

*Full Length Research Paper*

# How can we teach the mother tongue without creating a competitive environment? A comparative study on teaching of punctuation marks using the jigsaw technique

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**This study aims to determine the effect/contribution of the use of the jigsaw technique in the teaching of punctuation marks in mother tongue education on/to the academic improvement of students. The functionality of reading, speaking and writing skills falling within the understanding and expression domains of learning is dependent upon the proper use of punctuation marks so as to strengthen the meaning. Use of tone, stress, gesture and mimics which are effective in speaking enhances the effectiveness of the speech. Just as nonverbal behaviors are instrumental to rendering speech effective and making meaning and expression richer, the ability to express/understand the exact feeling and thoughts which are intended to be conveyed in reading and writing is dependent upon the use of punctuation marks by assigning them functions for different purposes. To that end, answers have been sought to the question how punctuation marks could be better taught in mother tongue education at primary education level. The jigsaw teaching technique, a contemporary teaching method, has been set to work in the teaching process. The study universe is consisted of a primary school in central Erzurum during the first semester of school year 2009 - 2010. The sample consists of two branches from the 4<sup>th</sup> grade that were selected using random sampling method, one serving as the study group, the other as the control group. The results of the study revealed that the jigsaw technique was superior to traditional teaching methods in the teaching of punctuation marks.**

**Key words:** Turkish teaching, punctuation marks, language skills, jigsaw technique.

## INTRODUCTION

Language comes to life with the effective use of four basic language skills belonging to reading and expression domains of learning. Reading, listening, speaking and writing which fall within those domains are nurtured by the grammar domain of learning and increase their effectiveness and functionality. Grammar is the entirety of rules which need to be followed for an effective and proper use of a language. Vardar (1998) defines grammar as an examination which reveals the functioning and order of a language, covering, in particular, morphology

and syntax; an internal system and knowledge which allow the speaker and listener of a language to produce and understand sentences. On the other hand, Gogus (1978) defines grammar as a discipline which examines the sounds, word types of a language, their structures and organization as a sentence, their functions within the sentence and rules regarding their inflection.

In the first stage of primary education (1 - 5), grammar and relevant subjects are not given as separate learning areas in mother tongue courses, but are limited to learning based on perception within other learning areas. In the second stage of primary education, the functions of grammar subjects, concepts and elements were intended to be comprehended broadly among basic language skill activities. No such classification is employed for punctuation

marks, which occupy an important place in grammar, rather punctuation marks and functions are tried to be taught, starting from the first grade of primary education. Punctuation marks and their functions need to be taught particularly while carrying out reading and writing activities in the first grade.

### Teaching punctuation marks and their functions

Punctuation marks are auxiliary signs that are used to facilitate the reading of a piece of writing and to help understand it correctly (Commission, 2000). Punctuation marks are used to express feelings and thoughts much clearly, to define the structure of a sentence and the places where to stop, to facilitate reading and understanding, and to determine the features of a word such as stress and tone (TDK (Turkish Language Institution), 2005) Punctuation means to place marks such as a full stop, comma, semicolon, colon, dash, quotation mark, parenthesis, question mark, exclamation mark in order to facilitate the understanding of a letter, to separate sentences and to strengthen the meaning. Helping to clarify the meaning, organize the reading and prevent misunderstanding, 'punctuation' shows the stops and keeps the reader's attention alert (Karaalioglu, 1992).

In our daily conversation, we drop or raise the tone of our voice according to the subject. We try to clarify speech and meaning with mimics or hands. We put an emphasis on some words and express the importance of the sentence. We use punctuation marks to express our feelings and thoughts in written expression, to facilitate the understanding of the reader, and to specify the emphasis and tone (Aydin, 2009). We cannot make use of the expression value of the hand, the face, the body and signs which we use spaciouly in speaking. There are punctuation marks in writing. Punctuation marks elucidate the meaning, prevent misunderstandings and organize the reading. They signify the stops, arouse the reader's attention, and provide the value which a sound would contribute to expression. Seeing a full stop, an exclamation mark, or a question mark at the end of a sentence alerts the reader in advance; sounds, traces which the text triggers on the face are adjusted accordingly. If we take punctuation marks out of a text, the meaning would be plunged into darkness. Doubts, misunderstandings would arise, and the sentence would lose its sweet musical rhythm (Gencan, 1983).

