

# Effect of the strategy, look before you listen about the achievement of geography among the fifth-grade literary level students

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## Abstract

This research aims to find out the effect of the Look before you listen strategy for the achievement of fifth grade literary students. To achieve the goal of the research, the researcher developed his hypothesis:

There is no statistically significant difference at the level of significance (0.05) between the average scores of the experimental group students who studied according to a strategy (see before you listen) in the achievement of the natural geographical subject and the average scores of the control group students who studied the same subject in the traditional way.

**Keywords:** geography, literary students.

## INTRODUCTION

This research is defined as:

1- Students of the fifth grade literary, for the academic year 2021-2022.

2- Topics of the book of natural geography to be taught to fifth grade literary students for the academic year 2021-2022.

The researcher adopted an experimental design with partial adjustment to his study, (experimental group and control group). The research community consisted of day preparatory schools affiliated with the General Directorate of Diyala Education, after they were randomly selected from among the four directorates of the Central Region, and the middle school (martyrs of Zanbur) for boys was chosen in a simple random way to be the research sample from it, and the sample consisted of two divisions of the fifth grade literary divisions distributed, in a random way to the research variables, as Division A

represented the experimental group, and Division B represented the control group. The sample reached (61) students, with (30) students in the experimental group, and (31) students in the control group. The researcher conducted an equivalence between the groups in the variables (previous knowledge, intelligence, temporal age calculated in months, parents' academic achievement, scientific thinking test). After the researcher specified the scientific material to be taught, which included the book of natural geography to be taught in the fifth grade literary for the academic year 2021-2022, and in light of its content, the researcher identified (192) behavioral goals that measure (knowledge, understanding, application, analysis, composition).

The researcher prepared an achievement test consisting of (43) paragraphs of the type of multiple choice, and (7) paragraphs of the essay questions. The researcher verified the validity of the test by presenting it to a group of

arbitrators and experts in the specialization of teaching methods, measurement, evaluation and educational psychology. The researcher also verified the stability and difficulty of the test and distinguished its paragraphs. and upon completion of the trial. The researcher used statistical means (K-square test, test that is for two independent samples, ease, difficulty and discrimination coefficient, Pearson correlation coefficient for the article paragraphs, Bonnet Payserial correlation coefficient for the substantive paragraphs, Cooper's equation, Vacronbach's equation coefficient, Cohen's (d) value to determine the size of the trace).

The results resulted in statistically significant differences between the average scores of the students of the two experimental groups who studied according to a strategy (see before you listen) and the average scores of the students of the control group who studied according to the traditional method, and in the interest of the experimental group, and in the light of the results of the study, the researcher reached several conclusions related to teaching using a strategy (see before you listen) and the recommendations related to them and proposals.

#### First: Problem of the research

This fact is clearly demonstrated by the results of the study (Al-Shammari, 2002), which showed a deficiency in the use of teaching methods suitable for the nature of the geographical topic and their focus on the preservation of deaf information, which led to the inability of students to acquire mental and motor skills, as found in a study. (Al-Faili, 2014) that geography teachers lack diversity in teaching methods, and the weak ability to create educational attitudes for different ways of thinking and the lack of diversity in the use of modern teaching and teaching methods, as well as the researcher reviewed the studies of (Al-Salihi, 2012) and (Al-Tamimi, 2016). It became clear to him that the low level of geographical achievement of students, and that most students preserve information without understanding the relationship, and this is due to the weakness of the teaching methods used that depend on preservation and to move away

from understanding scientific thinking and linking what they learn to their daily lives, and solving the problems facing them in scientific ways.

What confirms the reasons above, the researcher prepared a form, to stand up and reveal the main causes of this problem distributed by the researcher to a sample of geographical teachers of the fifth grade literary working within the Directorate General of Diyala Education, numbering (20), and the questionnaire included two questions:

First: Are modern methods and techniques used in teaching natural geography?

The results confirmed that (95%) of what was previously presented, from their use of traditional methods and not using modern geography teaching strategies, which became clear after reviewing the answers.

Second: Are you satisfied with the level of achievement of your students in the subject of geography as a teacher for this subject?

The results were (80%) dissatisfied with the level of achievement of their students after reviewing the answers.

As a result, there is a need to use the modern teaching strategy (see before you listen), which may enable students to increase the achievement of the age stage of fifth grade students as well as the specificity and importance of the geographical subject requires this. Therefore, the problem of research stems from the need to carry out this study from the models of the theory of expert learning and to prove them empirically to know their effect on the achievement of students.

#### Second: The importance of research

Educational achievement can be considered an indicator of the extent of the student's achievement of educational goals. Therefore, predicting and measuring it among students is one of the issues that workers in the field of education and psychology pay great attention to, in addition to parents because we are in a society that gives a great deal of attention to achievement and success in it. Therefore, we

find that the family and educational institutions work together to reach the process of academic achievement to the maximum extent possible so that each student can achieve the different stages of education. (Ahmed, 14:2011)

(1) Geography is a broad general topic related to many natural sciences and humanities, as it is strongly related to the sciences of technology, plants, animals, astronomy and nature, and that scientific progress forced each science to divide itself into multiple branches, as geography had to re-evaluate its relations with these branches on the basis of what it takes from them, or give them and so on multiply its responsibilities, and the details of the topics that must be digested and developed so as not to lag behind other progress. (Honor, 75:1975)

