

An action research to overcome reading difficulties encountered after the Covid-19 pandemic

Keziban Tekşan ¹, Pınar Kanık Uysal ¹, Zeynep Çayır ¹

¹ Turkish Education, Ordu University, Ordu, Turkey

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CORRESPONDENCE

Zeynep Çayır,
zeynepaydincayir@gmail.com

ABSTRACT

This study aimed to overcome the reading problems of a student who had reading difficulties due to the effect of distance education during the Covid-19 pandemic with reading fluency strategies. For this purpose, the study was conducted with a 5th grade student studying in Turkey. The study was conducted with action research, one of the qualitative research patterns. Texts appropriate to the student's age and reading level, as well as researcher and student diaries were used as data collection tools. The student's reading errors were determined and presented with descriptive data, and a reading action plan was prepared for the low-performing student. Over 18 lesson hours, a reading program incorporating strategies such as repetitive reading, paired reading, guided reading, word repetition, and word box techniques was implemented. Post-intervention evaluation revealed that the student's reading level improved from the concern level to the instructional level, with notable progress in reading deficiencies. This study contributes to the literature by demonstrating that students with reading difficulties can enhance their reading skills through appropriate methods and techniques, mitigating the adverse effects of the pandemic period.

Introduction

Reading is a basic skill that all individuals must acquire. Reading skills, which begin to be acquired formally in the first grade of primary school, are an important factor affecting the success of an individual in both their social and academic lives. The act of reading, which has an important place in the lives of individuals, is not only seeing, converting what is seen into sound, but also includes the high-level skills of attention, focus, remembering, analyzing, making sense of, and interpreting. With the combination of these skills, the act of reading is completed and transformed into a meaning, image, action, etc. in the mind. In their learning experiences, individuals are expected not only to convert letters into sounds, but also to read fluently and meaningfully, and to understand what they read. It can be said that the individual's ability to interpret what they read by making sense of it, to access new ideas and thoughts, to synthesize it with their previous knowledge and use it in their subsequent learning, and to make inferences are indicators of the act of reading being a physical and mental action. This action begins with the individual's school life and continues to exist in a way that covers their entire life and living spaces. It can be said

that the situations that develop in the individual's life axis, independent of the individual, have an important place in their acquisition of reading skills and development of reading fluency skills. Indeed, the pandemic process experienced at a universal level in the recent period can be one of the reasons why this development has been negatively affected. It can be stated that distance education, which entered our lives with the pandemic, provides many benefits to the individual and society, but it also paves the way for the formation of some deficient practices and negative situations and brings with it certain difficulties for some students. It can be said that especially students who are new to reading and have reading difficulties need more support and guidance in the distance education process. Reading difficulties can be caused by neurodevelopmental disorders, as well as environmental factors and insufficient reading practice. Since teachers' opportunity to provide direct guidance has decreased in distance education, students have been away from one-on-one interaction, and this situation has caused students who are new to reading and have reading difficulties to have difficulty in reading, understanding and interpreting texts. Instant feedback, communication and interaction between teacher and student have an important place in reading studies and it can be said that distance education has been limited in this context. In addition to the online environment, distractions and technological problems at home can also negatively affect students' reading fluency skills and reduce their motivation to read. However, an individual must be able to read fluently and quickly in order to understand and make sense of what they read.

In fluent reading, the individual pays attention to punctuation marks, spelling rules, tones of voice and emphasis; performs the act of reading by avoiding unnecessary repetitions and returns and preserving the integrity of the meaning of the text (Akyol, 2010). Reading fluency has a natural structure that includes emotion, as if speaking. Kuhn, Schwanenflugel, Meisinger, Levy and Rasinski (2010) state that the individual's level of understanding the text may vary according to their reading fluency skills. However, fluent reading, which includes prosodic, accurate and serial reading skills, enables the individual to understand what they read (Kuhn et al. 2010). In addition to these views, Güneş (2007) also stated that individuals who have acquired reading fluency skills or have reading fluency skills pay attention to the stress points, intonation and punctuation marks during the act of reading and do not make unnecessary pauses or skips. As another view, Zutell and Rasinski (1991) state that reading fluency is recognizing the words in the text in a short time with little effort, following the spelling and punctuation marks, using the appropriate tone of voice and emphasis, and reading the meaning of the text by adding emotion and excitement.

