The Effectiveness of Teaching According to the Integrative Model in the Subject Achievement of Rhetoric for Fifth Literary Students

Ihab Ibrahim Zaidan AL- Saadi[a], HayderDiekan Darweesh[b], [a]College of Education for Pure Sciences, University of Babylon, Iraq, [b]The open educational college, Babylon Academic Center, Ministry of Education, Iraq.

The current study aims at seeking for the effectiveness of teaching according to the integrative model in the achievement of the rhetoric subject for fifth-grade literary students. To achieve the goal of the research, the researchers randomly chose the Al-Thawra Preparatory School for Boys, by the random drafting method. They chose section 'B' to represent the experimental group that studies the rhetoric subject according to the contrary knowledge strategy. Meanwhile, section 'A' represents the control group that studies the rhetoric subject in the traditional way. The research sample reached 60 students, consisting of 30 students in each group. The researchers conducted parity between the students of the two groups, depending on the following variables: the chronological age of the students, which was accounted by months; the academic achievement of the parents; and the academic achievement of the mothers. The researchers identified the study topics that are studied during the experiment period after presenting it to an elite group of experts and specialists. The researchers prepared teaching plans for the subjects to be taught during the experiment period. These plans were presented to a group of specialists in teaching methods to demonstrate their validity, and they all agreed upon them. One of the researchers taught the students of the two study groups during the experiment period. After the end of the experiment, the same researcher applied the achievement test to the students of both groups. The researchers used the following statistical methods: T-test for two independent samples, Kay square and Pearson correlation coefficient. After analysing the results, the researchers determined the surpassing of the experimental group students who studied the rhetoric subject according to the integrative model over the control group students who studied the rhetoric subject by using the traditional method of testing achievement in the rhetoric subject. The researchers concluded that the students have responded to the cognitive integration

model in teaching and they interacted with it by the indication of the results. The researchers suggested a number of recommendations, including the necessity of using the integrative model in teaching the rhetoric subject because of its role in the achievement of the students.

Keywords: *Integrative model, Achievement, Rhetoric.*

Introduction

The current study sheds light on an important teaching model, which is the integrative model. This model was developed by the American scientist Posner. Posner based his model on modifying ideas and organising them according to structural philosophy. Structural philosophy is the philosophy that deals with value-based learning, knowledge-building, and the steps to use it. Several teaching methods have been derived from it, such as problem-centred learning strategy, learning cycle, Posner model, whitely strategy, constructive learning model, and Adveriver model, among others (Khutaba, 2005). This model is based on the premise that students' behaviour is governed by their cognitive structure, and that students have previous knowledge of what greatly affects what can be added to it from new learning or knowledge (Attia, 2008).

Based on the foregoing, the researchers wanted to know the effectiveness of this model in teaching rhetoric due to the absence of effective teaching methods in teaching this subject. Thus, meaning that these methods are capable of developing thinking, imagination, meditation, and rhetoric creativity.

The Problem of the Study

The rhetoric subject plays an active role in developing artistic taste. It also works to activate the imaginative ability of students. Yet, its teaching in the preparatory stage is carried out under literary texts, and perhaps the attachment of rhetoric to literature, the reduction of its educational share or subject with its incorporation into lessons of literary texts is very extreme. This is because the literary text sometimes does not expand for its material to show the rhetorical subject.

The teacher avoids himself for showing the rhetorical colour, due to the lack of incidence of the topic in modern literary texts (Atta, 2006: 301). Moreover, the rhetoric subject is taught as a way of providing examples that are made far from inherited literary texts, as the care is limited to familiarity with the rules and definitions, which is quoted in their validity with amputated sentences and costly examples made to support those rules and definitions (Fayed, 1975).

The approved methods of teaching the rhetoric subject is focussed on filling the minds of students with the subject matter as a filler, without taking care of the technical and aesthetic aspect. This is because the student memorises what he empties in the answer sheet on the day of the exam, forgetting what he has memorised because he is obliged to exert his utmost efforts in deaf memorisation, and then ends up completely cut-off from everything which related to it (Sharif, 1998).