The See Before You Listen strategy is one of recent learning strategies that helps learners to make their best efforts in the learning process, actively and energetically participate, and through it they apply the concepts they learn (HE, 34: 333). In the strategy, the teacher uses more than one method to allow the learner to go through sufficient experience and the teacher chooses the appropriate way to present the topic in proportion to the educational situation, whether through educational materials and means such as showing short films, a simple experiment, viewing pictures or accompanying them on a journey before explaining the topic makes the learning process easier (Happiness,340:2018), as the use of educational means in the lesson benefits the learner and enriches his learning by developing the love of discovery and his desire to learn, and helps him to create desirable trends that encourage him to participate and interact within the classroom, and address individual differences, as well as making educational experiences more effective, continuous and less forgotten. (trick, 114:2010)

One of the prominent principles of this strategy is that it puts students in experimental situations in a semi-structured way as the student learns from other students through their experiences, and it is designed to share the direct experiences of students and link them

with the standing in the lesson, as the teacher is based on the task of facilitating the receipt of experience instead of teaching and direct guidance. (Davis,2011:28). Kolb explains that the strategy of looking before you listen makes the student participate, stand, and focus on what is important and what to remember, and how to apply what he learned in new situations, and all this leads to comprehensive growth in the student in all cognitive, emotional, skill and social situations. (Koppe, 25:2012)

In addition, this stage, with its position on the educational ladder, represents the stage of the formation of the student's personality, because it needs the ability to think properly, creativity, openness, and self-reliance, to support their university education, to specialize in a variety of sciences. This stage prepares students for cultural and professional numbers, which helps them in choosing a specialization that suits their scientific potential. (Al-Arif,1993: 219)

Third: Research Aims:

This research aims to find out the effect of a strategy (see before you listen) in the achievement of natural geography, among fifth grade literary students.

Fourth: Research Hypotheses :

To achieve the validity of the research, the researcher hypothesis is the following:

"There is no statistically significant difference at the level of significance (0.05) between the average scores of students of the experimental group who studied according to a strategy (see before you listen) in the achievement of the natural geographical subject and the average scores of students of the control group who studied the same subject in the traditional method of achievement."

Fifth: Limitation of the Research:

This research is identified in:

1 - Students of the fifth grade literary in the secondary and intermediate daytime government schools for boys in the governorate of Diyala.

2- The content of the book of geography, which includes the first three chapters of the book of natural geography to be taught to students of the fifth literary edition, the tenth revised edition, for the academic year 2021-2022.

#### Definitions

Look, before you listen HE defined it (2014): "It is the strategy that requires presenting a new concept by providing students with the opportunity to look at the topic in several ways, then passing through a new experience before they listen about it, and the teacher encourages them to record this, then reflect on what happened when they engage in the learning process, and then students become active participants by introducing new concepts." (HE 2014: 167)

Procedural definition: It is the set of steps that are used to present the natural geographical material in a way that is appropriate for the presentation of the lesson, either through generalized materials and means, such as the presentation of a short film, an experiment, or a simple presentation of a set of images in which students participate with full vitality and activity.

Geography defined by Al-Masoudi (2013): "Science that deals with the study of the interrelationships between man and his natural environment and its analysis and the resulting effects in the political, social and cultural fields." (Al-Masoudi, 2013: 23)

#### c. Procedural definition

A set of facts, concepts and principles that are included in natural and human phenomena and include the three chapters of the fifth grade natural geography of the literary.

### **Theoretical Framework and Previous Studies:**

The first topic: Experimental learning theory:

- The concept of expert learning: Defined by the American Indiana University (2014) as formal and directed educational experiences, based on the students' application of the direct

experience of knowledge and information acquired through reading, various simulation patterns, electronic exercises, and teaching by teachers, or any model of direct learning, within the course, where knowledge, activity and reflection are integrated. (Indiana University, 2014:8) The Experimental Learning Model represents a new version of the "Experimental Learning Course" four-stage presented by the American psychologist David Kolb in 1984 as an application to his theory of "Experimental Learning. (Kolb, 2008:6-5), Experimental learning according to the Kolb model is one of the models that depends on the effectiveness of the learner by applying knowledge through individual or group activities, which may not be limited to the classroom only, which helps him to develop research and thinking skills, solve problems and acquire new knowledge about familiar and unfamiliar phenomena, because of what the model allows through its four stages, perceived experience, reflective observation, abstraction and active experimentation. (2002:67 , Wall & Aaron Shields &)

Experimental learning therefore represents a process of building knowledge that includes creativity from the path of the four components or stages (perceived experience, reflective observation, abstraction, and active experimentation)

- Philosophy of experimental learning: The philosophy of this type of learning and its method is based on participation between the teacher and the learner in the learning process, and makes the role of the teacher an assistant and the guide of this process. He is the one who performs the experiment and meditates on it to draw specific results that he uses in a new situation to obtain new knowledge from him.

