



Effects of Choral, Repeated and Assisted Reading Strategies on Reading and Reading Comprehension Skills of Poor Readers *

Hülya Kodan ¹, Hayati Akyol ²

Abstract

The main objective of this study was to explain the effects of choral, repeated and assisted reading strategies on fluent reading and reading comprehension skills of poor readers. The research was conducted with the single-subject research method and the multiple-subject model. The study group was consisted of six students who experience reading difficulties. The study was carried out in 90 hours. In the preliminary test, fluent reading and reading comprehension levels and reading mistakes of the students were determined. In this test, fluent reading level was lower than %89 and reading comprehension level was lower % 70, which showed that the students were at the Anxiety Level in both levels. During the study, choral, repeated and assisted reading strategies together had contributed to developments of the students' fluent reading and reading comprehension skills both in the informative and the narrative texts. The data obtained during the research were analyzed by the Wilcoxon Signed-Rank Test. When examining the pre- and post assessment results, it was found that there was a significant difference between the word recognition percentages, number of incorrect words, number of words per minute, and the reading comprehension percentages in the informative text. In addition, it was articulated that there was a significant difference between the word recognition percentages, number of incorrect words, and the reading comprehension percentages in the narrative text. However, it was not found a significant difference between the numbers of words per minute in the narrative text. The data obtained at the end of the study shows that choral, repeated and assisted reading strategies have positive effects on the fluent reading and reading comprehension skills of the poor readers.

Keywords

Reading
Fluent reading
Reading comprehension
Reading strategies

Article Info

Received: 06.21.2017
Accepted: 01.02.2018
Online Published: 03.01.2017

DOI: 10.15390/EB.2018.7385

* This article is derived from Hülya Kodan's PhD dissertation entitled "The Effects of the Methods of Choral, Repeated and Assisted Reading on the Reading and Reading Comprehension Skills of Poor Readers", conducted under the supervision of Hayati Akyol.

¹ Bayburt University, Education Faculty, Department of Primary Education, Turkey, hulyakodan@bayburt.edu.tr

² Gazi University, Gazi Education Faculty, Department of Primary Education, Turkey, hakyol@gazi.edu.tr

Introduction

Reading is one of the requirements that enhance individuals' ability of adaptation to social life and fulfill their needs. People use their reading skills from childhood to the end of life. It is an active process that builds new learning by combining new information with the current knowledge (Güneş, 2008). In order to achieve adequate level of reading, individuals should gain the fluent reading skill, which is one of the basic rudiments of reading (National Reading Panel Report [NRP], 2000).

The acquisition of fluent reading skill is important also for the development of reading comprehension. Fluency is a bridge to reading comprehension skill based on mutual and causal relations alongside structuring the decoding skills (Pikulski & Chard, 2005). There are various studies that show a high and positive relationship between fluent reading and reading comprehension skills (Wise et al., 2010; Spear-Swerling, 2006; Fuchs, Fuchs, Hosp, & Jenkins, 2001; Paige ve Magpuri-Lavell, 2014). It can be stated that students' ability of comprehension during reading process depends on their fluent reading levels. The literature articulated that the fluent reading and reading comprehension strategies contribute development of these skills (Baker & Boonkit, 2004; Guthrie, Wigfield, Metsala, & Cox, 1999; Homan, Klesius, & Hite, 1993).

Within the scope of this study, it was aimed to provide a suitable/adequate learning environment to the students who have reading difficulties and let them actively participate in the process and develop their reading and comprehension skills by the end of the active participation process. In the context of Turkey, reading difficulties is studied within the context of learning difficulties of students who need special education. This research, on the other hand, focuses on developing reading and reading comprehension skills of students who have reading difficulty but are not mentally, physically, audibly and visually disabled.

At this point, we should give brief information about the approaches regarding development of fluent reading strategies. The scholars generally examine it as assisted or unassisted reading strategies. In an unassisted reading, the person responsible for reading achievement is only the reader. However, in an assisted reading there is someone else helps and guides the reader. In development of fluent reading skills, assisted reading is more useful than unassisted reading strategies (Kuhn & Stahl, 2000). For this reason, in this study we preferred three assisted reading strategies: choral, repeated and, assisted reading strategy. It is also the first study that implements these three assisted reading strategies together.

The study primarily aimed to develop fluent reading skill of students with reading difficulties but have no mental or physical disorders. It will be helpful to articulate what are the reading difficulties and how to identify characteristics of the students with reading difficulties?

What are Reading and Reading Difficulties?

Reading is to derive sense from the text. Reading comprehension requires an action by the reader who understands the subject and the content of the text and uses her current knowledge to deprive meaning from it. So, the difficulty in reading comprehension is rooted in the lack of deriving sense from the text. This problem can be solved only when the reader aims to use her current knowledge to understand the information provided in the text (Brassel & Rasinski, 2008).

There are two objectives during the reading process. The first objective is about student's identification of the written words. The second objective is to derive meaning from the words that she vocalizes; that is, to comprehend words. For a reader at the beginner level, the word recognition process

in which she uses her mental performance is quite difficult. If she spends all of her mental performance to the word recognition, she cannot derive sense from the whole sentence at the demanded time. Otherwise, if she fulfills the word recognition process quickly enough, she can be able to focus on deriving sense from the sentence. Therefore, for poor readers, reading process is difficult, painstaking and challenging (Samuels, 2006). For a reading activity we don't need only the action of reading, but also the abilities of comprehension and analysis simultaneously. Hence, the inability to meet any adequate basic skill may have links to the reading difficulties.

The difficulty in comprehension of the words and phrases when reading a text or analyzing the sentence structure is called reading difficulties (Özsoy, 1984). A student who has difficulties in reading and reading comprehension will be affected negatively not only during her educational career but also in every stage of her life, which may also lead to significant problems for her family and society. She may have significant inadequacies in communication, confidence, inquiring and interpreting the developments in her social life (Sidekli, 2010).

Fluent Reading and Fluent Reading Strategies

Fluent reading is defined as reading words correctly, fast and automatically without an additional effort (Rasinski et al., 2005). Fluent reading skill is related to many aspects of reading. It includes both word recognition and vocalization. And it is determined by oral reading. Fluency requires skills such as expression, clarity, accuracy, and speed.

Although the development of fluency has been neglected in the past, today researchers consider it as a significant subject to study on. To reach a high level of reading achievement, fluency is not sufficient by itself, but it is absolutely necessary because it helps reader to deprive meaning from the texts and shows that comprehension takes place. So, there is a strong relationship between fluency and comprehension. Development of students' fluent reading skills prompts their reading comprehension skills also. Some of the suggested about development of these skills include repeated reading, assisted reading and choral reading, peer reading, and reader's theater. In the study we preferred to use three of them; repeated reading, assisted reading and choral reading strategies.

Repeated reading is considered to be an effective strategy that exposes poor students actively to the intense reading. In repeated readings, the text is repeated until the reader corrects her mistakes and read at the demanded speed with help from a good reader –in this study researcher helps- who guides and help when she is challenged. Based on the analysis that in instructive reading, instructor assisted reading strategy is complementary to repeated reading strategy (Rasinski, 2009), we have preferred both strategies in this study. And since we think that students will have less stress during reading activity, choral reading strategy was also preferred within the scope of the intervention program. As a group activity, one of the advantages of choral reading is that in such a environment student who has lack of confidence (or less confidence) in oral reading will have less-stress when she reads in group (Ferrara, 2012).

It will be helpful to touch upon the features of the three strategies used in the study; repeated reading strategy is the re-reading of short, meaningful paragraphs until student reaches a satisfactory level of fluency. This practice is repeated on a new paragraph. A text interesting for a student with reading difficulties is divided into short sections of 50-200 words based on the text's level. The student reads the determined sections orally and the other one records her speed and mistakes. This process continues until she reads the text at the demanded level. Studies have showed that with repeated

reading, student's speed increases and her mistakes reduce (Samuels, 2006; Therrien, 2004; Meyer & Felton, 1999).

Secondly, assisted reading is a reading strategy where good reader and poor reader are together. During assisted reading activity, the good reader firstly reads the text orally to the poor reader, and then the poor reader reads the text aloud. The good reader corrects the mistakes when the other vocalizes the text. In this way, the poor reader develops both her fluent reading and comprehension skills (Gilbert, Williams, & McLaughlin, 1996).

