# Students' Levels of Using Reading-Comprehension Strategies in relation to their Proficiencies in Reading Fluently 

# Öğrencilerin Akıcı Okumalarına Göre Okuma-Anlama Stratejilerini Kullanma Düzeyleri 

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#### Abstract

Fluent reading is a skill in which an individual increases his/her information process speed through the use of elements related to reading. He/she also can use reading-comprehension strategies more effectively while increasing the speed of information process. In this study, the reading-comprehension levels of the students in terms of the fluent reading abilities of the students were analyzed. To do that, 131 primary school $6^{\text {th }}$ grade students formed the study sample. The reading levels of the students were determined by a multi-dimensional fluent reading scale followed by tests on reading-comprehension strategies. Data were represented through percentages, averages, berivate correlations, one-way variant analysis, t-test and LSD techniques. Finally, the readingcomprehension strategies usage levels of the students were determined in relation to their sex and fluent reading levels. Within the frame of the findings, some suggestions were made on learners' reading-comprehension processes.


Keywords: Fluency, reading, reading comprehension, reading comprehension strategies
Öz
Akıcı okuma, bireyin okuma ile ilgili öğeleri kullanarak bilgi işleme hızını artırdığı bir beceridir. Bilgi işleme hızını artırırken okuma-anlama stratejilerini daha etkin kullanabileceği konuma gelmektedir. Bu çalışmada, öğrencilerin akıcı okuma yeterliklerine göre okuma-anlama stratejilerini kullanma düzeyleri incelenmiştir. Bu amaçla ilköğretim altıncı sınıfa devam eden 131 öğrenci çalışma evrenini oluşturmuştur. Çok boyutlu akıcı okuma ölçeği ile öğrencilerin akıcı okuma düzeyleri belirlenmiş, daha sonra okuma-anlama stratejileri kullanımıyla ilgili testler verilmiştir. Ölçme araçlarından elde edilen veriler, yüzdelik, aritmetik ortalama, berivate korelasyon tekniği, tek yönlü varyans analizi, $t$-test, LSD tekniğiyle analiz edilmiştir. Araştırma sonucu, öğrencilerin cinsiyetlerine, akıcı okuma düzeylerine göre okuma-anlama stratejilerini kullanma düzeyleri belirlenmiştir. Elde edilen bulgular çerçevesinde, akıcı okuma sürecine yönelik bazı öneriler dile getirilmiştir.

Anahtar Sözcükler: Akıcı okuma, okuma, okuma-anlama, okuma anlama stratejileri

## Introduction

Reading is a complex process in which the reader vocalizes written symbols, performs analysis in his mind, and attributes certain meanings to what he reads. The reader tries to vocalize symbols as shown and perceive sound groups as a whole while acquiring their reading ability. It is a gradual progress depending on repetition for the reader to recognize and analyze the words read during mechanical reading. Understanding improves with the increase in the reading speed of the reader. This is because there is a linear relation between speed reading and transfer of the read text information to working memory, keeping the information said in the memory, and recalling the information said (Berniger, Abbott, Swanson, \& Lee, 2010; Swanson \& O'Connor, 2009). A reader who reads fast and

[^0]correctly devotes less energy to the analyzing process. The reader will have a chance to direct the rest of the cognitive energy to understanding. Reaching the desired level in understanding what is read depends on spending less time on the analyzing process (LaBerge \& Samuels 1974). It is possible for reader to attain this capability by fulfilling the requirements of the prosodic reading, which includes speed and correct reading (Schreiber 1980; 1991; Schreiber \& Read, 1980). A reader possessing fluent reading ability absolutely performs such basic abilities as correct pronunciation of the sound units read, pausing when necessary, and intonation of the words depending on their functions in the sentence. These abilities facilitate the reader to make sense out of what is read.

If a reader reads correctly and fast, but does not give necessary pauses and does not stress the words at the right place and right time, the sound patterns read by him will sound routinized, the rhythm will be lost, words will be linked to one another, and the syntax will cause losses in the sentence meaning. Fluent reading is considered a reading process that pays attention to punctuation, emphasis and intonation, that does not contain backtracks or repetition of words, that does not make spelling or redundant pauses, and that is delivered as if talking by paying attention to meaningful units. There are three types of reading: correct reading, speed reading, and reading by paying attention to prosodic features. Correct reading enables correct transfer of text information to the working memory while speed reading ensures more information input to the memory at a unit of time.