Reading fluency is a three-legged component consisting of fast reading, accurate reading and prosody. For accurate reading, which is one leg of this three-legged component, it is necessary to know the letter features of the language, sound events, punctuation marks: the breadth of the vocabulary and to recognize the word quickly. Individuals with accurate reading skills perform the act of reading without skipping sounds, syllables, words or adding a non-existent sound, suffix etc. Reading speed, which is one of the three components, is related to the characteristics of the pauses, jumps and leaps that the eye makes on the line being read during the reading activity of the individual. If the reader is familiar with the different shapes and forms of the word, the pauses and leaps occur in a much shorter time and the reading speed increases (Kavcar, Oğuzkan & Hasırcı, 2016). In addition to some eye exercises for serial reading, frequent reading should also be done. Although this skill is an important skill, it can be said that focusing only on the speed of reading will cause especially primary school students to read incorrectly and to perform an action disconnected from the meaning, so it would be a more appropriate action to leave the action of fast reading to later periods (Keskinçiliç & Keskinçiliç, 2007). In fluent reading, which is a three-legged component; it is difficult for individuals who have not acquired accurate and serial reading skills to perform the action of prosodic reading (Keskin & Baştuğ, 2013: 202). Prosodic reading

skill, which is the natural reading of the text as if speaking, is the most important skill that shows that the individual performing the act of reading understands what he/she reads (Başaran, 2013). If the individual performing the act of reading has acquired prosodic reading skill, he/she pays attention to the intonations in the text as well as stress, punctuation and spelling; he/she experiences a natural process as if speaking by adapting the tone of voice while reading according to the dominant emotion in the text. When the studies conducted on this subject are examined; It is stated that individuals who understand the text they read, interpret it and put it into action have developed prosody skills. In this respect, it is indicated that prosodic reading skills are an important indicator that makes the act of reading meaningful (Başaran, 2013; Baştuğ & Akyol, 2012).

In order for an individual to carry out their academic and social life in a healthy way, it is essential to develop reading fluency skills and to do reading exercises. Thanks to reading exercises, the individual gains automaticity in word recognition, which reduces the mental power and time spent on word recognition. Thus, the individual uses this existing power and time more in constructing the meaning. In today's education system, the importance of gaining reading fluency skills has increased since the first year of education. Failure to acquire this skill in primary school and students' failure to develop this skill puts students in a difficult situation and causes them to be afraid of reading aloud. Text reading activities turn into a nightmare for these students. Hock et al. (2009) conducted a study with 202 students who passed from 8th to 9th grade and were described as weak readers and determined that 88% of these students had problems in fluent reading. Students with reading difficulties are not only at primary school level, but also at middle and high school level. It is an undeniable fact that if students cannot find solutions to their reading problems in younger grades, it becomes more difficult to carry out intervention studies in upper grades. The psychology of shame, being ridiculed by their peers, and being humiliated that develops with increasing age causes students with reading difficulties to withdraw and lose motivation. If this situation continues, it leads to low academic success and skills, and the student's termination of education due to negative learning experiences. Reading problems and literacy problems that cannot be solved at an early age continue in adulthood, causing low levels of education, unqualified employment, and often unemployment (Maughan et al. 2020).

In addition to these views, Karasu (2011) states in his article comparing individuals who have and have not acquired reading fluency skills that individuals who have acquired reading fluency skills perceive the text with little effort and perform a comprehensible and natural reading, and even transfer their remaining energy to areas such as understanding, comprehension, and interpretation because they exert little effort. He states that individuals who have not acquired reading fluency skills read words by spelling them slowly and put in a lot of effort for this action.