From the above, it is clear that there is an absence of the effective teaching methods in teaching this subject. That is, those methods that are capable of developing thinking, imagination, meditation, and rhetoric creativity (Al-Sayid, 1985).

The Significance of the Study

A. The importance of the Arabic language, as it is the language of the Holy Quran.
B. **2.** The importance of the Arabic rhetoric, as the adornment of the crown of the Arabian language, evidence of the integrity of its tongue, the decoration of its words, and also its ornamentation.
C. The importance of the integrative model as a teaching method that positions the learners' in a positive attitude.
D. The importance of the achievement, as it is the primary goal of the education process.

The Aims of the Study

The current study aims at determining the effectiveness of teaching according to the integrative model in achieving the rhetoric subject for fifth year literary students.

The Hypothesis of the Study

To achieve the research goal, the researcher has imposed the following hypothesis:

There is no statistically significant difference at the level of 0.05, between the average scores of students who are studying the rhetoric subject according to the integrative model, with the average scores of students who are studying the rhetoric subject in the traditional way, in the rhetoric achievement test.

The Limits of the Study

The study is limited by:
A. A sample of fifth grade literary students for secondary and preparatory day schools in the Babylon Governorate Centre for the academic year of 2018–2019.

B. A number of topics which are related to the fifth grade literary rhetoric book.

The Determining of the Terminologies

The Integrated Model

The integrated model was defined by Al-Bawiya as:

"It is a process by which the information in the individual is replaced by the correct scientific understanding, that is consistent with scientific principles by following a number of strategies, which are: integration, discrimination, substitution and conceptual bridging" (Al-Bawiya, 2006: 4).

As for the procedural researcher's definition of the model, it is:

It is a framework or blueprint for guiding the process of teaching and learning for students according to educational strategies, which is represented by forming ideas, interpreting information, and applying principles that include questions of an inductive nature, through which they can practice various mental processes related to teaching the subjects under experience.

Achievement

Khodir defined achievement as:

"A tool that is used to determine the learner's gain from information, skills and directions in a studied subject that he had learned in an official way by his answering about a sample of questions which represents the content of the subject" (Khodir, 2006).

Considering the previous definitions, the researcher defines the procedure definition of achievement as:

The amounts of what fifth grade literary students receive, measured by the scores in the achievement test for the rhetoric subject that the researcher prepares for the purposes of the current research.

Theoretical Framework and Previous Studies

Theoretical Framework

The current study also came to shed light on another teaching model, which is the complementary model for Posner. Posner, who is a Professor at Cornell University, suggested a model of teaching that proceeds from the idea that learning science is an active mental process in which knowledge is built based on previous knowledge. Therefore, new ideas are not added to ideas; the new ideas do not only add to old ideas, but rather interact with them and change them, and both sides may change. That is, the necessity of integrating new knowledge with previous knowledge to bring an effective learning experience (Posner, 1982). Posner also mentioned a set of steps that the teacher can use in the classroom. These steps are:

1. Integration: the goals of this strategy are to link previous knowledge with the new or to link different ideas together, even if they were not previously studied.
2. Distinguishing: the goals of this strategy are to provide students with the ability to distinguish, perceive, understand, and achieve acceptance of new ideas.
3. Substitution: this strategy aims to replace a new piece of information with a previous one, as a result of the difference between the two information, which will usually be generated by the learner when two facts are combined, one of which is correct and the other is wrong.
4. Bridging or aligning: this strategy aims to find an appropriate formula in which basic abstract ideas can be linked to familiar, meaningful experiences (Tyson & Others, 1997: 338).

Zeitoun (2007) has mentioned that teaching, according to the integrated model for Posner, is as follows:

A. Diagnosis of ideas and information (naive and wrong) among students. In this, learning activities are presented that raise the contradiction of knowledge, confirming their imbalance. This includes students' scepticism about the scientific ideas and information that are created for the situation under learning. This is done through dialogue or according to the students supporting to predict a certain behaviour for the phenomenon, according to his ideas to show (failure) of the prediction which leads to suspicion of the constituted ideas they have.
B. Prepare and develop appropriate educational materials and tools, taking into the consideration the students' previous thoughts and information.
C. Informing the students about the learning or perception error that it creates.
D. Providing the right scientific ideas and information to the students.