A reader having fluent reading ability creates an eye-voice width to follow what is read by moving his eyes before his voice. Moreover, such a reader successfully pronounces the words in the sentence, and stresses on words in accordance with their functions (Ashby \& Clifton, 2005: cited in Courbron, 2012). The success of the reader in daily life depends on the efficient use of his fluent reading abilities. This is because fluent reading is one of the indicators of understanding an individual (Stayter \& Allington, 1991).

Competency of the reader in using such organs as the brain and eye, tongue and teeth affects his perception. The use of reading and understanding strategies affects meta-cognition and realization of the importance of reading in daily life affects his affective aspects. In fluent reading, the reader uses these three abilities in a complementary and coordinated way. Researchers agree that for a reader to understand the text in fluent reading, he should go beyond the mechanics of reading and read the text according to its semantic and syntactical units (Rasinski, 1990, 1994, cited in Kuhn \& Stahl, 2003). This is because the purpose of the reader in reading is to understand what is read (Sweet \& Snow, 2002), to make an inference, and to facilitate his life by associating this with his social life. That is why the reader enters into a multidirectional interaction with the text (Rumelhart, 1994). Interaction of the reader with the text starts with the eyes, voice and emotions and ends with cognitive and affective integration. During this process, the reader uses his prior knowledge in his memory, associates his own knowledge with the messages expressed by the author in the text and integrates such knowledge. At the end of this interaction, he obtains a product, which he can explain with his own expressions with which he is satisfied. He spends an intense cognitive effort in order to obtain this product (Afflerbach, 1990; Anderson \& Pearson, 1984; Meneghetti, Carretti \& De Beni, 2006).

For a reader, understanding a text and drawing unique conclusions from it mostly depends on using intra-textual clues, combining word groups consistent with theme of the text (Gernschbacher, 1997), integrating the text read with the already existing knowledge and using the cognitive strategies that enable him to check whether he understands what he reads during the reading process (National Reading Panel, 2000; Snow, 2002). The reader uses understanding strategies to check whether he understands what he reads. Understanding is under the control of cognition and metacognition. Understanding uses and manages metacognition direction strategies to control the meaning. Strategies are generally the behaviors selected and controlled by the metacognition for the reader to reach his aims (Carrell 1989, 129). The reader uses meaning direction strategies to control the reading process. Within this context, he asks questions about the text, repeats what he has read in his own words, tells what he has understood to someone else to be sure that he has understood the text correctly, draws conclusions from the read, reaches some kind of generalizations, and summarizes the text briefly. All that he does is cognitive activities he uses to direct the meaning.

It is very important that the reader uses metacognition during reading to understand the text and to direct the meaning, but it is more important that he is aware of how to use his cognitive activities. (Anderson, 1991). Readers do not only apply different strategies while reading, but also improve themselves by following and organizing the strategies they use thanks to metacognition (Pang, 2008).

In the reading and understanding process, readers apply before reading, during reading and after reading strategies. Within the scope of these basic strategies, the reader applies many controlled cognitive activities such as the following ones:
a) to guess the subject and content of the text,
b) to find the key words within the text,
c) to find the synonyms and antonyms of the words and phrases within the text,
d) to find out a specific information from details,
e) to distinguish ideas from realities,
f) to analyze the words specified in the text, g) to conclude from the content,
h) to find an appropriate title for the text,
i) to summarize the content of the given text,
j) to recognize the aim and main topic of the text,
j) to synthesize more information from any of the paragraphs and
k) to summarize the text with one's own words (Brantmeier, 2000; Pessley \& Warton 1997; Slaimber, 1999).

The reader integrates knowledge attained from the text read with his own knowledge through above-mentioned cognitive activities, and thus he enters into an effective process in which he logically structures the messages intended to be given by the author (Radoyevic, 2006). Depending on the relation between reading and understanding strategies applied during this process, any improvement in any of them will cause an improvement in the other (Vaughn, et al., 2000; Oconner et al., 2002). Effective usage of these two competences by the reader during reading-understanding process is positively reflected on his performance. Students who are capable of understanding what is read gets better prepared for the classes, take down correct notes from teaching material, and participate in the intra-class interaction processes more intensely. This situation enables them to improve their performance in the exams and exercises as well. The attention and motivation of the student is higher if he understands what he reads. Students who are aware of the said competence have self-confidence.

