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The Effect of Yaker's Strategy on The Achievement of Fifth Grade Literary Students on The Achievement of Fifth Grade Literary Students In Philosophy and Psychology and The Development of Their Cognitive Curiosity

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Abstract: The current research aims to study "the impact of Yaker's strategy on the achievement of fifth grade literary students in philosophy and psychology and the development of their cognitive curiosity." The researcher relied on an experimental design with partial control that includes two equivalent groups: an experimental group and a control group, commensurate with the research conditions. The researcher deliberately chose fifth grade literary students from Khalid bin Al-Walid Preparatory School in the Tikrit Education Department for the academic year (2024-2025). Through a randomized method, Division B was selected as the experimental group, with 30 students studying using the Yacker strategy. Division A was chosen as the control group, which includes 32 students studying in the traditional way. Before the start of the experiment, the researcher was keen to achieve statistical equivalence between the students of the two groups in several variables that may affect the results of the experiment, namely: the chronological age of the students calculated in months, the average of the previous school year for the third intermediate grade, the intelligence test "Raven", the academic level of fathers, the academic level of mothers, and the scores of the pre-cognitive curiosity scale. The researcher determined the educational material to be taught, which included the first and second semesters of the book "Philosophy and Psychology" for the fifth grade of literature in the Republic of Iraq. Based on the content, the researcher prepared behavioral objectives within four levels, in addition to preparing (16) the model teaching plan for each of the two groups. The researcher used two tools to measure the research variables, where the first test had an achievement test consisting of (35) items, and it verified its truthfulness, stability and discrimination, and conducted statistical analyzes of its paragraphs. In addition, the researcher developed a scale of cognitive curiosity, which in its final form consisted of (34) items, and its truthfulness, stability and distinction were also verified. After completing the experiment, the researcher applied the two research tools to the two study groups. After completing the collection of results, the research data was analyzed and appropriate statistical methods were used, and the results showed the following: 1) There is a statistically significant difference at the level of (0.05) between the average scores of the experimental group students and the average scores of the control group in the achievement test, in favor of the experimental group. 2) It was revealed that there is a statistically significant difference at the level of (0.05) between the average scores of the experimental group students and the average scores of the control group in the dimensional cognitive curiosity scale, where the results were in favor of the experimental group. 3) The results showed a statistically significant difference at the level of (0.05) in the average differences between the scores of the experimental group students in the pre- and post-tests on the cognitive curiosity scale, where the results were in favor of the post-test.

Keywords: Yaker, Strategy, Philosophy, Psychology, Cognitive Curiosity

Introduction Definition of Research Search problem

Certainly, education, as a discipline responsible for learned behaviors, should seek to set educational goals aimed at learning and mastering these behaviors. This includes developing thinking in all its forms and teaching its skills, with the aim of creating a learner capable of understanding the developments around him and investing them for his benefit and for the benefit of society. One of the effective tools in this context are modern methods and strategies in teaching and learning, which constitute the main pillar of the success of the educational process. New educational strategies have emerged that focus on the student's centrality in education, and enhance his interaction in organized activities and events, which contributes to determining the quality of performance of both the student and the teacher towards the set goals. These strategies are not limited to the cognitive aspect, but also include the skill and emotional aspects.

The teachers' reliance on traditional methods of teaching academic disciplines in our schools, which mainly focus on providing scientific content to students, overlooks important aspects of the student's personality, such as the development of thinking skills, discovery and development of creative abilities. In addition, students suffer from poor academic achievement, especially in the preparatory stage. This leads the researcher to believe that students' difficulties and study disorders are due to a lack of competence in the field of psychology. It's not just about the subject or curriculum used, highlighting the need to develop the teaching methods of these subjects based on the latest and best strategies and models. All this helps the researcher in choosing a modern strategy among the strategies of constructivist theory.

Yakar conducted an open-ended survey to explore the methods teachers use to teach philosophy and psychology, as well as assess their level of satisfaction with students' progress and cognitive curiosity. The results showed that 95% of teachers rely on traditional teaching methods, while 80% are dissatisfied with their students' progress, and 90% believe that these methods do not enhance students' cognitive curiosity.

Subject teachers in our schools may rely on traditional methods that focus on teaching scientific content, which leads to the omission of important aspects of the student's personality, such as developing thinking skills, discovering and enhancing his creative abilities, in addition to the emotional aspects of students such as cognitive curiosity. Hence, the problem of the current research is reflected in the following question:

What is the impact of the impact of Yaker's strategy on the presentation of fifth grade literary students in philosophy and psychology lessons and the development of their cognitive curiosity?

Importance of research:

The Yakar strategy is one of the pedagogical learning styles derived from constructivist theory, so the researcher chose a model of constructivist theory. It's a strategy. Yacker of models this can be used. In teaching when? It is one of many facilities; a student makes a pivot for this process, as it is educational and provides opportunities for discussion and dialogue between students and the teacher and between students and each other, which enables the student to acquire the sound language of dialogue and develops and allows a spirit of cooperation between them. The opportunity to think of perhaps the largest number of solutions to the problem gives one, gives a chance. Before the students think in some way a scientific structured in accordance with its four stages, begins in one step call and finally in the procedural stage that - which includes holding decisions, to reach a final solution and then the learning process it works. In it somehow the dynamics (Maximus, 2003: 252)

The strategy of classroom teaching lies in its clear impact on students' acquisition of concepts, modifying their cognitive structure and forming a positive attitude towards knowledge. (Al-Najjar and Salim, 2008: 505)

The researcher believes that the strategy is working. About learners' positivity and engagement in the production of new knowledge based on their past experiences through the various activities they practice. (Compare, balance, propose solutions, clarifications and choose the best ones) and continue after the lesson to find appropriate applications in the daily life of what they have learned. In general, this is a strategy that helps all parties in the educational process.

