

Learning through tests: does testing improve second language learning?

Sınav yoluyla öğrenme: sınavların ikinci dil öğrenimine katkısı var mıdır?

Müjgan BÜYÜKTAŞ*

Özet

Bu araştırmada, “Sınavların ikinci dil öğrenimine katkısı var mıdır?” hipotezinden yola çıkılarak, sınavlar aracılığıyla öğrenme olanağı analiz edilmiştir. Öğrencilerin geçmiş yıllardan gelen bilgilerini hedef malzemeyi öğrenme yeteneğinden ayırt edebilmek amacıyla, araştırma alanı olarak yeni kelime öğrenimi seçilmiştir. Araştırmada, iki farklı sınıftaki benzer eğitim geçmişine sahip iki farklı grup öğrenci incelenmiştir. Deney grubundaki öğrenciler önce bir sınava tabi tutulur ve ertesi gün sınav oldukları konuyu çalışırlar. Kontrol grubundaki öğrenciler ise önce konuyu çalışırlar ve ertesi gün konu üzerine bir sınav olurlar. Araştırmanın son safhasında ise, her iki gruptaki öğrenciler bir final sınavına tabi tutulur ve konudaki gelişmeleri puanlanır. Klasik yaklaşımla önce konuyu çalışan ve ertesi gün konu üzerine sınav olan kontrol grubu, final sınavında daha başarılı olarak konuyu daha iyi anladıklarını ispat etmişlerdir.

Ne var ki, daha sonraki analizlerde, araştırmanın tekrar gözden geçirilmesi ve araştırma metodunun değiştirilmesi gerektiği kanaatine ulaşılmıştır. Yapılacak bu değişiklikler sayesinde, öğrencilerin daha önce hiç görmedikleri kelimelerle sınav ortamında karşılaşmalarının, bu kelimelere karşı meraklarını artırdığı ve o kelimelerle ilk kez derste karşılaşan öğrencilere göre daha başarılı oldukları ortaya çıkacaktır. Dolayısıyla bu araştırma en doğru araştırma metodunu belirleyebilmek için yapılan bir ön çalışma olarak görülmelidir.

Anahtar Kelimeler: Ölçme değerlendirme, test, sınav, ikinci dil öğrenimi, İngilizce öğretimi

* Öğr. Gör. Müjgan BÜYÜKTAŞ, mujganbuyuktas@anadolubil.edu.tr. T.C. İstanbul Aydın Üniversitesi Anadolu Bil Meslek Yüksek Okulu Beşyol İnönü Cad.No:40 Küçükçekmece / İstanbul

Abstract

Taking the hypothesis “Does testing improve second language learning?” as a starting point, the possibility of learning through tests is analysed in this research.

Vocabulary learning is used as the field of research in order to be able to distinguish students’ prior knowledge from the ability to learn the intended material. The experiments in the research have been conducted to two groups in two different classes with similar backgrounds. The experimental group took the test first and on the other day they studied the material. The control group studied the material first and on the other day they took a test on the material. Later, both of the groups took a final retention test and the improvement of the students’ knowledge of the subject is tested. My hypothesis proved wrong in the first analyses. The control group who studied the material first and took the exam later with the classical approach proved their better understanding of the new subject by performing better in the final retention test.

However, in later analyses, it is realised that the research needs a revision and a change in the research method. Through these changes it will be proved that dealing with the words that the students have never met before in an examination environment raises their curiosity towards the words. So, the role of this research should be seen as a preparatory work to be able to determine the best research method.

Keywords: Testing, second language learning, English language teaching.

Introduction

Testing and assessment is an important phase in second language learning. It is usually regarded as the last step of the intended process, the last point where learning stops and the student’s so far acquisition is evaluated. In Istanbul Aydın University, we even rearrange the classes by gathering the successful students in “Super Classes” or replacing them among their peers in “Stepforward” classes where we gently place them in a “more suitable” language learning environment. The students’ levels are determined with the tests that the University’s Testing Office prepares.