Existence of the relation between reading, understanding and fluent reading (Courbron, 2012) can be regarded as a process which enables readers to oversee the meaning without analyzing (Razinsky, 2004). If a student supports the fluent reading process with appropriate reading strategies, this will discipline his behaviors in cognitive perception and analysis.

This study seeks an answer to the question of whether differentiation in fluent reading abilities of students causes any variation in reading and understanding strategies (e.g. using words in paragraphs according to their meanings, associating ideas, finding and comparing differences, remembering details in the paragraph, finding the main idea, drawing conclusions from the paragraph, and summarizing the paragraph). To this end, hypotheses of the present study were structured according to the null hypotheses as follows:

1. There is no relationship between fluent reading ability of the students and reading-understanding strategies applied during reading-understanding process.
2. There is no difference between the levels of using reading-understanding strategies for students with higher fluent reading level and for students with lower fluent reading level.

## Method

Research has been done with $1316^{\text {th }}$ grade students attending state schools. Students' ages range between 11 and 13. They use their own mother tongue in their education. To determine students' reading fluency levels, multi dimensional "Oral Reading Fluency Scale" developed by Zutel and Razinski (1991) was used after translating and adapting it into Turkish. Fluent reading proficiency of students have been determined by their scores obtained from lower dimensions proficiency of "Oral Reading Fluency Scale". Students have been given eight different tests in order to determine their levels in using reading comprehension strategies.

## Measurement Tools

This scale was developed as a rubric including four items at four dimensions of fluent reading. The readers are assessed according to the determined items observed. Each student can get (4-16) total scores from this fluent reading scale. As a result of this observation, students are evaluated like this: scores between $0-4$ is very insufficient, $5-8$ is insufficient, $9-12$ is average and students who get $13-16$ scores are evaluated as higher level of fluent reading. In the adaptation phase, English text of "Multidimensional Oral Reading Fluency Scale" were given to 12 English teachers teaching to 6th grade students and teachers were asked to score their students'reading proficiency. By giving Turkish form of scale to the same teachers they were asked to score the same students' reading fluency level. Correlation value, between scores teachers gave to evaluate students in accordance with Multidimensional Reading Fluency Scale in both English and Turkish was 0.87. It has been thought that this scale can be used in Turkish courses. Consent was obtained to use the scale in this study.

Reading-Comprehension Tests: Eight different tests about reading comprehension strategies have been developed to determine students' levels of reading comprehension strategies. The reliability coefficient of the tests developed and the information concerning the questions in the scope of the tests are given in table 1.

Table 1.
Reliability coefficients and number of questions of reading comprehension tests.

| Types of tests used in the study | Number of <br> questions | r |
| :--- | :---: | :---: |
| Using word meanings appropriately | 20 | .72 |
| Finding opposite and similar ideas | 18 | .81 |
| Remembering details completely | 12 | .72 |
| Sorting expressions according to the plot | 10 | .76 |
| Establishing cause and effect relationships among the events | 10 | .74 |
| Predicting the results | 6 | .78 |
| Making inferences | 12 | .84 |
| Summarizing the main idea in one's own words | 8 | .76 |

The reliability coefficients of the tests were calculated through the Khr 20-21 formula method.

## Analysis of Data

Data was processed by using the SPSS 15 package program. Frequencies, percentages, arithmetic means, standard deviations, one-way analysis of variance, $t$-test for independent groups and LSD tests were used to process the findings. Findings

Among 131 students who participated in the reseach study, 79 (\%60) of them were female and 52 (\%40) were male.

