GRAPHICS AS A PEDAGOGICAL METHOD IN TEACHING GRAMMAR

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ABSTRACT

This paper examines the influence of using graphics on non-English Arab graduate students’ achievements in tests aiming at identifying nouns. The paper also investigates the influence of graphics on the time taken by the students to complete the test. The significance of the research is distilled from being the first to study this phenomenon among non-native speakers of English. Two groups of students were asked to sit to two tests, one with graphics and the other is plain. The scores the students got as well as the time they took to complete the test were measured and compared to each other. The research shows that graphics have positively influence the scores of the students; the average score for the students in the test with graphics was 23, while it was 19 for the students in the plain test. However, it was found that the students in the plain test took shorter times to complete the exam; the average time for students in the plain test was 5.4 seconds, while it was 10.9 seconds for the students in the test with graphics. The study indicates that graphics have positive effects on the achievements of students.

Key words: Teaching grammar, nouns, graphics, English

1. INTRODUCTION

This research paper aims at investigating the influence of using graphics on the students’ achievement in grammar tests focusing on determining the noun as a derived form. More importantly, the paper seeks to find out whether these graphics disturb and distract the students’ attention, and cause them to commit more mistakes due to concentration problems, or whether graphics work as a helpful factor that attracts the students’ attention, and perhaps affects positively their understanding of the questions given.

As far as we are concerned with the pedagogy of grammar and the teaching methods that best help students to establish a strong grammatical and linguistic background, we think that finding some new techniques and methods in teaching and learning grammar such as the use of graphics would be a useful classroom procedure and a more optimistic test technique for students of English, especially for the beginners’ levels or for the ESL students who continually encounter numerous learning obstacles when it comes to learning English as a second language. The paper looks at this issue as to see how the graphics appeal to students when writing a test for them, and whether this is a positive or a negative issue. It is a worth-investigating issue since stress and fear might be real big problems for most of the students while doing an exam, especially in a grammar test.

English grammar is a very rich field of knowledge and teaching grammar is not easy. Learners and teachers of this field must be able to understand the language, the methods and approaches that should be taken into consideration when teaching grammar. Using different instructional methods and techniques would be the best way to make grammar much easier for learners to learn, practice, and understand. We believe that using a variety of instructional methods and techniques in teaching grammar can create many options for teachers to use the best method in teaching English grammar. Furthermore, it can also create a lot of chances for the learners to pave the way for them to learn, use and practice grammar.

2. LITERATURE REVIEW

There have been few studies that focus on the influence of using graphics as a teaching method in grammar, and most of these studies have dealt with the visual learning that enhances the process of conceptualizing and understanding the materials taught. Noden (1999) in Image Grammar: Using Grammatical Structures to Teach Writing has mentioned the importance of using a variety of instructional techniques that mainly depend on using pictures and images, especially in teaching writing. Noden does not refer directly to teaching grammar rather he suggests some strategies that should be used in order to make it easier for students to learn writing, and he talked about nouns and verbs and their connection with images and photos. Noden states that, “teaching students to add specific details begins with helping them to see image qualities in two of the simplest grammatical structures: nouns and verbs. By the time students reach middle school and
high school, they often view these structures as cliché, with an “I know what nouns and verbs are” attitude. Yet ironically, professionals with years of writing experience find these simple structures to be overlooked engines that power good writing” (26).

As we notice in the above quotation by Noden, the “noun” as an essential grammatical unit and the most important part of speech can be best taught through images and visuals, and therefore students can better learn grammatical structures. Noden explains that teaching parts of speech with images can make students better understand them. He also talked about humor in learning grammar as one of the best techniques that can create a friendly and more relaxing environment for teaching and learning particularly if it is associated with learning graphics and pictures. He states, “whether working with nouns, verbs, adjectives or prepositional phrases, one way to lure students into understanding specific images is through humor” and also said that “most jokes are pictures” (32). Harry Noden also explains that grammar can be taught with fun and enthusiasm when teaching parts of speech with comic pictures as we notice in this quotation from his book:

Writers can also create comic images by moving from a general notion to a specific image. Usually, humorists accomplish this with clauses and phrases, where a generalization introduces the set up and the specific image provides the punch line (33)

Carol Olson (2007) in The Reading /Writing Connection: Strategies for Teaching and Learning in the Secondary Classroom, talks in passing about Graphic grammar. She explained that graphic grammar is a spatial approach to teaching parts of speech, and it could be looked at as a pedagogical strategy and activity that can make grammar memorable when learning and teaching it. Munro Leaf (1934) also uses pictures and images in Grammar can be fun. Mainly all of the exercises he uses in his book include pictures to teach grammar. However, Munro leaf does not talk about grammar and the use of graphics and visuals; rather he uses graphics and visuals for teaching grammar for the beginners. The new contribution in this study is that it shows how graphics could help students answer grammar questions by doing an experiment that reflects actual students’ results.