There are of course many advantages and disadvantages to this kind of a system. However, the ultimate aim of all these systems should be to make the testing and assessment an integral part of the language learning process. An indisputably beneficial way is to of course analyse the outcomes of a certain exam and therefore decide the individual students’, the classes’, the teachers’ and the testing office’s needs. This is a whole system to be implemented in the long run and will most probably change the education quality in the institution to a great extent.

Another way is through raising the students’ awareness to the language. Many of the students are unaware of the importance of the process. Since they are very much used to the spoon-feeding system, they are too far from gaining their learner autonomy and deciding on their own needs. We observe most of the student’s awareness being raised after the first exam. If we talk about the vocabulary for example, we see that, during the lessons most of the students are not interested in all the new words that are covered in a lesson. On the other hand, it can be observed that after an exam, just because they had to deal with the words in an environment where they have no access

to the dictionaries, their curiosity somehow rises towards the answers of the questions and even if they do the question wrong, they usually want to learn the right answer. Confronting the words in a testing environment immediately increases the “importance” of the new word and their mental occupation with the word for a certain period of time creates an awareness and curiosity towards the word. So, the students usually remember these new words that they are tested on. It contributes to the importance and effectiveness of the lesson after the test and makes the lesson much more important than the one before the exam.

However, since it is not usually possible to test the students on the same words, the students can't find the possibility of using the new words in many different contexts. So, they take the word out of their short term memory and dispose it altogether before it can find itself a place in their lexicon.

Literary survey

There are other researches that discuss the testing and its effects with a similar approach. The most beneficial of them all is *Test-Enhanced Learning “Taking Memory Tests Improves Long-Term Retention”* that has been conducted in Washington University Department of Psychology by Henry L. Roediger and Jeffrey D. Karpicke.

The research challenges the classical cycle of teaching-testing with the revolutionary approach of “putting the cart before the horse” In this research, on the delayed tests, prior testing produces substantially greater retention than studying, even though repeated studying increased students' confidence in their ability to remember the material. Therefore, the conclusion of the research is: “testing is a powerful means of improving learning, not just assessing it”.

The research

In this action research, testing and its effects on students' learning of a second language are analysed. I tried to understand testing and its immediate effect on students by challenging the classical cycle of teaching – testing and applied the process the other way round, this is, testing – teaching. The reverse of the cycle is evaluated with a final retention test that is conducted to both the experimental group and the control group. The outcomes are analysed in graphics to reach to a conclusion.

Aim

Through this research; I aimed to analyse whether taking a test helps students improve their second language learning. I was well aware of the difficulty of implementing this kind of a system in all the areas of the students' second language learning process even if I had proved my hypothesis. Therefore; this research aims to challenge the classical cycle of teaching – testing only to raise awareness to the importance of testing not only as an evaluation but also as a means of revising for the students. This may help to determine whether testing improves learning a second language beyond the benefits of restudying the material. This research can also be used as a starting point for further researches to explore the students' dynamics and motivations and its importance in second language learning.

Snav yoluyla öğrenme: sınavların ikinci dil öğrenimine katkısı var mıdır?

Objectives

Since testing is an immense field with all the different principles in different skills, I have taken testing vocabulary as my research area.

Learning vocabulary is not a skill that can be gained like the other skills. Prior researches have shown that the student has a capacity of learning 5 to 9 words in an efficient lesson. The best command of the new words is reached when the students see the same words in approximately 7 different contexts.

Taking vocabulary learning as a starting point also helps to distinguish students' prior knowledge and command of the language from the ability to learn the intended items. In this sense, using vocabulary teaching as the research area creates a fair atmosphere.

The objectives of this research are;

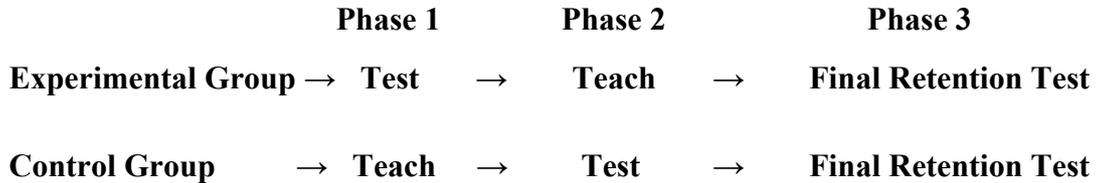
- To analyse whether testing can be used as an aid to assist vocabulary learning.
- To see whether it can create difference in the students' attitude towards the new vocabulary.
- To open up new research areas and reach a solid conclusion through further research.