Table 2.
Frequency distrubition of students according to multi-dimensional reading fluency scale scores

| Students' reading level | Level | N | $\%$ |
| :--- | :---: | :---: | :---: |
| High reading level | $(12-16)$ | 64 | 49 |
| Average reading level | $(7-11)$ | 45 | 36 |
| Low reading level | $(1-6)$ | 22 | 15 |
| Total |  | 131 | 100 |

According to the total scores of students obtained from multi-dimensional reading fluency scale, almost half of them (49) have good level of fluency in reading, one third of them (36) intermediatelevel fluency in reading and one-sixth of them (15) low levels of reading fluency.
Table 3.
Relationship between the students total score and levels of using reading comprehension strategies in paragraphlevel text

|  | N | $r$ | p |
| :--- | :---: | :---: | :---: |
| Finding the main idea | 131 | $.38^{* *}$ | 0,00 |
| Summarizing the paragraph | 131 | $.80^{* *}$ | 0,00 |
| Editing the paragraph according to flow of events | 131 | $.72^{* *}$ | 0,00 |
| Making cause-effect inferences | 131 | $.81^{* *}$ | 0,00 |
| Comparing and contrasting | 131 | $.50^{* *}$ | 0,00 |
| Guessing the conclusion | 131 | $.73^{* *}$ | 0,00 |
| Making deductions | 131 | $.81^{* *}$ | 0,00 |
| Making inferences | 131 | $.77^{* *}$ | 0,00 |
| ${ }^{* * S}$ Significance level of correlation is 0.01 |  |  |  |

${ }^{* *}$ Significance level of correlation is 0.01
The correlation coefficient has been determined as (.38) between the reading fluency score and the number of correct answers of students to the test given to determine the main idea of the paragraph.

Reading and comprehending the entire text at the paragraph level requires high level cognitive processes. It has been observed that there is considerable relation between students' scores obtained by reading fluency scale and number of correct answer to the test aiming to test of cognitive skills such as "bonding between cause and effect" (.81), "deducting from the paragraph" (.81), "summarizing paragraph by his own words" (.80), "making inference from the paragraph about daily life" (.77), "Estimating the conclusion of paragraph" (.73) As shown in Table 3, it is observed that there is a significant relationship between students'total scores obtained from multi-dimensional reading fluency scale and the reading comprehension test. Thus, it can be said that reading fluency and using reading comprehension strategies are two variables affecting one another. Data obtained shows that there is one to one relationship between these two variables.

It shows that students with high reading fluency proficiency increasingly obtain information from what they read, process these, think about information, use analysis and synthesis skills. While analysing the meaning of the text at the paragraph-level, defining similar and contrasting ideas and comparing them with each other has an important function.There is a relation between students' reading fluency scores and their number of correct answer to the determination test of similar and contrast ideas in the paragraph (.50).

Table 4.
Standard deviation and arithmetic means of students' scores obtained according to students'reading fluency levels

|  | Reading Fluency Level |  |  |
| :--- | :---: | :---: | :---: |
| Reading Comprehension Strategies | High grup | Average grup | Low grup |
| Finding the main idea | $\mathrm{n}=64$ | $\mathrm{n}=45$ | $\mathrm{n}=22$ |
|  | $\mathrm{M}=10,6$ | $\mathrm{M}=4,82$ | $\mathrm{M}=4,09$ |
|  | $\mathrm{SD}=1,07$ | $\mathrm{SD}=0,22$ | $\mathrm{SD}=0,22$ |
|  | $\mathrm{n}=64$ | $\mathrm{n}=45$ | $\mathrm{n}=22$ |
| Summarizing in one's own words | $\mathrm{M}=9,00$ | $\mathrm{M}=4,15$ | $\mathrm{M}=3,45$ |
|  | $\mathrm{SD}=2.69$ | $\mathrm{SD}=1,88$ | $\mathrm{SD}=0,85$ |
| Editing the paragraph according to flow of | $\mathrm{n}=64$ | $\mathrm{n}=45$ | $\mathrm{n}=22$ |
| events | $\mathrm{M}=7,03$ | $\mathrm{M}=4,13$ | $\mathrm{M}=4,09$ |
|  | $\mathrm{SD}=1,79$ | $\mathrm{SD}=1,45$ | $\mathrm{SD}=1,50$ |
|  | $\mathrm{n}=64$ | $\mathrm{n}=45$ | $\mathrm{n}=22$ |
|  | $\mathrm{M}=16,21$ | $\mathrm{M}=5.11$ | $\mathrm{M}=4,18$ |
| Making cause and effect inferences | $\mathrm{SD}=6,50$ | $\mathrm{SD}=2,82$ | $\mathrm{SD}=1,13$ |
|  | $\mathrm{n}=64$ | $\mathrm{n}=45$ | $\mathrm{n}=22$ |
|  | $\mathrm{M}=5,01$ | $\mathrm{M}=3,46$ | $\mathrm{M}=2.86$ |
| Comparing and contrasting | $\mathrm{SD}=1,79$ | $\mathrm{SD}=1,50$ | $\mathrm{SD}=1,74$ |
|  | $\mathrm{n}=64$ | $\mathrm{n}=45$ | $\mathrm{n}=22$ |
| Guessing the conclusion | $\mathrm{M}=7,65$ | $\mathrm{M}=3,91$ | $\mathrm{M}=3,50$ |
|  | $\mathrm{SD}=2,17$ | $\mathrm{SD}=1,31$ | $\mathrm{SD}=0,67$ |
|  | $\mathrm{n}=64$ | $\mathrm{n}=45$ | $\mathrm{n}=22$ |
|  | $\mathrm{M}=14,82$ | $\mathrm{M}=9.77$ | $\mathrm{M}=5,86$ |
|  | $\mathrm{SD}=3,11$ | $\mathrm{SD}=5,38$ | $\mathrm{SD}=0,99$ |
|  | $\mathrm{n}=64$ | $\mathrm{n}=45$ | $\mathrm{n}=22$ |
| Making deductions | $\mathrm{M}=10,62$ | $\mathrm{M}=7,57$ | $\mathrm{M}=5,50$ |
|  | $\mathrm{SD}=, 02$ | $\mathrm{SD}=2,43$ | $\mathrm{SD}=1,65$ |