This type of learning allows the learner to grow cognitively and transfer learning. Through this learning cycle, he will learn the skill of meditation and the skill of expressing his feelings. Therefore, the philosophy of learning seeks to put learners in realistic situations that allow them to learn from their experiences and acquire knowledge themselves, and link them to their previous knowledge and experiences to

build the new experience. Learning from experiences provides learners with knowledge and helps them to apply it in other situations. (Roberts, 2003:3-6), the development of these stages is influenced by the four stages of experimental learning (perceived experience, meditative observation, abstraction, and active experimentation). This influence is increased and made more complex by the learner's attempt to adapt to his life and by the mutual influence between the four components. Development understands this from the interaction between the learning method and the life course that the learner takes. (Sire , 2011: 176)

- Assumptions of the theory of experimental learning: Kolb's theory of experimental learning is based on six assumptions: Learning is better understood as a process, not as a result. To improve learning, learners must participate in the learning process and be immersed in it because this will enhance their learning process. They must also be provided with the required feedback that shows the effectiveness of their learning. Here it can be said that education must be understood as an ongoing process to rebuild the experiences of the learners. The process of education and its objectives are one thing.

1- Every learning is really a re-learning. The learning process can be facilitated by withdrawing all the ideas and beliefs that the learners have about the topic to be taught so that they can test it and integrate it with the new topics that they recognize.

2- The learning process is guided by the differences between educational patterns and the conflict in how the world in which the learners live is adapted. These patterns are represented in the meditation, thinking, feeling and action

3. The learning process is a holistic process of adapting to the environment in which we live, not just a knowledge process. Learning on this basis represents the completion of the learner's functions in terms of perception, feelings, thinking and behavior.

4 - Learning represents the product of cooperation between the learner and the environment, according to Piaget, it is a process of balancing comprehension and adaptation, and this balance in turn will be a prelude to identifying a new concept through a new experience.

The second topic: strategy Look before you listen:

This strategy is one of the learning strategies, and it builds on the efforts developed by Mary Lynn Mann, who also refined and developed it later. This strategy requires presenting a new educational concept or position, and presenting it through a set of modern educational methods to students. Students often find it difficult to convert what they listened inside the classroom into skills that they can use outside that classroom, because they will remember a little of what they listend if compared to what they saw or experienced well, so the teacher should give students the opportunity to first look at the topic, problem, or matter, and then go through a new experience before they listen about it, and that is by encouraging them to record that, and then reflect on what happened when they engage in the learning process. Students then become active participants, because in this case they are introduced to new concepts when they actually use them. Here, teachers can give students less abstract lectures because they have already had experience with these concepts with their teachers before classes. The teacher can also ask an appropriate set of questions to encourage students to record their experiences, and then work on analyzing them. From time to time, the opportunity to have an active and learner-centred discussion becomes necessary, especially if it revolves around unfamiliar concepts, problems or issues that they have a great responsibility to address, and attempts to devise successful solutions. (HE , 2014: 167)

Begin and colleagues (2012, & et al Bergin) see that in the traditional lecture style, learners often listen sentences and phrases such as (this is what will happen when something like (that) is done. These phrases indicate untested theoretical things, and it is more difficult for

the learner to use concepts and information during the lecture later, so it is advisable to give learners the opportunity to watch and experience a new concept they listen about. It is also recommended to encourage students to record everything that happened with them and what they witnessed and tried during their engagement in the learning process, and to encourage them to think and reflect on this, for example:

- See: Give students the tools and resources necessary to do a practical exercise in the lab, with instructions for how the experiment will work step by step, and how to document the results they can get. Then include questions to motivate students to record their experiences and analyze what they have done during the experience or experience. In doing so, give students the opportunity to discuss concepts that are unfamiliar to them and the problems they face while doing this practical exercise.

- Listen: After the experience gained in "See", the teacher can give a lecture or a traditional classroom session to consolidate the new concepts and information that students have passed through after they have acquired them at a stage (see). So, students become more integrated in what they learn because they are presented with new information and concepts that they have used before. Here teachers can give fewer classes and theoretical lectures than usual as students have already gained experience with new information. (2012:56) (Bergin & et al. Coop (koppe, 2012) has carried out a series of studies on different strategies and patterns of education, where he linked a strategy (see before you listen) to the teaching principles of Merrill (Merrill) in 2002, which he called (show me), where he explained that education is more effective and strengthened when he presents the educational material to students, not tell him theoretical information about it. (25: koppe, 2012), and Coop's review (Koppe), optimal strategies, not giving lessons, and stated that the strategy (see before you listen) is a strategy that can be followed in providing lessons in general, but its steps must be applied well in order to be of benefit and educational value,

which requires attention at the beginning of the lesson, which leads to the success of the lesson as a whole. (9 :2014, Koppe& Portier)

B- Strategic steps Look before you listen:

1- Teacher introduces a new concept, problem, or topic to students who have never known it.

2- The teacher chooses the appropriate way to present the topic either through materials and means, or by showing students a short film or taking them on a trip somewhere, before they listen anything about the new topic, and the teacher uses more than one method to enable students to pass through with sufficient experience.

3- The teacher provides his students with sufficient resources to provide them with information from references and books.

4- The teacher must ask appropriate questions to encourage all students to record their experiences and then work on analyzing them.

5- Provide the opportunity for an active group discussion centered around learners to listen solutions to problems or issues they have a responsibility to address.

6- Giving the teacher an abstract share because the students have had previous experiences with these concepts before the abstract share itself. (HE 2018: 341)

The teachers role in the strategy Look before you listen:

1- Dividing students into groups so that those groups are equal in number

2- The teacher should be familiar with the students' abilities and be versatile in presenting them with materials and means to suit their individual differences.

3- Walking among students in the experience phase to help or answer a query about a specific problem.