Lastly, the choral reading activity is one of the classroom practices. Here, all students read the same text aloud in the presence of the teacher. During the activity the teacher serves as a model for the student regarding to the correct vocalization and the reading speed. At the end of the activity, the teacher gives feedback to the students about the words or vocabulary groups that challenged them and explains the features of prosodic reading, and encourages them to read practice reading with the chorus (Paige, 2011; Poore & Ferguson, 2008).

By using these three strategies together, the primary goal of study was enhancing students' word recognition skills as the first step for reading to take place. When the first step is done, students would be able to spend a great portion of their mental performance to comprehend what they read. For this reason, repeated, assisted and choral reading strategies have been used to improve the poor readers' the fluent reading skills. It was aimed to determine the effects of these strategies on the poor readers' fluent reading skills. The determination of whether fluent reading improves the reading comprehension skills was the other objective of the research.

Reading Comprehension

Comprehension includes skills such as interpreting, criticizing, analyzing, synthesizing, inferring, connecting, and evaluating the idea presented in the text (Fielding & Pearson, 1994; Güneş, 2007b). The reading comprehension is a result of the interaction process between the text, the content, reader's current knowledge (e.g. knowledge about the content and features of the text), her motivation and goals. The important cognitive factors that affect reading comprehension skills include resolution speed, vocabulary, summarization, meta-cognition strategies, reading interest and motivation, and affective characteristics (Pecjak, Podlesek, & Pirc, 2011).

Particularly in the first years of primary school education, reading comprehension skill is strongly related to word recognition. The reflection of this strong relationship between them is considered to be a cornerstone for the fluent reading. Comprehension strategies such as Question & Answer, finding the main idea, guessing, visualization and summarization are effective in improving students' comprehension skills (Duke & Carlisle, 2011, pp. 197-228). Among them, in this study, we used Q&A, finding the main idea, and guessing strategies.

Why Fluent Reading and Reading Comprehension Strategies?

Reading achievement requires fluent reading and reading comprehension skills, which are two of the basic skills. Although fluent reading is an important element of reading education, it is not usually emphasized in the researches. When fluent reading is neglected, the text is read poorly and ineffectively, which could prompt difficulties when children want to associate their current knowledge with new information in the text. As a result they would experience troubles in understanding the text (NRP, 2000). In this context, in the research it was aimed to develop these skills of the students with reading difficulties by instructing fluent reading and reading comprehension strategies.

Intervention Program for Fluent Reading and Reading Comprehension Strategies

In the implementation of the research it was focused on the five basic elements of reading: sound awareness, phonetic analysis, word recognition, reading comprehension and fluent reading.

Sound Awareness - Phonetic Analysis Studies

Sound-letter consistency was examined to determine the students' level. Within the scope of sound awareness research following activities were performed with the students; writing the words representing the given visuals, finding the voice in the word, recognizing the voice in the beginning, middle and end of the word, writing a word starting with the given voice, and creating a new word beginning with the last word of the given word. Sound awareness studies lasted 6 class hours training, each was about 40 minutes.

Syllabi and Word Recognition Studies

Various activities were organized for students about recognizing syllabi and word. In addition, activities such as creating syllables from voices, creating words from the syllables, dividing words into syllables, deriving words beginning with the given syllable, completing the missing syllable in the words, deriving sentences from the words, presentation of word lists consisting of 1,2,3,4 and 5 syllables parallel to students' awareness levels were conducted since the beginning of the syllable and word activities. Syllables and word recognition studies took 16 class hours, each was about 40 minutes.

Reading and Reading Comprehension Studies

The word recognition practices were conducted on the text. Once the students' reading levels were identified, it was preferred to begin the implementation with the second grade texts. This text reading practices were conducted in 68 class hours, each was about 40 minutes. Of 10 class hours of this section were dedicated to reading comprehension practices.

The following steps were taken into account when the text was studied.

1. Pre-Reading Studies

The students were asked questions such as "what do you see in the images of the text?" "What does the image tell about?" "Which subject may the text about?" The aim here is to transfer the students' current knowledge to the reading environment by taking into advantage of the visual literacy of the students. When examining the visual, the researcher observed how the picture reminds them, what they see in the picture, and how they relate it to the text.

2. Studies During Reading

After discussing the text's visuals with the students, the researcher practices a sample reading. Then the researcher reads the text word by word and the students repeat it together (choral). The students read sections of the text in turn. Once the students encounter reading difficulties, the research immediately infers and helps them. Since the students are far behind in reading skills, the readings are adjusted to the speed of the students. At the point, it was benefited from the guessing strategy to improve reading comprehension skills. During the reading activity the students were asked to share their provisions about how the story continues. And as they continued to the text, the accuracy of their guess was discussed.

3. Studies After Reading

After the text reading activity was completed, the challenging words were re-read several times. The words were analyzed by dividing them according to their syllables and sound units. In addition to

the reading practices, reading comprehension strategies such as finding out and summarizing the main idea were used in the class hours devoted to development of comprehension skills.

Fluent Reading Activities

In fluent reading, individual reads the text as speaking, without starting over the sentence and repetition by paying attention to the punctuation marks, the stress and the intonation. During the implementation process, the students were warned about the significant key points of fluent reading skills by taking into account their level of reading. Of 10 class hours of the text reading activities time was committed to fluent reading exercises. The implementation process was considered to be 90 class-hours in total, each was about 40 minutes. The implementation plan is presented in Table 1.

Table 1. Implementation Plan

Date	Dur.	Activity	Content
Oct-Nov	40'+40'	Pre. Eval.	Determining Reading and Reading Comprehension Levels
Nov	6x40'	Word recognition	Sound-Letter Correspondence; Finding the letter in a word; recognizing the sound in the beginning, middle and end; writing a new word beginning with a given word; sound game
Nov	16x40'	Letter-word training	Forming syllable from sounds; single, two and three syllable words; word list; dividing words into its syllables.
Nov-Dec	23x40'	Text reading	Implementation of Repeated Reading, Assisted Reading, Choral Reading + Reading Comprehension Strategies
Dec	40'+40'	Int. Eval.	Determining Reading and Reading Comprehension Levels
Dec-Jan	45x40'	Text reading	Implementation of Repeated Reading, Assisted Reading, Choral Reading + Reading Comprehension Strategies
Jan	40'+40'	Fin. Eval.	Determining Reading and Reading Comprehension Levels

Table 1 shows the content of the implementation plan. Before the implementation, the process was planned and a preliminary evaluation was carried out to determine the students' current fluent reading and reading comprehension levels. The students firstly worked on sound awareness for 6 class hours and they practiced syllable and vocabulary exercises for 16 class hours. Following these studies, the students continued to fluent reading and reading comprehension strategies for 23 class hours. At the end of the 45th class, an interim evaluation was made to identify developments in the students' reading and reading comprehension levels. Then, the students resumed for the next 45 class-hours of the program. And at the end of the 90th class, the final evaluation was made about the progress of the students' reading and reading comprehension skills. The process was ended with this final evaluation.

Method

Research Model

The model of this research is an experimental model that aims to determine the effectiveness of the combination of repeated, assisted and choral reading strategies in correcting the reading errors and improving reading comprehension skills of the 4th grade primary school students who have reading difficulties despite having any physical (visual, auditory) and mental problems. In the research the "Multiple Survey Model" -a single-subject research design- was used.

The Multiple-Survey Model is one of the commonly used single-subject research models that evaluate the effectiveness of a teaching or behavior modification program in more than one condition. In the multiple-survey model design, same experimental procedure is applied for the multiple subjects in a way that the subjects and the experimental procedures are not influenced from each other (Tekin İftar & Kırcaali İftar, 2006).

Study Group

In this study, the participants were selected from 4th grade primary school students who do not have a mental, visual and auditory problem. After the selection completed, their parents were informed about research and they signed the parental consent form. The study group consists of 6 fourth grade primary school students from a public school in Bayburt province of Turkey. One of the students is a female and five are male. The study group was determined by the purposive sampling method. Considering determination of the study group two basic criteria was used: students did not have any mental, auditory-visual health problems and they were at the anxiety level.

Determination of the Study Group

The permission from the Bayburt provincial directorate of national education was asked prior to forming the study group. In a randomly selected primary school in Bayburt, oral reading performances of all fourth grade students were firstly identified. In order to determine the study group, each student was asked to read a section from the texts from their textbooks. According to the preliminary findings, there was an impression that 26 of the 108 students have possible reading difficulties. Class instructors were consulted whether these 26 students have reading difficulties and have no physical or mental problems.