As shown in Table 4, students who have high level of reading fluency have higher scores than average or low level of students. Scores of students who have high level of fluent reading are higher than average or low level of students as can be seen below:

Finding the main idea ( $\mathrm{M}=10.06$ ),
Summarizing the paragraph in one's own words ( $\mathrm{M}=9.00$ ),
Editing the paragraph according to flow of events ( $\mathrm{M}=7.03$ ),
Making cause and effect inferences ( $\mathrm{M}=16.21$ ),
Comparing and contrasting ( $\mathrm{M}=5.01$ ),
Guessing the conclusion ( $\mathrm{M}=7.65$ ),
Making deductions ( $\mathrm{M}=14.82$ ), and
Making inferences ( $\mathrm{M}=10.62$ ).
The $t$-test has been performed to determine whether the difference between the mean of their scores is important or not. It is observed that students who have high level of fluent reading are good at using reading comprehension strategies than average or low level of students.

Table 5.
One-way anova test results related to students'using level of reading comprehension strategies according to fluency level of students

| Reading and Comprehension Strategies | Sources of Variance | Sum of Squares | $d f$ | Mean Squares | F | $p$ | $L S D^{* *}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Finding the main idea | Between Groups | 991,03 | 2 | 495,51 | 13,28 | . 00 | $\begin{gathered} (1-2), \\ (1-3) \end{gathered}$ |
|  | With in Groups | 4776,14 | 128 | 37,31 |  |  |  |
|  | Total | 5767,17 | 130 |  |  |  |  |
| Summarazing in one's own words | Between Groups | 850,19 | 2 | 425,09 | 86,73 | . 00 | $\begin{gathered} (1-2), \\ (1-3) \end{gathered}$ |
|  | With in Groups | 627,36 | 128 | 4,90 |  |  |  |
|  | Total | 1477,55 | 130 |  |  |  |  |
| Editing according to flow of events | Between Groups | 277,56 | 2 | 138,78 | 51.79 | . 00 | $\begin{gathered} (1-2), \\ (1-3) \end{gathered}$ |
|  | With in Groups | 342,95 | 128 | 2,67 |  |  |  |
|  | Total | 620,51 | 130 |  |  |  |  |
| Making cause and effect inferences | Between Groups | 4276,26 | 2 | 2138,13 | 89.88 | . 00 | $\begin{gathered} (1-2), \\ (1-3) \end{gathered}$ |
|  | With in Groups | 3044,65 | 128 | 23,78 |  |  |  |
|  | Total | 7320,91 | 130 |  |  |  |  |
| Comparing and contrasting | Between Groups | 105,27 | 2 | 52,63 | 20,12 | . 00 | $\begin{gathered} (1-2), \\ (1-3) \end{gathered}$ |
|  | With in Groups | 334,77 | 128 | 2,61 |  |  |  |
|  | Total | 440,04 | 130 |  |  |  |  |
| Estimating the conclusion | Between Groups | 495,30 | 2 | 247,65 | 82,64 | . 00 | $\begin{gathered} (1-2), \\ (1-3) \end{gathered}$ |
|  | With in Groups | 383,58 | 128 | 2,99 |  |  |  |
|  | Total | 878,88 | 130 |  |  |  |  |
| Making deductions | Between Groups | 1540,26 | 2 | 770,13 | 51,73 | . 00 | $\begin{gathered} (1-2), \\ (1-3) \end{gathered}$ |
|  | With in Groups | 1905,47 | 128 | 14,88 |  |  |  |
|  | Total | 3445,74 | 130 |  |  |  |  |
| Making inferences | Between Groups | 519,07 | 2 | 259,53 | 57.52 | . 00 | $\begin{gathered} (1-2), \\ (1-3) \end{gathered}$ |
|  | With in Groups | 5770,47 | 128 | 451 |  |  |  |
|  | Total | 1096,55 | 130 |  |  |  |  |