4- Urge everyone to talk about their experiences with the topic at hand.

5- The teacher introduces a number of oral lectures that help and encourage students to apply them.

6- The need for references to be related to the experiences of students that they have experienced during the stage of the naked eye, things, things, issues, people or events.

7- Give the teacher more complex exercises to test the extent to which students understand them and to motivate them to discuss.

8- The teacher performs a rigorous assessment process. (HE , 2014: 168)

9- Provide an enabling environment for expert learning.

10- The teacher should be a critic in some educational situations.

11- Shows clearly the instructions and directions he gives to students. (Farhan , 2021: 46)

C- The student's role in the strategy of looking before you listen

1- Active participation in the exploration process of the new concept.

2- Collaborating with group members in order to find solutions to the problem.

3- Critical reflection of the student while going through experience in order to draw conclusions from the problem or situation.

4- Contributes to providing views on the concept in order to obtain evidence to help solve the problem.

1- Evaluates the work he/she does and therefore has confidence in his/her work. (Roughness 2015: 22)

Second: Previous studies:

1- A study ( Khashashneh , 2015 ): This study was conducted in Jordan , and it aimed to know (the effect of teaching the Arabic language using the methods of "See before you listen" and "Building and maintaining trust" in the achievement and motivation of the students of

the seventh grade in the basic city of Amman ). The researcher adopted the semi-experimental approach, and the research sample consisted of ( 111) students , and they were divided into three groups, two of them experimental , with ( 35) students studied in the method of building and maintaining trust, ( 42) students studied in a way that was seen before you listen , and( 36) students in the control group who studied in the traditional way. As for the research tools, the first tool was represented by an achievement test consisting of ( 60) paragraphs of the type of multiple choice, while the second tool was represented by the scale of motivation, which consists of ( 35 ) paragraphs with four alternatives, and the validity and stability of the achievement test and the scale of motivation were verified, and the researcher used the following statistical means: arithmetic averages, standard deviations , and analysis of the associated variance ( ANCOVA), Pearson correlation coefficient, and the results showed the following :There is a statistically significant difference at the level of significance ( 0.05) on the achievement test and the scale of motivation , in favor of the two experimental groups. ( Roughness , 2015 : J-57 )

2- Study ( Qureshi , 2020 ): This study was conducted in Iraq , and it aimed to know (strategic effectiveness, see before you listen about the acquisition of physical concepts and self-fulfilment of the fifth primary school pupils with the subject of science ). The researcher adopted the experimental approach with partial control, and the research sample consisted of ( 45 ) pupils , with ( 23) pupils for the experimental group, and( 22 ) pupils for the control group. As for the research tools, the first tool was represented by the test of acquiring physical concepts, which included ( 36) paragraphs of the type of multiple choice, and its validity and stability were verified, and the calculation of the difficulty coefficient and the strength of discrimination and the effectiveness of the wrong alternatives to its paragraphs. The second tool was represented by the self-fulfillment scale, which included ( 18 ) paragraphs in the form of report phrases describing the student's behavior, and the validity and stability were confirmed, and the

internal consistency coefficient of the paragraphs of the scale were confirmed, and the researcher used the following statistical means: the test that included two independent samples ( t-test), the Cowder Richardson 20 equation, the spss bag. The results showed the following:

The experimental group that studied with strategy, before you listen about the acquisition of physical concepts and self-realization, is superior to the control group that studied in the usual way. (Al-Quraishi , 2020: 482 – 494)

3- A study ( Farhan , 2021 ) : This study was conducted in Iraq , and it aimed to know (the effect of a strategy (see before you listen ) in the achievement of the subject of educational psychology among students of fine arts institutes) , and the researcher adopted the experimental approach with partial control, and the research sample consisted of ( 60 ) students with ( 30) students for the experimental group, and( 30 ) students for the control group. As for the research tools, they were represented by an achievement test consisting of ( 38) paragraphs , as it was ( 28) of the type of multiple selection, and(10) paragraphs of the essay questions, and its validity and stability were verified, and the calculation of the coefficient of difficulty and the strength of discrimination and the effectiveness of the wrong alternatives to its paragraphs. The researcher used the following statistical means: the K-square test, the test that is for two independent samples, the coefficient of ease, difficulty and discrimination, the Pearson correlation coefficient for the essay paragraphs, the Ponet-Payserial correlation coefficient for the substantive paragraphs, the Cooper equation, the Vikronbach equation coefficient, and the value of (d)Cohen to determine the size of the effect. The results showed the following :

- There are statistically significant differences between the average scores of the students of the two experimental groups who studied according to a strategy (see before you listen ) and the average scores of the students of the control group who studied according to the traditional method, and for the benefit of the experimental group. (Farhan , 021 2: 11-88 )

## Research Methodology and Procedures:

The researcher used the experimental approach and completed and completed

For the purpose of testing their hypotheses as an appropriate means to solve theoretical and applied educational problems, they contribute to the development of educational systems, which are highly efficient in obtaining reliable and accurate results, and the experimental approach is a planned and intentional modification process in specific circumstances of a phenomenon and explaining the changes that appear to the phenomenon in the midst of that modification. Anwar and Adnan,2008: 474), and therefore we find that experimental research is one of the most accurate types of research as the researcher stands neutral from the phenomenon to be studied because he studies the factors and variables that may have an effect on the prepared experiment, the study and control of all variables and sees that they affect the study and its results in addition to the variables to be studied explaining its effect on the experiment . (Al-Kindi, and Abdul-Damil,34:1988,) Therefore, it aims to make a change in some or all of its independent variables by conducting actual experiments, such as making a change in the method of teaching, in the educational methods used or in the management of the educational environment (Ibrahim 2009: 85). The experimental research is distinguished from other types of research in that the researcher makes an intended change in the position within specific conditions, and follows the change that may result from these conditions. (Abbas et al., 2009: 80)