In any letter, there are marks that are inserted in certain places of sentences and words to make reading and understanding proper, accurate and easy. These marks designate the structure of the sentence, linkages, stoppages, and stresses on and pronunciation of words. These marks bring life to the sentence in terms of meaning, emotion, speaking and writing. Punctuation marks allow organizing the reading, clarifying the meaning of the sentence, and avoiding misunderstandings (Bolayir, 1990).

We cannot use punctuation marks arbitrarily. Knowing well where they are used and using them accordingly are the most important elements which help to achieve success in text writing. Inability to use punctuation marks or failing to use them in place leads to confusion or loss of the meaning, misunderstandings and misapprehensions, or to a bothering text. Using them where appropriate allows to grab the meaning easily and provides a neat text. Those who fail to learn where to use punctuation marks are condemned to fail in written expression (Uludag, 2002).

Goker lists the benefits of punctuation marks as follows (2001):

1. Allow reading and understanding a written text correctly.
2. Clarify meaning, and thus facilitate learning.
3. Prevent meaning gaps and misunderstandings in written expression.
4. In spoken language we make use of, and contribute to our verbal expression with, voice tone, stress, gestures, and mimics. In written language, these capabilities are provided through punctuation marks to a certain extent.
5. They help us communicate better the information, ideas, feelings and thoughts we intend to convey to others in writing.
6. They play an important part in voicing the text easily and in accordance with our purpose during oral readings.

In primary education Turkish mother tongue teaching program (Grades 1-5), students are aimed to make a number of accomplishments in terms of punctuation marks and their functions starting from the first grade. For example, reading skill 1<sup>st</sup> objective (applying reading rules), 5<sup>th</sup> accomplishment (reads by paying attention to punctuation marks) is among the accomplishments which have been determined for all grades of the first stage of primary education (1, 2, 3, 4, and 5). Again, writing ability 1<sup>st</sup> objective (applying grammatical rules), 9<sup>th</sup> accomplishment (uses punctuation marks correctly and in place in his/her writings) is the common accomplishment for grades, 1, 2, 3, 4, and 5 (MEB, 2005).

### Purpose of the study

The purpose of this study is to determine the effect of the cooperative learning method using the jigsaw technique versus the traditional learning method on the academic improvement of students in the teaching of punctuation marks as part of the Turkish language course. The conducted study intends to seek an answer to the following question:

What is the effect of Jigsaw, a sub\*technique of the cooperative learning method, in teaching punctuation marks to primary education 1<sup>st</sup> Stage 2<sup>nd</sup> Period (grades 4-5) students during their mother tongue education course

## METHODS

### Context and settings

Conducted for the purpose of determining the effect of the use of Jigsaw technique in the teaching of punctuation marks on raising the success, this study was performed using a quantitative research method, that is, the experimental pattern involving a pretest – posttest control group. A TBT (Turkish Achievement Test) was drawn up using questions relating to punctuation marks from the exams conducted by MEB (Ministry of National Education) in the previous years, consulting also the views of specialists.

In addition, views of students, teachers and parents on application of the jigsaw technique were included using a quantitative research method, that is, the interview method.

### Data collection

As part of the study, a Turkish Language Achievement Test (TBT) was prepared using questions relating to punctuation marks from the exams conducted by MEB (Ministry of National Education) in the previous years. Views of the specialists were also conducted in respect of the test questions prepared, and necessary corrections were made in the light of their recommendations. The final version of TBT was given to both the control group and the study group as a pretest and posttest in order to determine the success level of the students on punctuation marks.

### Experimental actions process

Each classroom to which the jigsaw method was applied was divided into 6 primary groups each consisting of 5 students. Caution was exercised to ensure groups were heterogeneous. The classroom order was arranged in accordance with the method and technique to be applied. To that end, the assistance of the class teacher was sought. The groups created named themselves as follows: First group BASARI, second group BIRINCI, third group YAPRAK, fourth group YILDIZ, fifth group ASLAN, and sixth group SIMSEK. Thereafter the punctuation marks to be studied were distributed to each group member as (a) full stop (b) comma (c) question mark (d) exclamation mark and (e) apostrophe.

