

TEACHING SIMPLE AND COMPOUND SENTENCES WITH COMPUTERS AT INTERMEDIATE LEVEL

Elif Sezen Samancı

Abstract

This study aims at improving intermediate students' sentence knowledge (simple and compound sentences) by using computer-based activities. Moreover, this study aims to find out the difference between students' former sentence knowledge and their latter sentence knowledge after the treatment with computer-based activities. This research was conducted in the second term of 2011-2012 academic year at TOBB University of Economics and Technology, English Preparatory School, Ankara, Turkey. To conduct this study, the researcher used Pre- and Post-Test Technique to observe the effects of computer-based activities. This study consists of two groups: control group and experimental group. The sample of the study included 80 preparatory students as 40 control group students and 40 experimental group students. (n=80; 41 males and 39 females). As a result of the study, there has been a significant difference between control group and experimental group in favor of the latter.

Key words: simple sentence, compound sentence, computer-based teaching

BİLGİSAYARLA BASİT VE BİLEŞİK CÜMLELERİ ORTA DÜZEYDE ÖĞRETME

Özet

Bu çalışma orta düzey öğrencilerin cümle bilgisini (basit ve bileşik cümleler) bilgisayar-tabanlı aktiviteler kullanarak geliştirmeyi amaçlamaktadır. Ayrıca, bu çalışma öğrencilerin bilgisayar-tabanlı aktivite eğitiminden önceki ve eğitim sonrasında cümle bilgileri arasındaki farkı ortaya koymaya çalışır. Bu araştırma TOBB Ekonomi ve Teknoloji Üniversitesi'nde 2011-2012 akademik yılının ikinci (bahar) döneminde yürütülmüştür. Bu çalışmayı yürütmek için, araştırmacı bilgisayar-tabanlı aktivitelerin etkilerini gözlemlemek üzere, ön-test ve son-test tekniğini kullanmıştır. Bu çalışma iki grubu içerir: kontrol grubu ve deney grubu. Çalışma, 40 kontrol, 40 deney grubu öğrencisi olmak üzere, 80 hazırlık okulu öğrencisini kapsamaktadır (41 erkek, 39 kız). Çalışmanın sonucunda, kontrol ve deney grubu arasında sonrakinin lehine anlamlı bir fark bulunmuştur.

Anahtar kelimeler: basit cümle, bileşik cümle, bilgisayar-tabanlı öğretim

Introduction

The learning of sentences has been a tough task for English language learners with Turkish origin since systematic learning almost always begin with complete sentences with a different word order and rules of structure from Turkish. Sentences, being an important part of grammar learning, have long been confused by the language learners because of their complicated nature. Learners of English often fail to answer the question which sentence type a specific sentence belongs to. Having four different types, simple, compound, complex, and compound-complex, sentences themselves are hard to recognize and determine whether they are one of the kinds above. This knowledge-knowledge about language and grammar-leads the students to formulate proper sentences which may help them write good-quality essays with various sentence types.

In our technological era, it is almost impossible to disregard the use of computer in teaching foreign languages. In modern language classrooms Computer Assisted Language Learning (CALL, hereafter), which involves the use of technology in the form of computers, is an indispensable part of teaching. The advances in technology lead people to utilize computer and the Internet for computer-mediated communication and computer-mediated learning. With the application of CALL in the classrooms, especially with the use of the Internet, language teaching has significantly transformed. Firstly, teachers and learners have accessed to the World Wide Web, which has been described as a source of a near-infinite number of authentic materials. The Web offers exciting opportunities for integrating texts, audio, and even video-clips into language classes. The interactivity of websites makes them attractive to learners, who can work through language exercises, do an online test, play language games and much more. Secondly, the Internet itself offers opportunities for Computer-Mediated Communication (CMC, hereafter). Teacher and student can communicate through some tools, such as ‘chat’, email, and nowadays with social media sites such as Facebook and Twitter. The ‘negotiating of meaning’ involved when working in such online, collaborative environments can, it is argued, help learners develop their language systems. At this very point, teaching sentences and sentence types with some computer-based exercises is believed to have a positive impact on students’ formulation of correct sentences; and, therefore, their writing skills.

