The Effect of Collaborative Strategic Reading Model on Fourth Grade Students' Understanding Skills in Informative Texts
M. Serhat Semercioğlu*, Kasım Kıroğlub, Kaya Tuncer Çağlayanc

Abstract
The aim of study is to investigate the effect of teaching with Collaborative Strategic Reading Model on fourth-grade students' reading comprehension skills. In the quantitative section, a quasi-experimental design was used with a pretest-posttest control group. The study group consisted of 39 students in the Dumlupınar Primary School located in the central district of Gümüşhane in the 2017-2018 academic year. There are 20 students in the experimental group and 19 students in the control group. Measurement tools developed by the researchers have been used during the determination of the groups and the application. During the implementation phase, lecture have been given to the experimental group in accordance with the Collaborative Strategic Reading Model throughout five sessions as each session lasted four course hours; and the same texts have been given to the control group by way of the same course hours according to the Government Teaching Method included in the 2017 Turkish Program. As a result, it has been determined that the mean score of the pre-test which was conducted to both experimental and control groups have been close to each other, and that the experimental group has had higher average than the control group in the last test average.

Keywords: Collaborative Strategic Reading Model, Reading comprehension, Informative texts

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İşbirlikçi Stratejik Okuma Modelinin İlkokul Dördüncü Sınıf Öğrencilerinin Bilgilendirici Metinleri Anlama Becerisine Etkisi

Introduction

The process of reading comprehension is a process that needs to be cognitive and structured. It is an important step to increase students' reading comprehension, especially when the students determine these processes and support them in a strategy-based and reading-related understanding of their shortcomings. In addition, it is necessary for individuals to apply strategies that help them to understand the texts they read and to know in which situations they will be used.

Reading strategies that help the reader in the process of interpreting the text contribute to analysing and interpreting the meaning completely, and also make contribution to the readers to understand the content and the structure of the text. The reader gives his attention to the text through strategies, both evaluate the text in an easy way and facilitates the process of remembering the text (Akyol, 2013, p. 18). Text readers who use comprehension strategies activate their prior knowledge about the text they read, then choose the right strategy, make predictions about the text, and continuously control the configuration process between the prior knowledge and the new information they have obtained. Thus, they can easily find the main idea, the subject and the supporting idea of the text (Bauman, 1984, p. 95).

The first type text encountered by students in primary school is narrative texts. Then the type of poetry, and finally the informative texts begin to be read by students. The teaching of narrative texts is easier than informative texts (Sulak, 2014, p. 7). The reasons for the emergence of this difficulty; more foreign words and terms are included in the informative texts and fewer personal experiences are found in such texts (Hall, Sabey and McClellan, 2005, p. 213). Informative texts are the main reading source used to present academic content (Roehling, 2017, p. 71). Two techniques are used to teach informative texts: the first technique is to teach the existence of different types of informative texts, and the second technique is reading comprehension strategies used to teach informative texts (Simonsen, 2004). Based on the fact that both teachers and students with different characteristics; instead of the only method and single approach to understanding reading, the teacher's tendency to method, individual differences of the students, the possibilities of the school, the requirements of the age, etc. a variety of methods and approaches should be taken into account considering the variables (Taş and Kiroğlu, 2018).

The informative texts which are firstly encountered in the third or fourth grade are not given much importance. It can be said that the most important reason for this situation is that teachers think that students understand the informative texts (Read, Reutzel and Fawson, 2008, p. 214-215). Moreover, some of the following features of informative texts may be thought to cause this difficulty (Roehling, 2017, p. 71):

- High number of technical words
- High density of information
- The presence of unknown contents and words
- Being new a concept that is demanded cognitively

There are five basic ways for the authors to organize information in informative texts (Meyer, 1975; Gunning, 2005; Akyol, 2008): Explanatory explanations, comparison, ranking of events/ordering, problem solving, cause and effect. This classification is selected as the baseline on this study.