Students who planned to prepare a topic were provided with explanations about the topics they were to prepare and informed that they could use any method they would like in order to deliver an efficient presentation in a peaceful atmosphere (drama, dramatization, educational game, acting, chorus, etc.). Then, the students were allowed to carry out researches about the subjects they assumed. To support their researches, they were given the names of the sources of reference, various documents, and websites they could benefit from and also worksheets. Groups carried out the preparation stage under the guidance of the teacher. In the next step, primary groups were allowed to come together and discuss what kind of studies and preparations they had done so far. Group leaders and writers drew up the studies of group members as a report and delivered their presentations. Students were caused to provide information to their own group members about the subject they assumed and to exchange ideas about the topics they prepared and about how to use them.

Following the exchange of information in primary groups, 'jigsaw groups' were formed. 'Jigsaw groups', which we also describe as an 'expert group', are groups created to ensure that students who assume the same topic come together and contribute to each others' studies, complete deficiencies, become aware of different methods and techniques, and obtain the most efficiency from the practice. After the gathering of expert groups, the students were asked to return to their primary groups again, and meet to work out

the final version of their studies. For the purpose of monitoring which group carried out the studies, the students delivered reports regularly. Thus, they were able to see and correct the deficiencies of their own groups and we, as appliers, were able to provide them with guidance easily.

After the studies were given the final form, it was time to deliver the presentations. They conducted the presentation stage using the materials they prepared in advance and alternative methods and techniques. Each group presented its study in the time period allocated to it. Interesting and impressive methods were seen to be used on presentations. If we are to give examples to methods that attracted our attention, the first group prepared lesson materials using cardboards and tried to attract the audience's attention with visual elements. The second group prepared a cube of punctuation marks, and prepared a sentence game to strengthen the subject through a plenty of examples (exemplifying the places of use of punctuation marks by arranging letters, which they had written on cut paper, side by side, etc.) Members of the third group provided information about punctuation marks through stories. The fourth group prepared a Karagöz and Hacivat play with suitable costumes and makeup. The fifth and sixth groups formed a big play pool, wrote information about punctuation marks and distributed them to their classmates who had to read the explanation regarding the mark he/she had been given so as to reinforce the knowledge... The students were observed to use effective learning and teaching techniques.

The formation of primary groups and jigsaw groups are shown in Charts 1 and 2.

### What is jigsaw-matching technique?

This technique was developed by Aronson. Students are divided into groups of 5 - 6 persons each, and each group which is given a subject is divided into smaller parts equal to the number of its members so that each student is given a section. After the students learn their own section, they come together and each member teaches his/her section to the other members of the group. They exchange questions and make sure that the subject is understood completely. All group members make their presentations, bring all pieces together and achieve integrity.

After the students study for a while, they leave their own teams, and form new teams with other students who are in charge of preparing the same topic. These teams which are called "expert" teams try to clarify the subject, and after they consider how to teach the subject to other friends, they return to their primary teams. The team members who come together again are responsible for teaching the topics they have prepared to each other (Acikgoz, 2004).

## RESULTS

### Findings related to qualitative data

Views of students, parents and teachers on the application process and result of the Jigsaw technique are thus presented.

This section includes the views of students; teachers and parents on the study which was conducted taking into account the application processes of the jigsaw technique of cooperative learning method, one of the active learning strategies of the present, and on the process of the study.

### PRIMARY GROUPS

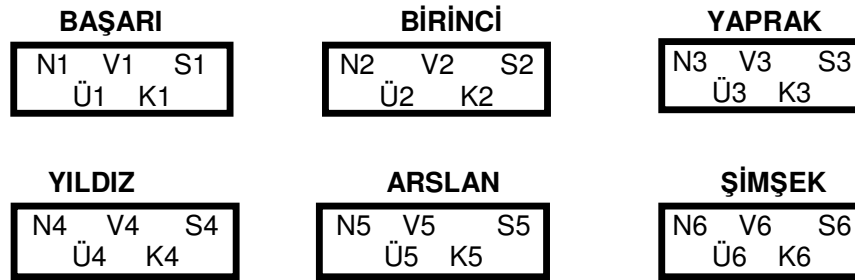


Chart 1. Separation into primary groups of the class where jigsaw technique is applied (N1, K1, N2, K2, N3, K3, N4, K4, N5, K5, N6, K6 shows the students).