Purpose and importance of the research

All countries in the world, as well as Turkey, have been faced with the novel coronavirus Covid-19 outbreak since the first quarter of 2020. This disease, which the World Health Organization declared a pandemic worldwide, has negatively affected almost all social life in the areas of health, nutrition, transportation, sports, etc. Education has also been an area negatively affected by the outbreak and has affected many individuals. Due to the outbreak that has also affected Turkey, face-to-face education has been suspended and education has been attempted to be continued with distance education tools. During this process, students who were in the first grade of primary school and had to learn to read and write through distance education, continued their education with distance education again after face-to-face education was suspended in the second grade. In addition to situations such as negative social environments and experiences, individual differences, and educational deficiencies that prevent a student from gaining reading

skills, it can be said that the distance education model implemented during the pandemic period also presents a different obstacle for these students. These students are now 5th grade middle school students. In the Turkish reading course studies, it has been observed that the number of students experiencing reading difficulties has increased especially at the 5th grade level, and the possibility that this may be related to distance education has begun to be discussed by secondary school Turkish teachers.

In the literature, studies examining the effects of distance education on students' academic success indicate that the pandemic period and distance education negatively affected students' motivation and engagement in learning (Bao, 2020), that this period led to learning losses among students, and that these losses were especially greater among students with low socioeconomic status (Kuhfeld et al., 2020). Suadi, Hanida, and Siregar (2022) emphasized that literacy studies were seriously affected during the Covid-19 pandemic due to the transition from face-to-face education to online education; and that this change could create many obstacles in students' acquisition of literacy skills. They stated that obstacles such as teachers' inability to provide direct guidance to students in the online education environment, weak internet connections, device shortages, and high internet costs also made this process difficult. Similar results were observed in studies conducted specifically for Turkey; It has been stated by Toptaş and Öztop (2021) that the distance education application carried out during the pandemic did not produce effective results, that students could not reach the desired level of achievements in the courses due to the problems experienced in the process, and that incomplete learning occurred. In addition, Sirem and Baş (2020) stated that reading activities carried out in distance education negatively affected students in terms of comprehension and writing. Bozkurt et al. (2022), in their study examining the effects of Covid-19 on education, found that distance education also had significant effects on the psychological and social states of students. This situation reveals the need for individual intervention programs prepared for students affected by the adverse conditions of the pandemic period. Therefore, this study aimed to determine the learning losses encountered in the distance education process after the Covid-19 pandemic, to use effective intervention strategies to compensate for these losses and to eliminate reading difficulties; in line with this goal, it was aimed to develop reading fluency skills through teaching activities prepared and implemented specifically for the individual using reading fluency methods and techniques in overcoming reading difficulties. In this context, the study; In addition to identifying the reading errors of a fifth-grade student who has difficulty reading despite not having any physical or mental disabilities, various methods and techniques were used to eliminate these errors. It is thought that the applications in the study will have beneficial effects on teachers and parents who are interested in reading fluently or who have students who have problems in this regard, in terms of providing guidance to students with reading difficulties.

This study aimed to eliminate the reading fluency problem of a student with reading difficulties by using reading fluency strategies. The following questions were sought for this basic purpose:

1. How did the reading fluency skills of the student with reading difficulties improve during the study?
2. How did the reading fluency skills of the student with reading difficulties change after the study?

Method

Research model

In this study, which was conducted to solve the problems of a fifth-grade student with reading difficulties, the action research method, one of the qualitative research methods, was used. Instead of a single method/technique, action research, which integrates research and actions with a flexible range of actions that include different and multiple steps (Somekh, 2006), is the definition of the problem and the intervention of the action to solve the problems. It is a research model that measures how successful the interventions are and includes retrying processes (Gürgür, 2016; O'Brien, 2001). In this research, which includes the steps of determining an existing problem, finding a solution to the problem, implementing and evaluating the solution found, changing the thoughts of the person who applied it, and the application guided by the evaluation, a student studying in the fifth grade of middle school and having reading difficulties was studied. In Turkey, numerous interventions exist for students experiencing reading fluency difficulties (e.g., Akyol, Çakıroğlu, & Kuruyer, 2014; Kanık Uysal & Akyol, 2019; Kaşkaya, 2016). However, these interventions often lack the characteristics of a collective consciousness, routine, or systematic approach within schools. Consequently, there is a recognized need to examine the decisions and actions taken by teachers in response to the challenges faced by children with reading fluency issues. This necessity underpins the rationale for conducting this research using the action research method.