As is seen, because the informative texts which are confronted for the first time in the third year of primary school and are a kind of text which is more difficult to interpret in comparison to other texts, they are taught with the help of different models. It has been observed that the studies based on the teaching of informative text structures for the fourth grade of primary school in our country have increased in recent years (Sulak and Güneş, 2014; Kuşdemir and Güneş, 2014; Tavşanlı and Seban, 2014; Kocaarslan and Akyol, 2015; Kuşdemir and Katranç, 2016; Özdemir and Kiroğlu, 2017). Within the study, the effects of the Collaborative Strategic Reading model, which is likely to be used when teaching informative texts, has been tested.

The Collaborative Strategic Reading Model began as an extension of research by Palinscar and Brown (1984) on mutual teaching and cooperative learning by Johnson and Johnson (1989). Reading in the model is interactive; both cognitive and social variables affect the reader's understanding of the text. In the process of understanding, readers take an active role in accessing basic information about texts, applying cognitive resources using the
Collaborative Strategic Reading Model, and developing the interpretation of what they read through meaningful social interaction (Fan, 2009, p. 38). The basis of the Collaborative Strategic Reading Model is carried out with the techniques which are going to be applied before, during and after the reading. Within this scope, "Previewing Method" before reading, "Click and Clunk Method" during reading and “Find the Main Idea Method” and “SQ4R Method” after reading are used.

**Previewing Method**

In previewing method, before starting to read the text, teachers and students shall use the Previewing Method together to obtain preliminary information about the text, to make a connection between the subject of the day and the previous learned subject and to make predictions what the subject will be and to determine the purpose of the reading (Klingner, Vaughn, Boardman and Swanson 2012, p. 25). The Previewing Method is the only method that should be applied before reading.

Through the Previewing Method, the teacher provides the students with an opportunity to relate the new knowledge with background knowledge (Boardman, Klingner, Buckley, Annamma and Lasser, 2015, p. 1257). At this stage, the teacher leads the students to scan titles, images or tables in the text. The teacher invites students to brainstorm what they already know about the topic and leads them to share ideas with their classmates (Sofyan and partners, 2016, p. 145). The background knowledge of the students is one of the most important factors affecting the level of reading comprehension (Rattanasaeng, 2011, p. 14).

**Click and Clunk Method**

Grabe (1988, p. 56-59) and Sweet and Snow (2002, p. 17-23) indicate that limited vocabulary is the main obstacle to reading fluently and understanding what they read for students who are learning a mother tongue or a second language. In dealing with this difficulty, these authors suggest that learners should be taught vocabulary strategies to overcome the reading comprehension problems. The name of the word finding method for the Collaborative Strategic Reading Model is Click and Clunk Method. This method is applied while reading text.

During reading, students use this method to fully understand what they are reading and to describe confusing words or concepts. They continue to read when there are no unknown words in the text and the section which is read becomes completely meaningful; when they are not meaningful, they stop and learn the meaning of the unknown word (Sofyan and partners, 2015, p. 146).

In this method, the following paths are used while the unknown word is found:

- First of all, the sentence which includes the unknown word is read again and it is tried to obtain a meaning.
- If it is not found by this way, the words before and after the sentence which contains the unknown word are read again. Clues are searched for the meaning of the word from the relevant sentences.
- If the meaning of the unknown word cannot be reached by the first two methods, the relevant word is divided into prefixes, suffixes and the stem, and the hint is searched.
- Finally, it is said that the words that can be the logical synonym of the word divided into syllables will be looked at and the meaning of the word will be estimated. If the meaning of the word cannot be found in any way, the meaning of the word is provided to be found using the word cards. (Klingner et al., 2012, p. 28).

Once the students have fully understood all the words and text, they begin the “Find the Main Idea Method” which they will identify the main idea,
Find the Main Idea Method

In order to make sure that students understand the most important ideas of the text they are reading, they must reword the important information with their own words after the reading has been completed (Vaughn and others, 2013, p. 146). In Finding the Main Idea Method, students should be able to identify the most important point of the text (people, places and activities). While making definitions, students are expected to reword what they understand with their own sentences firstly paragraph by paragraph until they obtain a single sentence. Applying these steps helps them to find out the main idea of the text (Rahmah, Hasan and Sudirman, 2017, p. 5).