In order to determine the reading errors and reading levels, the students were asked to read a 103-word section of the reading text (consisting of 210 words) named "Adventures of a Hornet" from the 3rd grade Turkish textbook approved by the Board of Education. When the students read the text they were recorded by a voice recorder. Then, the records were analyzed according to the Reading Inventory, which showed that 11 students were at the anxiety level. After talking with the parents of the students who have specified qualifications, necessary permissions obtained. Besides, the basic information about the study environment, duration and the schedule was given to the parents. Depending on the consent from the family, student and instructor, it was decided to study with 6 students who had reading difficulties. The students were checked by a physician to clarify whether they have auditory and visual problems. It was confirmed that they did not have these problems. In addition, the intelligence test was applied by a psychologist to determine the students' intelligence quotient (IQ). The test has showed that the six of the students had over 90 scores. According to this result, students' IQ scores were proven to be normal.

The study group has consisted of one female and five male students. All of them were eleven years old and they speak Turkish as their native language. The parents and the students filled the consent form. The students were named as Student 1, Student 2, etc. during the course of the study, which is a more appropriate ethical approach. The students were addressed and recorded in the report by these names.

Data Collection Tools

Reading Inventory

In order to identify reading difficulties, the Reading Inventory was used and the data on sound awareness, word recognition, and oral reading performances was collected. In the study, the Turkish version of the Reading Inventory, which was developed by Ekwall and Shanker and adapted to Turkish by Akyol (2010), was used. The Reading Inventory was used to determine individual's reading and reading comprehension levels. By detecting errors in the oral reading practice, the word and phonetics level of the students were determined. And in silent reading practice, the students' comprehension levels were determined by asking questions to them. The inventory was also informative about the errors in word recognition and reading comprehension. Three levels of reading were identified

according to the inventory (Akyol, 2003): Anxiety Level (individual has several reading errors in the text and has low degree of understanding) Teaching Level (individual needs support from instructor) and Independent Level (individual's ability to read and comprehend the materials appropriate to her level without others' help).

Reading Comprehension Inventory

The "Reading Comprehension Inventory" was developed to determine the students' academic achievement of reading comprehension. It was developed by the researcher from similar reading comprehension tools (Kuruyer, 2014; Keskin, 2012) obtained from the literature, which have parallel objectives with this study.

Implementation of Data Collection Tools

In order to determine the reading errors and reading levels, the students were asked to read a 103-word section of the narrative text (consisting of 210 words) named "Adventures of a Hornet" from the 3rd grade Turkish textbook approved by the Board of Education. The researcher recorded the student's text reading duration. When the students read the text, the places they misread or corrected themselves were marked on the text and some remarks were made about their performances.

The texts used in both the evaluation and the instruction process of the study consist of narrative and informative texts compatible with the 4th grade. In the text reading activities 18 narrative and 8 informative texts were used. Teaching and comprehension of informative texts are more difficult than stories because of their structure (Akyol, 2006). For this reason, the number of narrative texts was more than the informative texts.

When the students read both informative and narrative texts, the researcher recorded them. In order to determine the students' level of comprehension, 10 questions were asked about the narrative text, 5 for simple comprehension and 5 for deeper comprehension. And 10 reading questions were asked about an informative text, 6 for simple comprehension, and 4 for deeper comprehension. The simple comprehension questions include the sub-cognitive processes in the text and the deep comprehension questions cover cognitive processes. The researcher consulted an expert before preparing the questions. In addition, another 30 fourth grade students who were in another class answered the comprehension questions about both the narrative and the informative texts. These students were asked to respond to all questions within a sufficient time. They were also asked to indicate questions they found difficult to understand. The pre-implementation inventory collected from the students was evaluated and the final version of the inventory was formed.

Data Analysis

In the data analysis part, in order to determine the students' reading levels, the data regarding to the beginning level, teaching process and monitoring were collected. When the students read the texts, they were recorded by a voice recorder. Then they were transcribed and scored according to the Reading Inventory.

The researcher read the selected reading texts aloud for each student once and recorded the students' reading errors. Then, 20 questions were asked to the students from the narrative and informative texts, and according to their answers their levels of comprehension were determined.

The data received from the Reading Inventory and the Reading Comprehension Inventory was analyzed by the Wilcoxon Signed-Rank Test. The Wilcoxon Signed-Ranks Test is used to check whether the distributions of the two related sample points that have significant differences (Balci, 2009, Büyüköztürk, Kiliç Çakmak, Akgün, Karadeniz, & Demirel, 2006, Kalayci, 2010). By using the Wilcoxon Signed-Rank Test it was determined whether choral, repeated and assisted reading strategies have significant differences in students' fluent reading and reading comprehension levels before and after the implementation on the narrative and the informative texts.

Results

The main purpose of this research was to examine the effects of choral, repeated and assisted reading strategies on reading and comprehension skills of the poor readers. For this purpose, the following questions have been sought.

1. What are the fluent reading and reading comprehension levels of the students who have reading difficulties on informative and narrative texts before, during and after the implementation?

2. How do these strategies differ between fluent reading and reading comprehension levels of the students on the narrative and the informative texts before and after the implementation?

Findings Related to the First Sub-Problem

Table 2 shows the findings related to the students' fluent reading (number of misspelled words, word recognition percentage and number of words per minute) and reading comprehension levels in narrative and informative texts.

Table 2. Students' Fluent Reading and Reading Comprehension Levels Before, During and end of the Implementation

Reading Level		Student	Evaluation	Total words nbr.	Incor. words nbr.	Word recog. Perc.	Words per minute	Compr. Percentage
INFORMATIVE TEXT	Stud. 1	Pre. Eva.	81	27	% 64	33	% 0	
		Int. Eva.	81	9	% 88	30	% 20,83	
		Fin. Eva.	81	11	% 85,33	48	% 16,66	
	Stud. 2	Pre. Eva.	81	13	% 82,66	28	% 0	
		Int. Eva.	81	3	% 96	48	% 12,50	
		Fin. Eva.	81	3	% 96	53	% 42	
	Stud. 3	Pre. Eva.	81	15	% 80	28	% 4	
		Int. Eva.	81	8	% 89,33	37	% 4	
		Fin. Eva.	81	9	% 88	44	% 29,16	
	Stud. 4	Pre. Eva.	81	14	% 81,33	20	% 8,3	
		Int. Eva.	81	4	% 94,66	29	% 16,66	
		Fin. Eva.	81	2	% 97,33	34	% 25	
	Stud. 5	Pre. Eva.	81	19	% 74,66	61	% 4	
		Int. Eva.	81	8	% 89,33	34	% 29,16	
		Fin. Eva.	81	8	% 89,33	67	% 50	
Stud. 6	Pre. Eva.	81	63	% 16	10	% 0		
	Int. Eva.	81	37	% 50,66	17	% 8		
	Fin. Eva.	81	16	% 78,66	24	% 17		
NARRATIVE	Stud. 1	Pre. Eva.	75	24	% 70,37	16	% 0	
		Int. Eva.	75	12	% 85,18	31	% 0	
		Fin. Eva.	75	2	% 97,53	42	% 16	
	Stud. 2	Pre. Eva.	75	17	%79,01	31	% 16	
		Int. Eva.	75	4	% 95,06	52	% 32	
		Fin. Eva.	75	3	% 96,29	50	% 64	

Table 2. Continued

	Student	Evaluation	Total words nbr.	Incor. words nbr.	Word recog. Perc.	Words per minute	Compr. Percentage
NARRATIVE	Stud. 3	Pre. Eva.	75	12	% 85	32	% 4
		Int. Eva.	75	5	% 93,82	37	% 20
		Fin. Eva.	75	5	% 93,82	49	% 40
	Stud. 4	Pre. Eva.	75	10	% 87,65	23	% 0
		Int. Eva.	75	3	% 96,29	33	% 16
		Fin. Eva.	75	4	% 95,06	40	% 44
	Stud. 5	Pre. Eva.	75	11	% 86,41	78	% 4
		Int. Eva.	75	4	% 95,06	68	% 20
		Fin. Eva.	75	2	% 97,53	66	% 36
	Stud. 6	Pre. Eva.	75	66	% 18,51	11	% 0
		Int. Eva.	75	27	% 66,66	30	% 8
		Fin. Eva.	75	13	% 83,65	28	% 16

Table 2 shows that before the intervention program, students have a lot of reading errors in the informative text and comprehended a little of it. In the 81-word text, the word recognition percentage is below 90%. The students' reading comprehension levels is below 50%. This shows that students are at an anxiety level in terms of fluent reading and reading comprehension of an informative text.