Participant selection and characteristics

The criterion sampling method was used in selecting the participant student. The criteria used:

- i. The teacher's observation that the participant student could not read fluently in oral text readings in line with the Turkish course outcomes
- ii. As a result of the measurement and evaluation made after the observations, the student's word recognition skills were at the level of concern and his reading speed was low.

Information about the student codenamed Akin, who was selected in line with these criteria, is as follows:

Akin: He is a 5th grade middle school student. The ten-year-old student is the only child of a family that lost two children to SMA disease, and he lives with his mother and father.

His mother is a housewife, and his father is a worker. Akin is not a successful student in his studies, but he is quite talented in sports, especially football. He has a positive relationship with his friends, he is a well-liked, calm and respectful child. The student, who does not have any mental, visual or auditory problems, was determined by his Turkish teacher to have a problem with reading. His mother stated that the student gets bored very easily and therefore cannot pay attention to his lessons, and therefore has difficulty in doing his homework and reading.

Working Environment: The research was conducted in a room in the school library on weekdays. The participant had visited the school library many times before, so he did not have any difficulty adapting to the working environment. The study was conducted in an environment with two chairs and a table, ensuring that there were no objects or materials that could distract the participant.

Action research process

Determining the problem status

After the teacher observations conducted in the classroom, the participant was made to read a reading text at his/her own grade level (5th grade) in order to determine the reading errors of the participant student. When the measurement was made with the 5th grade level text, it was seen that the participant's reading level was at the concern level. Thereupon, a measurement was made with a 4th grade level text, and it was determined that the participant's reading level was again at the concern level. When the measurement was made with a text at the 3rd grade level, which is a lower grade, it was seen that the participant's reading level was at the instructional level. Therefore, it was deemed appropriate to start the study with 4th grade level texts. The texts used to collect the pre-application data, and the results obtained from these texts are shown in Table 1.

Table 1 Pre-implementation data

Grade Level		Text	Word Recognition	Reading Speed	Reading Level
3rd Grade	Pre-Implementation	Uçurtmam Bulut Şimdi	%94	52	Instructional Level
4th Grade	Pre-Implementation	Beştaş ve İki Ceviz Bileti	%92	64	Concern Level
5th Grade	Pre-Implementation	Çocuk Bahçesindeki Bekçi	%90	57	Concern Level

Along with the reading levels seen in Table 1, the reading errors made by the participant were also determined and the most frequent errors were determined. It was observed that the most frequent errors made by the participant were misreading, adding words, skipping lines, skipping words, not paying attention to punctuation marks, stress and intonation. In order to eliminate these reading errors and develop reading fluency skills, a literature review was conducted and it was decided to use the strategies of repetitive, paired, guided reading, word repetition and word box fluent reading. Then, a reading action plan was prepared by taking expert opinion and including these strategies, which will be applied for 18 lesson hours in six weeks.

Action plan

The six-week action plan prepared after determining the problem status and obtaining expert opinion is presented in Table 2.

The work carried out in line with the above action plan (Table 2) prepared to eliminate Akin's reading errors and improve his reading fluency skills can be summarized as follows:

This study, which aims to increase the reading fluency level of the participant student, was carried out as three lessons (120 minutes) per week, with one lesson hour on Wednesday, Thursday and Friday. The study was completed in 18 lesson hours in 6 weeks. Repetitive, paired, guided reading, word repetition and word box strategies were used to develop the reading fluency skills of the participant student. The steps taken while applying these selected strategies are as follows: In order to increase Akin's desire to study and to make him feel comfortable, he was chatted with and it was stated that this study did not have a grade value and that he would be helped with the words he had difficulty with. The participant was told that he would be given a reading text and that he should read this text out loud. When the participant felt ready, a copy of the text to be read was given to him and the study was started by placing the other copy in front of the researcher.