The Question - Answer Method (QAR)

The Question - Answer Method has been designed to help students review the information they have learned from the text (Yen, 2009, s. 8). The main purpose of this method is to review the text for the last time, to summarize the text, to produce questions and to check whether the whole text is understood. At this point, Question-Answer Relationship (QAR) technique is used to produce questions about the text and to check whether the whole text is understood (Klingner and Vaughn, 2000, p. 80).

Question-Answer Method is used for introducing three different types of questions and students should prepare a question about the text according to these question types. These types of questions below are explained to the students (Klingner and others, 2012, p. 35):

1. Type - Answer is in the text: This question type helps identify important details and ideas. The answers are found within the text and from one slot.
2. Type - Think and research: It helps students relate the basic ideas in a text; for example, comparing information. It should not be forgotten that the required answer should be found in several parts of the text.
3. Type - Author and reader: The questions should be prepared in such a way as to help students connect with the knowledge and experience of the reader has had before and the important information in the text. The answer is generated by co-synthesizing the information in the mind of the reader and the text.

Method

Detailed information about the research model, population and sample information, data collection tools, data collection process and data analysis will be given in this section.

Main Problem Sentence

In international studies such as TIMSS, PIRLS and PISA, our students’ reading comprehension and other measured skills were found to be quite low compared to expectations. At this point, increasing the reading comprehension skills of our students shows that it is possible to use different strategies than the ones currently being applied. It predicts that new strategies that will be used to increase the comprehension of reading comprehension can be easier and more successful for students and teachers to understand the text they will read or do meaning study ( Dönmez & Yazıcı, 2006, p. 139-141). Since there is no study on reading comprehension with the Collaborative Strategic Reading Model applied in primary schools in our country, the study takes an important step towards bringing a new model to the literature.

The main research question is “Does the Collaborative Strategic Reading Model significantly affect the informative text skills of primary school fourth grade students?”

Sub-Questions

1. Problem sentence; Does teaching with the Collaborative Strategic Reading Model have a significant effect on the reading comprehension skills of primary school fourth grade students?
2. Problem sentence; Does teaching with the Collaborative Strategic Reading Model significantly affect primary school fourth grade students' ability to determine main ideas?

Research Design

This research investigates the effect of traditional teaching method on fourth grade students’ level of reading comprehension and identifying the main idea via the Collaborative Strategic Reading Model. In this study, quantitative research method is used and the research represents the pre test-post test control group model which is one of the real trial models. In a pre-test-post-test control group research, it is found that two groups have been formed by random sampling method. In both groups, pre- and post-test measurements are carried out. Making preliminary tests in this model help to know the degree of similarity of the groups before the experiment and to arrange and interpret the final test results accordingly (Karasar, 2011).

While the students' reading comprehension and main idea identification scores are dependent variables; the current program applied to the control group and the Collaborative Strategic Reading Model applied to the experimental group are independent variable. The effect of independent variables on dependent variables has been tried to be identified with different teaching methods applied to the students. The research was planned between March 26 and April 19, 2018 as 5 sessions and 20 periods.

Population and Sample/Study Group/Participants

The population of the study consists of the fourth-grade students in primary schools studying in public school in the central district of Gümüşhane in the 2017-2018 academic year. The most important reason for choosing the fourth-grade students for the research population is that the students start reading more informative texts beginning in the fourth grade.

While the sample of the study has been selected, Purposeful Sampling which is non-random sampling method has been chosen. Purposeful Sampling is attempted to test one or more specific conditions which have specific characteristics (Patton, 1990). In this study, Typical Sampling technique of Purposeful Sampling has been chosen as a sample. A typical situation is determined by Typical Sampling and information gathering is carried out on this sample. The features of the sample in relation to the problem are typical, namely they are normal (Büyüköztürk, Aygün and Çakmak, 2016).