The results show that several pupils who have poor reading comprehension skills at the end of the $6^{\text {th }}$ grade. Many pupils could not discriminate the main ideas and the trivial ideas in the text. As shown in Table 5, analysis of variance was conducted to reveal whether the difference between the arithmetic means is significant or not. When the results obtained were examined, it is observed that the difference is significant between students' level of using reading comprehension strategies according to reading fluency in reading paragraph-level text. LSD test was performed to determine the source of the difference depending on the reading fluency level. Differences in reading comprehension strategies students use to analyze text in the paragraph level according to the LSD test results;

By testing students' abilities in finding the main idea, summarizing in one's own words, editing according to flow of events, making cause and effect inferences, guessing the conclusion, making inferences and deductions, and comparing and contrasting, it has been found that the difference is significant between the first group who have high reading fluency level (12-16 points) and the second
group who have average reading fluency level ( $6-11$ points) and also between the first and the third groups who have low reading fluency level ( $1-5$ points).

It can be concluded that fluent reading levels influence effective usage of strategies applied by students in understanding texts at the paragraph level. The higher fluent reading level a student has, the higher success he achieves in analyzing the texts at the paragraph level and in giving correct answers to the relevant test questions.

## Discussion

Correct and absolute understanding of a paragraph by students depends on increasing their fluency in reading and using reading-understanding strategies effectively. Reading-understanding strategy refers to cognitive activities conducted by readers to improve their understanding ability. Fluent reading and reading-understanding strategies support one another if reader can effectively use them. For the reader to understand what he reads, he should recognize the words correctly, read them fast, and achieve a prosodic reading, which requires harmony of words and voice. This is because; fluent reading is one of the factors that facilitate understanding of the reader.

The proportion of the students with low and middle fluent reading level corresponds to a substantial rate among six grade primary school students participating in the present study. Over half of the students participating in the study $(51 \%)$ have a fluent reading problem. The results acquired in this study support the finding obtained by Begeny and Silver (2006) in a study conducted on $4^{\text {th }}$ grade students revealing that almost half of the students failed to read the reading materials at their own level.

In the present study, in contrast to the null hypothesis of "there is no relationship between fluent reading ability of students and reading-understanding strategies applied during readingunderstanding process," high level relationships were detected between the data acquired by students from oral fluent reading scale and the strategies used by students in understanding the texts read. For the students, a relationship was found between fluent reading level and summarizing the paragraph with their own words (r.80); between fluent reading and arrangement of the events in the paragraph in the order of happening (r.72); between fluent reading and drawing cause and effect relation from the paragraph (r.81); between fluent reading and making a guess about conclusion of the paragraph (r.73); and between fluent reading and drawing conclusions from the paragraph about daily life (r.77). It can be said that there is a high relationship between fluent reading levels and the strategies applied by students in reading texts at paragraph levels and in answering questions correctly.