E. Verify that the correct scientific ideas and information are learnable from students on the one hand, and that students are able to express them on the other hand.

F. Instruct students to express the meaning of new ideas for them, and also instruct them to show the relationships of the new ideas to other information which contained the knowledge structure.

G. Instruct students to apply ideas in new situations that demonstrate the effectiveness and richness of these ideas through predictions or solving problem.

H. Helping students to accept new ideas by exposing them to situations that require defending these ideas.

I. Extending the application of these ideas or information in a variety of situations to ensure students accept these ideas and adopt them permanently (Zeitoun, 2007: 76).

Previous Studies

Al-Shimary Study (2002)

This study was organised in the College of Education, Ibn Al-Haytham at the University of Baghdad. This study aimed to know, "The effect of using the integrative model on conceptual change and students' achievement in physical information". This study attempted to answer the following question: what is the effect of using the integrative model on conceptual change and students' achievement in physical information?

The experiment was carried out on the fourth year of secondary school in the Saddam High School in the District of Baquba, and in the first semester of the academic year of 2001–2002. The research sample consisted of 50 students who were divided between two experimental and control groups, as the number of students in each was 25 students. The researcher equated between the two groups in the previous academic achievement of physics, chemistry, and mathematics subjects and testing concepts. As for verifying the two research hypotheses, the researcher conducted two tests:

The first test was concept testing, with the aim to define the physical concepts with a misunderstanding among the students. The test included 24 concepts and each concept included items of definition, example, and application. Thus, the test consisted of 72 items from the objective and article types which have a short answer. The validity of the test was verified by presenting it to a group of arbitrators, and according to its application to an exploratory sample, its stability using the Roland equation reached 0.73. Subsequently, the test was carried out on the research sample at the beginning of the school year. After correcting the answers, it was found that there were 18 concepts with a mistaken understanding that exceeded the students' error on it (0.34).

Meanwhile, the second test, was the achievement test, consisting of 50 items, 37 of which were various objective items and 13 various article items, which were also validated by presenting it to a group of arbitrators. Subsequently, the stability of its objective items was calculated by using the Kuder-Richardson equation (20), which reached 0.90. Furthermore, the Kronbach alpha equation was used to calculate the stability of the parasitic paragraphs, reaching 0.907. The researcher himself taught the two research groups; he taught the control group in the usual or traditional way, as the Posner model was used on the experimental group for a full semester. The concepts and achievement test were then implemented on both groups with the processing of the data statistically. To determine the effect of the integrative model on the research sample, the T-test was used. The results showed that there were statistically significant differences at the level of 0.05 in the change, as well as in the average achievement for the benefit of the experimental group (Al-Shimmery, 2002: A-B).

Al-Massoudi Study (2010)

This study was conducted at the University of Baghdad in the College of Education, Ibn Rushod. It aimed to determine "the effect of Driver and Posner models in correcting the wrong historical concepts for the third-grade students in teacher training institutes". This study sought to achieve the following:

A. What is the effect of using the Driver's model in correcting the mistaken historical concepts for the third grade teacher in training institutes?
B. What is the effect of using the Posner's model in correcting the mistaken historical concepts for the third grade teacher in training institutes?

To achieve this, the researcher adopted an experimental design with partial control, which is the design of an experimental group and a control group, and a post-test.