At the end of the first half of the implementation (at the end of the 45th session), the interim evaluation was made in order to observe the students' progress. Here, in terms of the students' level of fluent reading, it was concluded that Student 2 and Student 4 have reached the teaching level, it was observed that the other students were still at the anxiety level. However, when compared to the data of the preliminary evaluation, it is also possible to state that all students had improved their fluent reading skills until the interim evaluation. Considering the students' reading comprehension levels, it was articulated that the level of comprehension of the all students was below 50%.

The final evaluation data at the end of the implementation shows that the reading levels of Student 2 and Student 4 were at the teaching level and the rest of the students were at the anxiety level. The categories that form the students' fluent reading level show that: when comparing the preliminary and final evaluation, the students have less error in the informative text. However, it is observed that there is an increase in the percentage of word recognition percentage and number of words per minute. The students' reading comprehension levels in the informative text is below 75%.

The data about the preliminary evaluation of the students in the narrative text has articulated that students had a lot of reading errors and very low comprehension level, similar to the findings in the informative text. In the 75-word text, the words recognition percentage was below 90%. The reading comprehension level was below 50%. These results show that the students were at an anxiety level in terms of their fluent reading and reading comprehension levels.

At the end of the first half of the implementation (at the end of the 45th session), the interim evaluation was made in order to observe the students' progress. In terms of the fluent reading level, it was concluded that Student 2 and Student 4 and Student 5 reached the teaching level and the other students were still at the anxiety level. It is also possible to conclude that compared to the preliminary evaluation, all the students have improved themselves. In terms of the students' reading comprehension levels, all of them were below 50%.

The final evaluation data shows that the reading levels of the students 1, 2, 4 and 5 in the narrative text were at the teaching level. The reading levels of Student 3 and Student 6 were at the anxiety level. The categories forming the students' level of fluent reading show that students generally have fewer errors in narrative text compared to the preliminary evaluation data, while increased the word recognition percentage and the number of words per minute. The students' levels of reading comprehension in narrative text were below 75%.

It is observed that the students have developed their reading comprehension skills in both the informative and the narrative texts in parallel with the fluent reading skills, considering the development occurred from the preliminary to the final evaluations.

Findings Related to the Second Sub-Problem

The use of choral, repeated and assisted reading strategies produced a positive change in fluent reading (words recognition percentage, number of error words, number of words per minute) and reading comprehension levels in the informative and narrative texts before and after the implementation. In order to determine whether there was a significant difference, the data were analyzed by using the Wilcoxon Signed-Ranks Test.

Word Recognition Percentage

Figure 1 shows the data related to the word recognition percentage of the students in the informative and the narrative texts according to the preliminary and the final assessments.

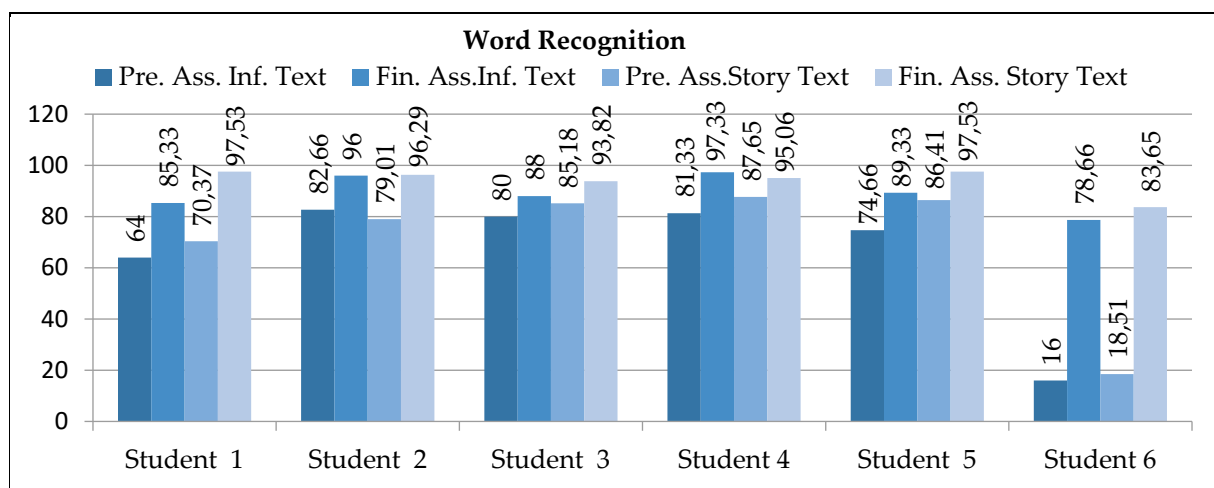


Figure 1. Data Related to the Word Recognition Percentage of the Students in Informative and Narrative Texts Before and After the Implementation.

Considering the preliminary and final evaluations, Figure 1 indicates that there is an increase in the word recognition percentage in informative text: Student 1 has 21.33%; Student 2 has 13.34%; Student 3 has 8%; Student 4 has 16%; Student 5 has 14.67% and Student 6 has 62.66%. There is an increase in the students' word recognition percentages in narrative text; Student 1 has 27.16%; Student 2 has 17.28%; Student 3 has 8.64%; Student 4 has 7.41%; Student 5 has 11.12%; Student 6 has 65.14%. In order to determine whether there was a significant difference in the word recognition percentages according to the preliminary and final evaluation results, the Wilcoxon Signed-Ranks Test was used. The result of the analysis is given in Table 3.

Table 3. Wilcoxon Signed-Marked Rank Test Results About the Word Recognition in the Informative and the Narrative Texts Before and After the Implementation

	Preliminary-Final Evaluation	n	Ranking Average	Rank Sum	Z	P
Inform. text	Negative Rank	0	.00	.00		
	Positive Rank	6	3.50	21.00	2.20*	.028
	Even	0	-			
Narrat. text	Negative Rank	0	.00	.00		
	Positive Rank	6	3.50	21.00	2.20*	.027
	Even	0	-			

* Based on negative sequences

Table 3 shows that there is a significant difference between the students' word recognition percentages in informative and narrative texts before and after the implementation, $z = 2.20$, $p < .05$. Considering the rank averages and the sums of the difference scores, it is observed that this difference is in the favor of positive ranks, that is, the final test score. According to these results, it can be stated that the program has important effects on improving students' word recognition percentage.

Number of Error Words

Figure 2 shows the data related to the number of errors words in the informative and the narrative texts according to the preliminary and the final assessments.

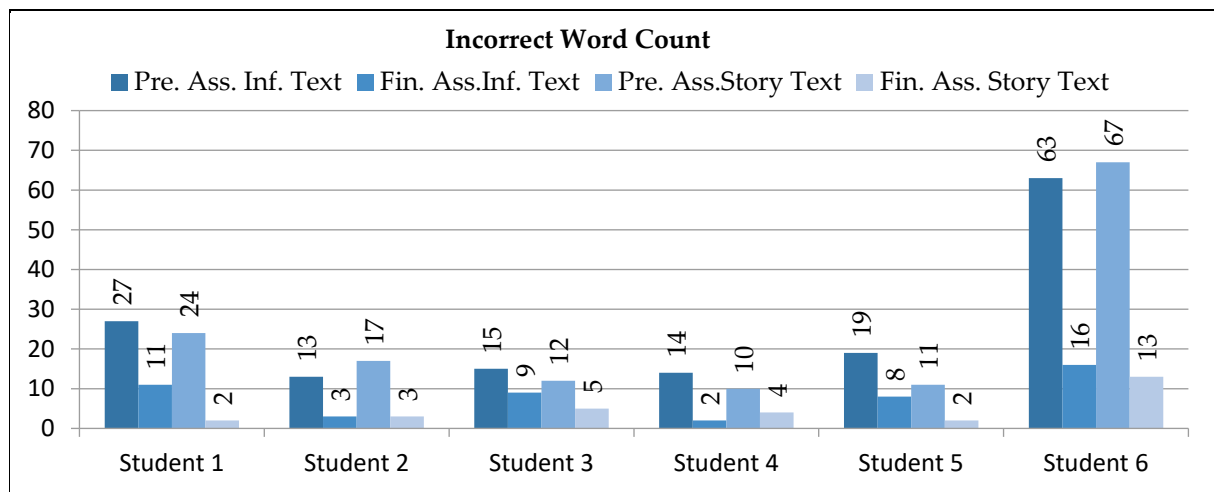


Figure 2. Data Related to the Number of Errors Words in the Informative and the Narrative Texts Before and After the Implementation

Considering the preliminary and final evaluations, Figure 2 indicates that there is a decrease in the number of the students' error words in informative text; Student 1 has 16; Student 2 has 10; Student 3 has 6; Student 4 has 12; Student 5 has 11; Student 6 has 47 errors. There is a decrease in students' word recognition percentages; Student 1 has 22; Student 2 has 14; Student 3 has 7; Student 4 has 6; Student 5 has 9; Student 6 has 54 in narrative text. In order to determine whether there was a significant difference in the number of error words according to the preliminary and final evaluation, the Wilcoxon Signed-Ranks Test was used. The result of the analysis is given in Table 4.