The null hypothesis suggesting, "there is no difference between levels of using readingunderstanding strategies for students with higher fluent reading level and for students with lower fluent reading level" was rejected in the present study. On the contrary, it was observed that students with high fluent reading level gave two times more correct answers in comparison to the students with low or middle fluent reading levels to the questions at paragraph levels, which required usage of different strategies. It can be said that students with higher fluent reading levels use readingunderstanding strategies more efficiently. The results obtained in the present study are supported by the findings of many studies in the literature. In a study conducted on students experiencing difficulty in reading, Baydık (2011) determined that while using reading-understanding strategies, students had difficulty in finding the main topic, detecting a cause and result relation, summarizing the text, guessing the events in the text, and making inferences concerning the text (Baydık, 2011; Çetinkaya \& Erktim 2002). In a study conducted on students' usage of strategies on the basis of think-aloud protocol, Ling Lau (2006) found out that students who were good readers were more successful in comparison to students with lower fluent reading level in finding key words, structuring the main topic, actively using their foreknowledge, making comparisons, making inferences, giving generalizing explanations, managing the reading process, and correctly answering the questions they should solve in a problem they read.

Fluent reading enables reader to analyze the words correctly, establish a semantic link, pronounce the words with the least of errors, use them in line with his cognitive energy, make meaning analysis, and spend less energy in creating meaning (La berge \& Sammuels, 1974). That is why students with fluent reading ability attain more information from the text and can apply more strategies in comparison to the students with lower fluent reading ability.

Students who use fluent reading and reading-understanding strategies effectively transfer more information to the working memory thanks to fluent reading, and succeed more in analyzing, controlling and managing information as well as in applying and arranging different strategies. Reading-understanding strategies facilitate reader to mentally discipline himself in analyzing texts at paragraph level and to understand the text, and enable him to obtain truer and faster results. Findings obtained in the present study provide clues to reinforce this conclusion.

Considering the findings obtained in the present study, it can be concluded that students with higher fluent reading level use reading-understanding strategies effectively and succeed more in analyzing and interpreting texts at the paragraph level.

## Conclusion

In conclusion, there is relationship between effective usage of reading-understanding strategies and fluent reading of the $6^{\text {th }}$ grade students. Fluent reading constitutes one of the variables making up this relationship. Fluent reading supports usage of understanding strategies. Considering the fact that half of the students participating in the study have insufficient fluent reading level, it should be one of the primary goals of education at schools to eliminate this incompetency. This is because incompetency of students for applying reading-understanding strategies in reading and understanding the texts is directly affected by fluent reading. Based on this predictor, it can be suggested that students should strive for competency in terms of effective usage of both fluent reading and cognitive-based readingunderstanding strategies.

## Recommendations

Based on findings of the study, the following recommendations can be made. Fluent reading levels of students can be evaluated separately starting from the second grade in primary school in order to eliminate the incompetency of students in fluent reading. Depending on the situation obtained at the end of the evaluation, a fluent reading program based on the requirements of each student can be created. Programs can be arranged in a way to include intense reading and interaction depending on willingness of the students. Individual or group based practices can be performed with students in need of fluent reading. In the programs, content can be chosen from texts appropriate for levels of the students or above these levels. In texts above students' levels, individual guidance can be provided. While this guidance can be individual, it can also be converted into group guidance by including practices that are based on peer interaction. Adults in interaction with the children can support this process by using model reading and repeated reading methods.

Classroom teachers can be provided with information and abilities they need especially in terms of fluent reading. In the teaching process, activities to improve fluent reading ability of the students can be organized. Teachers should allocate adequate time for each student in order to pay attention to each student and improve fluent reading level of each student.

Fluent reading offers students an opportunity to effectively use the activities and behaviors they apply when using reading-understanding strategies. Therefore, after students pass from oral reading to silent reading phase, fluent reading efforts can be supported with such techniques as reading with word repetition method, reading by discussing, reading by associating with the text, reading by guessing, reading by asking questions, and reading by taking notes and summarizing.

Both fluent reading practices and efforts for improving reading-understanding strategies can be regarded as complementary activities. These efforts can include asking student-centered questions, creating a summary according to the content of the given text, showing the relationship between question and answer, summarizing explanatory and informative texts, creating story maps through stories, and information production activities based on text-schema interaction.

For students to use their reading-understanding strategies in a correct and effective way, all teachers serving in primary schools should attend in-service training courses about effective usage of reading-understanding strategies and fluent reading. Activities for teaching fluent reading and reading-understanding strategies can be organized for increasing awareness levels of teachers about the issue.

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