Full Length Research Paper

A comparative research on the effectivity of cooperative learning method and jigsaw technique on teaching literary genres

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One of the basic purposes of language and literary education is to maintain a target population and the use of proper attitude, method and technique in proper learning environments. Therefore, proper attitudes and methods are to be resorted for students to become active elements of the environment throughout the learning-teaching process. One of the methods to attain this aim is the cooperative learning and jigsaw technique. Having this method and technique utilized interlockingly, they maintain a significant parallelism in terms of structural aspects and functionality, and thereby operate decisively in the development of language skills. In this study, having focused on the use of cooperative method and jigsaw technique in teaching literary genres, an attempt was made to assess their effectivity. Making use of both quantitative and qualitative research, this study was preceded over a work group, which comprised 60 students. In accordance with the qualitative and quantitative findings attained, therefore, cooperative learning and jigsaw technique were found to be more effective than conventional teaching methods.

Key words: Language and literary education, teaching of literary genres, cooperative learning and jigsaw technique.

INTRODUCTION

Integrity of a language reveals itself by a durable literature having derived from there. Literature comprises works that have been derived from a language. In other words, distinguished works, having been put forth in various genres, altogether comprise a literature. Literature contributes to the exploration of life. Children depend on literary works for acquainting themselves with life and ways of living (Oğuzkan, 1987, p. 15). The part of literature that is involved particularly in language teaching is children's literature.

Children's literature works are the most important beauties and wealth of a language to the upbringing generations. In this respect, language teaching comprised such literary genres, including lullabies, jingles, nursery rhymes, tales, stories, poems, jokes, etc., while respective activities are to be conducted over texts of their distinguished examples.

Upon their murmuring jingles, riddles, clearances and nursery rhymes, children come to open the door of a colorful, dynamic and amusing world. In this world, it is embedded in Turkish language's centuries old refined and infinite expressional fineness, as well as its people's traits of warm and sincere sensibility, perception, sharing and creativity (Sever, 2008, p. 145-146). Children develop their language by reading such literary works of stories, novels, etc. Literary works comprise a significant factor in skilled conversation, writing, listening and comprehension (Demiray cited in Ateş, 1998, p. 3).

Literary works' can be some sort of ideational works. There are numerous gains to be attained by reading such

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Abbreviations: KL, Kayseri Lisesi (State High School); **TSL,** genre questions list; **ÖSS,** student selection examination; **ÖSYM,** student selection and placement center.

works. Some of them may be put forth as follows: logical thinking, developing expressional forms, attaining analysis-synthesis skills, attaining the skills of reasoning and intuitive thinking for interpreting similar conditions or occurrences, as well as separating major points from minors in a text being read or listened, and developing reading skills extending beyond sentence level (Günay, 2007, p. 17 and Aras, 2008, p. 101). According to the results from the research of Öztürk and Otluoğlu, in the case of making use of written literary works as teaching materials, significant increase are seen in students' attainment of affective behavioral attributes (2002, p. 181-182).

Nowadays, the leading situation being questioned with regard to our educational system is to which extent the utilized teaching strategies, methods and techniques may develop critical-analytic thinking in the context of product or result.

Conveying literary works with rich content into learning and teaching processes, in order to have students attain higher levels of mental, social and lingual skills, is to maintain the productivity of the respective works. The leading key external stimulus, making students ready for learning are the literary works to be used, which are suitable to the levels of the students in the activities to be applied for attaining the predetermined achievements.

Literary genres are variously classified by linguists and educators by taking a number of criteria as bases. For instance, Özdemir, (2002, p. 185-218) has described such texts as diaries, memoirs, letters, travel writings, biographies and auto-biographies as 'writings originating from real life stories' for their relation with people's daily lives. On the other hand, he described such texts as stories, novels, tales and science-fiction as writings in the genre of 'enlivening or fiction' (2002, p. 185-218). Günay mentions eight different types of text in terms of functionality (2007, p.230). 'Narrative': interviews, novels, tales, short-stories, research reports and jokes with a certain type of narration; 'descriptive': novels, short-stories, tourist guides, tales, puzzle texts, catalogues and auto-biographies; 'evidential': assays, articles, scientific assessments and commentaries, polemic-oriented writings, operating manuals, business and professional letters; 'explanatory': any kind of course books, reference books, simplified scientific texts, didactic discourses, philosophical texts and religious information; 'authoritative': laws, by-laws, regulations, recipes, operating manuals, research questions in course books and institutional obligatory rules; 'dialogic': plays; 'linguistic': poems, songs, ballads, epics, proverbs, mottos and graffitis; 'foretelling texts': meteorological bulletins, predictions, fortune and horoscope tellings.