Academic achievement is considered a complex psychological and educational concept, due to the overlap of many factors, including academic, individual, and social factors. Therefore, this field is one of the most important areas that allow the learner to discover his talents and abilities and develop his ambitions. (Hamdan, 1996)

Academic achievement in all its forms is a means to achieve educational and teaching goals, due to the great importance in the life of the learner. Academic achievement is one of the main objectives of the educational process, as it is considered the main criterion for evaluating students during their educational stages. It is also used to determine their transition to new educational stages, and their distribution according to different disciplines, in addition to their admission to universities and institutes (Mashhadani, 1389).

The importance of cognitive curiosity lies in the importance of its result, which enables the individual to adapt to different life situations, whether at work, home or the changing environment, and to initiate changes to reach new concepts and develop different models for types of interaction. Cognitive curiosity is also an important and necessary tool for overcoming problems, adapting and learning. Cognitive curiosity is important because it helps people recognize hazards in their environment and survive by exploring them. One of the most important outcomes of cognitive curiosity is the acquisition of information about new and unknown topics and situations (Littman, 2006, 86).

Natural cognitive curiosity is a powerful stimulus for humanity and is the main reason for scientific discoveries and the progress of civilization. Cognitive curiosity is also a condition for expanding knowledge. Maslow (1970) posited that curiosity is an important element in determining a psychologically healthy individual. Foss Keller (1983) asserted that curiosity and exploratory behavior are of vital importance to human evolution, contributing to flexible adaptation to changing environments and implying "the developmental trend towards diverse patterns of interaction and more effective problem solving" as he claimed (Giambra, 1992). Experiences gained through curiosity and exploratory behavior allow learning the normal patterns of cognitive development in adults. Therefore, cognitive curiosity is the desire to acquire information and knowledge, which is one of the important human motives and behaviors at different stages of life..

Based on the above, the importance of this research is evident in the following points:

- 1. Yaker's strategy as one of the important educational models in constructivist theory.
- 2. The importance of academic progress in that it is a measure of students' success and progress from one stage to another.
- 3. The importance of cognitive curiosity because it is linked to cognitive exploration among students.

Research Objective

This study aims to explore the impact of the strategy (Yaker) on improving the performance of fifth grade literary students in philosophy and psychology subjects and enhancing their cognitive curiosity.

Research hypotheses

To achieve the objectives of the research, the researcher identified the following null hypotheses :

- 1. The first null hypothesis: At the level of significance (0.05), there is no statistically significant difference between the average achievement of students of the experimental group who study philosophy and psychology using the Yacker strategy, compared to the average achievement scores of control group students who study the same subject in the traditional way.
- 2. The second null hypothesis: states that there is no difference at the level of significance (0.05) between the average scores of students of the experimental group who study philosophy and psychology using the Yacker strategy, and the average scores of students of the control group who study the same subject, with regard to the scale of cognitive curiosity.
- 3. The third null hypothesis: There are no statistically significant differences between the average scores of the experimental group students before and after conducting the experiment on the cognitive curiosity scale.

Research Limitations: The current study is defined as follows: Human limitations: fifth-grade literature students.

- 1. Spatial boundaries: government day schools affiliated to the Directorate of Education of Salah al-Din Directorate of Education of Tikrit .
- 2. Goal limits: The first three chapters of the book "Philosophy and Psychology" are scheduled for fifth-year literature students in middle and primary schools..
- 3. Time period limits: for the first semester of the academic year 2024-2025.

Preparation of conditions: Business Strategy:

Abdel Hafeez (2005) says that this method contributes to enabling students to build their own concepts, and enhance their knowledge by linking them to previous concepts and knowledge. As a result, they develop the ability to retrieve information and relate new knowledge to what has already been learned. (Abd al-Hafeez, 1384).

The researcher determines the strategy, or procedural work

That one of the teaching strategies based on constructivist theory, in which the learner is the focus of the educational process as a philosophical and psychological subject for fifth grade literary students, taking into account its four stages, which are the stage of defense, the stage of exploration and innovation, the stage of explaining suggestions and solutions, the stage of determining the impact of the research stage, and the stage of determining its impact on the research stage. Model students and develop their curiosity .

Group, ID :

Jalali (2011), To understand and know the skills that students acquire as a result of certain educational experiences (Jalali, 2011).

Cognitive curiosity

- Slater (2009) as: the desire to seek and integrate knowledge related to the environment surrounding the individual in order to improve or stimulate mental work (Slater, 2009: XI).
- Procedural definition: represents the total score obtained by the respondent when answering the items of the cognitive curiosity scale established by the researcher based on Littman's theory.

Theoretical Framework

Yakar Strategy

The idea of modeling appeared in engineering sciences, as the architect or mechanic tends to create a three-dimensional miniature model that represents the building he wants to build or the machine he wants to design, and uses it to conduct the necessary tests as the final achievement, and then circulates the results to the machine. When moving from instrumental to human studies, we may encounter difficulties in conducting practical experiments to study the mechanisms of systems, and entities are the main idea that led to building a model that reflects their basic characteristics. And this has been done. Test it.

Real's (Eldridge, 2004: 30) argues (that teaching models rely primarily on psychological learning theories, as they serve as a teaching program that can be used to organize the teacher's work and tasks through educational materials and experiences. (Qatami, 2002: 155) The Yacker strategy is an educational strategy based on the principles of constructivist theory. It was modified and expanded by Susan Lux. Chance et al. (1990) As quoted This strategy is based on a set of constructive foundations, the most prominent of which is the concept of positive and active participation of the learner in creating his own experience by benefiting from his previous knowledge (Taj al-Din & Sabri, 1379).