This study is concerned with sentence learning and the recognizing the differences of sentence types (simple and compound) via computer-based exercises as well as the impact of sentence knowledge upon writing skills. Particularly best way of approaching these issues is to first looking at learners’ current knowledge about sentences, i.e. whether they know the differences between simple and compound sentences. Then, they will be exposed to a treatment about teaching simple and com-

pound sentences with computer-based exercises. The results will be correlated in order to find out there is a difference between their pre-test and post-test results. At the end of the research whether this treatment is successful in developing students' structure knowledge will be acknowledged.

Literature Review

Simple Sentences

A simple sentence is an independent clause with no subordinate clauses. It begins with a capital letter and closes with an end mark (Baugh, 1993: 55). A sentence composed of one clause is called a simple sentence, and its structure is the same as that of a clause (Jackson, 1982: 93).

A similar definition is given by Teschner and Evans (2007: 225) as “any sense-making piece of writing that begins with a capital letter and ends with a period, with three dots, with a question mark, or an exclamation point. In a simple sentence there is one main clause and no subordinate clauses (Demirezen, 1998: 1). According to generally accepted rule, a simple sentence in English consists of two parts: subject and predicate; that is, a simple sentence consists of one main clause only. A simple sentence is a main clause itself; in other words, a simple sentence is always an independent sentence that is a sentence capable of occurring on its own (Aarts and Aarts, 1988: 80). It does not contain an embedded or a subordinate clause in its structure. A useful way to begin identifying clauses in sentences is to count main verbs. For each main verb there will be a clause and in each simple sentence, there has to be a subject and a verb. However, this does not mean that the simple sentence has to be very short. Simple sentences can consist of compound subjects, compound verbs, some additional phrases. These additional phrases can appear at the beginning, at the end of or in the middle of a sentence. A simple sentence no matter how long, no matter how intellectually dense, has only one independent clause. The sentence below illustrates the problem with defining a simple sentence in terms of its length.

e.g. Having been disappointed by love in the past, Lucas his head bowed and burdened with grief, his arms limp and heavy by his sides, walks slowly and haltingly away from the woman sobbing in the doorway, her cries and tears a sign for him to return and give her a chance to show love and devotion (Lutz and Stevenson, 2005: 77).

Compound Sentences

A comprehensive and pedagogical definition on compound sentence is this: a compound sentence is a sentence consisting of at least two clauses, each of which can be separated off into its own independent clause and independent sentence (Teschner and Evans, 2007: 222). A compound sentence consists of two or more main clauses (Verspoor and Sauter, 2000: 36). We often need to join ideas. One way we can do this is to link simple sentences to form compound sentences. This linking can be achieved by a semi-colon; a semi-colon followed by a connecting adverb; a coordinating conjunction often preceded by a comma; correlative conjunctions; tag questions; no conjunctions; and both coordinate conjunctions and conjunctive adverbs at the same time. The examples are as follows:

e.g. We fished all day; we didn't catch a thing.

*We fished all day; **however**, we didn't catch a thing.*

*We fished all day, **but** we didn't catch a thing.*

*In 1795 B.C.E., Babylon was **not only** the capital city of ancient Babylonia, **but also** the world's first metropolis.*

*I'm in big trouble, **aren't I?***

"I love you," she whispered in his ear.

*According to the weather forecaster today would be quite hot; **but, in fact**, it is quite chilly.*

Computer-Assisted Language Learning (CALL)

CALL may be defined as "the search for and study of applications of the computer in a language teaching and learning. (Levy, 1997: 1). CALL has been made possible by the invention and subsequent development of the computer. As a result, the nature of CALL is a reflection of the level of development of the technology.