Table 2 Action plan

	Text Read	Grade Level of the Text Read	Implementation Method
1ST WEEK 25.12.2023 -29.12.2023	Dedemin Öyküsü	4th Grade	Repeated reading Paired reading Guided reading Word repetition technique
2ND WEEK 02.01.2024 -05.02.2024	Otomobil Uçar Gider	4th Grade	Repeated reading Paired reading Guided reading Word repetition technique Word Box Strategy
3RD WEEK 08.01.2024 -12.01.2024	Kitaplar Ne İşe Yarar?	4th Grade	Repeated reading Paired reading Guided reading Word repetition technique Word box strategy
4TH WEEK 15.01.2024 -19.01.2024	Anadolu'da Konukseverlik	5th Grade	Repeated reading Paired reading Guided reading Word repetition technique
5TH WEEK 22.01.2024 -26.01.2024	Wright Kardeşler	5th Grade	Repeated reading Paired reading Guided reading Word repetition technique Word box strategy
6TH WEEK 29.01.2024 -02.02.2024	Ebru Sanatı	5th Grade	Repeated reading Paired reading Guided reading Word repetition technique Word box strategy

The participant's reading performance was recorded simultaneously, while the participant was reading the text, the words that the participant read incorrectly and incorrectly were determined by the implementer, and then the words that the participant read incorrectly and with difficulty were written on word cards. After reading, these word cards were read to the participant and the participant was asked to read. In cases where the participant had difficulty reading, the participant was helped, and if there were words that he did not know, the meanings of the words were explained to the participant. The word repetition technique was continued until the participant read each word fluently. Afterwards, the reading text was read together by the researcher and the participant by paired reading, the participant's reading was monitored and the words he read incorrectly or had difficulty were identified. If different words were identified from the first reading, these words were added to the word cards after the second reading was completed and word repetitions were made. Then, the third reading was done independently by the participant. While applying the word box strategy, the words that the participant read incorrectly were identified, the words were read aloud to the participant and each incorrect word detected was said to the participant in order. The participant was asked to create boxes on paper as many as the number of sounds he heard in each word spoken to him and to write the word spoken in these boxes. This study was continued until the incorrectly read words were completed. During writing, it was observed that the participant wrote words incorrectly or incompletely and these mistakes were tried to be corrected. Later, "Repeated Reading" and "Paired Reading" were done on these words to ensure that the participant learned these words. The participant was made to read repeatedly until fluency was achieved in the text.

The participant was told that he/she would be given a reading text and that he/she would have to read it out loud. When the participant felt ready, a copy of the text to be read was given to him/her, and the other copy was placed in front of the researcher and the study began. The participant's reading performance was recorded simultaneously. While the participant was reading the text, the words that the participant read incorrectly and incorrectly were identified by the implementer and these words were noted. The participant was then asked to draw a rectangle and the word that the participant read incorrectly and with difficulty was read to him/her. The participant was asked to divide the rectangle so that there was a box for each sound he/she heard in the word spoken to him/her. This activity continued until the participant divided each word, he/she read incorrectly. Then, the reading text was read together by the researcher and the participant, the participant's reading was monitored and the words that he/she read incorrectly or with difficulty were identified. If different words were identified from the first reading, the same activity was continued with these words after the second reading was completed and the words were repeated. Then, the third reading was done independently by the participant.

While the researcher observed that Akin was generally eager and happy during the studies, the study was paused for the participant to rest when Akin got tired, bored or distracted. The study was continued when the participant felt ready after resting. The participant was given positive feedback to encourage him to study and homework was given from time to time to support the studies.

Data collection tools

In this research, "Reading Texts" and "Researcher and Student Diaries" were used as data collection tools.

Reading Texts: Texts taken from books approved by the Ministry of National Education and the Board of Education and Training, and appropriate to the participant's reading performance and level, determined by expert opinion, were used.