This is considered a strategy, Yakar Strategy is derived from the learning cycle model, which first appeared in the United States in 1962 by Atkin and Carplus. Carbulus et al. made some modifications to it in (1974) and then modified by Susan Lux and developed to its current form. The term (luck) et al. were used in (1990 (Zeitoun, 2007: 187). Yager, 1991)

Strategic steps Yakar :

The educational and psychological literature has shown that the strategy Yakar relies on the philosophy of constructivism in that concepts are constructed by the learner through the mental processes carried out by the learner using four consecutive stages in order, where each stage is related to the next stage. This step can be displayed as follows:

Advocacy Phase:

At this stage, students are invited to engage in the learning process, as the teacher seeks to attract their attention, motivate them and increase their interest in the material he will present, whether it is a new lesson or a specific problem that students are asked to find a solution to at the end of the lesson. This process can be done by the teacher by asking some questions or problems that may confuse learners or conflict with their previous information and experience. This requires the learner to think, reflect and work hard to reach explanations and solutions to these issues. The teacher can direct learners' attention towards concrete things that support them, and the more the problems are related to the learner's reality and environment, the more interested and responsive he is to the lesson. (Taj) (Din and Ismail, 2000: 75)

The stage of discovery, exploration and creativity:

The number of students in each group is no more than ten students. The teacher also encourages students at this stage, urging them to collaborate and exchange ideas, and reinforcing that each group finds the right solution..

This stage serves as a determination of the student's abilities and level of mental abilities, where the student reviews, meditates and re-asks the questions posed to him. This is done in addition to the process of recalling their previous experiences and rearranging them to suit the nature of the problem, where the teacher gives his students enough time to provide suggestions, explanations and conclusions about the problem presented to them..

The stage of providing solutions and clarifications:

At this stage, the teacher organizes a public discussion session with the students, where each group through one of its members presents solutions, conclusions and clarifications on the questions asked. All clarifications provided by each group are carefully listened to and followed, even if they are not correct. Students' opinions and ideas should not be ridiculed, even if they are unclear. After each group presents its findings, a discussion is opened, where students have the opportunity to justify and defend their ideas. The teacher should reinforce the right ideas and conclusions during these discussions. And try to correct perceptions and misconceptions so that they are replaced by correct ideas. (Abu Ataya, 2004: 72)

Verb stage:

This stage is considered an evaluation stage for both the teacher and the student. At this stage, the teacher can verify that his students understand the material presented, and recognize the abilities and potential of the students and the differences between them. In the case of the student, this gives him an assessment of himself in terms of his ability to identify strengths to strengthen them and identify weaknesses to reduce them at this stage, the students' abilities are enhanced by providing appropriate applications for what they studied and reached solutions to the problems presented to them as applications of the ideas and concepts of the lesson. (Maximus, 2003:56)

The role of the teacher in the strategy Yaker :

- 1. Prepare an invitation for active participation of students at the beginning of each new lesson, where the teacher identifies the problem he presents to them. Students discuss and review their interpretations.
- 2. Investing students' perceptions, concepts and ideas in the following: guiding them and giving them the opportunity to try their ideas, even if they are wrong.
- 3. Providing an opportunity for students to discuss the collected material through dialogue between the students themselves or among the students. And the teacher
- 4. Formulate questions that motivate students to refer to diverse sources of information and seek evidence that supports the explanations provided regarding the problem being studied.
- 5. After asking the lesson question, give students enough time to respond before receiving their answers.
- 6. Motivating students to make correction and revision of interpretations and not to judge the validity or incorrectness of interpretations .
- 7. Paying attention to alternative concepts among students and designing lessons in a way that challenges their misconceptions (Wicklin, 2005)

Cognitive curiosity

The literature asserts that cognitive curiosity is a hypothetical concept that represents an internal psychological state that pushes the individual to research and explore in his environment in which he lives, collect information and gain knowledge from it. Satisfying this condition is an absolute necessity for mental health at all ages. In educational contexts, cognitive curiosity is one of the main factors in education and is considered (the factor behind a person's will or desire to obtain information). Getting information and showing openness to new information can be one of the most important needs of society. Mao and Mao (1964) state that the concept of cognitive curiosity is the desire to know and understand new, unknown and mysterious things in the environment, while Kashdan (2004) points out that the concept of cognitive curiosity is the concept of an internal positive emotional system associated with the desire for knowledge, the search for knowledge, and self-organizational challenges, 2004.

Day and Berlin pointed out that there is a state of uncertainty and ambiguity that accompanies the individual which creates a state of stimulus called cognitive curiosity that creates a state of uncertainty through non-symbolic stimulus or specific environmental stimulation. However, if the uncertainty is caused by a symbolic stimulus (language or ideas) the result is called cognitive curiosity. Cognition and cognitive curiosity are both factors that drive an entity to engage in an activity related to obtaining warnings or information and knowledge about a specific subject that an individual is looking for (Day & Berlyne, 1971). The concepts mentioned by the researcher above are similar to the nature of curiosity and share some components, but differ from it in other components.

Methodology

The researcher relied on the experimental method, which he defines as is modification

The document on the specific circumstances of a phenomenon, its explanation, observation of changes in it and their explanation

The community defines the research and an example of it

The research community knows: It is the research community of fifth grade literary students in preparatory schools in the Salah al-Din Education Directorate, Salah al-Din Governorate, for the academic year (2024-2025). The researcher obtained statistics from the Directorate of Education of Salah al-Din to determine the location of his experiment, and also obtained the names of the governorate's schools based on data received from the Department of Educational Planning in the General Directorate of Education of Salah al-Din Governorate. – Department of Tikrit Education .