Knowing the importance of using technology in language classes, language teachers should be aware of the new technologies in CALL. In designing computer-based activities, teacher has a crucial role. Choosing the right activity, at the right time; applying the activities into the curriculum in the classes, the teacher is responsible for the improvement in learners' language skills. Teachers also need to keep up with the pace of the rapid change in technology (from auditory dictionaries to web exercises; from podcasts to vidcasts).

As it is stated before, learning sentence types and formulating correct sentences with using correct word order, ideal length, and punctuation accordingly have always been a tough task for ELL students. Especially in written language, producing proper sentences is a must since conveying the message has a strong bond with using correct grammar and sentence structure. For teaching sentence structure, explicit grammar teaching is said to be efficient. Its blending with technology is believed to provide a better understanding of sentence structures for students. Computer-based exercises and the Internet, having endless sources of information, being entertaining and educatory with its visual and auditory support, have a number of advantages in education.

Methodology

Research Questions

This study seeks to make an associative relation between using computers in language teaching and learning simple and compound sentences. It also explores whether this learning affects formulation of better sentences at intermediate level or not. Specifically, the following research questions are addressed:

Is there a statistically significant difference between experimental group and control group in terms of recognition test (pre-test) for sentence types?

Is there a statistically significant difference between experimental group and control group in terms of post-test?

Is there a statistically significant difference between the pre-test results and the post-test scores/results for the experimental group?

Is there a statistically significant difference between the pre-test results and the post-test scores/results for the control group?

Subjects

This study was conducted in the second term of 2011-2012 academic year at TOBB University of Economics and Technology, English Preparatory School, Ankara, Turkey. This study consists of two groups: control group and experimental group. The sample of the study included 80 preparatory students as 40 control group students and 40 experimental group students. There are 41 male, and 39 female students in total. When regarding the division between control group and experimental group, one can see that there are 16 female students in control group and 25 female students in experimental group; in terms of male students there are 24 male students in control group and 15 male students in experimental group.

Materials and Procedures

The study was held on four weeks and students were voluntarily involved in this study. In the first phase of the study students (both control group and experimental group students) completed the pre-test (recognition test) on sentence types. The major aim of this part is to find out students' general knowledge of sentence types (especially of simple and compound sentences) and to design computer-based or traditional lesson according to this test's scores and common errors. This test consists of 50 questions. Each question has 5 possible answers. Students are supposed to decide whether the sentences are simple or compound. For the first 25 questions, students tried to decide on that: Which alternative indicates a SIMPLE SENTENCE in the following sentences? Then, they tried to decide on the following question for the last 25 questions: Which alternative indicates a COMPOUND SENTENCE in the following sentences?.

For the second phase, control group students were exposed to the treatment for 4 weeks, 1 hour each week. The researcher taught simple sentences and its uses in two hours; then, compound sentences and its uses in the other two hours. The researcher used white board and her own notes. Although student-teacher interaction is inevitable in the classes, main authority in the classroom was "the teacher" and teacher talking time (TTT) was more than student talking time (STT). Teacher was the one who had all of the knowledge and information about simple and compound sentences, and directly and deductively taught the students the rules. Rather than meaning, the correct and grammatical use of punctuation marks was significant.

On the other hand, in experimental group computer-based activities were designed by the researcher. Rather than the teacher, students were more active in the classes. As in control group, in experimental group also, the treatment lasted for 4 weeks, 1 hour each week. Simple and Compound sentences were taught in an integrated way rather than parting them in 2 different weeks. The activities started with a speaking activity based on pictures on the computer which enabled them with interaction and formulation of the sentences without even being aware of the fact that they were going to learn sentence types. After that, they read and listened to a passage in English and answered the concept questions and context questions. After they had enough input, they were given the chance to discover the rules of sentence types themselves. Then, the teacher showed them the rules and example sentences via the computer program. They did lots of exercises about simple and compound sentences such as matching, multiple choice, and rewrite.