Table 4. Wilcoxon Signed-Marked Rank Test Results About the Number of Error Words in the Informative and the Narrative Texts Before and After the Implementation

		Preliminary-Final Evaluation	n	Ranking Average	Rank Sum	Z	P
Inform. text	Negative Rank		6	3.50	21.00		
	Positive Rank		0	.00	.00	2.20*	.028
	Even		0	-			
Narrat. text	Negative Rank		6	3.50	21.00		
	Positive Rank		0	.00	.00	2.20*	.027
	Even		0	-			

* Based on positive orders

Table 4 shows that there is a significant difference between the students' number of error words in informative and narrative texts before and after the implementation, $z = 2.20$, $p < .05$. Considering the rank averages and the sums of the difference scores, it is observed that this difference is in the favor of negative ranks. According to these results, it can be stated that the program has important effects on decreasing the students' number of error words.

Number of Words Per Minute

Figure 3 shows the data related to the number words per minute in the informative and the narrative texts according to the preliminary and the final assessments.

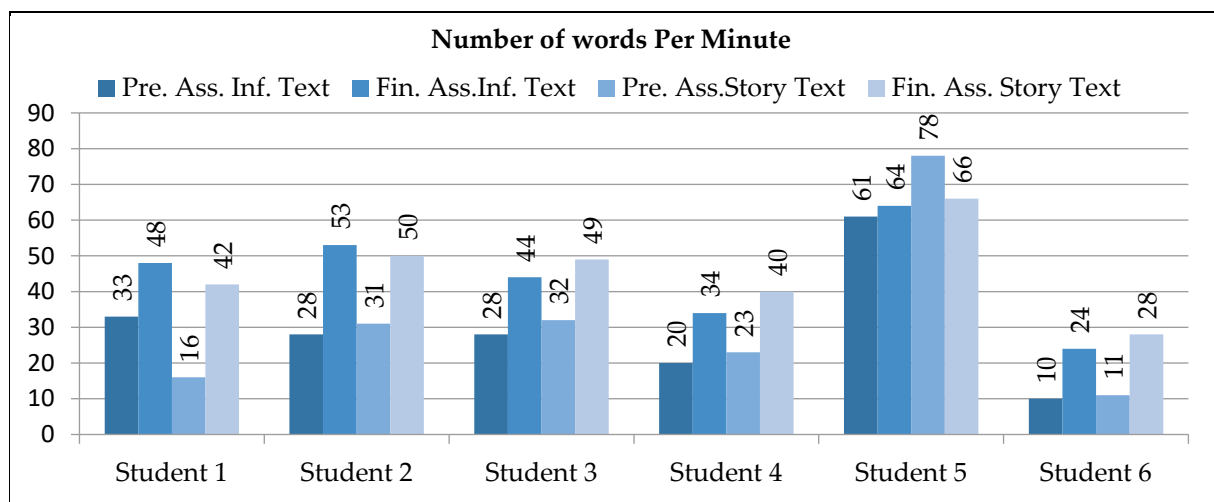


Figure 3. Data related to the Number Words Per Minute in the Informative and the Narrative Texts Before and After the Implementation

Considering the preliminary and final evaluations, Figure 3 indicates that there is an increase in the number of words they read per minute in the informative text; Student 1 has 15; Student 2 has 25; Student 3 has 16; Student 4 has 14; Student 5 has 3; Student 6 has 14. There is an increase in the number of words per minute in the narrative text; Student 1 has 16; Student 2 has 19; Student 3 has 17; Student 4 has 17; Student 6 has 17. In contrast, Student 5 has decreased 12 words per minute. In order to determine whether there was a significant difference in the number of words per minute according to the preliminary and final evaluation, the Wilcoxon Signed-Ranks Test was used. The result of the analysis is given in Table 5.

Table 5. Wilcoxon Signed-Marked Rank Test Results About the Number of Words Per Minute in the Narrative and the Informative Texts Before and After the Implementation

		Preliminary-Final Evaluation	n	Ranking Average	Rank Sum	Z	P
Inform. text	Negative Rank		0	.00	.00		
	Positive Rank		6	3.50	21.00	2.20*	.027
	Even		0	-			
Narrat. text	Negative Rank		1	2.00	2.00		
	Positive Rank		5	3.80	19.00	1.78*	.074
	Even		0	-			

* Based on negative sequences

Table 5 shows that there is a significant difference between the students' number of words per minute in the informative texts before and after the implementation, $z = 2.20$, $p < .05$. Considering the rank averages and the sums of the difference scores, it is observed that this difference is in the favor of positive ranks, that is, the final test score. According to these results, it can be stated that the program has important effects on increasing students' number of words per minute in informative text. But there is not a significant difference between the number of words per minute in the narrative text before and after the implementation, $z = 1.78$, $p > .05$. According to these results, it can be stated that the program does not have an important effect on decreasing the number of error words in the narrative text.

Comprehension Levels

Figure 4 shows the data related to the reading comprehension level in the informative and the narrative texts according to the preliminary and the final assessments.

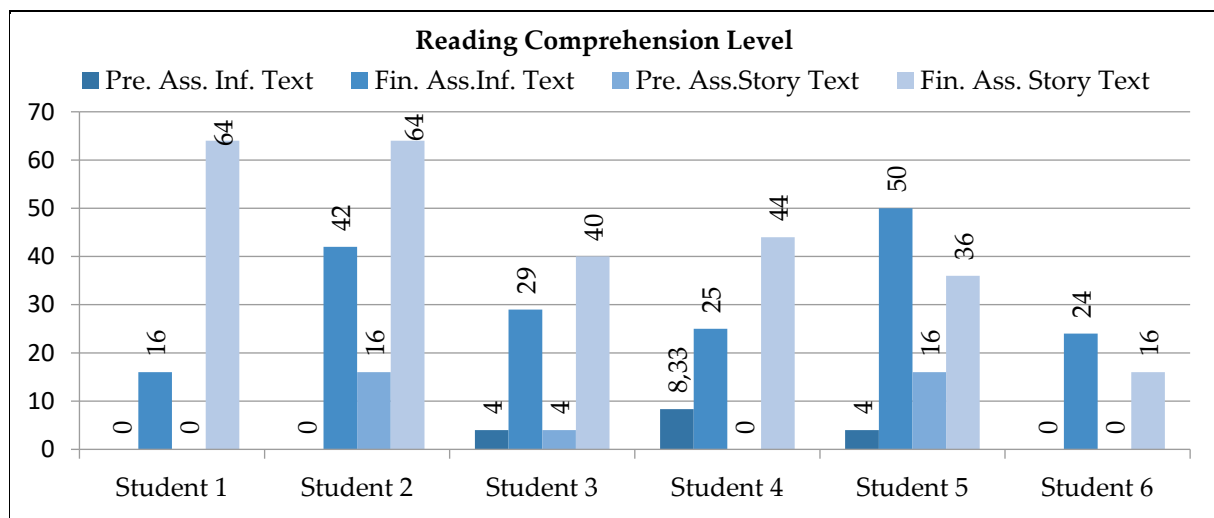


Figure 4. Data Related to the Reading Comprehension Level in the Informative and the Narrative Texts Before and After the Implementation

Considering the preliminary and final evaluations, Figure 4 indicates that there is an increase in percentage of the students' reading comprehension levels in the informative text; Student 1 has 16%; Student 2 has 42%; Student 3 has 25%; Student 4 has 16.67%; Student 5 has 46%; Student 6 has 17%. There is an increase in the percentage of the students' reading comprehension levels in the narrative text; Student 1 has 64%; Student 2 has 48%; Student 3 has 36%; Student 4 has 44%; Student 5 has 20%; Student 6 has 16%. In order to determine whether there was a significant difference in the percentage of reading comprehension levels according to the preliminary and final evaluations, the Wilcoxon Signed-Ranks Test was used. The result of the analysis is given in Table 6.