İleri (1998, p. 105-178) has classified literary genres as 'writings with intellectual value' (news, articles, critiques, assays, conversations, interviews, travel writings, memoirs, diaries, biographies, autobiographies) and 'writings with artistic value' (poems, stories, fables, jokes

(short comic stories), novels, plays, and as correspond-dences, private correspondences, electronic mails, letters, official correspondences, official writs, petitions, curriculum vitas, reports, minutes, decrees, business correspondences and business letters).

Cemiloğlu (2003, p. 48) has dealt with genres in three categories: 'genres based on events (based on narration and animation), ideas and emotions'. Aytaş (2006, p.263) has classified literary genres as 'poems, plays, narrative genres, novels, stories, tales, epics and ideational genres', articles, jokes, conversations, assays, inter-views, memoirs and travel writings.

Aytaş (2006, p. 263) puts another classification as follows:

1. Main genres: verse, prose (epics, tales, fables, stories and novels).
2. Theatrical genre (dramas).
3. Ideational genres (articles, interviews and assays).
4. Supplementary genres (biographies, memoirs, travel writings and proverbs).

Texts being used in lingual education are mostly classified as informative (didactic), narrative and verse-formed texts (poems and fables).

Table 1 has been arranged in a way to enable the display of genres fitting with each grade level. For specifying a text, an election is made among the following genres (MEB, 2005, p. 163).

It is possible to divide the works from these literary genres in the form of verse and prose into three categories according to their modes of use:

1. Literary works are to contribute to the lingual development of children from preschool ages.
a. The use of texts in the family environment.
b. The use of texts in the period of kindergarten / nursery class.
2. Literary works are to be used as main materials in the course of Turkish lessons.
a. The use of texts in listening, comprehension and narration works.
b. The use of texts in listening, comprehension and narration works.
3. Literary works are to be used in supplementary studies both in and out of the courses.
a. Auxiliary texts are to be used for sampling during the activities in the courses.
b. Texts are to be used in the activities out of the courses.

In order to comprehend Turkish language as well as the proper use of it, it is evident that one should encounter and teem with different literary genres by utilizing different narrative styles (Cemiloğlu, 2003, p. 45). How should the literary genres, being used as decisive pedagogical materials in lingual education, be taught to students?

Table 1. Distribution of text genres in grades.

Literary genres	Grade level (Elementary)		
	6	7	8
Poems	✓	✓	✓
Stories	✓	✓	✓
Tales	✓	✓	✓
Novels			✓
Assays	✓	✓	✓
Articles			✓
Jokes		✓	✓
Fables	✓	✓	
Letters		✓	
Memoirs	✓	✓	✓
Diaries	✓	✓	
Conversations		✓	✓
Travel writings	✓	✓	✓
Biographies	✓	✓	✓
Autographies			✓
Plays	✓	✓	✓
Interviews		✓	✓
Speeches			✓
Other works of verbal culture (proverbs, riddles, ballads)	✓	✓	✓

COOPERATIVE LEARNING METHOD AND JIGSAW TECHNIQUE

Cooperative learning, as being cited by Demirel (1999) from Christison, "comprised attempts of the students, by forming small groups towards a common goal of learning a subject matter for solving a problem, or performing a task by way of collective working".

According to Açıkgöz (1992, p. 246), "cooperative learning comprised the efforts of small groups of students, by assisting each other in learning towards a common goal". For naming such efforts as cooperative other than group works, students are to be aware of the fact that, they should work so as to maximize the learning levels of not only themselves, but also those of their peers. In cooperative learning, peers assist each other's learning by establishing proper communication among themselves. Students with different cultures, experiences and learning modes get together to achieve success towards a common goal by assuming the responsibility of each other's learning processes.