In this study, Macromedia Breeze Presenter was used. Breeze Presenter can be used to create short videos explaining difficult scientific theories and concepts, which

would then be made available to students via the Web. PowerPoint slides that are enhanced with animations and audio can then be delivered as streamed media over the Web, and students can view them online without having to own a copy of PowerPoint.

Results and Discussion

Quantitative methods were applied to analyze the data. The analysis was conducted by using Statistical Package for Social Sciences (SPSS) 16.0. An independent samples t-test and paired samples t-test were used to understand the difference between experimental and control group. In the following sections the differences between these two groups and their improvement after the treatment will be analyzed and discussed. As to the reliability the Cronbach's Alpha, it is .95 which indicates a high level of reliability.

In the following sections, data analysis will be discussed in detail in relation to the research questions.

Analysis of Research Question 1

Is there a statistically significant difference between experimental group and control group in terms of recognition test (pre-test) for sentence types?

Although the number of subjects are the same in experimental and control group, the results of pre-test scores (pre-test mean differences between control and experimental group) are evaluated with "independent samples t-test" for these two groups are different.

In Table 1, descriptive statistics for pre-test results, mean, standard deviation, and standard error of the mean, are given. Table 2 indicates the results of the equality of variances test between the means. The null hypothesis (H_0), which asserts that there is not a significant difference between pre-test results of control and experimental group students, is rejected since in Table 12 t-value at 78 degrees of freedom is -2,064 and t table value at the same degrees of freedom (as absolute value) is greater than 1,645. We can reach the same result by analyzing that significance 2-tailed value is 0,042, which is smaller than 0,05 p-value. Briefly, we can state via the help of t-test that the difference between control group and experimental group in terms of pre-test results is statistically significant with a reliability of .95.

Table 1: Group Statistics for Pre-test Results

	Group	N	Mean	Std. Deviation	Std. Error Mean
Result	Control	40	12,8750	4,93646	4,93646
	Experimental	40	15,8250	7,57150	7,57150

Table 2: Independent Samples T-test Results for Research Question 1

		Levene's Test For Equality of Variances		t-test for Equality of Means				
		F	Sig.	t _{calc}	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Test Score	Equal Variances Assumed	10,333	0,002	-2,064	78	0,042	-2,95000	1,42913
	Equal Variances Not Assumed			-2,064	67,082	0,043	-2,95000	1,42913

In pre-test, both groups were given a 50-questioned test in which there were 5 possible answers for each. English Language level for control group and experimental group was intermediate. Although they have the same level, there are some slight differences in their exposure to the language. In experimental group, there are 11 English Language and Literature students while in control group there aren't any. English Language and Literature students were exposed to English at high school, while the others weren't. However, ultimately, according to the Placement Test results they end up in the same class which means that the other students know English as much as English Language and Literature students. As they are in preparatory class, not in departmental classes, these departments' difference is not that significant.

Neither control group, nor experimental group was exposed to treatment before pre-test. Their difference in results can be resulted from their personal awareness level in English. While mean for control group is 12,8750, mean for experimental group is 15,8250 in 50 questions. According to the results of control and experimental group which took pre-test, we state that there is a statistically significant difference between them.

Analysis of Research Question 2

Is there a statistically significant difference between experimental group and control group in terms of post-test?

Although the number of subjects are the same in experimental and control group, the results of post-test scores (post-test mean differences between control and experimental group) are evaluated with “independent samples t-test” for these two groups are different.

In Table 3, descriptive statistics for post-test results, mean, standard deviation, and standard error of the mean, are given. Table 4 indicates the results of the equality of variances test between the means. The null hypothesis (H_0), which asserts that there is not a significant difference between post-test results of control and experimental group students, is rejected since in Table 14 t-value at 78 degrees of freedom is -8,826 and t table value at the same degrees of freedom (as absolute value) is greater than 1,645 ($t\text{-value}=8,826 > t\text{-table}=1,645$). We can reach the same result by analyzing that significance 2-tailed value is 0,000, which is smaller than 0,05 p-value. Briefly, we can state via the help of t-test that the difference between control group and experimental group in terms of post-test results is statistically significant with a reliability of .95.