3. METHODOLOGY

The study uses both empirical and theoretical approaches to explore the influence of graphics on students’ grades when answering grammar questions. It is very noticeable that using graphics is not a common phenomenon among teachers and instructors when they come to put grammar questions. However, we believe that using graphics can be an essential issue for test makers and teachers, especially when they decide to maximize their efforts to make the students get the most possible advantages in learning grammar.

Questions of the Study:
The study seeks to answer the following questions:
1. Do graphics trigger more concentration and motivation for students, and consequently aid students to obtain higher grades?
2. Is there a significant difference in the grades of the two groups that sat for the tests?
3. Will the graphics make students consume shorter times to answer the test?
4. Is there a significant difference in the time required to answer the two tests?

The Test:
To answer the questions, the study will conduct two tests for two groups of subjects that have the same or similar qualifications and features. The experiment tests whether these graphics can have any motivating influence that pushes students to answer questions correctly. Time is a significant factor along with the precision and correctness of the answers in our assessment.

All of the questions given focused on one aspect which is the use of the noun as a part of speech. There were two forms, the first form consists of 25 multiple choice questions without graphics and the second one includes 25 multiple choice questions with graphics and visuals. The two forms are identical except for the use of graphics. The graphics were mainly basic shapes including rectangles, triangles and clouds with the options inside. Both of the two forms contain no hints that may guide students to choose the best options. Instruction was mainly a question that asks the students to find the noun exclusively.

The graphics used were so clear and obvious with the options inside written in bold with a clear and readable font size. The non-graphics form contains only 25 questions in the traditional format, the question and the options only. The questions contained different grammar questions that dealt mainly with one part of speech which is the noun. All of the questions were multiple choice questions that ask the students to find the nouns as they fit the context and fill the gaps to make up meaningful sentences. The questions vary in complexity as some of them need subtle distinction between the derivatives of the noun, while the others were easy to answer. Identifying the nouns was a process of looking at the options given and then looking at the context to find the suitable option.

The subjects:
The number of the subjects was 30. Thus, we divided them into two separate groups, but they sat for the exam separately and in different times. The groups were homogenous to a great extent; they were
graduate students preparing for their M.A or Ph.D. programs. They were non-native speakers of English and not majoring in English or linguistics. All of them attended public schools i.e. did not attend private schools where English is usually focused on through extra hours of teaching or through appointing native speakers specialists in teaching English. In other words, the subjects were exposed to English nearly the same number of years. Gender is disregarded here since it is not a variable.

Many students said that the exam is pretty long because it got 25 questions. And many of them expressed their enthusiasm to take it, despite being a little bit anxious. But doing such an exam to them was a high school experience which reminds them of their school years. We noticed that a lot of students have what we shall call “grammar phobia”. It was very noticeable that many students got startled when we told them that this exam was a grammar test, and that it would cover a basic aspect of grammar that measures the ability of students to find nouns out of given derivative options. It seemed to the researchers that many students had misconceptions about grammar as being the most difficult part of the language. A lot of students began to ask about the exam before delivering the exam papers. Many students just expressed that grammar was their most complicated course in their high school, and often they had a lot of problems while doing grammar exams.

4. FINDINGS

The students’ performance is viewed from two perspectives: the grades obtained and the time taken to finish the test.

When it comes to the grades obtained, we have found that out of the 15 graduate students who have sat for the plain test i.e. the one without graphics, only 5 students have got a full mark 25/25, and all of the rest have scored lower than 20. The mean of the grades in this group is 19, and the mode is 25. When it comes to the test with graphics, nine students have got 25/25 and 3 students have got grades between 23 and 24, and only two students have scored below 20. The mean of the grades in this group is 23, while the mode is 25. Relying upon the results of the exam, it is very obvious that graphics may have pushed students to look attentively at the questions before they rush to answer. These findings answer the first question posed earlier in the study. Graphics do stimulate students and aid them to get higher grades.