In the context of cooperative learning's contribution to lingual teaching, it has also been observed that students get together towards attaining a collective meaning, alongside learning from each other in terms of making use of their lingual skills (Hirst and Slavik, 1990, p. 141).

Cooperative learning's particular contributions to language lessons are as follows (Bromley and Modlo, 1997, p. 22):
1. Increase in the learning motivation of the class: While working in groups towards a common goal, students become more ambitious in language lessons and also in learning.
2. Increase in sharing of meta-cognitive strategies in thinking and learning: Students talk about how they find their answers, review their used processes and develop their awareness on how they learn.

Just as in many other skills, lingual skills also develop in comfortable educational environments, free from competition and from pressure as well. Throughout the educational processes, in which jigsaw technique is used, individuals make use of their lingual skills fearlessly and are subjected to the general purposes of lingual education as well.

In terms of language and literature teaching, the main reasons why cooperative learning is attractive may be put forth as follows:

1. Educational philosophy: A method of active learning.
2. Purpose: Enabling the learners learn in collaboration.
3. Starting point: Contents of subject.
4. Process: Students attempt to learn the contents of the subject by working in groups.
5. Student: Participatory and responsible for the learning of not only him/herself, but also that of other members of his/her group.
6. Teacher: Guiding and facilitating forms the groups which determine the learning goals and control the proper working of the process.

7. Assessment and evaluation: Alternative assessment and evaluation techniques are used throughout the process.

Integration (Jigsaw) technique

This technique was developed by Aronson. Students are divided into groups of 5 - 6 per each. 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 sections, they regroup, 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. Integrity is achieved by having all the group members make their presentations, so as to bring all pieces together.

Integration technique may be used in numerous subject matters from elementary school to university (Choe and Drennan, 2001). So, to achieve complete learning of a subject matter, each student becomes both a learner and a teacher as well. Therefore, there is no environment that enables some of the students to surpass the others. This is a unique group-learning experience, in which students are to cooperate with each other so as to achieve a certain goal (Kagan, 1989-90, p. 128).

Integration is a teaching technique that is being used successfully particularly in teaching foreign languages, math and reading (Aronson, 2006, p. 128).

By means of this technique, students become more kind to each other while developing their empathic powers (Aronson, 2000, p. 51 and Barratt, 1992, p.75).

PURPOSE OF THE RESEARCH

In this research, it is intended to compare the level of effectiveness of jigsaw technique, being applied in teaching literary genres, with that of conventional teaching methods. Towards this goal, an attempt has been made to ascertain how the features of the informative/didactic and narrative text types, and those of the genre of poem may be taught by making use of cooperative learning method and jigsaw technique, as well as to ascertain the effectiveness of the said technique in teaching.

Problem

Is there any significant difference between cooperative learning method and jigsaw technique, being put into practice for teaching secondary education 11th grade students the literary genres and conventional teaching methods in terms of effectiveness?

Sub problems

1. What are the advantages of jigsaw technique from tea-chers' point of view?
2. Is jigsaw technique effective in teaching literary genres from students' point of view?

MATERIALS AND METHODS

In this research, quantitative and qualitative research methods were used together. In terms of quantitative approach, experimental design with control groups were used, in which pre-test and post-test are applicable; and in terms of qualitative research, interview method was applied.

Research was conducted over the work group. Work group comprised a total of 60 students studying in 11th grade of Kayseri State High School in the educational year of 2008-2009, n=30 of whom were from A Branch, and the remaining n=30 from B Branch. Classes were randomly determined as experiment (B Branch) and control group (A Branch).

Students applied TSL (Genre Questions List) as pre-test, in order to assess their knowledge levels with regard to the determined genres (travel writings, interviews, stories, plays and poems). Thereafter, experimental group (n=30) applied cooperative learning method and jigsaw technique, and control group (n=30) applied conventional straight narration method in order to teach them the said literary genres. While teaching the control group via conventional method, experimental group was informed of the basic information with regard to the technique to be applied. Finally, TSL – Genre Questions List was re-applied to the groups as post-test. This research, in which both groups were lectured by the same teacher, lasted for three weeks with the application periods of the tests included.

