football*. Baghdad: Al-Mustansiriya University.
3. Al-Chalabi, S. (2005). *Fundamentals of Building Psychological and Educational Examinations and Standards*. Damascus: Aladdin Institution for Printing and Distribution.
4. Al-Harthi, Mona. and Al-Otaibi, Bandar. (2008). *The Use of Peer Teaching Strategy to Acquire Functional Words for Mentally Retarded Pupils of Medium Degree*. Egypt: Ain Shams University.
5. Al-Hayali, S. (2004). *The Effect of Using the Effectiveness of Science Teaching Using the Young Teacher Strategy in the Development of Achievement and Learning Motivation among Primary School Students*. Saudi Arabia: Qassim University.
12. Al-Otaibi, N. (2018). *The Effectiveness of Science Teaching Using the Young Teacher Strategy in the Development of Achievement and Learning Motivation among Primary School Students*. Saudi Arabia: Qassim University.
13. *Teacher Strategy in the Development of Achievement and Learning Motivation among Primary School Students*. Saudi Arabia: Qassim University.
14. *Motivation among Primary School Students*. Saudi Arabia: Qassim University.
15. University.
16. Al-Quraishi, A. (2017). *The causes and problems of students' failure and how to*

17. *address them*. Baghdad.
18. Hassan, W. (2013). *The Effectiveness of the Scientific Stations Strategy in*
19. *Solving Mathematical Problems and the Tendency towards Subject*
20. *Matter among Fifth Grade Primary Students*. Baghdad: Al-Mustansiriya
a. University.
21. Kiess, H. (1989). *Statically Concepts for the Behavioral Science*. Canada: Sydney
22. Toronto Allyn & Bacon.
23. Muhammad, H. (2019). *The Young Teacher is a strategy that meets the diverse*
24. *academic needs of students, Egypt: Abd Al-Tawab Abdel Hamid Saleh*
25. *Preparatory School*.
26. Youssef, Z. (2018). *Pupils' attitudes towards mathematics*. Algeria: Qasdi
27. Merbah and Ouargla University.
28. Al-Nuaimi, H. (2009). *The Effect of Using Mental Arithmetic Strategies on*
29. *Achievement and Creative Thinking of Elementary School Students and*
30. *Their Tendency towards Mathematics*. Baghdad: University of Baghdad.