Research questions

1. Does testing improve learning a second language?
2. If so, is it because of its quality as a more efficient stimulation or because of a means of restudy or both?
3. Can testing be used as a warm-up before teaching the vocabulary?

Research method

This research is conducted through simultaneous experiments with 2 groups of students.



Phase 1: The experimental group took a vocabulary test of 20 new words. The words were given in a box and they were asked to fill in the blanks in the sentences with the given words in the box. The sentences were easy to understand. The students filled in the blanks in 20 sentences with the 20 new words in the box. The control group was taught the same 20 new words by their teacher. The new words were explained in context. The students didn't know that they would have an exam on the new words.

Phase 2: The experimental group was taught the 20 new words by their teacher the day after they took the exam. The new words were explained in context. The students didn't know that they would have a final retention test on the new words.

The control group took the first vocabulary test the day after they were taught the new words.

Phase 3: Both the experimental group and the control group took a final retention test on the same words that they were tested on and taught by their teacher. The exam consisted of one part where the students matched the 20 definitions with the 20 words in the box.

Subjects

34 Istanbul Aydın University English Preparatory School Waystage Students, ages 17 to 23, participated in partial fulfilment of Teacher Assessment requirements.

34 students are from two different classes. Therefore, they are tested in groups of 17. Their GPAs are very close to each other in their quizzes and the cumulative assessment tests conducted by the Testing Office.

Outcomes

The charts below show the students’ performances in the first and the second exams.

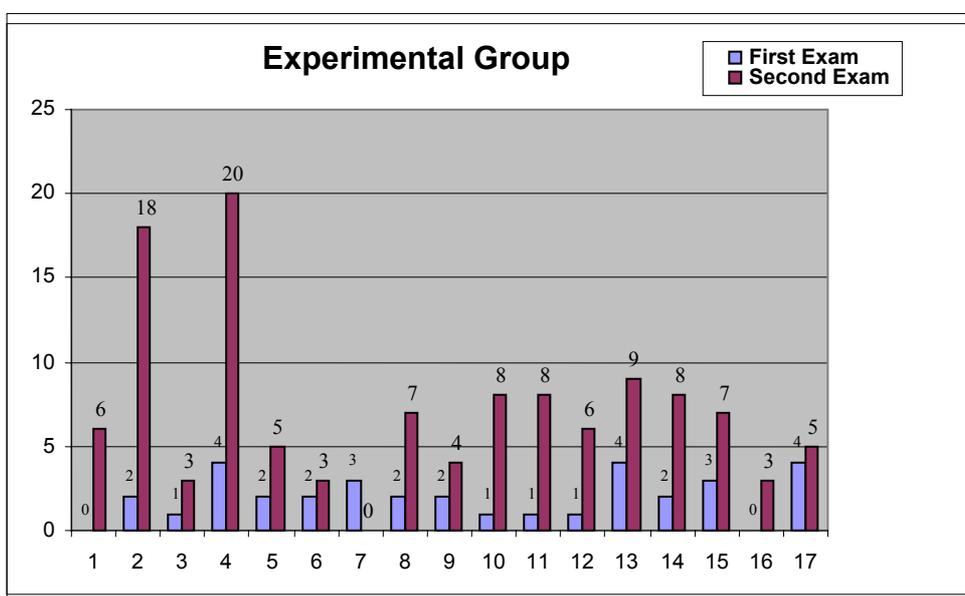


Table- 1

Sınav yoluyla öğrenme: sınavların ikinci dil öğrenimine katkısı var mıdır?