When it comes to the second variable i.e. time, it was noticed that the students who sat for the plain test have finished earlier than the students who sat to the test with graphics. The mean of the time the students in the plain test took is 5.4 minutes, while for students in the test with graphics, is 10.9. Talking about the mode, it was found that the mode of time taken by the students in the plain test was 5, while the mode of time in the test with graphics was 15. It seems that the students have taken longer times to view the basic shape used. These findings answer the third question posed earlier.

Tables 1 and 2 below contain the grade of each student, the time each student took to finish the test, the mean, the mode and the median of each group in the two variables.

<table>
<thead>
<tr>
<th>Table 1. Time and grades of students in the plain test</th>
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<tbody>
<tr>
<td>Student</td>
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<tr>
<td>Time/m</td>
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<tr>
<td>Grade/25</td>
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<table>
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<tr>
<th>Table 2. Time and grades of students in the test with graphics</th>
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<tbody>
<tr>
<td>Student</td>
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<td>Time/m</td>
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<th>Table 3. The means and the Standard Deviations of the two groups</th>
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<td>Time</td>
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<td>Grade</td>
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In order to answer the second and the fourth questions, the standard deviation and the t-test are needed. The standard deviation is calculated in order to see to what extent the scores of the two groups vary around the mean. It has been found that the scores of the subjects who sat for the plain test were more varied than the scores of the students who sat for the test with graphics; the standard deviation of the first group was 5.1 while for the second group it was 3.47. This means that the grades of the subjects who have sat for the test with graphics are less varied than the grades of the students in the other group. As for time, the scenario is quite the opposite. The standard deviation of the time taken by the students in the plain test is less than the standard deviation of the time taken by the students in the test with graphics. This means that the times taken by the students in the plain test are closer to the mean than the times taken by the students in the test with graphics.
A t-test was used to determine whether the difference between the grades and the times of the two groups is significant. It was found that the p-value for the grade variable was 0.008, which is considered very significant statistically. This means that the graphics helped the students to a great extent to get higher grades.

When it comes to time, the p-value for the time variable was 0.0001, which is considered extremely significant. The time consumed by the students in the plain test was shorter than the time taken by the students in the test with graphics. This means that graphics did not help students in taking shorter time.

5. DISCUSSION

Based on the students’ grades, one can say that graphics have proved to be useful in grammar because they have enhanced the students’ achievements. Graphics might be a very significant factor in that they work as stimuli which motivate students to think more carefully about the answers before hurrying to choose the correct answer.

The difference in time can be accounted for by saying that while doing the exam with graphics, the students have taken a longer time like 13-15 minutes because they have used up more time to think and reflect on the questions given. They have spent much time to look at the graphics, gaze at them, and then analyze the questions, and then choose the correct answer. Actually, this time process is not noticed while doing the traditional questions, because the students could only look at the questions within a very short time. So the only thing they did was that they read the question and chose the answers without even having enough time to think about it. This might explain the difference in time between the two groups.

The difference in the grades can be said to refer to the use of graphics in the test. It seems that the graphics have forced students to spend longer time on questions and to think thoroughly about the options given, and to choose the correct answer. It might be that graphics have helped the subjects to get over their fears, or that they have minimized the amount of stress and fear the subjects usually have when they sit for tests in grammar. Obviously, one can say that using graphics makes the students understand English grammar much better and makes them approach grammar in a very natural way.

We guess that using graphics in teaching grammar can better make the students understand the rules especially if these graphics are introduced appropriately. We notice that the use of graphics may have influential consequences that may make the students like grammar. We believe that the use of graphics may also minimize the amount of stress and fear that may occur while learning grammar, especially, for the beginners’ levels that may need a specific attention and variety in teaching methods. As we believe that learners of grammar might be afraid while approaching the field of grammar and just start jumping into rules, using graphics would certainly play a significant role in diminishing their fears. We also believe that while a lot of grammar students might be vulnerable to make many mistakes as the scaffolding technique of teaching and learning grammar, until we feel the point that students become much more aware of grammar, and that their linguistic competence has come to a satisfactory level.

6. CONCLUSION

This paper has set out to determine the influence of using graphics in teaching grammar on the students’ grades and the times they take to finish the tests.

It has been found that graphics do play a significant influence on the students’ grades. Generally speaking, the grades of the students who sat for the test with graphics were much better than the grades of their counterparts who sat for the plain test; the number of students who got full marks is bigger, and the number of the students who achieved higher grades is bigger as well. However, the students who sat for the test with graphics consumed longer times than those who sat for the plain test.