Research example

School example

To obtain more accurate results, it is necessary to choose one or two schools from among the morning preparatory schools for boys in the district of Tikrit. The researcher relied on a simple intentional approach to choose one of these schools, which is Khalid bin Al-Waleed Secondary School for Boys.

Research sample

The researcher identified Khalid bin Al-Wald Intermediate School for Boys, which will be included in the experiment. Therefore, the researcher visited it and found that its management is ready to cooperate with him and facilitate his work and research procedures. The researcher chose the simple random method because Part (B) chose this high school to represent the experimental group that was taught using the strategy. In the case of section (A) the control group was the one that taught in the usual way, and the total number of students in the two sections was (62) students. The researcher did not exclude any student from the two groups for their equivalence in the students' data, as the distribution of the sample members remained (62) students by (30) students representing the experimental group and (32) students representing the control group. Table (1) illustrates this:

Group	Number of students before exclusion	Number of students removed	Number of students after exclusion
Demo	30	-	30
Officer	32	-	32
Total	62	-	62

Table 1. Number of students in my group 2 Research before and after exclusion

Equivalence of Research Groups Calendar age in months

Data related to the variable were collected in the records of the administrations of the two schools and information forms. Where the births of the students were recorded, and then the calendar age was calculated in months. The arithmetic average of the age of the experimental group students showed (198.57) with a standard deviation of (5.48), where the arithmetic average for the age of the control group students is equal to (197.66) with a standard deviation of (5.63). Using the T test of two independent samples, the results showed that there was no statistically significant difference, as the calculated value (T) (0.65), which is smaller than the value (T) (2.00) at the level of significance (0.05) and the degree of freedom (60). This indicates that there is equivalence between the two groups in terms of chronological age. Table 2 illustrates the above.

group	Sampla	Arithmetic mean	Standard deviation	Degree of freedom	T value		- Significance
	size				calculated	table	Level (0.05)
Experimental	30	198.57	5.48			Voor	It has no
officer	32	197.66	5.63	60	0.65	2000	statistical significance.

Table 2. Test results (T) to indicate the difference between the two experimental and control groups in which the chronological age calculated in months

Cumulative GPA for the last year

The students' scores in the research sample for the previous year were collected from the records of the school administration. The arithmetic mean of the experimental group students was (61.83) with a standard deviation of (7.79), between what was the arithmetic mean of the control group, (62.56) with a standard deviation of (8.67). Using the t-test for two independent samples, results were shown that there was no difference in statistics, The value t (3.5) was the lowest tabular value of t(2.00) at the significance level (0.05) for the degrees of freedom (60). This indicates the parity of the two groups at last year's degrees, as shown in Table (3)

Table 3. and the arithmetic mean, deviation, standard and t-value of the two groups in induction in whichthe students progress fourth grade literary last year

	Sample size	Arithmetic mean	Standard deviation	Degree	T value		Significan
group				of		table	ce Level
				freedom	calculated		(0.05)
Experimental	30	61.83	7.79				It has no
officer	32	62.56	8.67	60	0.35	Year	statistical
						2000	significanc
							e.

Parents academic level

By collecting data on the academic progress of the parents in the two research groups, the researcher compared the two groups in terms of parents' academic achievement. To determine how equal the two groups are in this aspect, the researcher used the chi-square test.

A. Parents academic progress

To review the school card in cooperation with the school administration, information was collected about the educational level of the parents. The variables data were divided into graded rates based on the three-dimensional criterion. To determine the differences between experimental and control groups, a chi-square (^{K2}) was used. The results showed that the calculated value (0.079) is less than the tabular value (0.0) at the significance level of 99.5, which indicates that there is equivalence between the two research groups in the academic achievement of parents. Table 4 shows these results.

group	Academic Level			number	degree Freedom	What is the value?		Level of importance
	primary and below	Mediator and high school	introductory or an institution		2	calculated	Planning.	0.05
Demo	1	14	5	3		0.0	5.9	Not
	1			0		79	9	that
officer	1	15	6	3				
	1			2				

Table 4. Equivalence of the educational level of parents of students in the two research groups, calculated and tabular chi-square value (²), degree of freedom, and level of significance.

With regard to maternal academic achievement, the researcher conducted a statistical analysis to assess maternal achievement for the two research groups. To determine the significance of the difference between the two research groups, the researcher used the Ka2 test at the significance level (0.05). The results showed that the calculated values (Ka2) amounted to (1.20), less than the tabular value (Ka2) which is equal to (5.99) with degrees of freedom (2). This indicates that the two research groups are similar for the maternal academic achievement variable.

Table 5. Equivalence of the educational level of the mothers of the students in the two research groups, the calculated and tabular chi-square value (²), the degree of freedom, and the level of significance

group	Academic Level			number	degree Freedom	What is t	he value?	Level of importance 0.05
	Primary	Mediator	Diploma		2	calculated	Planning.	Not that
	and above	Or high	or higher					
	you beg	school.	top					
Demo	13	12	5	30		1.20	5.99	-
officer	12	11	9	32				

Intelligence

The researcher chose the test (Raven, 1983), which is designed to measure mental ability, and is considered one of the most commonly used and common measures in the assessment of intelligence. The arithmetic mean of the experimental group students was prepared (71.53) with a standard deviation of (6.80), while the arithmetic mean of the control students was (72.00) with a standard deviation of "(7.09). Using the t-test of the two independent samples, the results showed no statistically significant difference, where the value of t (0.26) was less than the value of t (2.00) at the significance level (0.05) and the degrees of freedom (60). This indicates the equivalence of the two groups at IQ scores.

group	Sample size	Arithmetic mean	Standard deviation	Degree of freedom	T value		- Significanco	
					calculated	table	Level (0.05)	
Experimental	30	71.53	6.80			Voor	It has no	
officer	32	72.00	7.09	60	0.26	2000	statistical significance.	