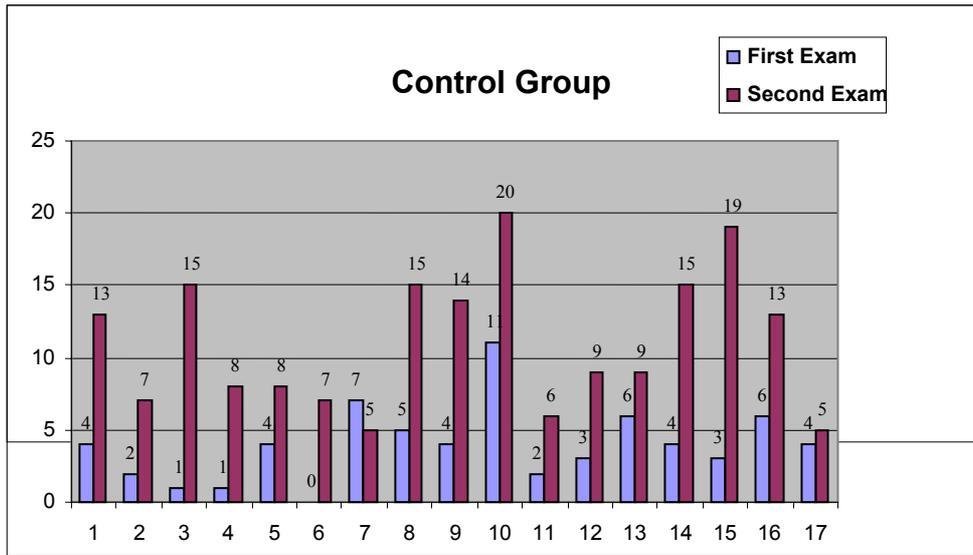


Table- 2

In Tables 3 and 4, when we compare the students' performances in the first and the second exams respectively, we see that the control group has shown a better improvement than the experimental group.

