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Model Effectiveness Good Lavoie The acquisition of biological concepts for second-grade intermediate students

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Abstract:

The aim of the research is to identify the effectiveness of a model good lavoie In acquiring the scientific concepts of the second grade students, the average of the biology, to achieve the goal of the research, the following null hypothesis was formulated: - There is no statistically significant difference at the level of significance 0.05 Demonstrate the average degree of acquisition of the experimental group of the scientific concepts that they have studied according to a model good lavoie With a biology subject and the average degree of acquisition of the control group's students of the scientific concepts they studied According to the usual method,The research sample consisted of 60 Student and they were distributed in two groups A, B By 30 For the experimental group A Indeed 30 Student for the control groupB The covent groups in the IQ test variables, test the previous information in material biology Wa to collect sab s to verify the aim of the research has been prepared search tool to measure the acquisition of scientific concepts sister b R acquire scientific concepts and the back of t search results outweigh the students of the experimental group that studied According to the model good lavoieOn the students of the control group, who studied according to the usual method

Key Word: *model, Good Lavoie, concept*

I. Introduction:

The methods and techniques of teaching used in the educational field still pays great attention to the conservation and memorization rarely Matoli of interest in higher mental processes of learners and reflected on the level of achievement of knowledge by the form of the relative decline in the various stages of education ,as school curricula contain m Vahem multiple but not proven these concepts have formed LED Z learner are correct for the difficulty of learning pupils Mvahe m and absorbed, especially the naked ones that do not t dark Balh SPA as it found that the difficulty of acquisition and retention resulting from varying scientific concepts themselves in terms of their types and complexity and abstracted and non - use of teachers ' methods

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of teaching effective luxury P of its level A, so the researcher experimented with using a model good lavoie In teaching that may be effective in acquiring concepts, and thus the research problem can be formulated with the following question

Do for a model good lavoieEffective in acquiring biological concepts for the second intermediate grade?

Research importance:

It characterized this era as the Internet age and surgery genes and genetic engineering , and is no doubt that these developments of impact on societies and their development and social progress depends on scientific and technological progress Nations advanced today are able to achieve progress in the field of modern science and technology has not science a lot of people 's beliefs and ideas wrong And develop them the skills and scientific thinking and make the scientific observation and scientific experience occupy the novel and the transmission of others)Kazem Saad Weissi Zaki ,1987,2 5

So I had the science curricula at different educational levels radical changes since the emergence of signs of these developments in the fields of fixed scientific knowledge discovered and organized by scientists to control the phenomena of the universe and control , as you see the look of modern science is not based cognitive dynamically developed but activity humanly does not know stability and inertia , and beyond that To the way you gain this knowledge)Algebra ,1988 ,7 And increase their scientific ability, because science did not leave any aspect of life without putting its magic touches on it, so what was unknown turns into what is known, and thus what was difficult, makes it easy and accessible.

Research goal

The current research aims to know

The research aims to identify the P sector Maly teaching modelGood LavoieIn acquiring the biological concepts of the second intermediate students

Research hypothes

The aim of the research is achieved by validating the following hypothesis:

There is no statistically significant difference at the level of significance 0.05 Between MTW St grades students group the control of the people who have studied the way according to the normal and experimental group students who have studied according to the specimen Good Lavoie In the acquisition of biological concepts

-limits search

The current research is limited to:

-Second grade students average for the academic year2020-2019

The first semester of the academic year2020-2019

-The scientific concepts contained in the biology book for the middle stage

for the academic year 2020-2019

Define terms

_The effectiveness of - : known

-Sabry , 2002 As the ability of any treatment to achieve specific educational goals and even desired cognitive outputs

My patience ,401,200 3

Procedural definition: - the size of a model effect Good Lavoie In acquiring biological concepts, second-year intermediate students in the subject of biology

_SpecimenGood Lavoie

-Tarawneh,2011 : He Grow Zj teaching syntactical was developed not in Wei aims to develop scientific thinking among students through their search for solutions to the problems and educational situations and tasks they face mutual interaction between themselves and their environment , including the content of experiences and a variety of activities