Table 6. Test results (T) for the two research groups in terms of IQ scores

Cognitive curiosity scale (preliminary test):

The researcher used the cognitive curiosity scale prepared by the researcher before the start of the experiment process. The arithmetic mean and standard deviation of the students' scores in both groups were calculated. By applying the t-test to two independent samples, the results showed that at a significance level (0.05) and with three degrees of freedom, there was no statistically significant difference between the two groups. And the variable of cognitive curiosity scale as shown in Table (7).

 Table 7. Arithmetic mean and standard deviation Standard and value (T) for research groups

 On the scale of prior cognitive curiosity

group	Sample size	Arithmetic mean	Standard deviation	Degree of freedom	T value		- Cionificanco	
					calculated	table	Level (0.05)	
Experimental	30	72.13	2.14	63	0.12	2.00	It has no	
officer	32	72.06	2.30	_			statistical	
							significance.	

Control of external variables (internal and external security)

A. Internal Safety

To ensure the internal consistency of the research, the researcher adjusted the following variables:

1. Sample selections

To reduce the impact of individual differences between students in the experimental and control groups, the researcher used the random sample method to select two research groups, in addition to conducting equivalence between them. Maturity, refers to the biological, mental or psychological changes that may limit an individual during the experiment, such as fatigue and growth, which can positively or negatively affect research results (Melhem, 2006).

2. Associated factors

The duration of time in which the experiment is conducted may affect the dependent variables as a result of some external factors. However, in its current experimental conditions, education was carried out in an environment free of any factors that might affect the experiment, and the duration of the experiment was equal for both groups, continuing throughout an entire semester.

3. The tools used

The researcher relied in his study on the use of the presentation test and the cognitive curiosity scale.

4. Subject teacher

The researcher taught the two research groups, including experimental and control, in the test period.

5. Experimental attrition

refers to the effect resulting from the withdrawal of a number of students from the sample, which leads to the absence of differences between the variables of the study and its interruption during the experiment, which did not occur during the experiment period (Zubaidi, 1981: 95).

6. Placement of tests

"Pre-tests" applied to the research group affects the subsequent test, especially if the time periods between them are short (Al-Moussawi, 2012: 107). This variable was determined based on the interval between previous and subsequent programs. Students did not have any prior information about re-submission..

7. School materials

The school materials used by the two research groups in K of the two schools were identical, as they included the first and second chapters of books (philosophy and psychology for the fifth grade of literature). The researcher has ensured that his contents presented in all lessons are equal between the research groups.

Distribution of shares

A weekly debate was held by agreement between the administrations of the two schools to teach philosophy and psychology courses for two research groups (experimental). Officer (Wednesday and Thursday). As shown in Table (8):

group	today	Study Period	clock	group	today	Study Period	Clock
Domo	Sunday	First of all	At 8:00 AM	officer	Tuesday	second	9:15
Demo	Wednesday	third	At 10:00 AM		Thursday	fourthly	10:45

Table 8. for the distribution of courses between two research groups

B. External Secretariat

The research must be reliable, allowing the researcher to generalize the results to communities. For external inclusion by the Secretariat, the following considerations have been taken into account :

1. The relationship when choosing and experimenting: and evaluating the effects of these variables through random selection of the experimental and control groups.

- 2. Interactions between tests and experiment: Using a pre-test to measure cognitive curiosity may cause the two groups to learn about the nature of the experiment through its implementation. To minimize them and their impact and these variables, the subject teacher applied the standard and informed the students that this is done for scientific research purposes.
- 3. The impact of experimental approaches: overcoming this effect through the researcher to perform his procedures on the group (experimental and control) himself, while maintaining the confidentiality of the experiment.

Research Requests

1. Identify academic (scientific) topics:

The scientific material was selected from the literature book for the fifth grade of primary school, where the focus was on the first and second semesters in philosophy and psychology.

2. Behavioral goals

The researcher developed behavioral goals based on Bloom's classification in the cognitive domain, which are divided into four levels: remembering, understanding, application, and analysis. These objectives were presented to a group of experts and arbitrators specialized in teaching methods to obtain their opinions on the accuracy of the formulation of the objectives and the extent to which they cover the educational content of the topic. Then determine the levels that are measured after one paragraph and another. Based on expert opinion, all targets with agreement ratios of 80% or more have been certified. The wording of the paragraphs was modified to change cognitive levels, leaving some behavioral goals at 79 goals, distributed according to educational content and Bloom's levels.

Daily Workout Programs

Accordingly, the researcher prepared a teaching strategy for some topics for the book of philosophy and psychology for the fifth grade of literature, where he developed (16) teaching plans for the experimental sample and the same for the control sample. The research presented a model of this plan to a sample of experts and arbitrators to benefit from their observations and suggestions. Accordingly, minor modifications were made and improvements were added until the designs reached their final form, after obtaining an approval rate exceeding (80%) from the opinions of experts and judges..

Research Tools

First, the test, Coming through

To measure students' levels of the course, the researcher prepared development tests to contribute to the completion of part of the objectives of his research, according to the following plan:

- a. Determining the goal of the tests: These tests are prepared for the measure of academic progress for fifth grade literary students in the philosophy and psychology course.
- b. Distinguishing the steps of the tests: The researcher inquired a group of experts in literature and philosophy to distinguish the test paragraphs and progress. It was agreed that the number of paragraphs should be suitable for grades, ranging from (3 to 5) paragraphs, with (30) paragraphs of the type of echo and (5) multiple-choice paragraphs of the same type.
- c. Test Instructions: Test instructions are basic guidelines aimed at guiding students through the processes of taking the test. Although effective as test questions are, they lose value if the student does not have a clear understanding of writing their answers within the prescribed time (Malham, 2005: 322).