Experimental design: The approach of experimental studies is one of the best scientific research methods to study the relationships of cause and effect that link a phenomenon to the variables that cause it (Samadi, 1996: 11), and experimental research requires an experimental design that serves as the general structure of the experiment. (Al-Dahri, 2000: 40), and the experimental design is “a blueprint and work program for how the experiment will be carried out.” (David, 1990: 256)



Experimental design requires a high degree of efficiency and skill, as all factors and variables related to the phenomenon should be included, so the type of design should be determined on the nature of the problem, the conditions of the sample and the time and place of conducting the experiment, in addition to preparing the means of measuring the results and testing their validity, and educational research did not get to an experimental design to a full extent and sophistication of control, because adjusting the variables is difficult, because educational and psychological phenomena are very complex. (Alyan & Ghonim, 2004)

Therefore, in conducting the experiment, the researcher adopted the semi-experimental design (partial control) for the two groups (experimental and control). The experimental group is studied with a strategy. Look before you listen and represent the independent variable. The control group is studied in the traditional way, and the post-test. The researcher chose this type of design because it suits the nature of this study, as in the following figure:

Figure (1) *Experimental Research Design*

group	Sample	The independent variable	Dependent variable	Device
Experimental group	Division (a)	Strategy. Look before you listen.	Collection	Summative assessment
Control group	Division (b)	—————		

Third: The research community:

"The research community is all the vocabulary or units of the phenomenon subject of the study from which the sample is chosen in a deliberate or random way" (Al-Samak and Qais, 1986: 20), so the researcher should define the research community accurately and limit the results of the research to the community from which the research sample was chosen, so the researcher chose the general directorates in each of ( Diyala, Salah al-Din, Kirkuk, Wasit ), as the researcher worked to put the names of the directorates within a bag, and the general directorate of Diyala Education was chosen from among the four directorates in a random way to be the research community.

Fourth: The research sample

The sample is part of the original community chosen by the researcher in different ways and includes a number of individuals from the original community (Obaidat, et al., 2005: 100). The researcher selected the sample as follows: 1- The sample of the schools: For the purpose of choosing the sample of the students, and in order to be representative of the research community, and for the safety of the experimental procedures, and since it is

difficult to choose one school from among the government preparatory schools in Diyala Governorate, and from the boys' schools so that the number of fifth grade literary divisions is not less than three to suit the experimental design of the research, the researcher adopted the method of the random sample because it corresponds to the research methodology and objectives, and the random selection of the sample is made according to specific conditions so that each member of the original community has the equivalent opportunity for each other individual chosen for the sample without prejudice from the researcher . (Melhem, 2000: 150-153), and the lottery was signed on raising Diyala randomly.

The sample of students: The research sample represents a segment of the community that is chosen according to the rules and scientific methods to represent the community correctly (Lutfi, 1976: 353), as a division (A) was randomly chosen to represent the experimental group that is studying according to a strategy ( see before you listen), while a division (B) represents the control group that is studying in the traditional way, and the number of students of the two divisions reached (61) students, with (30) students in the experimental group and (31) students in the control group. The researcher excluded students who failed only from the

results and kept them in the classroom in order to preserve the school system, and their number is one student in the control group, as the final number of the sample became (60) students with (30) students in the experimental group, and (30) in the control group, and if the reason for excluding the failed student, the researcher found that he has previous experience in the

Table (1) *The number of students of the two groups of the research sample (experimental and control) before and after exclusion.*

groups	Section	Number of students before exclusion	No. of Student Fail	Number of students after exclusion
Experimental group	A	30	0	30
Control group	B	31	1	30

Fifth: Equivalence of groups: The large number of variables in educational topics has made it difficult for educational researchers to achieve experimental groups and equal control groups in the variables that may affect the relationship between the independent and dependent variable. The extraneous variables are the variables that will affect the dependent variable, but they are not part of the study. To control the independent variables, the random procedure is used for each step as much as possible. (Abdulrahman and Safi, 2005: 168)

Therefore, achieving parity between study groups is a prominent necessity. The researcher should take this step and obtain an equal total of variables related to the study. The researcher should organize, identify and repair these variables in order not to have an effect on the dependent variable. The method of presenting and adjusting the independent variable is one of the most prominent measures taken by the researcher, but this role is not limited to showing this variable, because the researcher should identify the variable that has an effect on the dependent variable, whether the effect is negative or positive, and the researcher should adjust, fix and determine these variables (Farhan, 2020). In order for the researcher to

topics studied from the methods of the trial period and this experience may affect the accuracy of the research results, because he had previously studied the same topics in the previous year, which may affect the internal safety of the experiment, and table ( 1 ) shows this:

be able to obtain correct results, the researcher identified these variables and tried to adjust them through statistical parity. These variables are:

1- Chronological age in months: The researcher prepared a data form that was distributed to the students in which (the name of the triple student and his/her date of birth) and the data were recorded by the students. The researcher was able to compare these data with the data of the special records, and calculated the ages of the students of the research sample in months from the day of birth of the student until the day (1/11/2021), so the average age of the students of the experimental group was (203,200) months, and the average age of the students of the control group was (203,600) months. When using the t-test for two independent samples to determine the significance of statistical differences, it was found that the difference was not statistically significant at the level of (0.05), as the calculated T-value was (0.162), smaller than the tabular T-value (2.00), and with a degree of freedom (58). This indicates that the experimental and control research groups are statistically equivalent in chronological age and table (2) shows this.