The research sample included 78 students from the third grade of the 'Teacher Preparation Institute', morning studies in Karbala. As they were randomly distributed among three groups, with 26 students for each section, the researcher measured the students of the research groups in the following variables: the chronological age of the students, the variable of intelligence and the results of the exams for the last academic year in the course of history subject, with the academic achievement of parents, the academic achievement of mothers, and misconceptions in the history subject. After the researcher identified the study material that was included in the topics of 'History of Arab-Islamic Civilisation' — which is scheduled for teaching in the third grade of the "teacher training institute", amounting to five semesters — the researcher prepared a diagnostic test for misconceptions. It consisted of 40 items for 40 concepts. As the concept is mistaken by the students when the wrong answers exceed 34 per cent, after applying the test upon the research sample, it was corrected, finding

that there were 18 wrong concepts within the research sample. The researcher prepared teaching plans for each of the groups. The first group studied history according to the Driver model, while the second group studied history according to the Posner model. As the control group studied the history subject according to the usual method, after completing the teaching of the academic subjects and in order to identify correcting the historical concepts of the students, the researcher prepared an objective dimensional achievement consisting of 54 items from the type of blanks and pairing, and multiple choice. The researcher confirmed the validity and the reliability of the test, the discriminatory powers of items, and its difficulty coefficient, which was applied on 14 January 2009, by using the Kay Square (Ka^2) method to analyse the data. The results revealed a statistically significant difference in correcting historical concepts between the first and second group and for the benefit of the first group. In addition, there was a statistically significant difference between the first group and the control group in correcting historical concepts and for the benefit of the first group, as there are also statistically significant differences between the second group and the control group with the benefit of the second group in correcting historical concepts (Al-Massoudi, 2010: i-j).

The Balancing of Previous Studies

After presenting the above studies, the following became clear to the researcher:

A. The objectives of previous studies differed with the variation of their problems. The Al-Shammari study (2002) aimed at the effect of using the integrative model on conceptual change and students' achievement in physical information. The study of Al-Masoudi (2010) aimed at determining the effect of the Driver and Posner models on correcting the misunderstanding of historical concepts in third grade students, and teacher training institutes. Meanwhile, the current study aimed at identifying the effectiveness of teaching according to the integrative model in the achievement of rhetoric for students of the fifth literary grade.
B. The previous two studies were conducted in Iraq and they agree with this study in the place of the procedure.
C. The previous studies that were presented used the experimental method, and they agree with this study, to use this approach.
D. Both studies used an experimental design characterised by exactly the partial post-test and thus, are consistent with the current study.
E. The number of the individuals in the previous studies were very close. In the study of Al-Shimmery there were 50 students, while there were 75 students in the study of Al-Massoudi, and further, the current study has reached 60 students.
F. The previous studies differed with the current study in the method of selecting the sample.

G. Al-Shammery's study agreed with the current study in the school stage that included the secondary stage, while Al-Masoudi's sample was at the 'Teacher Training Institute'.

Useful Aspects of the Studies

The researcher has benefited from the previous studies in the following aspects: the aim of the study, the experimental design, the method of taking the sample, parity in a set of variables, building the measurement tools, determining statistical means, and analysing and interpreting the results.

Study Methodology and Procedures

The Experimental Design

The current research requires the researcher to follow the experimental approach, as the experimental research is not merely a show for the past events, but rather for controlling the variables in experimental situations. The experimental approach is characterised by the ability to control the various factors that were affecting the phenomenon to be studied (Abdel Rahman & Zangana, 2007).

The researcher chose an experimental design with partial control because it is more suitable for the research procedures, and the design came, as shown in Table 1.

Table 1: The Experimental Design

The Group	Independent variable	Dependent variable	The Tool
The experimental group	Integrative Model	Achievement	Achievement test
The control group	The traditional method		
Calculate the difference between the results of the two groups in the achievement test.			

The Research Community and Its Sample

The Study Community

The current research community includes secondary and preparatory schools for boys in the Babylon Governorate Centre for the academic year of 2018–2019, that includes two sections for the fifth literary grade.

The Study Sample

The present research sample is divided into the following:

A. The Sample of the schools: the researchers chose the Al-Thawra preparatory school for boys via the intentional method.
B. The sample of the students: the two researchers visited the Al-Thawra Preparatory School and a total of 60 students were selected, with 30 in both the experimental and control groups.

Equivalence of the Two Research Groups

The researchers equivalenced the two research groups with a set of variables, as follows:

A. The students' chronological age is calculated in months.
B. The academic achievement of mothers.
C. The academic achievement of the parents and the chronological age of the students are calculated in months.