Therefore, the researcher used specific instructions for students to clarify the process of answering test questions, the distribution of grades, the time allocated for answering, as well as the points that should be considered before starting to answer. One point is allocated for the correct answer in the target paragraphs, while (zero) is given for the wrong or omitted answer. As for the paragraphs of the article, (3) points were awarded for each correct answer, making the total score of the test up to (45) points.

a. Identification of contents: Then scientific materials are determined for the application tests in the two semesters of the "Literature for Philosophy" course for the academic year 1391-1392.

Seasons	Number	Materiality	Behavior	Number of			
	of lessons		To remind you 30%	Wrap 30%	request 30%	analysis 10%	— paragraphs
The first	6	40%	4	4	4	2	14
second	10	60%	6	6	6	3	21
Total	16	100%	10	10	10	5	3 5

b. Preparation of the test map (tables) for selection:

Table 9. Specifies the specifications

c. Believe me: Exam: Therefore, the researcher verified the apparent and guaranteed honesty of the test as follows:

1) Apparent honesty

A test paragraph was used in its original form, with the inclusion of goals and behaviors, on a group of scientists and specialists in the fields of education for psychology. To confirm the correctness and suitability of test items for behavioral purposes, some paragraphs have been modified as directed by experts. The test items received average agreement rates of 80% or , using Cooper tests, ensuring the apparent validity of the instrument.

2) Authenticity of the Content:

The researcher presented the behavioral objectives, specifications and content tables to a group of specialists to assess the amount of compatibility of the tests with the required content. 80% or more of the test items are specified. Some test paragraphs were also marked based on the opinion of specialists. Now, the final test is ready for application to the test sample.

- 3) Exploratory test application:
- First Scan Program:

The progress test was applied to the initial sample consisting of a group of students in the fifth grade, with the aim of determining the scheduled time for answers to the questions of the tests to clarify its paragraphs. Their instructions were extracted and the average completion time for the first five students and the last five students, where the average was prepared 35 minutes.

Second scanning programs:

After confirmation, clarification of paragraphs of tests and instructions to calculate the appropriate time for a test, to be applied this test for the exploratory sample of (100) male and female students of the fifth grade literary in order to analyze from the test paragraphs to ensure its psychometric properties. After believing the students' answers, the researcher prepared the order of grades (descending from the highest grade to the lowest grade)", the percentage (27%) was calculated, with the papers that obtained the highest 27% of the students' answers (27), and the lowest 27% of the students' answers (27), representing the groups. Building on those and dealing with statistical analyses what follows :

A. Difficulty coefficient of the vertebra:

The researcher calculated the difficulty coefficient for all test items, and found that its value ranges between 0.23 and 0.73. A test item was considered acceptable if its difficulty coefficient was between 0.20 and 0.80, which meant that all test items were within the acceptable range.

B. Discrimination Coefficient:

The researcher extracted the discrimination power for each of the test items, and found that its value ranges between 0.21 and 0.62. Consequently, the degree of distinction for the paragraphs was acceptable.

C. Effectiveness of incorrect alternatives:

For the 30 multiple choice questions, the effectiveness of the wrong choices was calculated. The results showed that the effectiveness coefficient of all the wrong choices was negative, which means that the students' responses were lower in the upper group compared to the lower group. This suggests that the wrong alternatives attracted more students in the lower group than in the upper group, so the researcher decided to keep all the items.

Test reliability

After conducting the test on a sample of (40) students, the stability of the test was verified through the internal consistency method using the (Coder-Richardson 20) equation. The results showed that the stability coefficient was (0.83), which indicates that the test has a good level of stability. Thus, the test is ready for final application to the research sample.

Cognitive curiosity scale :

The researcher reviewed several measures of cognitive curiosity such as (Al-Darraji, 2018), and found that it does not correspond to his research sample and experimental conditions. Therefore, the researcher created a measure of cognitive curiosity. The researcher followed the following steps to create the test:

A. Preparation of scale paragraphs:

After reviewing previous metrics, theoretical studies, and theories that explain cognitive curiosity, the researcher developed a scale consisting of 34 items, where each paragraph contains three options: "Applies to me to a large degree" and "Applies to me to a moderate degree."

B. Validity of Standards:

After the completion of the construction of the scale, it was presented to a group of specialized arbitrators in the Department of Educational Sciences and Psychology to obtain suggestions and opinions towards the formulation and content of the scale paragraphs. The result of the agreement percentage achieved amounted to 86% in the paragraphs of the scale, and this percentage was taken into account by making adjustments to the wording of some. The scale is therefore valid in terms of wording and content through the adoption of expert opinions.

C. Application of the scale to the survey sample:

The researcher applied the cognitive curiosity scale to an exploratory sample of (30) male and female students, which is the same sample used to test progress. The aim of this experiment was to ensure the accuracy of the scale instructions and determine the time required for students to respond, in addition to ensuring the clarity of the scale paragraphs. The response time took (30) minutes.

D. Exploratory test of the scale of cognitive curiosity:

The cognitive curiosity scale was applied to a statistical analysis sample consisting of (100) male and female students from the middle and high school stages of the research community. This was done by reading and explaining the scale instructions and how to respond to it. After correcting the scale, the scores were arranged in descending order, and the highest (27%) and lowest (27%) of the percentages were taken to calculate the discriminating power of the scale elements.

y - discriminating power of elements on the scale of cognitive curiosity :

After calculating the discriminating strength of the elements using the t-test of two independent samples, it was found that the extracted t-value (discrimination) is between 3.85 and 9.38.

a. Correlation coefficient between the items and the total score:

The researcher used Pearson's correlation coefficient to calculate the value of the correlation coefficient, and it was found that all correlation coefficients were statistically significant at the level of significance (0.05) and the degree of freedom (98), and its tabular value was (0.19).

b. Scale stability:

After performing statistical analysis on the sample, the stability coefficient was calculated based on the internal consistency of the responses using the Cronbach alpha equation, which amounted to (0.86). This is considered a suitable level of stability for non-standard tests, which led to the final version of the scale.