Researcher and Student Diaries: The feelings, thoughts and impressions regarding the activities were reflected in writing through the diaries. These data obtained were considered important in creating and interpreting the research findings.

Data collection and analysis

The "False Analysis Inventory" was used when analysing the data.

Incorrect Analysis Inventory: In this study, the "Incorrect Analysis Inventory" adapted from Ekwall and Shanker (1988) by Akyol (2016) was used to determine reading and comprehension errors. This inventory can be used to measure students' reading fluency and reading comprehension skills. According to this inventory, the teacher's decision to go over, add, misread, reverse, and repeat words for students who cannot read in 5 seconds is determined as a reading error. Three types of reading levels can be determined with this inventory.

- a) Concern level: Making too many mistakes while reading a text that is appropriate for the level and understanding only a small part of the text.
- b) Instructional level: Reading and understanding an appropriate text with help.
- c) Free level: Reading and understanding appropriate texts without needing any help.

In determining these levels, the reading level and percentage quoted by Akyol (2016) from Ekwall and Shanker (1988) were used as criteria.

Table 3 Reading levels and percentages

Reading Level	Word Recognition
Free Level	%99 and above
Instructional Level	%93 - %98
Concern Level	%92 and below

There are no uniform criteria for students' reading speeds based on grade level and term in our country. However, a large-scale oral reading fluency norm was created by Hasbrouck and Tindal (1992) in the literature. Although the applicability of these values in the Turkish context is a matter of debate, it is thought to be a guide for teachers to determine the levels of students.

The oral reading fluency norm created by Hasbrouck and Tindal (1992) was used as a criterion in determining reading speed.

Table 4 Reading speed ratios

Targeted Reading Rates by Class			
Class Level	Correct Number of Words to Read in One Minute		
	Fall/Autumn	Winter	Spring
3	50-110	70-120	80-140
4	70-120	80-130	90-140
5	80-130	90-140	100-150

The analysis and evaluation of the research data were carried out in a coordinated manner by ensuring order and harmony in all stages of the action research. The interpretation of the quantitative data of the research (pre-test-post-test) was carried out in line with the guidance in the literature regarding the use of relevant measurement tools.

In the analysis of qualitative data, content analysis was used, and in order to support the quantitative data, the qualitative data obtained from the student and researcher diaries were analysed and used as supporting data in the findings.

Findings

Findings regarding the reading speed and word recognition level of the student with reading difficulty in the application process

In the study conducted in line with the reading action plan, the participant's first and last reading levels of the texts, reading speed were determined, and the results of the reading level evaluation and the findings regarding the number of words read per minute are given in Table 5.

Table 5 Word recognition percentage - reading level – reading speed

	Text Read	Grade Level of the Text Read	First Reading Word Recognition Percentage	Initial Reading Level	Final Reading Word Recognition Percentage	Final Reading Level	Initial Reading Speed	Last Read Speed
1 st Week 25.12.2023- 29.12.2023	Dedemin Öyküsü	4 TH Grade	%90	Concern Level	%94	Instructional Level	56	67
2 nd Week 02.01.2024- 05.01.2024	Otomobil Uçar Gider	4 TH Grade	%94	Instructional Level	%100	Free Level	56	81
3 rd Week 08.01.2024- 12.01.2024	Kitaplar Ne İşe Yarar?	4 TH Grade	%96	Instructional Level	%99	Free Level	63	87
4 th Week 15.01.2024- 19.01.2024	Anadolu'da Konukseverlik	5 TH Grade	%92	Concern Level	%94	Instructional Level	48	66

5 th Week 22.01.2024- 26.01.2024	Wright Kardeşler	5 TH Grade	%95	Instructional Level	%98	Instructional Level	64	107
6 th Week 29.01.2024- 02.02.2024	Ebru Sanatı	5 TH Grade	%96	Instructional Level	%99	Free Level	63	94

When Table 5 is examined, it was determined that the participant's reading level was at the concern level in the first measurement made in the first week, and after the application of reading fluency strategies, the reading level in the same text increased to the instructional level at the end of the 3rd day. In the first measurement made in the second week of the application, it was determined that the participant's reading level was at the instructional level, and after the application of reading fluency strategies, the reading level in the same text increased to the free level at the end of the 3rd day. Then, in the first measurement made in the third week, it was determined that the participant's reading level was at the instructional level, and after the application of reading fluency strategies, the reading level in the same text increased to the free level at the end of the 3rd day.