Within the scope of the study, a school with similar characteristics has been found and the school administrators have been consulted. As a result of the interview, it has been decided to implement the project in Dumlupınar Primary School located in Gümüşhane city center. The 4-D and 4-C classes has been selected from between three fourth-grade schools as the application classes as a result of the lots drawn with the school administrators. As a result of the new lots between the two classes, the 4-D class has been determined as the experimental group and the 4-C class has been designated as the control group.

The characteristics of the groups included in the study are shown in the tables below.

<table>
<thead>
<tr>
<th>Table 1. Characteristics of Experimental and Control Groups in Pilot Scheme</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-B Experimental Group</td>
</tr>
<tr>
<td>n</td>
</tr>
<tr>
<td>Female</td>
</tr>
<tr>
<td>Male</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

159
As seen in Table 1, the number of female students in both groups is equal. In addition, when we look at the number of male students, it is seen that 50.0% of the 4-B class and 47.36% of the 4-C classes are male students. According to this table, it is determined that the number of classes and gender ratios are very close to each other.

Another factor that will affect the study is the characteristics of classroom teachers. Even if the researcher will perform the activities in both groups, the characteristics of the class teachers can be effective on the students’ readiness. For this reason, it is important that the characteristics of the classroom teachers involved in the practice should be similar. The characteristics of the classroom teachers are given in Table 2.

<table>
<thead>
<tr>
<th>Table 2. Characteristics of Classroom Teachers Involved in the Scheme</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Experimental Group Teacher</strong></td>
</tr>
<tr>
<td>Gender</td>
</tr>
<tr>
<td>Age</td>
</tr>
<tr>
<td>Seniority</td>
</tr>
<tr>
<td>Span of teaching the classroom</td>
</tr>
<tr>
<td>Department of graduation</td>
</tr>
</tbody>
</table>

When Table 2 is examined, it is seen that classroom teachers have the same gender, span of teaching classroom and the department. It is seen that the features of seniority and age are close to each other. In this case, it can be said that the teacher characteristics of 4-B and 4-C classes are similar.

**Data Collection Tools**

Within the scope of the research, “Reading Comprehension Test in Informative Texts” to deliver students' reading comprehension and “Main Idea Determination Test in Informative Texts” to reveal the main idea and topic of the text have been used.

The questions prepared to determine the students' reading comprehension and main idea determination levels have been prepared using the related acquisitions mentioned in the Primary School Turkish Curriculum. While reading comprehension test, 8 achievements which are measurable and related to informative texts from the curriculum have been selected. While preparing the Finding Main Idea Test, 5 measurable achievements from the program have been selected. Both tests measure a total of 13 achievements. The KR-20 index for the reliability of the reading comprehension test has been 0.86 and the KR-20 index for the reliability of the main idea test has been found as 0.87. Both tests were applied to 62 students studying in three different grade 4 branches in a public school in a school in Aksaray. During the test, students' behaviors, duration of the test, disruptions in the outputs and the opinions of the students were noted. At the end of the pilot study, the difficulty and discriminative indices of each item to be measured were calculated.

**Practise Phase**

During the study, Collaborative Strategic Reading Model was conducted for the experimental group, while the control group was conducted within the framework of the activities included in the Turkish Teacher Guide. In order to avoid any problems in the tests performed, the researcher and the researcher made the activities of both experimental and control groups. During the practices, the classroom teachers of both groups were present in the classroom. As a result of the application, both the experimental and control groups were subjected to post-tests.

In order to ensure internal validity, 4-B and 4-C classes were determined as application classes as a result of the evaluation made with the school administrators and classroom teachers from three fourth grade students at
Collaborative Strategic Reading Model on Fourth Grade Students' Understanding Skills

Dumulupinar Primary School. While determining the classes, the number of students (female, male distribution), the total class size, the presence of inclusion students, the students' desire to make the application were taken into consideration.

Data Analysis

In order to determine the effect of the Collaborative Strategic Reading Model on fourth-grade students' reading comprehension and finding main idea skills in informative texts, experimental and control group students were subjected to some measurement procedures. In the research, reading comprehension test and finding main idea test in informative texts have been used as a data collection tool. The data have been analysed with SPSS 20.0 package program.