Control of Foreign (Non-Experimental) Variables

The Researcher Controlled the Following Variables

The differences were in the sample selection, experimental extinction, experiment conditions, accompanying accidents, and the effect of the experimental procedures and the measuring instrument.

The Determination of the Scientific Material

The researchers identified ten subjects from the rhetoric book to be taught to literary students of the fifth grade.

Formulating Objective Goals

The researcher formulated eighty behavioural goals, depending on the general objectives and the content of rhetoric topics to be studied in the experiment, and distributed across the six levels in the cognitive domain of Bloom's taxonomy (i.e. knowledge, understanding, application, analysis, synthesis, and evaluation). In order to verify its suitability, it was presented to a group of specialists in teaching methods.

Preparing Teaching Plans

The researchers prepared for the experimental group plans by using the integrative model, while the control group plans were prepared for them in the traditional method. The researchers presented a set of these plans to a group of specialists in teaching methods to verify their suitability.

Conducting the Experiment

After completing the requirements of the experiment, the researcher began to apply the experiment by teaching one lesson per week to each group. One of the researchers studied the experimental group using the integrative model, meanwhile the researcher himself studied the control group according to the traditional method.

The Study Tool

The Achievement Test

The process of measuring achievement requires the presence of a tool, and this tool is the test. Therefore, the researchers reviewed the literature and previous studies in this field, so they built a test in the achievement of the rhetoric subject. The researchers also presented it to a group of specialists in the Arabic language teaching methods. The researchers extracted the validity, stability, and psychometric properties for the test.

The Survey of the Application to the Test

The researchers applied the test of achieving in the rhetoric subject to a survey sample consisting of 35 students, the aims of which were:

A. Learn about clarity of the items.
B. Determine the appropriate time to answer the test.

After applying the achievement test on the survey sample, it was found that the test was clear to the students of the survey sample, and that the time required for the test is 45 minutes.

The Application of the Final Test

The researchers applied the achievement test to the students of the two research groups, as the following was taken into account when applying the test:

A. The researchers supervised the test application.
B. The researchers explained and clarified the test instructions.

The Stability of Correction

To verify the stability of the test correction, the two researchers randomly selected ten questionnaires from the answer forms of the two research groups' 60 forms, extracting the stability of correction in two ways:

A. The Stability Over Time

The researcher corrected the forms, and after two weeks, repeated their correction by using the correlation coefficient (Pearson). The degree of consistency between the researcher's corrections reached 0.90.

B. The Stability with Another Corrector

The degree of consistency between the researcher's correction and the correction of another correction was 0.85.

The Statistical Means

The researchers used the T-test for the two independent samples, and the Kay square (Ka^2), Pearson correlation coefficient, and statistical methods for dealing with data.

The Presentation and Interpretation of Results

The Presentation of the Results

The researchers used the T-test equation for two independent samples, to identify the difference between the average scores of students of the two groups in the rhetoric achievement test. The results are provided in Table 2.

Table 2: Arithmetic mean, variance, T (calculated and tabular) values, and statistical significance for the scores of the two research groups in the rhetoric test

| The group | Num. | Average | Variable | Freedom degree | T-Value | | Statistical indication at the level of 0.05 |
					Counted	Tabular	
Experimental	30	34.6	5.521	58	3.234	2	Statistical indication
Control	30	31.5	4.511				

It is noted in Table 2 that the average score of the experimental group students was 34.6, while the average score for the control group students was 31.5. The difference between them is statistically indicated at the level of significance of 0.05, the degree of the freedom is 60, as the calculated T value is 3.234, which is greater than the tabular value of 2. Therefore, the experimental group outperformed the control group in the examination of the achievement of the rhetoric subject.

The results found that the experimental group students who studied the rhetoric according to the integrative model were superior to the control group students who studied the rhetoric subject in a traditional way in the achievement test. Consequentially, the zero hypothesis is rejected, so the alternative hypothesis is accepted:

There is a statistically significant difference at the level of 0.05, between the experimental group average scores of the students who are studying the rhetoric according to cognitive conflict, and the average score of the students of the control group who are studying the rhetoric in the traditional method, in testing the achievement of the rhetoric subject. It is for the benefit of the experimental group.