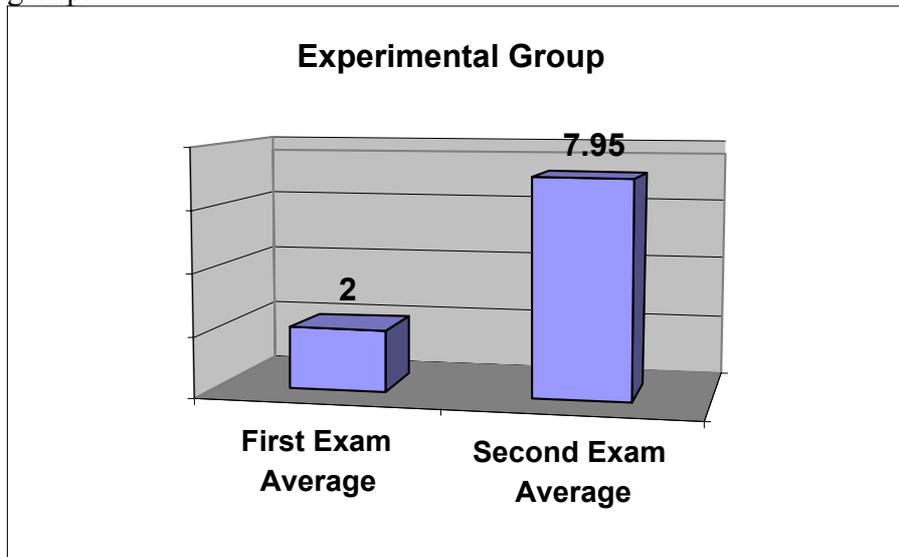


Table- 3

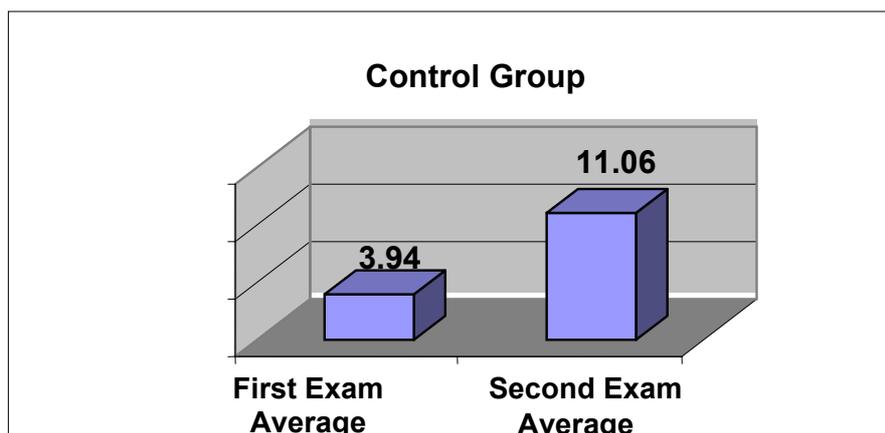


Table- 4

In Table 5, when we look at the first exam averages of the two classes, we see that in the first exam the control group has performed better. This was an expected outcome considering the phases of the research, because they were taught the new words before they took the exam. However, the experimental group didn't have any prior knowledge of the new words when they first took the exam. So, the chart below shows the expected outcome of the first exam.

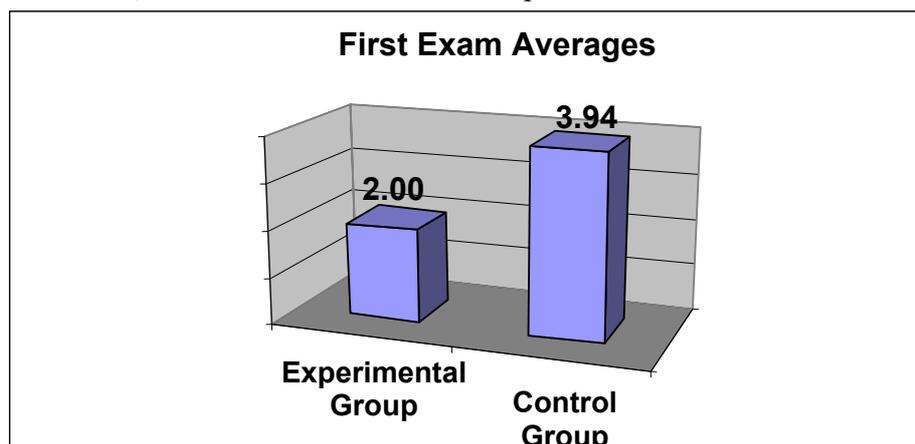


Table- 5

However; the unexpected outcome is the relatively better but still meagre performance of the control group in the first exam. Although they had already studied the meanings of the new words, they still couldn't perform very well. This might be because of the fact that the maximum of the students' vocabulary learning capacity is 5 to 9 words a day. However, it shouldn't be neglected that the students' performance in the control group was not even the minimum either. The average success rate of the class is nearly 4 words out of 20.

Sınav yoluyla öğrenme: sınavların ikinci dil öğrenimine katkısı var mıdır?

On the other hand, in the final retention test, we see that the control group performed better than the experimental group; who took the test first then studied the words before the final retention test. You can find the tables below.