Within the research, in order to determine whether the distributions of the score of the Reading Comprehension Test are normally distributed, Kolmogorov-Smirnov and Shaphiro-Wilk tests have been used, and to determine the significance of gain scores and pre-test and post-test findings t-test has been tested. And again, in order to determine whether the distributions of the score of the Finding Main Idea Test are normally distributed, Kolmogorov-Smirnov and Shaphiro-Wilk tests have been used, and to determine the significance of gain scores and pre-test and post-test findings t-test has been tested.

Findings

The findings and comments about the findings are presented in this section. In the first part of the study, students and groups consisting the experimental and control groups have been determined. Informative text teaching has been professed to the students who were included in the experimental group according to the program prepared by adopting Collaborative Strategic Reading Model. The control group was taught according to the traditional teaching methods included in the Turkish Curriculum which is still being applied. Thus, the effect of informative text instruction on reading comprehension and finding main idea skills has been examined with the help of Collaborative Strategic Reading Model.

Before the comparison between the groups, it has been examined whether the scores of the groups showed normal distribution. Shapiro-Wilk test is used for normality distribution when group sizes are less than 50 (Büyüköztürk, et. 2016). The table below shows the results of the normality test applied to the groups.

Table 3. Shapiro-Wilk Normality Test Results of Pre-Test Scores

<table>
<thead>
<tr>
<th></th>
<th>Statistics</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental Group Reading Comprehension Pre-Test Scores</td>
<td>.921</td>
<td>.155</td>
</tr>
<tr>
<td>Control Group Reading Comprehension Pre-Test Scores</td>
<td>.921</td>
<td>.074</td>
</tr>
<tr>
<td>Experimental Group Finding Main Idea Pre-Test Scores</td>
<td>.886</td>
<td>.230</td>
</tr>
<tr>
<td>Control Group Finding Main Idea Pre-Test Scores</td>
<td>.765</td>
<td>.701</td>
</tr>
</tbody>
</table>

According to Table 3, pre test scores of the experimental and control groups' reading comprehension and finding main idea and finding main idea test of the control group show normal distribution (p> .05). For this reason,
the independent inter-group samples t-test was used in the comparison of reading comprehension and finding main idea pre-test scores.

Table 4 which shows The Independent Groups t-test results which was performed to determine whether there was a significant difference between the groups in comparison of the pre-test scores of the reading comprehension test is given below.

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>x̄</th>
<th>S</th>
<th>df</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental Group</td>
<td>20</td>
<td>11.65</td>
<td>1.98</td>
<td>37</td>
<td>-0.350</td>
<td>.683</td>
</tr>
<tr>
<td>Control Group</td>
<td>19</td>
<td>12</td>
<td>3.21</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As is seen in Table 4, while the average of reading comprehension of the experimental group was 11.65, the control group's average was 12. According to the results of independent samples t-test, there is no significant difference between the pre-test scores of reading comprehension of the classes \( t(37) = -0.350, p > .05 \).

The effect of the finding main idea pre-test scores on whether there is a significant difference between the groups has been examined by t-test. Test results are given below in Table 5.

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>x̄</th>
<th>S</th>
<th>df</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental Group</td>
<td>20</td>
<td>10.25</td>
<td>2.59</td>
<td>37</td>
<td>-1.644</td>
<td>.078</td>
</tr>
<tr>
<td>Control Group</td>
<td>19</td>
<td>11.89</td>
<td>3.09</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As is seen in Table 5, there has been no significant difference between the 4-D and 4-C groups that applied the finding main idea test \( t(37) = -1.644, p > .05 \). According to these results, no significant difference has been found between the groups in terms of reading comprehension and finding main idea tests. In this case, it can be said that both groups are equivalent.

Throughout the study, while the Collaborative Strategic Reading Model was conducted in the experimental group, studies which are in the context of activities in the Turkish Teacher's Guide were conducted to the control group. In order to avoid any problems in the tests, the researcher himself performed the activities of both the experimental and the control groups. During the practices, the classroom teacher of both groups was present in the classroom.