### JIGSAW GROUPS

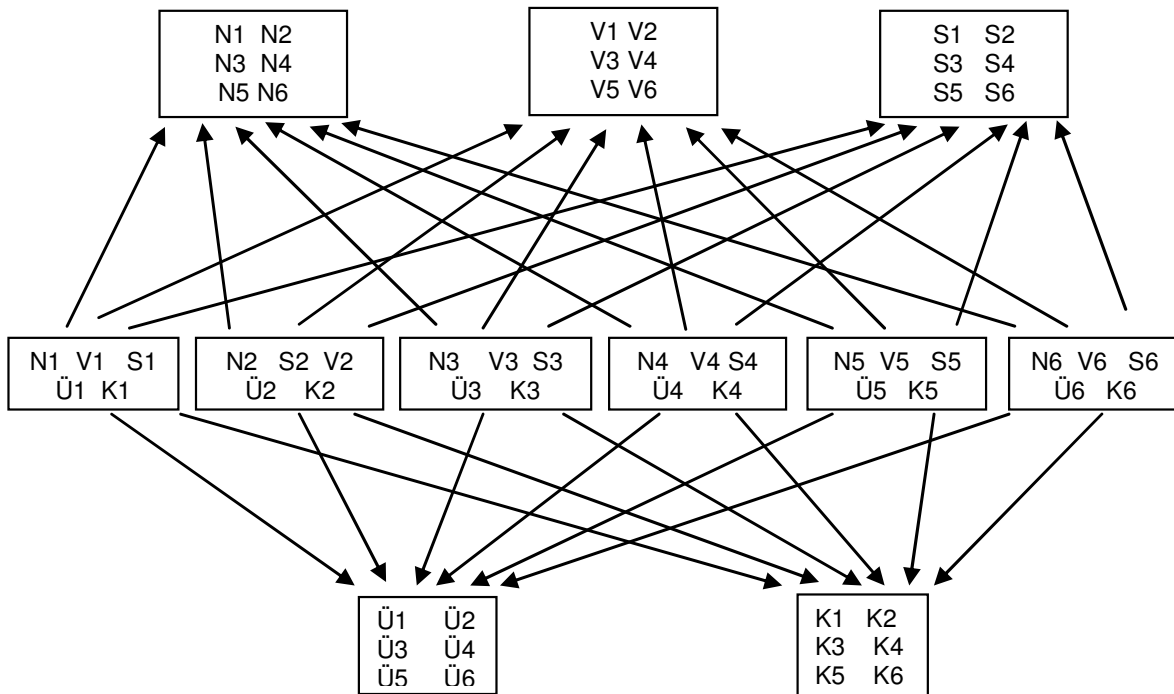


Chart 2. Formation of jigsaw groups from primary groups.

#### From the views of the students who took part in the study

Student said they did not have the opportunity to make such a study before, and said, unlike the other methods: "It was we who taught the subject and conveyed our knowledge, however, when it is the teacher who teaches the subject, we do not generally have the opportunity to speak. We always want to take part in such studies, because we both entertain and learn while entertaining, which makes our learning long lasting. We learned what we can achieve by taking on responsibility; we completed

the deficits in our knowledge in our expert groups; we accomplished the learning and teaching goals through the materials, plays and stories we prepared; we had the chance to know our friends better and socialize within the group, and we exchanged ideas. We put ourselves in the shoes of our teachers, and told what we knew; at the same time, we understood the importance of being a good listener; in brief, we have shown what kind of a learning we could achieve if we are given the opportunity. At the same time, we had hardship about what we were to do as it was the first time we took part in such a study, but the guidance of our teachers helped us overcome that

hardship.”

### From the views of the parents who were asked to state their thoughts about the studies of their children

This study provided our children with the chance to achieve knowledge with their own efforts, and at the same time, did not only improve their ability to research, but also the ability to become a good narrator and a good listener. In particular, they had the chance to improve their social responsibility and positive engagement abilities within a group. During the course of the study, they were asking what they could do further to expand their research and preparation. They had the excitement and happiness of conveying their knowledge, acting like a teacher. They even shared the subjects they learned with us as if they were a teacher. The method is suitable for rendering their knowledge on the subject permanent. We would like such methods and techniques to be used much broadly and applied to other courses.

### From the views of the teacher of the class where the application was carried out

With the method applied, the learning level of the student is high. Involving the student in teaching triggers the success. The guidance provided by the teacher when they face difficulties in comprehending reinforces the learning.