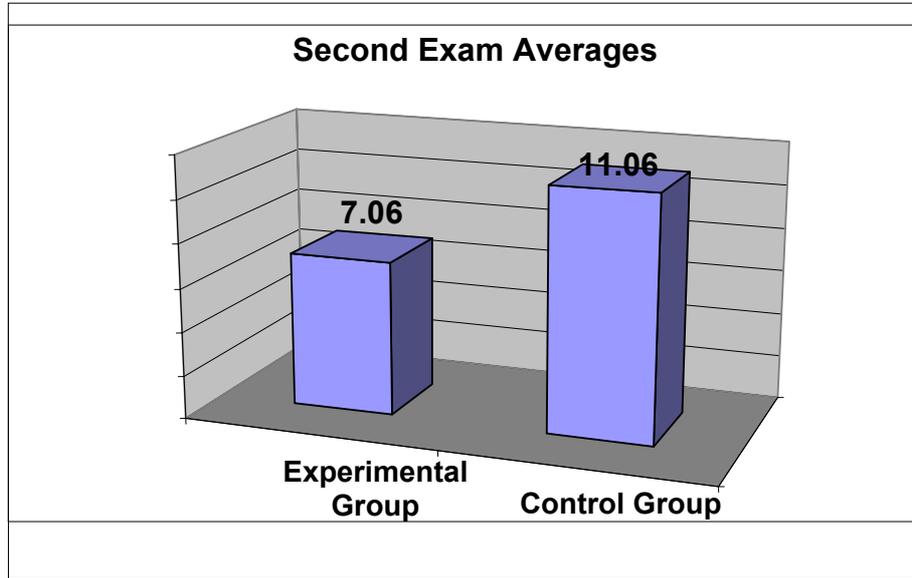
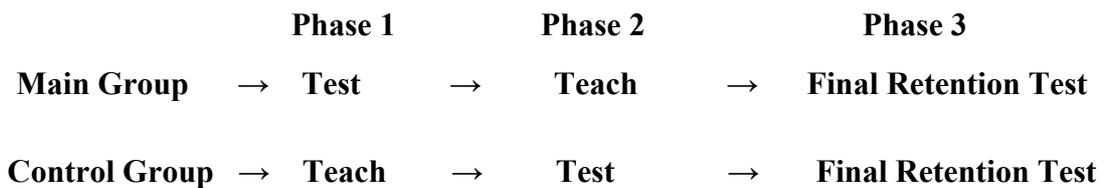


Table- 6

Conclusion

According to the outcomes of the research it can be concluded that testing cannot be used efficiently as an aid in the vocabulary learning in a second language. However, there is another outcome of this research which shouldn't be undermined. Although my hypothesis proved wrong when we compare the final retention test outcomes, I also realised something which should also be kept in mind. Let's remember the process again before discussing the alternative idea.



As we see, according to the chronology, the first valid test of the main group is not the first test but rather the "final retention test". In order for us to call a test a means of assessment, the students should have studied the material that they will take the test on. In other words, the first test of the experimental group cannot be said to be a "real test", because it is not designed to test their knowledge but rather used as an alternative means of stimulation. Therefore, it is also logically fair to compare the outcomes of the final retention test of the experimental group and

the first test of the control group, both of which are the first tests of the students after they have studied the new words properly.

In Table 7, we can see that the students of the experimental group have performed better in their first proper exam than the students of the control group.

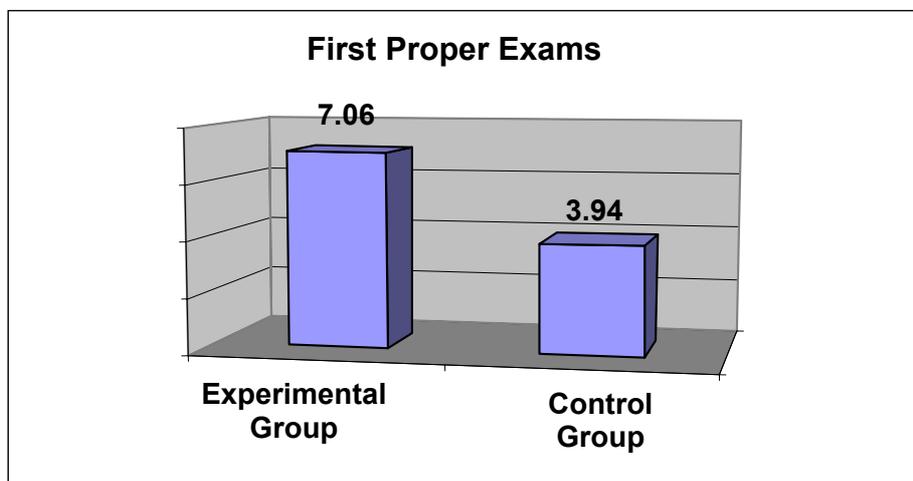
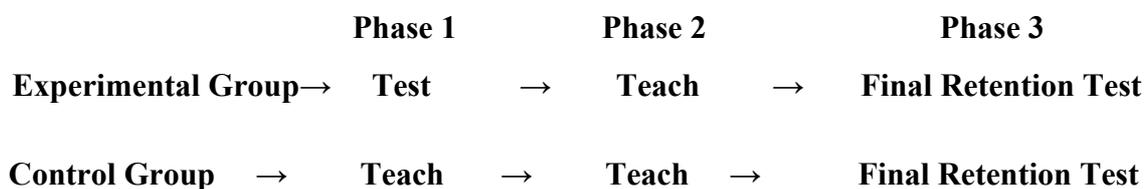