Interpreting the Results

In light of the results that were presented, the researchers believe that the reason for the experimental group's superiority over the control group is due to the following:

A. The use of the integrative model has given students an opportunity in quiet dialogue and discussion, as well as the freedom to express their opinions. Thus, the students with poor achievement levels have benefited from the students who do not suffer from poor achievement.
B. The use of the integrative model in teaching has stimulated the psychological motivations of the students of the experimental group, making them pay attention, think, work, and succeed.

C. The use of the integrative model helped make students more accommodating of the subject matter using educational strategies, such as bridging, discrimination, and differentiation.

D. The integrative model helped to summarise the study material, and to reformulate and compile it in a new form so that the student can easily understand it.

Conclusion

In light of the research result, the researchers came to the following conclusions:

A. The use of the integrative model within the limits of which the current research was conducted, has proven effective in increasing the achievement of literary fifth graders in rhetoric.

B. The use of the integrative model positions the student at the core of the educational process, while the teacher is the guide for going through the lesson steps.

C. The use of the integrative model depends on the students' activity, and the succession of the individual in the group means the succession of their groups.

D. The superiority of the integrative model over the traditional method is due to the fact that it is a new thing for students which is actually practised to prepare for the subject of the lesson. It made it easier for them to quickly understand the subject by absorbing it and not forgetting it.

The Recommendations

In the light of the research result, the researchers recommend the following:

A. The necessity of using the integrative model in teaching the rhetoric subject for fifth grade literary students.

B. Emphasising on the use of the integrative model in the teaching of various educational subjects.

C. Using the integrative model in teaching other Arabic language subjects because of its multiple benefits in science enrichment.

The Suggestion

In light of the results of the research, the researchers suggest the following studies:

A. A similar study to the current study but in other stages and classes.

B. A similar study to the current study exploring other variables, such as retention and tendency towards matter.

REFERENCES

Abdul Rahman, A., & Zangana, A., (2007): Methodological Patterns and their Applications in Humanities and Applied Sciences, Baghdad, Iraq.

Al-Bawiya, M.,(2006): "The effect of using the constructivist learning and Posner models to modify the misconceptions of some physical concepts among students of teacher training institutes and their attitudes towards the subject" College of Education (Ibn Al-Haytham) / University of Baghdad, (unpublished Master Thesis).

Al-Masoudi, M.,(2010) "The effect of two examples of Drafer and Posner in correcting the historical misconceptions of third-grade students in teacher training institutes", University of Baghdad, College of Education (Ibn Rushd), (unpublished Master Thesis).

Al-Saiyed, M., (1985): Teaching the Arabic Language between Reality and Ambition, 1st floor, Dar Al Fikr Al-Arabi.

Al-Shammari, T., (2002):"The effect of using the integrative model in conceptual change and students' achievement in physical information," University of Baghdad / College of Education (Ibn Al-Haytham), (unpublished Master Thesis).

Attia, M., & Abd Al-Rahman A,(2008): Practical Education and its Applications in Preparing the Future Teacher, Al-Manhaj Publishing House, Amman.

Fayed, A,(1975): Pioneer of General Education and Foundations of Teaching, 3rd floor, Dar Al-Kitab, Lebanese, Beirut.

Khadir, F,(2006): Methods of Teaching Social Studies, Al Masirah House for Publishing, Distribution, and Printing, Amman, Jordan.

Khatabia, A,(2005): Science Education for All, 1st edition, Dar Al Masirah, Amman, Jordan.

Posner, G. J., Strike, K. A., Hewson, P. W., & Gertzog, W. A. (1982). Accommodation of a scientific conception: Toward a theory of conceptual change. Science education, 66(2), 211-227.

Tyson, L. M., Venville, G. J., Harrison, A. G., & Treagust, D. F. (1997). A multidimensional framework for interpreting conceptual change events in the classroom. Science education, 81(4), 387-404.

Zaitoun, A., (2007): Structural Theory and Strategies for Teaching Science, Al-Shorouk, Jordan.