Table 6. Wilcoxon Signed-Marked Rank Test Results About Reading Comprehension Level in the Informative and the Narrative Texts Before and After the Implementation

	Preliminary-Final Evaluation	n	Ranking Average	Rank Sum	Z	P
Inform. text	Negative Rank	0	.00	.00		
	Positive Rank	6	3.50	21.00	2.20*	.027
	Even	0	-			

* Based on negative sequences

Table 6 shows that there is a significant difference between the students' reading comprehension levels in the informative and narrative texts before and after the implementation, $z = 2.20$, $p < .05$. Considering the rank averages and the sums of the difference scores, it is observed that this difference is in the favor of positive ranks, that is, the final test score. According to these results, it can be stated that the program has important effects on increasing students' reading comprehension levels.

Discussion, Conclusion and Suggestions

Within the first sub-problem, the students' current fluent reading and reading comprehension levels in the informative and narrative texts were examined. The number of error words they read, the number of words they read per minute, and the percentage of word recognition both in the informative and narrative texts were explored. It was observed that the students' reading and reading comprehension levels both in the informative and narrative texts were at the anxiety level.

It was determined that the students had difficulties both in narrative and informative texts, did not able to spell correctly, and read the syllables and words inappropriately or misread them by skipping them, adding letters and syllables or reading syllable by syllable. It was also observed that they did not pay attention to the stresses and intonations and ignored the punctuation marks. It was also seen that the number of words per minute was less than they suppose to read. It was determined that the reading errors had negative effects on the level of comprehension because they led the students to lose the meaning. In terms of the errors in oral readings, similar findings was reached by the scores of studies conducted on fluent reading (Yilmaz, 2008; Ergül, 2012; Ateş & Yildiz, 2011; Baydik, Ergül, & Bahap Kudret, 2012; Mahlke, 2009; Uzunkol, 2013).

The fact that the students have considerable amount of errors in word recognition and fluent reading affects students' comprehension levels negatively. They missed the meaning of the text when reading because they devoted most of their time to word recognition. The studies also support the fact that students' fluent reading problems affect their reading comprehension levels negatively (Akyol, 2014; Kouider & Brian, 2006; Crowe, 2003, 2005; Yildirim & Rasinski, 2014; Yildiz, 2013; Beşgöl, 2015; Baydik, 2012; Talada, 2007; Powell, 2008; Anema, 2008; Kruger, 2008; Conway Sledge-Murphy, 2011; Hixson & McGlinchey, 2004; Başaran, 2013; Yildirim & Ateş, 2012).

The study also articulated that the students in the study group have lower reading speed than they should have. The poor readers have considerably low reading speed compared to good readers. Considering the reading speed norms of Güneş (2007a), it is possible to state that the study group's reading speed is below the norms. It is possible to conclude that similar findings were articulated by other studies. In their studies Erden, Kurdoğlu, and Uslu (2002) found that reading speed of 2481 students who are studying at 1st, 2nd, 3rd, 4th and 5th grades are below the given values. In their studies Yildiz, Yildirim, Ateş, and Çetinkaya (2009) found that the number of words that fourth grade students read per minute is 87.18. Additionally, in their studies Akyol and Temur (2006), Akyol, Çakiroğlu, and Kuruyer (2014) articulated that the reading speed of the students who have reading difficulties was so low. Of course, the priority in the studying was to give students the correct reading skills. Correct reading also improves the reading speed. Studies showed that students with reading difficulties make fluent reading errors, have low reading speeds and have difficulties in reading comprehension as well.

There are also a number of studies supporting the results of this research on how fluent reading strategies help students with reading difficulties to develop their fluent reading and reading comprehension skills in informative and narrative texts. Mokhtari, Neel, Kaiser, and Le (2015) found that as a result of their one-to-one teaching on literacy to the first grade primary school students with reading difficulties, there was a significant difference in the literacy level compared to other students – who were not included to the study- in a similar situations. In a similar study, McDonagh (2003) has concluded that his study with 2nd and 3rd grade primary school students with a risk of reading difficulties has developed students' fluent reading and comprehension skills. Moreover, the results of a number of studies conducted by Gellert (2014), Belet (2005), Kaman (2012), Dağ (2010), Yüksel (2010), Karasu (2009) support findings of this study.

The data shows that the development in fluent reading also positively affected the level of comprehension. Especially, the fact that students automatically recognize the words helps them to form the meaning. Poor readers use their cognitive capacities at the highest level, yet this happens in lower level in word recognition. Because good readers perform word recognition more quickly and correctly compared to poor readers, they use higher level of cognitive capacities in terms of comprehension (Therrien, 2004). Based on the results of the research, it is possible to conclude that choral, repeated and assisted reading strategies have positive impact on the development of fluent reading and reading comprehension skills in the informative text. The Wilcoxon Signed Ranks Test was used to determine whether there was a difference between fluent reading and reading comprehension skills in the informative and the narrative texts, based on the pre- and post-assessment of the study group. According to the results of the analysis, the sub-headings of the word recognition percentage, the number of error words, and the number of words read per minute were discussed within the fluent reading skills heading.

It was found that there was a significant difference between the word recognition percentage, the number of error words and the number of words per minute in the informative texts before and after the implementation. Student 2 and Student 4, who were at the Anxiety Level before the implementation, have passed to the Teaching Level after the implementation. Although the reading levels of Student 1, Student 3, Student 5 and Student 6 were at the Anxiety Level, a statistically significant difference was found between pre-assessment and final assessment scores. There were a significant difference between the word recognition percentage and the number of error word in the narrative texts, but there were no a significant difference in the number of words per minute. This can be correlated by the fact that the students were more familiar with the words in the narrative text than the words in the informative text. This correlation can be explained with the fact that improving of class level (after the 4th grade in the elementary school) has relationship with the subjects of the reading, which makes reading material more abstract, domain specific, rarely used and less appealing to the student's life experiences (Akyol, 2017). Student 1, Student 2, Student 4 and Student 5, who were at the Anxiety Level before the implementation, have passed to the Teaching Level at the end of implementation. Although the reading levels of the Student 3 and Student 6 were at the Anxiety Level before and after the implementation, a statistically significant difference was found between the pre-assessment and the final assessment scores. It was also determined that there was a significant difference between reading comprehension skills both in the informative and the narrative texts before and after the implementation. Valleley and Shriver (2003), in their study conducted on four students between 10 and 18 years old with reading difficulties, in contrast, found that assisted reading strategy did not impact on reading comprehension skills even though it contributed to their fluent reading skills.

There are also studies supporting the results of the researches on choral, repeated and assisted reading strategies implemented with students who have reading difficulties develop their reading and reading comprehension skills both in informative and narrative texts. In their studies Poore and Ferguson (2008) concluded that choral reading is effective in improving students' fluent reading skill. By means of choral reading, poor readers recognize the strengths of good readers and at the same time identify their own deficiencies (Cliff Hodges, 2016). The chorus encourages students to read due

the fact that in choral reading good reader makes correct pronunciation of the words, vocalize at appropriate reading speed, correct error words and give feedback. In addition, model reading makes it possible for students to detect and correct their mistakes and to read properly and with favorable speed (Paige, 2011). The study conducted by Compan, Iamsupasit, and Samuels (2001) has improved third grade primary school students' fluent reading and automation skills through repeated reading strategy. Moreover some studies have showed that the repeated reading strategy improves students' fluent reading skills (Therrien & Kubina, 2006; Kuhn, 2005). In their research, Mefferd and Pettegrew (1997) have articulated that assisted reading strategy has improved fluent reading and reading comprehension skills of 9-11 age student groups who needed special education. Additionally, a number of studies including Sidekli (2010), Yilmaz (2006), Welsch (2007), Guerin and Murphy (2015), Nelson, Alber, and Gordy (2004), Chafouleas, Martens, Dobson, Weinstein, and Gardner (2004), Ellis (2009) have parallel results with this research.

The research showed that combined implementation of choral, repeated and assisted reading strategies have developed the poor readers' the fluent reading and reading comprehension skills. The research was conducted on the oral reading, which represents the general tendency in the area. So, the future studies may focus on the relationship between silent reading and reading comprehension. In this regards, the effects of silent reading levels on reading comprehension levels can be studied. Therefore, choral, repeated and assisted reading strategies can be used by teachers to develop fluent reading and reading comprehension skills of poor readers at the fourth grade of elementary school. Students with reading difficulties should be identified and in order to solve their problems they and their parents should be informed about reading and how to use comprehension methods and strategies. Moreover, the effects of developing choral, repeated, and assisted reading strategies can be explored on different sample groups to improve fluent reading and reading comprehension skills.