Table- 7

This leads us to the conclusion that the research method needs revising. If I had conducted the research as is shown below, my hypothesis could very easily be proved.



The difference that would lead my hypothesis to success is a difference in method where we omit the test in the second phase for the control group and teach them the new words instead. So, the test that the experimental group takes will turn out to be a warm up which will raise the students' awareness and curiosity towards the new words and will act as an efficient stimulator. The efficiency of the stimulation can be compared to the repeated studying of the material which will be conducted to the control group.

The research result

When we consider the outcomes, we come up with the conclusion that the classical teaching – testing cycle doesn't lead us to the students' improvement of their acquisition of vocabulary when learning a second language.

However, when we think about the new conclusions where we change the cycle of the research, we see that my hypothesis can actually be proved. We see that testing raises the curiosity of the

Sınav yoluyla öğrenme: sınavların ikinci dil öğrenimine katkısı var mıdır?

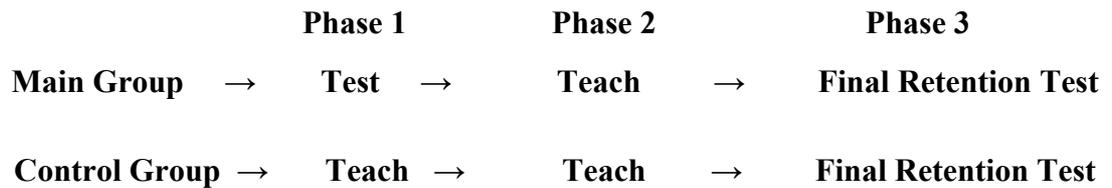
students towards the vocabulary they are tested on either because of its stimulative effect or because it gives a chance to restudy the material.

So, although further research needs to be done in order to distinguish between the two qualities of testing mentioned above, this research can be thought as an advice to the teachers to lead them think of the exam in Phase 1 as a warm up for the vocabulary that the students will learn in the following lesson. Dealing with the words that they have never met before in an examination environment will raise their curiosity towards the words and they will learn them better than the students who meet these words for first time during the lesson. So, the role of testing can be used as a more effective stimulation for the learners than repetitive studying.

Suggestions for further researches

To be able to understand this phenomenon better, we have to redesign our research method which will inevitably lead us to another action research. This new research has the same process with the last one for the experimental group; however for the control group we follow a different process. Instead of taking a test in the second phase, the control group should study the new words again. This will lead us to the hypothesis: “Is testing a more effective stimulation for the learners than repetitive studying even if those tests are not graded”. So, the approach will be more of a psychological one.

You can find the details of the process below.



Another way to reach to more solid conclusions is to repeat the tests and compare the outcomes of the repeated tests that are taken at different intervals and see whether testing proves better than restudying the material in the long run.

References

- Brown, James Dean. *Understanding Research in Second Language Learning: “A Teacher's Guide to Statistics and Research Design”*. London: Cambridge University Press, 1988.
- Costello, Patrick J.M. *Action Research*. New York: Continuum, 2004.
- Genesee, Fred and John A. Upshur. *Classroom-based Evaluation in Second Language Education*. London: Cambridge University Press, 1996.
- Lightbrown, Patsy M. And Nina Spada. *How Languages Are Learned*. New York: Oxford University Press, 2006.
- Roediger, Henry L. and Karpicke, Jeffrey D. *Test-Enhanced Learning “Taking Memory Tests Improves Long-Term Retention”*. (February 2006). Washington University Department of Psychology. January 2009. <<http://www3.interscience.wiley.com/journal/118597351>>