Seventh: Steps to implement the experiment:

To implement the experimental approach correctly, the researcher followed these steps:

- 1) The experiment was conducted during the first semester of the academic year 1393-1394 AH on a sample consisting of two (experimental) groups: the experimental group and the control group, for a period of 8 weeks for each group.
- 2) The researcher applied the cognitive curiosity scale to students in both groups in order to assess the level of cognitive curiosity among students.
- 3) The pilot group was trained according to a specific strategy, based on training programs specially prepared for this strategy.
- 4) On the other hand, the control group was trained using the traditional method, according to training programs prepared for this purpose.
- 5) The progress test was conducted on the two groups (experimental and control) in cooperation with the subject teacher, and under the supervision of the researcher. Students were informed of the test date a week before it began, and asked to read the instructions carefully before answering the test questions. The students' answers were corrected according to the previously prepared answer form.
- 6) The cognitive curiosity scale of students was analyzed in both groups (experimental and control).

Findings and Interpretations

The researcher reached conclusions and after processing the research data and the use of statistical packages, which includes the interpretation of the results for the identification and impact of the Yacker strategy. In the contexts of fifth-grade students' progress, philosophy courses, and psychology, in addition to developing their cognitive curiosity, significant knowledge confirms statistics on the difference between the average research group scores for study hypotheses.

Result and Discussion

- 1. Investigate the validity of the first hypothesis: To verify the validity of these hypotheses, the researcher calculated the arithmetic mean, standard deviation, and students' scores in the two groups (experimental and control) in the presentation variables. Then use T tests for the two independent samples, the results of which are shown in Table 10, which presents this problem.
- 2. Table (10) A (for the arithmetic mean and standard deviation and t-value) The two groups search in the test and progress

Group	number	Arithmetic	Standard	Degree	T value		Statistical
		incan	de viation	freedom	calculated	table	0.05
Experimental	30	34.73	4.52	60	5.94	2.00	function
Officer	32	29.03	2.91	-			

Table 10. The arithmetic mean show	s
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By studying the tables (10), it was found that the arithmetic mean of the experimental group was (34.73), the arithmetic mean of the control group was (29.03), the standard deviation of the experimental group was (4.52), and the standard deviation of the control group was (2.91). To determine the significance of the difference between the two averages, the researcher used the test (T) for two independent samples to evaluate the differences statistically at the level of significance (0.05). The results showed that the calculated value of (T) was (5.94), which is greater than the tabular value (2.00) with degrees of freedom (60). This indicates that there is a statistically significant difference between the averages of the two research groups, which is in favor of the experimental group. Accordingly, the null hypothesis is rejected and the alternative hypothesis is accepted, suggesting that there is a statistically significant difference in favor of the group. Experimental taught using the Yacker strategy.

Presentation of results

The researcher presents his results according to the order of his research variables in the title and his hypotheses after obtaining the students' grades in the two research groups as follows:

Results of the first null hypothesis

To confirm the null hypothesis, the researcher did the following The t-test was used for two independent samples to determine the significance of the difference between the experimental and control groups. The results showed that the arithmetic mean of the experimental group was (78.19) with a standard deviation of (2.57), while the arithmetic mean of the control group was (72.8) with a standard deviation of (72). After conducting a t-test of two independent samples, it was found that the calculated value of t was (8.64), which is greater than the tabular value of t of (2.00) at the level of significance (0.05) and degrees of freedom (63), as shown in Table (11).

Table 11 shows that:

Table 11. Test results (t-test) to determine the significance of the difference in average scores between thetwo research groups in the cognitive thinking test and the curiosity test

Groups	number	Arithmetic mean	Standard deviation	T value and statistical significance		
				calculated	table	Significance Level 0.05
Experimental	32	78.19	2.57	8.64	2.00	function
officer	33	72.88	2.38			

There is a statistically significant difference at the significance level (0.05).

Results of the second null hypothesis

To validate the second null hypothesis, the researcher performed the following steps:

Use the t-test for two correlated samples to determine the significance of the difference in the average scores of the experimental group before and after the experiment. The results showed that the arithmetic mean of the experimental group before the experiment was (72.13) with a standard deviation of (2.14), while after the experiment, the mean increased to (72.14) with a standard deviation of (2.57).

After conducting a test (t) for two related samples, the calculated value (t) was equal to (21.10), which is greater than the tabular value (t) which was (2.04) at the level of significance (0.05) and degrees of freedom (31), as shown in Table (12).

Table 12. The results of (T) test for two samples associated between the pre- and post-test of cognitive curiosity among the experimental group students

Groups	Arithmetic mean	Standard deviation	Arithmetic mean of	Standard deviation	T value and statistical significance		
			differences	of variance	calculated	table	Significance
southern	72.13	2.14	6.06	1.63	21.10	2.04	function
Go away	78.19	2.57	-				

Interpretation of the results

Interpretation of the result related to achievement:

The researcher's findings showed that the use of the Yacker strategy in teaching has a positive effect on the progress of fifth graders in philosophy and psychology subjects. This educational method has surpassed the traditional curriculum, and the researcher attributes this to several main factors, most notably:

1. Developing a strategy (Yaker) the student is in a stage of conceptual conflict between his cognitive structure and the new information provided to him regarding the grammatical concept, which leads the student in the end to reach the correct concept.