Since it was determined that the participant had reached a free level in reading texts at the 4th grade level, the study was continued with reading texts at the 5th grade level. In the first measurement made in the 4th week of the application, it was determined that the participant's reading level was at the concern level, and after the application of reading fluency strategies, at the end of the 3rd day, his reading level in the same text increased to the instructional level. In the first measurement made in the 5th week of the application, it was determined that the participant's reading level was at the instructional level, and after the application of reading fluency strategies, at the end of the 3rd day, his reading level in the same text was again at the instructional level.

According to Table 5, it was determined that the participant's reading level was at the instructional level in the first measurement made in the 6th week, and after the application of reading fluency strategies, his reading level increased to the free level in the same text at the end of the 3rd day.

It was observed that the participant, whose reading level and reading speed were determined, had an increase in both his reading level and reading speed.

Findings regarding the post-implementation reading speed and word recognition level of students with reading difficulty

The findings obtained by comparing the post-implementation evaluations with the pre-implementation evaluations after the completion of the six-week program are presented in Table 6.

Table 6 Pre-implementation – post-implementation data

Class Level		Text	Word Recognition	Reading Speed	Reading Level
4th Grade	Pre-Implementation	Beştaş ve İki Ceviz Bileti	92	64	Concern Level
4th Grade	Post-Implementation	Beştaş ve İki Ceviz Bileti	98	94	Instructional Level
5th Grade	Pre-Implementation	Çocuk Bahçesindeki Bekçi	90	57	Concern Level
5th Grade	Post-Implementation	Çocuk Bahçesindeki Bekçi	98	96	Instructional Level

When Table 6 is examined, when the pre-application and post-application values of the text read by the participant at the 4th grade level are examined, it is determined that the participant's word recognition level increased from 92% at the concern level before the application to 98% at the end of the application, and his reading speed increased from 64 to 94. When the pre- and post-implementation values of the 5th grade reading text were examined, it was determined that the participant's word recognition level before the application was at the concern level of 90%, while it increased to the instructional level of 98% at the end of the application, and his reading speed increased from 57 to 96. In the evaluation made on the two texts, it was seen that the participant's concern level reached the Instructional level.

In addition to the development in word recognition and reading speed, it was observed that there were positive developments in the participant's attitudes and behaviours towards reading. It was observed that the participant student gained self-correction behaviour while reading, corrected himself by going back and correcting the mistakes he made and acted more carefully.

When the student diary was examined, it was seen that the participant enjoyed the study, was happy, was aware of the development in his reading level and started to like reading. The participant made the following reflections about this situation in his diary:

"I read quickly, corrected my mistakes, and read well." (Student diary dated 04.01.2024)

It was observed that the participant made self-evaluations in his diary, noticed his mistakes and showed correction behaviour, and that his sense of confidence developed while performing the act of reading.

"I read better, I read faster, I am very happy." (Student diary dated 12.01.2024)

From the above reflection, it is understood that the participant was satisfied with the study process and his development in reading level.

"I read it well, it is a nice feeling. I liked reading." (Student diary dated 25.01.2024)

In the reflections in the participant's diary, it was seen that he developed a positive attitude towards the act of reading with the increase in his reading fluency skills. In the interviews conducted with the participant and his family, Akin and his family stated that there was an improvement in his reading fluency skills through the techniques applied. When the reflections were examined, it was understood that the applied work contributed to the improvement of the difficulties experienced by the participant in terms of accurate reading and reading speed, and to the development of his reading fluency skills.