As a result of the pilot scheme, final tests were applied to both experimental and control groups. The results of the normality test for post-test scores are shown in the Table 6 below.

<table>
<thead>
<tr>
<th>Group</th>
<th>Statistics</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental Group Reading Comprehension Post-Test Scores</td>
<td>.927</td>
<td>.155</td>
</tr>
<tr>
<td>Control Group Reading Comprehension Post-Test Scores</td>
<td>.941</td>
<td>.274</td>
</tr>
<tr>
<td>Experimental Group Finding Main Idea Post-Test Scores</td>
<td>.910</td>
<td>.074</td>
</tr>
<tr>
<td>Control Group Finding Main Idea Post-Test Scores</td>
<td>.948</td>
<td>.368</td>
</tr>
</tbody>
</table>
According to Table 6, the post test scores of the experimental and control groups show normal distribution (p>.05). The pre-test and post-test scores of the groups have been compared with the dependent t-test to reveal the effectiveness of the pilot study. The table for the dependent t-test results is given below.

**First Problem**
In the first problem of the study, the effect of teaching with Collaborative Strategic Reading Model on fourth-grade students' reading comprehension skills has been tried to be revealed. According to the results of the study, it has been determined that the students of the experimental group studying with the Collaborative Strategic Reading Model increased their averages compared to the control group students who applied the traditional learning method. Besides, there has been found no significant difference between the experimental and control groups. Relevant statistical information is given below.

**Table 7. Comparison of Pre-Test and Final Test Scores of Experimental and Control Group Students’ Reading Comprehension**

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>( \bar{x} )</th>
<th>S</th>
<th>df</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>20</td>
<td>11.65</td>
<td>1.98</td>
<td>19</td>
<td>-7.62</td>
<td>.000</td>
</tr>
<tr>
<td>Pre-Test</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post-Test</td>
<td>20</td>
<td>14.45</td>
<td>1.73</td>
<td>19</td>
<td>-7.62</td>
<td>.000</td>
</tr>
<tr>
<td>Control</td>
<td>19</td>
<td>12.00</td>
<td>3.21</td>
<td>18</td>
<td>-.47</td>
<td>.644</td>
</tr>
<tr>
<td>Pre-Test</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post-Test</td>
<td>19</td>
<td>12.15</td>
<td>2.73</td>
<td>18</td>
<td>-.47</td>
<td>.644</td>
</tr>
</tbody>
</table>

As is seen in Table 7, it is seen that the number of the correct answer of students applying the Collaborative Strategic Reading Model increases from 11.65 to 14.45. It is seen that the increase in the score revealed with this result increases significantly according to the dependent t-test \( [t(19) = -7.62, p <.05] \). Although there is a slight increase in the number of the correct answer of the control group, there is no significant increase according to the dependent t-test \( [t(19) = -.47, p >.05] \).

Whether the experimental and control groups had a significant difference between the reading comprehension post-test scores measured after the application has been tested by independent t-test. The test results are given in Table 8 below.

**Table 8. Reading Comprehension Post-Test Independent Samples T-Test Results**

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>( \bar{x} )</th>
<th>S</th>
<th>df</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental Group</td>
<td>20</td>
<td>14.45</td>
<td>1.73</td>
<td>37</td>
<td>3.145</td>
<td>.119</td>
</tr>
<tr>
<td>Control Group</td>
<td>19</td>
<td>12.15</td>
<td>2.73</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Even though the increase in the experimental group after the pilot study according to Table 8 is higher than the control group, this increase does not show a significant difference \( [t(37)=3.145, p >.05] \). Finding Main Idea pre-test and post-test scores for the pilot study must be compared. As all groups showed normal distribution in pre-test and post-test, dependent samples t-test has been used. Analysis results are given below.