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attitudes or concepts and concepts that exist in his cognitive structure about his natural environment. This conflict is usually between two conceptions of one concept, one of which is previous in the cognitive structure of the learner and the other is new and represents the scientifically correct concept. This discrepancy is resolved when the student realizes his error in perception, and thus the correct scientific concept is replaced in the overall cognitive structure, leading to a change in the concept (Shaer, 1999, p. 148). This is illustrated by Maximus (2003), where the student reviews, reflects, and paraphrases the questions posed to him. This is done in addition to the process of retrieving their previous experiences and rearranging them so that they are consistent with the nature of the problem, where the teacher gives his students enough time to provide suggestions and clarifications. and the results related to the problem presented to them (Maximus, 2003).

- 2. The use of the Dunker strategy has helped students organize the information presented to them with a better understanding is the sudden realization of useful connections between the elements of the problem after several unsuccessful attempts to find a solution. After these failed attempts, new relationships emerge that lead to a solution, and this solution is quickly adopted. Learning is the process of creating meaningful representations and understanding the world through one's experiences. During this process, the student's mistakes are viewed positively, as they are corrected as part of the learning path, 116)
- Working to break the monotony of the method of indoctrination in the study of 3. sociology among students., which made them recipients of knowledge from the teacher and do not interact with it in vital ways such as strategy, depends on giving students the opportunity to take the initiative and work in a competitive spirit, without shame or hesitation in presenting their required ideas, and in a competitive spirit. This, in turn, creates a sense of engagement and positivity among students towards the subject. This was mentioned by Abu Ataya (2004) and Ali (2018). In the Yacker strategy the teacher organizes a public discussion session between him and the students, where each group provides solutions, conclusions and interpretations it has reached regarding the questions, all explanations given by the groups should be carefully listened to and followed, even if they are incorrect, while avoiding ridiculing the students' opinions and ideas, even if they are unclear. After each group presents its findings, it opens the door for discussion, allowing an opportunity to justify and defend the ideas put forward. The goal is to The teacher reinforces the correct ideas and conclusions, and corrects misconceptions and ideas, so that they are replaced by the right ideas (Ataya, 2004).

Interpret findings related to cognitive curiosity :

- 1. The logical sequence of ideas presented about the problem through the use of the Yacker strategy in the teaching environment contributed to enhancing the mental and emotional interaction of students with the content of the course, which made the lesson more attractive. This increased their self-confidence and abilities, and helped them transfer the impact of learning, which sparked their interest and enjoyment of psychology. This reflects their sense of satisfaction and awareness of the value and importance of the subject in their lives. This is in line with the findings of the study of Muhammad et al., who noted in 2003 2012 pointed out that constructivist learning is more exciting than traditional methods, because it encourages students to discover solutions, make decisions and innovate, and enhances their ability to link new concepts with previous concepts, which develops their creative imagination. (Mohammed et al., 2012).
- 2. The steps of the Yacker strategy include creating a positive classroom environment free of tension, characterized by a spirit of competition and enthusiasm between members of the same group and other groups. This contributed to the students' commitment to excellence and interaction with information, which attracted them to the subject space. Ali's (2018) study showed that students in the pilot group found that their classroom environment was appropriate thanks to the steps of the Yacker strategy.. Stress-free and also stimulates the motivation to learn and therefore the cognitive curiosity of students. (Ali, 2018).
- 3. The student follows the scientific and sequential approach in reaching the correct answers through the steps of the strategy (Yaker) to keep more information in his memory, as the researcher reaped the benefits by measuring cognitive curiosity, as shown by the study of Al-Sultani (2016). The effective role of the Yakar strategy (helped students understand the content and exert a great mental effort in finding solutions to the problems they face, which made students remember information more easily and retain it in their cognitive structure for a longer period (Al-Sultani, 2016) as the study conducted by Muhammad et al. (2012) showed that Yacker's strategy helps students explore ideas. New concepts and materials and through their direct interaction and learning situations, and is presented to them through activities that occur during the stages of the model (Muhammad et al, 2012).
- 4. Yaker's strategic steps Its integration and the activities carried out by the students helped to build new concepts gradually and cumulatively, which helped them move from details to the whole, raise their level of thinking, and maintain the integration of information logically and practically. This resulted in an increase in the use of this information to satisfy cognitive curiosity.

Conclusion

Through the results reached by the researcher, the following conclusions can be reached:

- 1. The possibility of using the Yaker strategy among fifth grade literary students in philosophy and psychology lessons.
- 2. Yacker's strategy has proven effective and led to positive results in the progress of fifth graders literary.
- 3. Teaching based on the Yacker strategy encourages students to feel like a source of information, which leads to increased student confidence through active participation in the classroom through questioning and clarification. and forecasting and in conclusion.
- 4. The effectiveness of Yaker's strategy in developing cognitive curiosity among fifth grade students. literary

Recommendations

Based on the results of this study, the researcher recommends the following:

- 1. Applying Yaker's strategy in teaching philosophy and psychology to fifth grade students Literary
- 2. Emphasize on teachers of philosophy and psychology the need to pay attention and focus on teaching cognitive curiosity to students.

Proposals

To complete this research, the researcher proposes to conduct other studies as follows:

- Conduct a similar study to the current study to determine the impact. Yaker's strategy in the progress of fifth grade students in Dubai in the lessons of philosophy, psychology and the development of convergent thinking they have.
- Conduct a study to determine the impact.
- Yaker's strategy for acquiring concepts in other grades of middle or primary school. Designing an educational program based on creative imagination and its impact on developing students' thinking skills.

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