Discussion and conclusion

In this study, which aims to determine the reading problems of a 5th grade student who does not have any disability (physical, mental) and has reading difficulties and to eliminate these problems with reading fluency strategies, it was observed that the participant's reading errors decreased, his word recognition percentage and the number of words read per minute increased after 18 hours of practice. As a result of the pre-tests, it was determined that the participant made many reading errors and had difficulties while reading. It was observed that the most common errors made by the participant were misreading, adding words, skipping lines, skipping words, not paying attention to punctuation and intonation. After determining that the participant's word recognition and reading level was at the concern level, a reading action program was prepared, and this program was implemented for 6 weeks. After the implemented program, it was determined that the participant's reading level, which was at the concern level in both fourth and

fifth grade reading texts, increased to the teaching level. This result showed that reading fluency strategies have positive effects on word recognition and reading levels. This development seen in word recognition and reading levels was also seen in reading speed. These findings showed that the participant's reading with appropriate study strategies increased his reading level.

The participant, whose reading level was determined to be below his/her class level before the application, was observed to have increased to the teaching level of his/her class level at the end of the application and his/her reading speed increased from 57 words per minute to 96 words. The words that the participant had difficulty with in the first reading were automatically recognized with the word cards, word boxes and repeated reading of the text, and it was observed that the words were read fluently by the participant. As the participant became familiar with the words, the participant made fewer mistakes. Studies in literature also support this finding. While Yılmaz and Köksal (2008) from academic studies conducted in the context of repeated reading concluded that repeated reading improves the individual's ability to comprehend what he/she reads, corrects errors in reading aloud that are perceived with the eye, grasped with the mind and vocalized with the speech sense organ, Peksoy (2018) also concluded that repeated reading has a positive effect on the development of this skill in individuals who have difficulty in reading.

While repetitive reading and word repetition strategies positively affect accurate reading, paired reading is important in terms of being a role model for the student. When the student reads with the practitioner who is a better reader than him, paying attention to punctuation and emphasis and adjusting his speed accordingly, it was observed that the participant read quickly and fluently. When the literature is examined, Yamaç (2014), İşler and Şahin (2016) found that the paired reading strategy, Sağlam (2019) found that repetitive and echoing reading methods improve students' reading comprehension, fast and reading fluency skills, and Çayır and Ulusoy (2014) found that echoing, chorus, and paired reading plans and reader theater improve students' fast and reading fluency skills, reduce reading errors and improve reading comprehension skills. Ay (2020) also reached a similar conclusion with similar content in his research with fourth-grade students in basic education. Studies in literature also show that paired reading increases reading fluency skills.

When all the findings are evaluated, it is seen that repeated, paired, guided reading, word repetition and word box strategies have positive effects on developing reading fluency skills. It is seen that the participant became willing to read and enjoyed reading with the strategies used. The findings obtained from the interviews conducted with the participant and the student diary also show that the participant enjoyed the application process and was aware of the development seen in his reading level. This situation also contributes to the development of the participant's self-confidence. The interviews conducted with the family also support this. At the same time, the strategies used are easily applicable in terms of time and cost.

Based on the results obtained from this research, the following recommendations are proposed:

Reading fluency assessment studies should be carried out for 5th grade students, the first-grade level of secondary school, and individual or class-based applications should be developed based on the results obtained.

Students with reading difficulties are not only at the primary school level, but there are also students who experience this problem at the secondary and high school levels. If students cannot find solutions to their reading problems in the younger grades, it becomes difficult to carry out intervention studies in the upper grades. It is thought that decisions and special measures should be taken in schools regarding the provision of the necessary individual support to students who do not have any disabilities but have reading difficulties, that reading studies should be carried

out in line with these decisions and that these studies should be supported by authorized persons. It may be recommended to come together with experts on the subject, to prepare and implement individual programs that use appropriate strategies for students with reading difficulties.

In addition, teachers should be made aware of this issue, and it may be recommended that training be organized on how to identify a student with reading difficulties and how to intervene. It may be recommended that school administrations be supportive in this regard and take on a facilitating role in the implementation of the work.

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Appendix 1

Implementation images