Table (2) *The results of the T-test of the chronological age of the students of the two research groups, calculated in months*

group	Number of sample members	Arithmetic mean	standard deviation	Freedom degree	T value		Significance level
					Calculated	tabular	
Experimental group	30	203,200	9,163	58	162	2,00	Not significant
Control group	30	203,600	9,933				

2- Educational attainment of parents: The researcher obtained personal information related to the educational level of the parents from the school cards of the students of the two study groups, as the educational level of the parents was classified according to the type of qualification they hold to five levels (primary, intermediate, middle, institute, college and above).

A- Academic achievement of parents: The researcher relied on the equivalence of the experimental and control groups, the academic achievement of parents and according to the form prepared by the researcher in data

collection, the academic achievement of parents, and after collecting the data, it was found that there are several levels, and in order to know the equivalence between the control and experimental groups, in the academic achievement of parents, the researcher used the equation of K-square calculated for the educational achievement of the father equal to (0,673), which is smaller than the value of the K-square table of (9,49) at the level of significance (0.05) and with a degree of freedom ( 4), which indicates the equivalence of the two groups in the academic achievement of the father and table ( 3) shows this.

Table (3) *Frequencies of the academic level of the parents of the research sample in the two groups, the value of the calculated and tabular K-square and the level of statistical significance*

group	Number	Elementary school	Average	Junior high	Institute	College and above	Significance level	Freedom degree	Value ( $\chi^2$ )		sig
									Calculated	tabular	
Experimental group	30	8	6	5	5	6	0.05	4	673	9,49	Not significant
Control group	30	7	5	7	6	5					

#### B. Maternal Educational Achievement:

1The researcher relied on obtaining data related to the same method that led to the collection of data on the educational achievement of parents for the experimental and control groups, which is the submission of the form prepared by the researcher, and the researcher used the equation

of the Ki square calculated for the academic achievement of the mother equal to (0.527), which is smaller than the value of the Ki square at the level of significance (0.05) and with a degree of freedom (3), which indicates the equivalence of the two groups in the academic achievement of the mother and table (4) shows this.

Table (4) repetitions of the academic level, the tasks of the students of the research sample in the two groups, the value of the calculated K-square, the tabular and the level of statistical significance

group	Number	Elementary school	Average	Junior high	Institute	College and above	Significance level	Freedom degree	Value ( $\chi^2$ )		sig
									Calculated	tabular	
Experimental group	30	12	8	5	3	2	0.05	3	0,527	7,81	Not significant
Control group	30	11	9	6	3	1					

### The Instrument (Preparing two tests)

After the researcher has worked on formulating his study questions or hypotheses, he should determine the measures that he would like to use in his study. The relationships and differences provided for in the hypotheses should be between measurable variables. (Al-Batsh, & Abu Zeina, 2007: 64).

**Achievement Test:** Achievement Test is defined as a systematic measure of learners' achievement for specific learning objectives. (Ali, 2007: 240), and that achievement tests are the only measure that allows students to move from one class to another, and from one educational stage to another, and since the current study requires the preparation of an achievement test to measure the research sample of students after the completion of the experiment, the researcher chose two types of written tests (essay and objective) to measure mental levels at all levels, high and low, and the researcher followed these steps when preparing for the achievement test:

### 1. Identifying Aim for test

The test equipment should state the main purpose of the development test before starting the design or preparation of the achievement test, because this step guides the rest of the steps below, as the objectives of the achievement tests and their uses vary according to the objectives of the evaluation process. (Alam :2006 :134), this test is designed to measure the performance of the students' geographic knowledge in the two research groups after the completion of the three chapters of the book Natural Geography to be taught for the fifth grade literary year for the academic year 2021/2022 .

**2 - Determination of test levels:** The dimensions of the post-achievement test were determined by the six levels of the Bloom classification in the knowledge field (knowledge, understanding, application, analysis, composition, and evaluation) because of their suitability for the level of the academic stage and the nature of the content of the scientific material.