References

- Akyol, H. (2003). *Türkçe ilk okuma yazma öğretimi*. Ankara: Gündüz Eğitim.
- Akyol, H. (2006). *Türkçe öğretim yöntemleri*. Ankara: Kök.
- Akyol, H. (2010). *Türkçe ilk okuma yazma öğretimi*. Ankara: Gündüz Eğitim.
- Akyol, H. (2017). *Türkçe ilk okuma ve yazma*. Ankara: Pegem Akademi.
- Akyol, M. (2014). *Yapılandırılmış akici okuma yönteminin üçüncü sınıf öğrencilerinin akici okuma ile okuduğunu anlama becerilerine etkisi* (Unpublished master's thesis). Niğde University, Institute of Educational Sciences, Niğde.
- Akyol, H., & Temur, T. (2006). İlköğretim 3. sınıf öğrencilerinin okuma düzeyleri ve sesli okuma hataları. *EKEV Akademi Dergisi*, 29(25), 9-274.
- Akyol, H., Çakiroğlu, A., & Kuruyer, H. G. (2014). A study on the development of readingskills of the students having difficulty in reading: Enrichment reading program. *International Electronic Journal of Elementary Education*, 6(2), 199-212.
- Anema, I. (2008). *The relationship between fluency-based suprasegmentals and comprehension in oral and silent reading in Dutch speakers of English* (Doctoral dissertation). The City Univesity of New York.
- Ateş, S., & Yıldız, M. (2011). Okumayı farklı yöntemlerle öğrenen ilköğretim üçüncü sınıf öğrencilerinin sesli okuma akiciliklerinin karşılaştırılması. *Türk Eğitim Bilimleri Dergisi*, 9(1), 101-124.
- Baker, W., & Boonkit, K. (2004). Learning strategies in reading and writing: Eap contexts. *Regional Language Centre Journal*, 35(3), 299-328.
- Balci, A. (2009). *Sosyal bilimlerde araştırma yöntem, teknik ve ilkeler*. Ankara: Pegem A.
- Başaran, M. (2013). Okuduğunu anlamının bir göstergesi olarak akici okuma. *Kuram ve Uygulamalarda Eğitim Bilimleri*, 13(4), 1-14.
- Baydik, B. (2012). *Okuma güçlükleri*. In S.Yıldırım Doğru (Ed.), *Öğrenme güçlükleri*. Ankara: Eğiten Kitap.
- Baydik, B., Ergül, C., & BahapKudret, Z. (2012). Okuma güçlüğü olan öğrencilerin okuma akiciliği sorunları ve öğretmenlerinin bu sorunlara yönelik öğretim uygulamaları. *Elementary Education Online*, 11(3), 778-789.
- Belet, D. (2005). *Öğrenme stratejilerinin okuduğunu anlama ve yazma becerileri ile Türkçe dersine ilişkin tutumları* (Unpublished doctoral dissertation). Anadolu University, Institute of Educational Sciences, Eskişehir.
- Beşgül, M. (2015). *Okuma güçlüğü olan ve olmayan öğrencilerin okuduğunu anlama becerilerinin incelenmesi* (Unpublished master's thesis). Yakin Doğu University, Institute of Educational Sciences, Lefkoşa.
- Brassel, D., & Rasinski, T. (2008). Comprehension that works: Taking students beyond ordinary understanding to deep comprehension. Huntington Beach.
- Büyüköztürk, Ş., Kılıç Çakmak, E., Akgün, Ö. E., Karadeniz, Ş., & Demirel, F. (2006). *Bilimsel araştırma yöntemleri*. Ankara: Pegem.
- Chafouleas, S. M., Martens, B. K., Dobson, R. L., Weinstein, K. S., & Gardner, K. B. (2004). Fluent reading as the improvement of stimulus control: Additive effects of performance-based interventions to repeated reading on students' reading and error rates. *Journal of Behavioral Education*, 13(2), 67-81.
- Cliff Hodges, G. (2016). Becoming poetry teachers: Studying poems through choral reading. *Changing English*, 23(4), 375-386.
- Conway Sledge-Murphy, F. (2011). *The relationship between oral reading fluency and reading comprehension for third grade students in a rural Louisiana school district* (Doctoral dissertation). University of Louisiana.
- Compan, B., Iamsupasit, S., & Samuels, J. (2001). Effect of repeated reading and self- directed behavior on reading skills and generalization of the reading skills of third- grade hill tribe students. Retrieved August 3, 2015, from <http://files.eric.ed.gov/fulltext/ED458531.pdf>

- Crowe, L. K. (2003). Comparison of two reading feedback strategies in improving the oral and written language performance of children with language-learning disabilities. *American Journal of Speech-Language Pathology*, 12, 16-27.
- Crowe, L. K. (2005). Comparison of two oral reading feedback strategies in improving reading comprehension of school-age children with low reading ability. *Remedial and Special Education*, 26(1), 32-42.
- Dağ, N. (2010). Okuma güçlüğü'nün giderilmesinde 3P metodu ile boşluk tamamlama (cloze) tekniğinin kullanımı üzerine bir çalışma. *Ankara Üniversitesi Eğitim Bilimleri Fakültesi Özel Eğitim Dergisi*, 11(1), 63-74.
- Duke, N. K., & Carlisle, J. (2011). The development of comprehension. In M. L. Kamil, P. D. Pearson, E. B. Moje, & P. P. Afflerbach, (Eds.), *Handbook of reading research Volume IV*. Routledge Publishers, New York.
- Ellis, W. A. (2009). *The impact of C-PEP (Choral reading, partner reading, echo reading, and performance of text) on third grade fluency and comprehension development* (Doctoral dissertation). The University of Memphis.
- Erden, G., Kurdoğlu, F., & Uslu, R. (2002). İlköğretim okullarına devam eden Türk çocuklarının sınıf düzeylerine göre okuma hizi ve yazım hataları normlarının geliştirilmesi. *Türk Psikiyatri Dergisi*, 13(2), 5-13.
- Ergül, C. (2012). Okumada güçlük yaşayan öğrencilerin performanslarının öğrenme güçlüğü riski açısından değerlendirilmesi. *Kuram ve Uygulamada Eğitim Bilimleri*, 12(3), 2033-2057.
- Ferrara, S. L. (2012). *Literacy and the inclusive classroom*. Nova Science Publishers, New York.
- Fielding, L. G., & Pearson, P. D. (1994). Reading comprehension: What works. *Educational Leadership*, 51(5).
- Fuchs, L. S., Fuchs, D., Hosp, M. K., & Jenkins, J. R. (2001). Oral reading fluency as an indicator of reading competence: A theoretical, empirical, and historical analysis. *Scientific Studies of Reading*, 5(3), 239-256.
- Gellert, A. S. (2014). Does repeated reading predict reading development over time? A study of children from grade 3 to 4. *Scandinavian Journal of Psychology*, 55, 303-310.
- Gilbert, L. M., Williams, R. L., & McLaughlin, T. F. (1996). Use of assisted reading to increase correct reading rates and decrease error rates of students with learning disabilities. *Journal of Applied Behavior Analysis*, 29(2), 255-257.
- Guerin, A., & Murphy, B. (2015). Repeated reading as a method to improve reading fluency for struggling adolescent readers. *Journal of Adolescent & Adult Literacy*, 58(7), 551-560.
- Guthrie, J. T., Wigfield, A., Metsala, J. L., & Cox, K. E. (1999). Motivational and cognitive predictors of text comprehension and reading amount. *Scientific Studies of Reading*, 3(3), 231-256.
- Güneş, F. (2007a). *Türkçe öğretimi ve zihinsel yapılandırma*. Ankara: Nobel.
- Güneş, F. (2007b). *Ses temelli cümle yöntemi ve zihinsel yapılandırma*. Ankara: Nobel.
- Güneş, F. (2008). *Hızlı okuma ve anlamlı yapılandırma*. Ankara: Nobel.
- Hixson, M. D., & McGlinchey, M. T. (2004). The relationship between race, income and oral reading fluency and performance on two reading comprehensiin measures. *Journal of Psychoeducational Assessment*, 22, 351-364.
- Homan, S.P., Klesius, J. P., & Hite, C. (1993). Effects of repeated readings and nonrepetitive strategies on student's fluency and comprehension. *Journal of Educational Research*, 87(2), 94-99.
- Kalayci, Ş. (2010). *SPSS uygulamalı çok değişkenli istatistik teknikleri*. Ankara: Asil.
- Kaman, Ş. (2012). *Akıcı okuma stratejilerini kullanmanın ilköğretim üçüncü sınıf öğrencilerinde okuma becerisini geliştirmeye etkisi* (Unpublished master's thesis). Ahi Evran University, Institute of Social Sciences, Kirşehir.