**Second Problem**
In the second problem of the study, it is tried to reveal the effect of the Finding Main Idea skills of the fourth-grade students of the primary school with the Collaborative Strategic Reading Model. According to the results of the study, it has been determined that the averages of the students of the experimental group studying with the
Collaborative Strategic Reading Model increased compared to the control group students who applied the traditional learning method. Besides that, there has not been found any significant difference between the experimental and control groups. Related statistical information is given below.

### Table 9. Comparison of Pre-Test and Post-Test Scores of Finding Main Idea Scale of Experimental and Control Group Students

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>$\bar{x}$</th>
<th>S</th>
<th>df</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre Test</td>
<td>20</td>
<td>10.25</td>
<td>2.59</td>
<td></td>
<td>19</td>
<td>-4.98</td>
</tr>
<tr>
<td>Post Test</td>
<td>20</td>
<td>12.60</td>
<td>2.81</td>
<td></td>
<td>-4.98</td>
<td></td>
</tr>
<tr>
<td>Pre Test</td>
<td>19</td>
<td>11.87</td>
<td>3.07</td>
<td></td>
<td>-1.00</td>
<td>.326</td>
</tr>
<tr>
<td>Post Test</td>
<td>19</td>
<td>12.47</td>
<td>3.07</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As seen in Table 9, Dependent t-test has been used to determine whether the change in average of pre-test and post-test tests was significant. According to the results of the test, there is a significant difference between the pre-test and post-test of the experimental group \[t(19)=-4.98, p<.05\]. However, any significant difference has not been found between the pre-test and post-test of the control group \[t(18)=-1.00, p>.05\].

Although the Collaborative Strategic Reading Model significantly increased the finding main idea score of the experimental group, it was examined whether there was a significant difference between the post-test scores of the experimental and control group students in order to compare the post-test scores of the experiment and the control group to show the effectiveness of teaching. As the post-test scores of the two groups were normally distributed, independent samples t-test has been used to compare the scores. The independent samples t-test results are presented in Table 10:

### Table 10. Finding Main Idea Post Test Independent Samples t-Test Results

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>$\bar{x}$</th>
<th>S</th>
<th>df</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>20</td>
<td>12.60</td>
<td>2.81</td>
<td>37</td>
<td>.134</td>
<td>.829</td>
</tr>
<tr>
<td>Control</td>
<td>19</td>
<td>12.47</td>
<td>3.07</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As shown in Table 10, no significant difference has found between the experimental group and the control group's main idea scores in the independent groups t-test conducted to determine whether the differences between the groups were significant \[t(37)=.134, p>.05\].

**Discussion and Conclusion**

According to the findings obtained from this research, it was determined that informative text teaching with Collaborative Strategic Reading Model positively affected fourth grade students' reading comprehension and main idea determination skills.

The results of the first problem of the study are similar when the other studies conducted with the Collaborative Strategic Reading Model are examined. Vaughn et al. (2013) found that the model had a positive effect on reading comprehension in language teaching in his study with 48 secondary school students (Rattenasaeng, 2011). In the result of Nurhayati (2015) study which he conducted to 60-person secondary school students, it has been determined that the experimental group was more successful than the control group. At the end of the study, the
result of reading comprehension post-test has showed that the experimental group was 25.50 and the control group was 14.50. Again, as a result of a similar study conducted by Barberio (2005) in the third-grade primary school students it has been concluded that reading comprehension test scores significantly increased. It was determined that the model has affected positively the reading comprehension skill with the significant increase in reading comprehension post-test scores after the training with Collaborative Strategic Reading Model conducted to the fifth-grade students in Thailand. In the study conducted by Seacrist (2012) with fourth grade students, a significant increase has been found in the reading comprehension test scores throughout five weeks of the courses taught according to the model. As a result of the study conducted by Rosalina (2014) with sixth grade students, the post-test score of the experimental group was 82.20 and the control group was determined as 64.57.