Table 3: Group Statistics for Post-test Results

	Group	N	Mean	Std. Deviation	Std. Error Mean
Result	Control	40	27,6500	5,442	0,86049
	Experimental	40	35,9750	2,444	0,38645

Table 2: Independent Samples T-test Results for Research Question 2

		Levene's Test For Equality of Variances		t-test for Equality of Means				
		F	Sig.	t_{calc}	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Test Score	Equal Variances Assumed	9,191	0,003	-8,826	78	0,000	-8,32500	0,94329
	Equal Variances Not Assumed			-9,926	54,117	0,000	-8,32500	0,94329

This research question is the most significant one in this study for it shows whether the treatment with computers or the treatment in traditional way is more efficient in teaching simple and compound sentences.

The results show that experimental group students have been much more successful than control group students in terms of post-test scores. While the mean for control group is 27,6500, the mean for experimental group is 35,9750 out of 50 questions. This clearly shows that there is a statistically significant difference between control group and experimental group in terms of post-test results.

Analysis of Research Question 3

Is there a statistically significant difference between the pre-test results and the post-test results for the experimental group?

Since the data for pre-test and post-test results belong to the same subject group (experimental group), equality of variances between the means is conducted with “paired samples t test”.

In Table 5, descriptive statistics for pre-test and post-test results belonging to experimental group, mean, standard deviation, and standard error of the mean, are given. Table 6 indicates the paired samples correlations between pre-test and post-test results. It is seen that there is a .530 correlation which means there is a positive correlation between them. Table 7 indicates the results of the equality of variances test between the means. The null hypothesis (H_0), which asserts that there is not a significant difference between pre-test and post-test results of experimental group students, is rejected since in Table 7 t-value at 39 degrees of freedom is -19,285 and t table value at the same degrees of freedom (as absolute value) is greater than 1,645 ($t\text{-value}=19,285 > t\text{-table}=1,645$). We can reach the same result by analyzing that significance 2-tailed value is 0,000, which is smaller than 0,05 p-value. Briefly, we can state via the help of t-test that the difference between pre-test and post-test result in terms of experimental group is statistically significant with a reliability of .95.

Table 3: T-Test Paired Samples Statistics for Pre-test and Post-test Results of Experimental Group

		Mean	Std. Deviation	Std. Error Mean
Pair 1	Experimental_pre	15,8250	7,57150	1,19716
	Experimental_post	35,9750	2,44412	0,38645

(t-value=12,793>t-table=1,645). We can reach the same result by analyzing that significance 2-tailed value is 0,000, which is smaller than 0,05 p-value. Briefly, we can

		Correlation	Sig.
Pair 1	Experimental_pre & Experimental_post	0,530	0,000

Table 5: Paired Samples T-test Results for Research Question 3

		Paired Differences			T	Df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean			
Pair 1	Experimental_pre Experimental_post	-2,01500E1	6,60827	1,04486	-19,285	39	0,000

According to the results, there is a statistically significant difference between pre-test results and post-test results of experimental group students. Mean for experimental group pre-test is 15,8250 which is clearly lower than 35,9750 which is mean for experimental group post-test. It supports the assumption of the researcher that computer-based activities are efficient in teaching sentence types.

Analysis of Research Question 4

Is there a statistically significant difference between the pre-test results and the post-test results for the control group?

Since the data for pre-test and post-test results belong to the same subject group (control group), equality of variances between the means is conducted with “paired samples t test”.

In Table 8, descriptive statistics for pre-test and post-test results belonging to control group, mean, standard deviation, and standard error of the mean, are given. Table 9 indicates the paired samples correlations between pre-test and post-test results. It is seen that there is a 1,2 correlation which means there is a positive correlation between them. Table 10 indicates the results of the equality of variances test between the means. The null hypothesis (H_0), which asserts that there is not a significant difference between pre-test and post-test results of experimental group students, is rejected since in Table 10 t-value at 39 degrees of freedom is -12,793 and t table value at the same degrees of freedom (as absolute value) is greater than 1,645

state via the help of t-test that the difference between pre-test and post-test result in terms of control group is statistically significant with a reliability of .95.