- Karasu, M. (2009). Akici okumayı sağlamaya yönelik uygulanan yöntemlerin etkililiği. Retrieved August 2, 2015, from <http://www.eab.org.tr/eab/2009/pdf/300.pdf>
- Keskin, H. K. (2012). *Akici okuma yöntemlerinin okuma becerileri üzerindeki etkisi* (Unpublished doctoral dissertation). Gazi University, Institute of Educational Sciences, Ankara.
- Kouider, M., & Brian, T. H. (2006). How problems of reading fluency and comprehension are related to difficulties in syntactic awareness skills among fifth graders. *Reading Research and Instruction*, 46(1), 73-94.
- Kruger, L. (2008). *The relationship between reading fluency and comprehension in Spanish language measures* (Master's thesis). University of Nebraska.
- Kuhn, M. R. (2005). A comparative study of small group fluency instruction. *Reading Psychology*, 26, 127-146. doi:10.1080/02702710590930492
- Kuhn, M. R., & Stahl, S. A. (2000). Fluency: A review of developmental and remedial practices. *Journal of Educational Psychology*, 95(1), 3-21. doi:10.1037/0022-0663.95.1.3
- Kuruyer, H. G. (2014). *Zenginleştirilmiş okuma programının okuma güçlüğü olan öğrencilerin bilişsel süreç ve nöral yapılarına etkisi* (Unpublished doctoral dissertation). Gazi University, Institute of Educational Sciences, Ankara.
- Mahlke, A. G. (2009). *Does systematic miscue analysis explain variance in struggling readers' oral reading proficiency?* (Doctoral dissertation). University of Minnesota.
- McDonagh, S. H. (2003). *Developing automaticity at the component skill levels of lettersound correspondence, letter combinations, word and connected text: An analysis of outcomes for children at risk for reading difficulties in grades two and three* (Doctoral dissertation). University of Oregon.
- Mefferd, P. E., & Pettegrew, B. S. (1997). Fostering literacy acquisition of students with developmental disabilities: Assisted reading with predictable trade books. *Reading Research and Instruction*, 36(3), 177-190.
- Meyer, M. S., & Felton, R. H. (1999). Repeated reading to enhance fluency: Old approaches and new directions. *Annals of Dyslexia*, 49(1), 283-306.
- Mokhtari, K., Neel, J. L., Kaiser, F., & Le, H. (2015). Assessing the promise of a supplemental reading intervention for at risk first grade students in a public school setting. *International Electronic Journal of Elementary Education*, 7(3), 281-300.
- National Reading Panel Report. (2000). Retrieved July 1, 2013 from <http://www.nichd.nih.gov/publications/pubs/nrp/Pages/findings.aspx>
- Nelson, J. S., Alber, S. R., & Gordy, A. (2004). Effects of systematic error correction and repeated readings on the reading accuracy and proficiency of second graders with disabilities. *Education & Treatment of Children*, 27(3), 186-198.
- Özsoy, Y. (1984). Okuma yetersizliği. *Anadolu Üniversitesi Eğitim Fakültesi Dergisi*, (1), 17-20.
- Paige, D. D. (2011). "That sounded good!": Using whole-class choral reading to improve fluency. *The Reading Teacher*, 64(6), 435-438.
- Paige, D. D., & Magpuri-Lavell, T. (2014). Reading fluency in the middle and secondary grades. *International Electronic Journal of Elementary Education*, 7(1), 83-96.
- Pecjak, S., Podlesek, A., & Pirc, T. (2011). Model of reading comprehension for 5th grade students. *Studia Psychologica*, 53(1).
- Pikulski, J. J., & Chard, D. J. (2005). Fluency: Bridge between decoding and reading comprehension. *The Reading Teacher*, 58(6), 510-519.
- Poore, M. A., & Ferguson S. H. (2008). Methodological variables in choral reading. *Clinical Linguistics & Phonetics*, 22(1), 13-24.
- Powell, L. E. (2008). *The relationship between reading comprehension and oral reading fluency in third grade students* (Doctoral dissertation). South Carolina State University.

- Rasinski, T., Padak, N. D., McKeon, C. A., Wilfong, J. A., Friedauer, J.A., & Heim, P. (2005). Is reading fluency a key for successful high school reading?, *Journal of Adolescent & Adult Literacy*, 49(1).
- Rasinski, T. V. (2009). Fluency for everyone: Incorporating fluency instruction in the classroom. In C. M. Mooney, (Ed.), *Essential readings on fluency* (pp. 17-20). International Reading Association.
- Samuels, J. (2006). Looking backward: Reflections on a career in reading. *Journal of Literacy Research*, 38(3), 327-344.
- Sidekli, S. (2010). *İlköğretim 5. sınıf öğrencilerinin okuma ve anlama becerilerini geliştirme (Eylem araştırması)* (Unpublished doctoral dissertation). Gazi University, Institute of Educational Sciences, Ankara.
- Spear-Swerling, L. (2006). Children's reading comprehension and oral reading fluency in easy text. *Reading and Writing*, 19, 199-220.
- Talada, J. A. (2007). *The relationship between oral reading fluency and comprehension* (Doctoral dissertation). Liberty University.
- Tekin İftar, E., & Kırcaali İftar, G. (2006). *Özel eğitimde yanlış öğretim yöntemleri*. Ankara: Nobel.
- Therrien, W.J. (2004). Fluency and comprehension gains as a result of repeated reading: A meta-analysis. *Remedial and Special Education*, 25(4), 252-261.
- Therrien, W. J., & Kubina Jr, R. M. (2006). Developing reading fluency with repeated reading. *Intervention in School and Clinic*, 41(3), 156-160.
- Uzunkol, E. (2013). Akıcı okuma sürecinde karşılaşılan sorunların tespiti ve giderilmesine yönelik bir durum çalışması. *Mersin Üniversitesi Eğitim Fakültesi Dergisi*, 9(1), 70- 83.
- Valleley, R. J., & Shriver, M. D. (2003). An examination of the effects of repeated readings with secondary students. *Journal of Behavioral Education*, 12(1), 55-76.
- Welsch, R. G. (2007). Using experimental analysis to determine interventions for reading fluency and recalls of students with learning disabilities. *Learning Disability Quarterly*, 30, 115-129.
- Wise, J. C., Sevcik, R. A., Morris, R. D., Lovett, M. W., Wolf, M., Kuhn, M., ... Schwanenflugel, P. (2010). The relationship between different measures of oral reading fluency and reading comprehension in second-grade students who evidence different oral reading fluency difficulties. *Language, Speech and Hearing Services in Schools*, 41, 340-348.
- Yılmaz, M. (2006). *İlköğretim 3. sınıf öğrencilerinin sesli okuma hatalarını düzeltmede ve okuduğunu anlama becerilerini geliştirmede tekrarlı okuma yönteminin etkisi* (Unpublished doctoral dissertation). Gazi University, Institute of Educational Sciences, Ankara.
- Yılmaz, M. (2008). Kelime tekrar tekniğinin akıcı okuma becerilerini geliştirmeye etkisi. *Türk Eğitim Bilimleri Dergisi*, 6(2), 323-350.
- Yıldırım, K., & Ateş, S. (2012). Silent and oral reading fluency: which one is the best predictor of reading comprehension of Turkish elementary students?. *International Journal on New Trends in Education and Their Implications*, 3(4), 79-91.
- Yıldırım, K., & Rasinski, T. (2014). Reading fluency beyond English: Investigations into reading fluency in Turkish elementary students. *International Electronic Journal of Elementary Education*, 7(1), 97-106.
- Yıldız, M. (2013). Okuma motivasyonu, akıcı okuma ve okuduğunu anlamanın beşinci sınıf öğrencilerinin akademik başarılarındaki rolü. *Turkish Studies-International Periodical for The Languages, Literature and History of Turkish or Turkic*, 8(4), 1461-1478.
- Yıldız, M., Yıldırım, K., Ateş, S., & Çetinkaya, Ç. (2009). An evaluation of the reading fluency of 4th graders with respect to prosodic characteristic. *International Journal of Human Sciences*, 6(1), 353-360.
- Yüksel, A. (2010). Okuma güçlüğü çeken bir öğrencinin okuma becerisinin geliştirilmesine yönelik bir çalışma. *Kuramsal Eğitim Bilim*, 3(1), 124-134.