Collection and analysis of the data

Questions being asked in TSL – Genre Questions List (applied as both pre- and post-test) were selected from the exams that have been applied by ÖSYM in the previous years. Therefore, reliability and validity of the said questions were already tested. Opinions of two assessment and evaluation experts were asked in selecting the said questions, while special attention was paid for having the questions come from various difficulty levels (hard, very hard, easy and very easy).

Each experiment group to which the cooperative method was applied was divided into 6 primary groups, each consisting of 5 students. The classroom order was arranged heterogeneously in accordance with the method and technique to be applied. Preparation stage was conducted by the students under the guidance of the teacher. In the next stage, primary groups were allowed to come together and discuss what kind of studies and preparations they had done so far. Group representatives delivered presentations with regard to the activities they had done so far. Following the exchange of information in primary groups, jigsaw groups were formed.

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 which studies, students regularly delivered reports and shared them with the others for record purpose. Thereby, they had the opportunity to ascertain their deficiencies, and eased the study's guidance on the implementers' side.

Upon finalizing their works, by making use of the materials they had prepared beforehand, they accomplished the presentation stage. Following the presentation stage, TSL, having been applied in the beginning, was reapplied at the end of the process. It was thereby intended to ascertain whether there was any significant change in between the students' pre-knowledge on literary genres

and those they acquired following the application of cooperative learning method and jigsaw technique.

The findings obtained with TSL - Genre Questions List, and the *interview forms* used as data collection tools have been classified into two categories. The first one is the findings related to TSL - Genre Questions List and the second one is the findings obtained with the interview form.

Statistical analysis

Findings related to TSL questions list analysis has been performed with the Statistical Package for the Social Sciences version 11.0 (SPSS Inc., Chicago, IL, USA).

Data analysis (The findings obtained with interview form)

In the qualitative approach-based content analysis of the data obtained with interview questions, the following process has been derived. The processing of the data obtained from the answers of the reference people for the questions in the interview form was assigned themes by coding based on noteworthy answers. Definition and interpretation of it was in accordance with codes and themes.

FINDINGS AND COMMENTS

Findings and comments on the qualitative data, having been attained from the interviews with the teacher in charge, with regard to the application process of the technique

The class teacher's mentioning of numerous contributions of applying jigsaw technique to learning and teaching processes went on as follows:

For their group comprised 11th grade students. Thanks to this application, they could get away from their ongoing examination stress at least. Even one of their students was said to have benefited from these knowledge in a trial ÖSS (Student Selection Examination).

Thanks to this technique, a research- and review-based learning rather than the conventional rote-learning method was established.

In the conventional education, teaching literary genres was mostly based on narration. For the teachers, they were like-minded that, they too were trying to learn the literary genres lesson, including each of the genres therein, by having them memorized. However, upon entering the university, they noticed that those memorized knowledge had faded from their minds. Today, they come to the conclusion that jigsaw technique, currently applicable in contemporary education, is effective in the learning process. Jigsaw technique is more effective in achieving permanent learning.

As was seen, having not only compared jigsaw technique with other conventional methods, the class teacher also lined up the benefits of jigsaw technique. For instance, while mentioning its positive effect in the learning process, the class teacher also stated that the applied technique has brought about permanent learning, increased communication and solidarity among students, developed their skills of cooperative working and replaced the competition in the classroom environment with cooperation.

Findings and comments on the qualitative data, having been attained from the interviews with the students, with regard to the application process of the technique

A student was not quite knowledgeable with travel writings and this activity of their teacher made him to be acquainted with the subject. Besides, he transmitted his acquaintance to other friends of his. Thus, they also got to know the subject. It was quite a different study from his point of view. He never felt bored throughout the lesson and it also increased his interactions with his friends. He felt happy to be a part of these activities (Arar = S_1).

It was a pleasant social activity for them. He also got to learn the other subjects better apart from the one he was assigned with. He thinks that, it would be better to have lessons taught this way also in their normal classroom environment. It was not only a learning activity, but also a good social activity for them. Thanks to this activity, they have found the chance to make up with a friend they had been discontented with for a while. Up to him, it would be better for the teachers to apply such activities, than teaching continuously throughout the lessons (Erdoğan = S_2).