If the jigsaw technique is applied successfully by the students, it will lead the students to the specified goals and accomplishments, and the learning to the targeted results.

This is an indication of the fact that the research, learning and teaching process being focused on the learner and the learner being active in the process facilitate finding the answer to the question "Why do we learn and teach?" in the true address (the student). One of the strengths of the method applied is the use of all methods and techniques by the student throughout the process. Thus, it is a shared idea that the study is open to alternative methods.

### Findings related to quantitative data

As it is evident from Table 1, pretest and posttest averages for the study group are 56 and 61.83, respectively. The pretest and post test averages of the control group are 56.33 and 56.63, respectively. There is statistical proximity between the pretest averages of the study and control groups. This may be accounted for by the fact that the level of readiness of the study and control groups related to literary genres was close to each other.

In Table 2, the correlation between the pretest and posttest results is  $r = 0.896$   $p < 0.01$ , which shows that there is a linear relation between the pre- and post-test.

In Table 3, while the difference between the pre- and

**Table 1.** Average results related to the pretest – posttest applied to the study and control groups.

		$\bar{x}$	Sx
Study group n = 30	PRE-T.	56.0000	3.16446
	POST-T.	61.8333	3.04792
Control group n = 30	PRE-T.	56.3333	3.13978
	POST-T.	56.6333	3.02878

**Table 2.** Correlation between the pretest – posttest applied to the study and control groups.

		n	Correlation	P
Study group	PRE-T.	30	0.896	0.000
	POST-T.			
Control group	PRE-T.	30	0.946	0.000
	POST-T.			

**Table 3.** T-test result between the pretest – posttest applied to the study and control groups.

		t	Df	P
Study group	PRE-T.	-5.83333	29	0.000
	POST-T.			
Control group	PRE-T.	-0.30000	29	0.770
	POST-T.			

post-test results of the study group was statistically very significant ( $p < 0.01$ ), the difference in the control group was found to be insignificant ( $p > 0.05$ ).

## RESULT

In the light of the qualitative findings achieved at the end of the study process, it was seen that much effective and permanent learning was achieved in grammar education using the jigsaw technique (teaching of punctuation marks) when the learner achieved the knowledge through discovery, and that the accomplishments that were targeted were high in individuals of the same age group and the same educational level. It was observed that students learned while entertaining, and interactive learning improved social abilities of the students, such as self-confidence, responsibility-taking, feeling of belonging, and the students had sufficient motivation. In addition, it was concluded that the children could take on responsibility, develop, use different and alternative methods and techniques, and use their best efforts for individual and collective success in the absence of a competitive atmosphere.

The statistically close averages of the pretests applied in the beginning of the process indicate that the groups were similar in terms of level of knowledge.

The study group students being academically superior to the control group students in the achievement test applied (posttest) suggests that the jigsaw technique is effective in grammar education (teaching of punctuation marks).

## DISCUSSION

In the light of the qualitative findings achieved at the end of the study process, it was seen that much effective and permanent learning was achieved in mother tongue education (punctuation marks) using the jigsaw technique when the learner achieved the knowledge through discovery, and that accomplishments that were targeted were high in individuals of the same age group and the same educational level. This may be interpreted as the realization of the theoretical benefits of the technique applied. The fact that students learned while entertaining, and interactive learning improved social abilities of the students, such as self-confidence, responsibility-taking, feeling of belonging, and that the students had sufficient motivation indicate that the jigsaw technique is useful in mother tongue education. In addition, the fact that children could take on responsibility, develop, use different and alternative methods and techniques, and use their best efforts for individual and collective success in the absence of a competitive atmosphere may be interpreted as an overlap between the applied technique and the language teaching targets.

## SUGGESTIONS

Language acquisition, language learning is an act which takes place much easily in a natural environment where competition does not exist. The jigsaw technique may be utilized broadly in teaching grammar rules and skills, notably in reading, writing, listening and speaking skill domains.

Grammar topics in the teaching of which the jigsaw technique can be applied may be listed as follows:

1. Punctuation marks: Apostrophe, exclamation mark, quotation mark...
2. Constituents of a sentence: subject, verb, object...
3. Teaching of word types: noun, adjective, pronoun, adverb, preposition, conjunction...
4. Teaching of grammatical rules: Grammatical rules for interrogative sentences, etc.

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