The results of the second problem of the study are similar when the other studies conducted with the Collaborative Strategic Reading Model are examined. In the study conducted by Simamora, Sihombing and Gultom (2015) with seventh-grade students, it has been determined that the students were more successful in verbal expressions about the questions in finding main idea. In addition, in the study conducted by Sari and Tamah (2015) with sixth-grade students, it has been found that experimental group was more successful in the questions of reading comprehension included in reading comprehension test than the control group. It has been observed that there is not much work when we look at the other surveys that measure the ability of finding main idea of the Collaborative Strategic Reading Model. Generally, reading comprehension skills have been measured and these results have been supported by qualitative data. The finding main idea test developed for this research differentiates this research from other studies. Again, the test applied in the research provides a better understanding of the effectiveness of the Collaborative Strategic Reading Model and finding main idea method within the model.

According to the findings of this research, informative text teaching with Collaborative Strategic Reading Model positively affects the comprehension of reading comprehension and main ideas of primary school students. In addition to this study, the effectiveness of different models or strategies should be demonstrated to make it easier to understand informative texts. In addition, it was concluded that it is important to understand the effects of the students on the use of the Cooperative Strategic Reading Model, the use of multiple methods of the Collaborative Strategic Reading Model together, and the effects of finding the main ideas and subjects that affect the understanding.

Although the result of the study positively affects their reading comprehension and main idea determination skills; test or open-ended questions may be insufficient from time to time to measure different measurement techniques can be used. Researchers can also make collaborative strategic reading model experimental studies in different courses since informative texts are frequently used in the fourth grade of primary school, Social Studies and Science courses. Finally, if teachers make use of reading comprehension strategies as they often do in their classes, students are predicted to be a strategic reader at every moment of their lives.
References

Akyol, H. (2008). *Yeni programa uygun Türkçe öğretim yöntemleri* [Turkish teaching methods suitable for the new program]. Ankara: Kök Yayınları


166
okuduğunu anlama becerisine etkisi (Doktora Tezi) [The effect of “Think before reading, during reading, after 
reading” Strategy on reading comprehension skills]. YÖK veri tabanından erişilmiştir. Ondokuz Mayıs 
Üniversitesi

Italics Cognition and Instruction, 1, 117–175. Doi: 10.1207/s1532690xci0102_1


children’s picture books for fifth grade students (Yükseklisans Tezi). Chulalongkorn University very 
tabanından erişilmiştir.

as models to teach text structure. Early Childhood Education Journal, 36(3), 213-219. Doi: 10.1007/s10643-
008-0273-0.

reading comprehension. The Reading Teacher, 71(1), 71-82. Doi: 10.1002/trtr.1590

Rosalina, A. (2014). İşbirliçi Stratejik Okuma Modelinin Bilgilendirici Metinleri Anlamaya Olan Etkisi (Lisans 
bitirme tezi). State Islamic University Endonezya veri tabanından erişilmiştir.

achievement. IJEE (Indonesian Journal of English Education), 2 (1), 17-27. Erişim adresi: 

(Yüksek lisans tezi). Rowan University veri tabanından erişilmiştir.

on students’ achievement in reading comprehension on hortatory exposition text. Journal of Applied 


learners. Kasetsart Journal of Social Sciences, 37, 144-149. Doi: 10.1016/j.kjss.2016.08.004

Sulak, S.E. (2014). Süreçsel modelde bilgilendirici metin öğretiminin okuduğunu anlama becerilerine etkisi 
(Doktora tezi) [The effect of teaching informative text with the process model on reading comprehension 
skills]. YÖK veri tabanından erişilmiştir. Gazi Üniversitesi


okuma ve yazma eğitimi [Comparative analysis of Turkish and US’ California state native language curriculum 

metinleri çözümleme ve özetleme başarılarına etkisi [The effects of graphic organizers on 4th grade 
students success in analyzing and summarizing expository text]. Dumlupınar Üniversitesi Sosyal Bilimler 

Vaughn, S., Roberts, G., Klingner, J.K., Swanson, E.A., Boardman, A. Stülmans-Pispak, S.J., Mohammed, S.S. 
Research on Educational Effectiveness, 6(2), 137-163. Doi: 10.1080/19345747.2012.741661

Ethos veri tabanından alınmıştır. University of Leicester