Tarawneh,293,2 0 11

_Procedural definition: a model that includes a group of stages and activities of teaching the biological concepts in which students of the experimental group are taught

It includes four stages - :The predictive terminal analysis phase - Exploration phase- Concept stage - The implementation phase of the concept

Acquire the concept

- Al Deeb knew it198 6 As: the mentality of the process carried out by the conclusion of the learner relationships that can exist between a total of features and is built on the basis of the distinction between those Meuse data

Deeb, 1989,95

-Al - Kubaisi and Al -Dahiri , 2000

It is represented in helping education collect examples indicating it and in forming new concepts. Al-Kubaisi and Al -Dahiri 2000,47

The procedural definition of the concept is: an abstract mental conception in the form of a paraphrase, a word, or a sentence used to denote an object, topic, or health phenomenon.

II. Theoretical framework:

The first axis: constructivism theory and model Good Lavoie

Know it wheaty1991 As the theory of education, which means the adaptations occurring in the functional cognitive systems of the individual in order to equalize the contradictions arising from his interaction with the data of the experimental world

Wheatly, 1991: 9

Second: a model Good lavoie

Fits into the learning cycle model Good lavoie Teaching science because it reflects the investigative nature of the teacher in the first place, in addition to achieving other goals for learning concepts, and the learner can write during which concepts and skills Lulu and Alava 2007,203

-stages of specimenGood lavoie-:

It consists of four stages:

-Prediction stage

-exploration phase

-the stage of concept - stage application Mufho Henawi 2004,36

Phase I: - being aware of the P , may the t t burden j

Where this is stage three steps predict and discuss and debate any submission problem hypothesis Watanabe A Yeh at the beginning of the lesson in which each learner which n b A solution and its interpretation and then discuss those resp Baat under the supervision of the teacher and then the teacher to encourage debate and dialogue between learners and helping them eating experiences and create meaning and discover pain in concepts Kat I of the Tsaha h ha

Ahmed ; 2002,443

Phase II: - the stage of exploration at this stage are based on the learner 's teacher (student , (where the note and collecting information, recording and tabulation and analysis for her in order to reach information and re - balance Almarda has Abrah Yum2009,468

The third stage: - the concept extraction stage This stage uses the experiences that students gained from the previous stage, and the learners are required to reach generalizations for what they gained in the previous stage

Shehata , 2008,209;

Fourth Stage: Application of the Concept In this phase, students apply what they have reached and obtained in the previous phase on new attitudes through activities that they carry out that help them transfer the impact of what they have learned to these situations and generalize their experiences they have acquired.

- Model features Good Lavoie

- Using high-skills of analytical removes many misunderstanding -taattalb many questions -taattalb administration drain more stable - using science processes skills m- tvaal more with their fellow students A .Katsav Higher degrees of understanding

The second axis: - Scientific concepts * Scientific concepts: - Scientific concepts are one of the most important outcomes of science by which scientific knowledge is organized in a meaningful sense, as it is the organizing and guiding elements for any scientific information that is divided in the semester Abdulsalam ;2001,146

That term is conceptual though Phrases used in a definition and description, but there are influences indicating the existence of agreement between researchers in education and psychology, the length of the data for this term, and among these definitions are the following :Among them is the National Commission's definition of educational study in its sixth book

Forty released 1947As defined as : : installation or organization of ideas and meanings

. Alwan and others, 2014.57

The importance of learning scientific concepts

Simplifying environmental criticism - reduces the need for continuous learning -Scientific concepts facilitate learning - Concepts contribute to enriching the cognitive construction of the individual - Concepts provide one point of view of truth or reality - Concepts help to organize experience - Forming concepts in individuals is a way to form broader generalizations later, such as principles and theories - Concepts are more stable and stable than facts

Alwan and others ,2014.57

Factors Affecting Acquisition of Concepts - Number of Examples - examples and non - examples- Concepts Type Previous experience - individual differences between learners Feedback

Paranoid, 2001,83

A- Factors related to the learner

The age of the learner, and his willingness and motivation to learn the concept and his previous experiences of previous concepts and necessary learning of new concepts

Factors related to educational attitudes, which relate to the steps involved in organizing concept learning, and examples of these steps are what Davis and others mentioned:

Test students' knowledge of the desired concepts A pre-test to know the students' previous learning - Choose the appropriate education strategy

-sister b R appropriate examples of planned concepts

Provide an opportunity for training and practice - Examining the extent of learning the desired concepts

Factors related to the concept itself - Examples are examples -mental qualities and only mental qualities related to the concept -The nature of the concept, materialistic and abstract - Feedback that takes the place of reinforcement when the answer is correct

-Terms of learning concepts

-For the learner to have the necessary information, skill and experience in order to learn the new concept - to be a motivated learner to the point of wanting to participate in educational activities - for the learner to have sufficient capacity to teach in order to be able to participate in educational activities - That the learner is given some guidance in order to preserve Researcher and motivator so that education is effective and targeted - That the learner prepare some educational aids such as books, three-dimensional models, or pens, to bring the concepts closer to him in a sensory way - that the learner gives sufficient time to participate in educational activities to uncover some of the required concept. Ibrahim 1997,209

Strategies, methods and methods of learning and teaching concepts, says Abu Ataya 2001, The teacher can choose two methods of teaching the concepts: -Conclusion

-Inductive

Conclusion: This method consists of giving the definition of the concept and then following that with detailed examples - Inductive: - This method consists of giving examples first and then extrapolating or extracting the intended concept from them.

Abu Ataya 2001,68

Principles of acquiring scientific concepts

Concepts develop through various experiences related to the concept it is going through

Learners.

Concept development and formation for learners depends on their level of understanding of concepts

-The focus should be on the diverse experiences more than the repeated ones through the use of different educational methods. Concepts is when those concepts fulfill their needs and interests

Learners seek out each other and match their capabilities.

Yassin and Rady ,2012,40

Learning the concepts) acquisition (Learning the concept means any activity that requires the learner to combine two things or two or more events and this activity is performed by the individual in order to classify things with an acceptable degree of validity that makes him able to differentiate between positive and negative examples

El-Sherbiny and Sadik ,2005,45

Brunner identified five elements that facilitate the learning of the concept

-concept name -Definition Concept Characteristics of the concept - Value the concept Concept examples Olives, 1994,81

Search procedures:

-Empirical approach:

The researcher followed the experimental approach to verify the goal of the research and its hypothesis, as the experimental approach is characterized by its ability to control the various factors affecting the phenomenon to be studied, and it begins with the existence of a problem facing the researcher and requires him to search for its causes and the circumstances that affected it by conducting Experiments

-Experimental design

The experimental design is intended to control the variables affecting a phenomenon except for one variable that the researcher normalizes and changes in order to determine and measure its effect on the phenomenon subject of the study and to achieve the goal of the research, the researcher chose the experimental design with two groups (experimental control) of those with the post-test to collect biology material as it is suitable for the purpose of research and verification. From the validity of the null hypothesis, as shown in the diagram- :

Experimental design for experimental and control groups with post-test

Dependent variable	Independent variable	Equivalence		Group
Biometric acquisition test	A model Good Lavoie	Prior achievement in science Intelligence		Experimental
	Ordinary method			Control

- :Research community and sample

The current research community for female students represents the second grade intermediate at Al-Muhtadi Billah co-educational school for the academic year 2020-2019 Which is the sister of the rate Qsidia from one of the schools of the General Directorate of Education Diyala / Breeding spend Baquba , reaching the research

community120 'A student and a student by four people, A, B, C, DThe researcher was chosen for the school intentionally, for reasons including

Full cooperation from the school administration and the facilities provided to conduct the experiment

-Most of the pupils from one geographical area constitute a homogeneous social, cultural and economic environment which facilitates the procedures for the researcher to parity between the two groups of students Alp urged.