Table 6: T-Test Paired Samples Statistics for Pre-test and Post-test Results of Control Group

		Mean	Std. Deviation	Std. Error Mean
Pair 1	Control_pre	12,8750	4,93646	0,78052
	Control_post	27,6500	5,44224	0,86049

Table 7: Paired Samples Correlations between for Pre-test and Post-test Results of Control Group

		Mean	Std. Deviation
Pair 1	Control_pre & Control_post	0,012	0,943

Table 8: Paired Samples T-test Results for Research Question 4

		Paired Differences			T	Df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean			
Pair 1	Control_pre Control_post	-1,47750E1	7,30468	1,15497	-12,793	39	0,000

According to the results of control group's pre-test and post-test scores, one can clearly say that there is a rise in the mean of correct answers. Although it is not as high as experimental group's results, there is a statistically significant difference between their pre-test and post-test results. As they have taken pre-test without getting any kind of treatment about simple and compound sentences, their exposure to traditional way of teaching also has had positive effect on them. It is not as much as computer-based teaching, though.

Conclusion

There is no doubt that the use of computers and the Internet in foreign language learning/teaching has been a matter of discussion for a long time. However, there is no clear-cut answer to this problematic case. Hence, this study has tried to see if the computer use, and specifically computer-based activities designed with MacroMedia Breeze Presenter Program has a benefit to the students of English in the sense of sentence structure.

As a conclusion, the data gathered from the pre-test and post-test displays that students' knowledge about sentence structures and sentence types improved by both traditional teaching-based activities and computer-based activities in favor for the latter. All of the research questions are proved to be answered by the statistics and the results are statistically significant for each of the question. Independent samples t-test was conducted for the groups that are different (between male and female students); paired samples t-test was conducted for those that are similar. According to the results, explicit sentence structure teaching blended with CALL has had a positive impact on students at intermediate level. The post test results seem to be greater than pre-test results which proves that the treatment has been successful. The difference in results between traditional way of teaching and CALL indicates that, as the researcher had previously assumed, CALL has been much more effective than traditional way of teaching.

The findings and the discussion of the study show that there is a significant effect of computer-based exercises on teaching sentence structures. Now that computer-based exercises are proved to be efficient in teaching simple and compound sentences, similar exercises should be designed using Macromedia Breeze Presenter as the researcher has done (or other computer-based programs). Curriculum and Instruction departments at universities should give importance to teaching of simple and compound sentences which have long been neglected in course books. New materials should be designed to make EFL-ESL students more competent in writing good-quality essays and paragraphs.

References

- Aarts, F. & Aarts, J. (1988). *English Syntactic Structures*. Oxford: Pergamon Press.
- Baugh, L. S. (1993). *Essentials of English Grammar: A Practical Guide to the Mastery of English*. Lincolnwood (Chicago), Illionis: Contemporary Publishing Group, Inc.
- Demirezen, M. (1998). *From Sentence to Paragraph Structure*. Ankara: Adım Publications.
- Jackson, H. (1982). *Analyzing English: An introduction to Descriptive Linguistics*. Oxford: Pergamon Press.

- Levy M. (1997). *CALL: Context and Conceptualisation*, Oxford: Oxford University Press.
- Lutz, G. & Stevenson, D. (2005). *The Writer's Digest: Grammar Desk Reference: The Definitive Source for Clear and Correct Writing*. Cincinnati, Ohio: FW Publications.
- Teschner, R., & Evans, E. (2007). *Analyzing the Grammar of English* (3rd ed.). Washington, DC: Georgetown University Press.
- Verspoor, M. & Sauter, K. (2000). *English Sentence Analysis: An Introductory Course*. Amsterdam: John Benjamins Publishing Co.