Table (5) Test map of achievement test paragraphs

Chapter	Number of goals in each chapter	Relative Importance of Content	Number of goals per level					Number of paragraphs per level					Number of Paragraphs:
			Knowledge	Under stood.	Applyi ng	Analy sis	Install ation	Knowl edge 44%	Under standi ng 32%	applic ation 11%	Analy sis 8%	Graft 5%	
First	62	33%	29	19	6	6	2	7	5	2	1	1	16
Second	71	37%	29	25	8	5	4	8	6	2	2	1	19
The third	57	30%	25	17	6	5	4	7	4	2	1	1	15
Total	190	100%	83	61	20	16	10	23	14	6	4	3	50

- Test validity: The general definition usually given for validity is the degree to which the test

measures the characteristic it is designed to measure. ( Al-Batsh, & Abu Zainah, 2007 :

127) The concept of the validity of the test is linked to the validity of the test for use, as the honest test is the test that is suitable for use in light of the objectives for which it was designed. (Melhem, 2001: 353), so the validity of the test is one of the basic things that the researcher should consider, and the validity of the test is that it measures what he is actually preparing, that is, it measures what he is trying to achieve. It is set and nothing else is measured (Al-Abadi, 12:2006), so it is very important to achieve honesty if it can measure the goals for which it was formulated, then the test is true (Abdul Hafeez and Mustafa, 2000: 174), and in order to prove who the test is true and its ability to achieve the goals for which it was set, the researcher used the following:

**Apparent validity:** It means that the test itself belongs to the subject to be measured, and is suitable for measuring that subject, and it is verified by observing the paragraphs of the measurement tool and that each of its paragraphs is concerned with measuring the objectives of the material to be measured . (Attia, 2008: 298) and therefore it is called nominal or formal truthfulness, and the test is considered true if its title indicates what it measures. (Welded, 2001, p. 360) and is reached by the consensus of expert and arbitrator estimates on the degree of measurement of the test for the attribute and the general appearance of the test in terms of vocabulary, how it is formulated, and its clarity, as well as the instructions of the test, its accuracy, degree of clarity and topics . (Al-Azzawi, 2007: 94)

In order to verify the validity of the tool on the face of it, the researcher presented the test paragraphs (11 and 12) to a group of experts and specialists, in order to express their opinions and observations regarding the validity of the paragraphs in measuring the achievement test. The researcher relied on an agreement rate of (80%) of the opinions as a minimum to accept the paragraphs, and all the paragraphs were accepted, except for some paragraphs in the light of the observations and opinions on which the researcher made some amendments.

**The exploratory application of the test:** The researcher applied the test to a sample of fifth grade students literature in the (Pioneer Preparatory for Boys) of the General Directorate of Education of Diyala, which consisted of (100) students, after the researcher verified that these students had studied the same subject, and the purpose of the application of the test was to know the time required to answer the test, the clarity of its paragraphs and instructions, and the calculation of the time specified for the test, and in agreement with the school administration and the teacher of the subject, the date of the test was determined on Thursday 6/1/2022, and the students were informed five days before the start of the examination, and they were informed that the examination was comprehensive of the subject and the researcher himself supervised the examination in order to record the students' inquiries and their questions about the ambiguous paragraphs, and it turned out that the paragraphs were clear and unambiguous among students and the students did not have difficulty in answering them, and the appropriate time was calculated by calculating the time to conduct the test by calculating the fastest student of the sample who took the test and slowed them in answering the answer, and by extracting the appropriate time (58 minutes).

#### 7- Statistical analysis of the test items:

The researcher conducted the statistical analysis of the test paragraphs from the results of the exploratory experiment of (100) students, and after correcting the answers of the students, their grades were arranged in descending order, then (27%) of the higher answers were taken and ( 27%) of the lower answers were taken as the best percentage of the balance between two disparate groups of the total group to study the characteristics of the test paragraphs and choose this percentage of the distribution as the two extremist groups, as the number of students of the two groups in the exploratory sample reached (54) students, with (27) students in the upper group and (27) students in the lower group. The procedures for the statistical analysis of test items are as follows:

A- Paragraph difficulty coefficient: The researcher calculated the difficulty coefficient for each of the test paragraphs using the difficulty equation for the substantive paragraphs and the difficulty equation for the article paragraphs, and found that it was limited between (0.37) and (0.63), and the test paragraphs are acceptable if the rate of their difficulty is between (0.20 - 0.80), as (1981, Bloom) believes that the test paragraphs are good and valid for application if their level of difficulty ranges (0.20 - 0.80) (1981:66 Bloom), which means that all the test paragraphs are acceptable and valid for application.

B The discriminatory strength of the paragraphs: The researcher calculated the discriminatory strength of each paragraph of the test using the distinction equation for the substantive paragraphs and the distinction equation for the article paragraphs found that it is limited between (0.30) and (0.59), and the higher the strengths of the paragraphs, the better, so the researcher kept all the paragraphs without deletion or amendment, and (Ebel) indicates that the test paragraphs are valid if the strength of their distinction is (30%) or more (Ebel, 1972:406)

8. test Stability : means objectivity, accuracy of measurement and that the test results are not affected by the subjectivity of the examiner (Aggression and Hawamidah, 2011: 205). There are several methods for measuring the stability coefficient among the most important methods used in the test, the retest method, the half-part method, the Cronbach alpha method and the Cooper method. (Alam,2006: 93) Test stability was calculated in the Vacronbach method:

Using the Cronbach alpha coefficient, the researcher selected the Cronbach alpha coefficient, which represents the extraction coefficient of stability, which measures the internal consistency between the vertebrae and the correlation coefficient, which represents the correlation between any two parts of the test. (Abdul Rahman,172:1998).To calculate the stability of the test, the Vacronbach equation

was used and used to reveal the extent of consistency and internal homogeneity in terms of the relationship of each paragraph to the other paragraphs in the test, which is the most accurate method of stability when we have substantive and temporary paragraphs in the same test and after applying the equation to the sample of statistical analysis of (100) students reached the stability coefficient of (0.88) .