This activity was very beneficial for him. He had not heard the word "travel writing" until that day. While telling him of the subject of travel writings during the in-group studying, his friend Zeynep mentioned that word and he kept it in mind thereafter. In the second test that was applied, when this question appeared to him, he, without any doubt, gave the right answer and thereby increased his nets by one. He may assuredly tell you that, he benefited very much from these activities (Demir = S_3).

He may tell you that, this was a good activity for him. At the end of the day, he added more to what he had known already. He came to know that he was weak in literary genres. In fact, if they had been given more time and opportunities, they could have worked on it better. He thinks their teacher should also make use of such applications in the lessons. As soon as they completely get used to such activities, an adequate learning will come thereafter (Altunkaynak = S_4).

As can be previously seen, it was told that the interviewed students have found the opportunity to learn many knowledge and skills. Thanks to the application of this method. For instance, acquiring detailed knowledge in literary genres (S_1), interactions with friends, no loss of attention throughout the lesson, etc. ($S_{1, 2}$). Permanent learning and its contributions to the increase in success ($S_{3, 4}$) were mentioned. Students recommended that les-

Table 2. Average results related to the pre- and post-test applied to the research and control groups.

		$\overline{x}$	Sx
Research group n = 30	Pre-test	56.8000	3.23892
	Post-test	68.6333	2.88814
Control group n= 30	Pre-test	57.3333	2.89444
	Post-test	56.4000	2.74243

Table 3. Correlation between the pre- and post-test applied to the research and control groups.

		n	Korelasyon	P.
Research group	Pre- and post-test	30	0.937	0.000
Control group	Pre- and post-test	30	0.984	0.000

Table 4. T-test result between the pre- and post-test applied to the research and control groups.

		t	df	P
Research Group	Pre- and post-test	-10.373	29	0.000
Control group	Pre- and post-test	1.785	29	0.085

sons should be taught this way in the normal classroom conditions ($S_{1,4}$).

Findings and interpretation on the quantitative data, having been attained from the pre- to post-tests that was applied to research and control groups with regard to the application process of the technique

As it is evident from Table 2, pre- and post-tests averages for the research group are 56.8 and 68.63, respectively. The pre- and post-tests averages of the control group are 57.33 and 56.4, respectively. There is statistical proximity between the pre-test averages of the research and control groups. This may be accounted for by the fact that the level of readiness of the research and control groups related to literary genres was close to each other.

In Table 3, the correlation between the pre- and post-tests results is r = 0,937 p < 0.01, which shows that there is a linear relation between the pre- and post-tests.

While the difference between the pre- and post-tests results of the research group was statistically very significant (p < 0.01), the difference in the control group was found to be insignificant (p > 0.05) (Table 4).

RESULTS

With regard to the teaching of literary genres, the class teacher's mentioning of the students having developed positive dependency by empathic approach and conducted cooperative activities, altogether coincide with the philosophy of cooperative learning and thereby, prove the effectivity of the applied jigsaw technique in genre teaching. Further in the context of teachers' point of view, students' getting away from their exam stress, their inclination to review and research, and achievement of permanent learning also prove the successful application of the technique and the positive results attained therefrom.

From the point of view of the students, they mentioned that they never felt bored, maintained in-class communication and learned the lessons happily during the process, which are important aspects, revealing the positive sides of the applied technique.

The proximity between the averages of the pre-tests, having been applied in the beginning of the process, certifies the thesis that, there was also a proximity between the groups in terms of level of knowledge, and that the selected groups were suitable for the activities to be performed.

The students' research group being academically s uperior to the students' control group in the achievement test applied (post-test), suggests that the jigsaw technique is effective in teaching literary genres.

RECOMMENDATIONS

Jigsaw technique should be applied in grammar and lite-

rature teaching. It should also be done in an effective way applicable for teaching the following literary genres:

1. Ode, eulogy, mesnevi… among Divan literature genres.
2. Metaphor, simile, symmetry… among literary arts.
3. Also for teaching the periods of Turkish Literature, including Tanzimat (Reform) Era, Republican Period…
4. It may also be applied effectively in reiterating the in-subjects at the end of the respective term.

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