The findings of this study indicate that graphics could be of much help for teachers to introduce difficult concepts and ideas and for students to grasp these concepts. Teachers can apply this method in introducing basic concepts in grammar to the beginner or pre-intermediate levels. This study is significant since it is one of the first to explore the influence of non-traditional strategies of teaching grammar on the achievements of the students.

This study, however, has a few limitations. The first is related to the small number of the sample, which can be overcome easily. The second is that this method is space- and time-consuming. It requires a long time on behalf of the instructor to prepare a test with graphics, and it requires much space on paper. This last limitation can be overcome in computerized tests.

Further research could be implemented to explore the influence of graphics on teaching other grammatical concepts such as verbs, tenses, and prepositions. It would be interesting to explore the influence of other non-traditional strategies on teaching and learning grammar.

REFERENCES

2. Company.
APPENDIX

Grammar questions with graphics

Q1: Choose the correct answer from the options given for each sentence. Remember that we need to find the noun. Notice that nouns may be preceded by an article.

1. We intend to set up a charitable ________ when we become rich.
   - Organize
   - Organization
   - Organizational
   - Organizing

2. They have seen a ________ in the lake.
   - Monster
   - Monstrous
   - Monstrously
   - Monstrosity

3. This is a very strong ________.
   - compete
   - competition
   - competitive
   - competitivel

4. The whole ________ was insipid and old-fashioned.
   - Program
   - Programmer
   - Programming
   - To program

5. We meet the ________ of the advertised job.
   - Requirement
   - Requires
   - Requiring
   - Required
Q2: Choose the correct answer from the options given for each sentence. Remember that we need to find the noun. Notice that nouns may also be preceded by nouns.

1- The ..................... process is one of the life cycle elements.

   - Evaporate
   - Evaporation
   - Evaporated
   - evaporating

2- You must see the ..................... department before you leave the airport.

   - immigrate
   - immigration
   - immigrated
   - immigrating

3- Can you make a ..................... of what you have already explained?

   - conclude
   - conclusion
   - conclusive
   - concluding

4- This is a new traffic ..................... regulation.

   - regulation
   - regulate
   - regulatory
   - to regulate

5- We went together to the ..................... Park.

   - amusing
   - amusement
   - amuse
   - to amuse

Q3: Choose the correct answer from the options given for each sentence. Remember that we need to find the noun. Notice that nouns may come after adjectives.

1- This is true .....................

   - Evident
   - Evidently
   - Evidence
   - An evidence

2- Tom has a shady .....................

   - personal
   - personally
   - personality
   - personalize

3- Can you think of a reasonable .....................?

   - explain
   - explanation
   - explaining
   - to explain
Q4: Choose the correct answer from the options given for each sentence. Remember that we need to find the noun. Notice that nouns may come after possessive pronouns.

4. Tom has added a nice ………………….. 
- elaboration
- elaborate
- elaborative
- elaborating

5. What a sharp ………………….. 
- Memory
- Memorize
- memorial
- memorizing

1. Your ………………….. is more logical than his.
- criticism
- critical
- criticize
- to criticize

2. His ………………….. against you was obvious. I don’t know how could you put up with all of that?
- explain
- explanation
- explaining
- to explain

3. My ………………….. was not sufficient and convenient.
- behavior
- behave
- behaving
- behavioral

4. Her …………… was a little bit eccentric.
- argue
- argument
- argumentative
- arguing

5. What was Tom’s ………………….. about?
Q5: Choose the correct answer from the options given for each sentence. Remember that we need to find the noun. Notice that nouns may come after demonstratives.

1-This ………………………..is very helpful and truthful.
   cooperation
   cooperate
   cooperatively
   cooperating

2-That ………………………..was so much embarrassing.
   situation
   situational
   situate
   situationally

3-That ………………………..was in all the newspapers.
   advertise
   advertisement
   advertise
   advertising

4-You deserve this …………..
   punishment
   punish
   punish
   advertise
   punishing

5-That ………………………..was really fantastic.
   presentation
   present
   presentational
   presenting

Q6: Choose the correct answer from the options given for each sentence. Remember that we need to find the noun. Notice that nouns may come after prepositions.

1- He did his homework with …………..
   Wise
   Wisdom
   Wisely
   To be wise

2- Happiness is in ……………………….
   Enthusiasm
   Enthusiastic
   To be enthusiastic
   To have enthusiasm
3- We were moved by ............ when he gave the speech.

4- He is in love with ........

5- He greeted his teacher with ........