As for the search sample, it was tested by the simple random determination of my divisionA, B Of them60 Student and tested his people A To represent the experimental group and its people B The control group is represented by a fact 30 Student of the experimental group

-Equivalence of the search group

Equivalence is intended to make two homogeneous groups equal in exactly the same conditions. To confirm the equivalence of the two groups, the researcher conducted equivalence in some variables that are directly related to the conduct of the experiment, namely intelligence, previous achievement

In biology for the second grade, average, if the researcher has parity, the two groups of the researcher, and the following procedure shows the equivalence of the two research groups with the following variables:

-Intelligence :adoption date researcher of a brother Tabar ra P n suctioning Fofat similar degree of intelligence to compare the two sets of experimental research and the compressor being suitable for the Iraqi environment is characterized by honesty and stability as a result of the application in many local studies .It is one of the most common intelligence measures used in measuring the general actual ability as one of the intelligence tests freed from the language factor. The test consists of60 Paragraph distributed in groups within groupsA, B, C, D, By 12 A paragraph distributed for each group, and each correct answer to the paragraph is one score, meaning that the sum of the correct answers is the score that the student records

The researcher also obtained grades in the biology of the two groups of the researcher attached2Students' grades supplement two groups research past achievement for the school year2018-2019 For the second grade, average, and after adopting the statistical treatments represented by the use of the T- test for its knowledge and its significance, the difference between the two averages , it was found that the calculated T value0.8It is less than tabular and extreme 1.96At a level 0.05 Critical degree 60Which indicates that the two groups experimental and control variable in the statistically unequal the collection of the former in the Mad of Science

The two groups of research are equivalent in science, intelligence and previous achievement

Statistical significance	T - tabular	T - caluclated	Standard deviation	Average account	Group	Variables
Is statistically significant	1.96	0.8	540.7	654.2	Experimental	Prior achievement in science
			608.1	637.2	Control	
Is statistically significant	19.6	12.1	794	351	Experimental	Intelligence
			748	327	Control	

Statistical treatments :

The two researchers used to process the data statistical program for social sciences which is known as(spss-x).

III. Results

-null hypothesis there is no difference is statistically significant at the level of achievement between the average scores of students in the experimental group biology and studying on and Vq styleGoodlavioeIn biology and the average achievement scores of the control group who study according to the usual method and through the results of biology material achievement, the two experimental and control research groups appeared that the average of students for the experimental group who studied according to the modelgood lavoie Has reached 14.9 And contrast235.4 In terms of the average grades of the control group students who studied the same subject in the usual way36 . 2 And contrast 101.3 Using the test Altaia of samples m will be less figs equal figs number appeared to value the T was32.5It is greater than the tabular T value of the amount1 9.6At the indication level 0.05 And freely 60 Which indicates the superiority of the experimental group students who studied according to the method good lavoieThe students of the group of the officer who studied over the buil Coordination of the usual ie that there is a statistically significant difference between the two groups was the difference in favor of the experimental group as the method ofgood lavoie It has an achievement effect for second grade middle school students

*The statistical significance of the mean scores of the two research groups in the final achievement

Significance at level)0.05(	t- tabular	t- caluclated	Standard deviation	Average account	Group
Statistically function	19.6	32.5	235.4	14.9	Experimental
			101.3	36.2	Control

Interpretation of results:

This indicates the superiority of the experimental group over the control group in the test of acquiring concepts , and the researcher attributes this to several reasons, including- :

-The model worked to increase interaction between the members of the experimental group, and the effective discussions about the educational mission and the teacher's directions had an effect on their understanding of the educational material, and this understanding may transfer to their original groups, which led to an increase in their achievement, and also helped in the exchange of experiences between students and taking into account individual differences between them being heterogeneous groups as it made the student is the focus of the educational process as it urges students to seek to reach knowledge, and working to reduce the level of anxiety and fear of failure among students and to provide reassurance and self - reliance and increased confidence Blanc vs.

Recommendations

In light of the research results, the researcher recommended the following:

-Using a form Goodlavioe At all academic levels, for its effectiveness in increasing the acquisition of concepts

-Using a template Goodlavioe In teaching a great deal to achieve an atmosphere of familiarity and communication among students and eliminate individual competition among students in the classroom

-Holding workshops for teachers to train them on how to plan lessons in various study subjects using a model Goodlavioe

Suggestions- :

-Conducting other research to find out the effect of a modelGoodlavioe On other variables such as thinking skills and achievement motivation....

-Conducting similar research to find out the effect of a modelGoodlavioeM in educational materials and other educational stages

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