The final version of the test: After the completion of the statistical procedures for the test, the test consisted of (50) test items, distributed over two questions. The first question consisted of (43) test items of the type of objective questions, and the second question consisted of (7) test items of the type of article questions, as it is given a score of one for the correct answer and zero for the wrong or abandoned answer in the substantive questions. The second question consisted of (7) test items of the type of article questions, as it gives a score of one for the correct answer and zero for the wrong or abandoned answer in the substantive questions. The second question was distributed according to the answer to each question.

Statistical methods The researcher used a set of statistical methods in analyzing the data with the help of the statistical program spas To extract the results .

### Research Results:

To verify the validity of this hypothesis, the researcher applied the post-achievement test to the students of the experimental and control groups, and the students' scores were extracted on the test in both groups, and it was found that the average scores of the experimental group (50,267) had a standard deviation (5,953), and the average scores of the control group (38,933) had a standard deviation (6,617), and to identify the difference between the average scores of the experimental group and the average scores of the control group, the researcher used the T test for two independent samples, and the results were as shown in Table (6):

Table (6) *The calculated, tabular, average and standard deviation of the grades of the students of the two groups*

group	Number	Arithmetic mean	standard deviation	Freedom degree	T value		Significance level
					Calculated	tabular	
Experimental group	30	50,267	5,953	58	6,974	2,00	Function
Control group	30	38,933	6,617				

The above table shows that the calculated T-value of (6,974) is greater than the tabular T-value of (2,00) at a significance level of (0.05) and a degree of freedom of (58). This means that there are statistically significant differences between the experimental group that is studied according to a strategy (see before you listen) and the control group that is studied in the usual way in the post-achievement test and in favor of the experimental group. Thus, it rejects the zero hypothesis, which confirms that there is no statistically significant difference between the average scores of the two research groups in the post-achievement test, and accepts the alternative hypothesis, which confirms that there is a statistically significant difference between the two groups.

Size of the trace using the ETA square:

The size of the effect can be extracted in this way by dividing the square of the calculated T-value by (the square of the calculated T-value + degree of freedom), and knowing the size of the effect helps us to determine the amount of the relative effect of the strategy, and after extracting the value of the ETA square we compare it to the following criteria: (the effect is simple: 0.01\_The effect is medium: 0.06\_The effect is high: 0.14)

After the arithmetic mean, standard deviation and the calculated T-value were extracted between the experimental and control groups in the post-achievement test, the ETA square equation was applied and the size of the effect was (0.46). Therefore, the size of the effect of the strategy (see before you listen) in the achievement has a high effect for the experimental group.

Second: The results are explained: Results in temptation

The current study aimed to find out the effect of the strategy. Look before you listen about the achievement of the geographical subject of the fifth grade literary students, and its effect on the achievement. After reaching the results, it was found that there is a difference between the average scores between the two research groups (experimental and control) and in favor of the experimental group that was studied using (see before you listen). The researcher believes that this result is due to several reasons, including: -

1- The results of this study revealed that there is a positive effect of teaching with a strategy (see before you listen), in the excellence of the experimental group in achieving the control group that they studied in the traditional way, because it is one of the strategies of learning experiences, which emphasizes making the student the focus of the educational process, and participating in it because it enhances the learning process.

2- The presentation of the material through a strategy that looks before you listen seen to increase the interaction of students' cognition, which makes the student an effective element in the classroom, as students graduate from the lower level of thinking to the higher level of thinking (analysis, synthesis and evaluation) and work to build knowledge and reflect on it. (Elephant,78:2018)

3- The strategy of seeing before listening contributed to the multiple use of senses, through the use of educational means to help explain and clarify educational materials,



which leads to the receipt and retrieval of information in the lesson and reduces boredom, which led to the excellence of the experimental group over the control group in academic achievement. (Al-Mawla,176:2011)

4. The process of taking students' notes, asking questions, and reviewing information from scientific sources increases the retrieval of information and experiences, in addition to linking examples to reality, which has a great role in improving students' achievement. (HE: 166, 2014)

7-That the evaluation process was continuous during the lessons, asking questions, and providing them with feedback and external sources, has a great role in the excellence of the experimental group over the control in increasing their cognitive awareness and academic achievement.

### Conclusions:

Based on the findings of the study, the researcher concluded the following:

1- The strategy (see before you listen) contributed to increasing the level of academic achievement of the natural geography subject for fifth grade literary students.

2- Spreading the democratic atmosphere among students and teachers, and among class students, and reducing the authoritarian atmosphere within the classroom.

### Recommendations:

In light of the findings, the researcher recommends the following:

1- Some of the results of the current study confirmed the superiority of the experimental group students who studied according to the strategy (see before you listen), over the students of the control group who studied the same subject in the usual way in the results of achievement.

2. The researcher recommends educational institutions to introduce a strategy. See before

you listen the modern methods of teaching in secondary and intermediate schools, because of the importance of raising the educational level of students.

### Proposals:

In light of the results of the current research, the researcher proposes the following:

In light of the findings of the researcher in his current research, and in order to develop it, the researcher proposes the following:

1. Conducting field studies dealing with expert learning methods in general, and the strategy of see before listening in particular in areas other than geography, as well as with a variable other than achievement, and at other levels and stages of education.

2-Conducting similar studies to the current study of experience learning strategies such as (the effect of Robin's table strategy) or (following the method presentation strategy) of the natural geography of the fifth grade literary.

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