Speed reading and comprehension training needs analysis and curriculum development

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Abstract

The aim of the research is to determine the education needs for the speed reading and comprehension curriculum with the focus group interview method and develop the speed reading and comprehension curriculum. The research was designed according to the descriptive survey model and was performed as a case study. The study group of the research trained of six instructors. The qualitative data was analyzed through content analysis. In the light of the research findings, the results regarding the determination of the target group, goals, instruction and evaluation process, class size and education duration of the speed reading and comprehension curriculum were reached. In line with the findings, a speed reading and comprehension curriculum was designed. It is among the results that eye exercises in the instruction process of the speed-reading curriculum, which can be developed for those with attention deficit, adults and students at different levels, and formative tests in the evaluation process have an important place.

Keywords: Needs analysis, speed reading and comprehension, curriculum development, focus group interview

Introduction

Reading, reading comprehension and speed reading are among the basic skills that people of the twenty-first century should have. Speed reading and comprehension are the foundation of lifelong learning and learning to learn skills. Determining the education needs related to speed reading and comprehension and developing the speed reading and comprehension curriculum are important in terms of acquiring lifelong learning and learning to learn skills (Karacaoglu, 2022). Since all the elements of the curricula, especially the targeted gains, should be arranged according to the needs, the first step of developing a curriculum is to determine the education needs. As in all curricula, the objectives of the speed reading and comprehension curriculum should be determined according to realistic needs. The importance of needs analysis is obvious in determining the need for a curriculum for the preparation of the curriculum and determining what the real need is in order to meet this need in the best way. Determining the targeted gains, content and learning experiences; organization of learning experiences; the analysis of the needs is mandatory for the correct planning and implementation of the evaluation processes of the level of achievement of the targeted gains (Karacaoglu, 2018). Needs analysis in education focuses on learner deficiencies and enables the determination of the necessary knowledge and skills for a curriculum (Bosher & Smalkoski, 2002). Moreover, need analysis is important to develop quality process of faculties (Saklı & Titrek, 2019) and schools in education.

In the focus group interviews, which will also be applied in the needs analysis study to be carried out for the speed reading and comprehension curriculum, it should be determined what the participants of the curriculum should know, what skills and common values they should have (Brunton, 2006; Karacaoglu, 2018; Macdonald, 2008). It can be thought that the need for speed reading training will increase as the skills related to reading comprehension and speed reading gain importance all over the world (Arifin, 2015; Yalçın, Çeltik & Altınok, 2017). Considering that students who are preparing for exams have recently encountered skill-based questions consisting of long texts, the ability to read and comprehension gains even more importance. Moreover, studies emphasizing the relationship between reading comprehension skills and reading speed, cognitive achievement, learning outcomes, thinking and self-expression skills can be seen when examining the literature (Bozan, 2012; Chung, 2010; Coşkun, 2010; Çam, 2006; Demirel & Epçaçan, 2012; Karacaoglu, 2020; Şen Baz & Baz, 2018). Emphasizing that speed reading training also has a positive effect on reading comprehension, Dedebali (2010) revealed in his experimental study that speed reading training contributed not only to students' reading speed but also to their reading comprehension levels. Despite the contributions of speed reading training, it is remarkable that there is no compulsory course in formal education levels in Turkey and only one course curriculum has been prepared (Board of Education and

Discipline; BoED, 2021). For this reason, determining the needs for speed reading and comprehension curricula will make important contributions to the field. Group interviews with reference groups who have received training on the subject will allow the determination of realistic needs.

Focus group interview, which is defined as a technique in which information about the content of the spoken topic is obtained from a group of people with common characteristics, is a needs analysis technique based on the interaction and communication of the participants. Interviews take place in a small group that is not crowded. The group members discuss the common topic for several hours according to the directions of an administrator or moderator. The administrator or moderator carries out the group discussion by following the question directive and putting forward various topics focused on determining needs. This interview is recorded, organized and analyzed qualitatively (Çokluk et al., 2011; Karacaoglu, 2018).

Reaching information, reading and comprehension the information and questioning its accuracy has become more important than memorizing and storing information. In the twenty-first century world, where the possibilities for accessing information have increased so much, the skills of quickly scanning and reading the information, reading comprehension, interpreting and questioning the accuracy of information have naturally gained vital importance (Karacaoglu, 2020). The problem of this research is the ability to read and comprehension, which forms the basis of modern skills such as lifelong learning and learning to learn, and what is needed in a curriculum that will gain this skill. In this context, there was a need for a needs analysis for speed reading training.

Problem statement and sub-problems (hypotheses)

This research aims to identify speed reading training needs using focus group interview and develop the speed reading and comprehension curriculum. For this aim, answers to the following questions were sought:

1. Who needs a speed reading and comprehension curriculum and who should attend?
2. What should the participants of the speed reading and comprehension curriculum know, what skills and values should they have after the curriculum is completed?
3. Which activities, methods, technologies and tools should be used in the instruction process of the speed reading and comprehension curriculum?
4. How long should the speed reading and comprehension curriculum be and how many people should the groups be?
5. How should measurement and evaluation processes be done in the speed reading and comprehension curriculum?

Method

This research, which aims to determine the needs for the speed reading and comprehension curriculum, is suitable for descriptive survey model that reveals the current situation, since focus group interview, which is a qualitative method, is used. A qualitative method with case study design was used which provided a great deal of information about instructors' opinion. Focus groups are used to identify common views. Focus group interviews are a qualitative data collection process in which a group of experts in the field respond to the questions asked in an interactive discussion environment (Cresell, 2012; Hejres et al, 2017; Krueger & Casey, 2002; Rabiee, 2004). The aim of the focus group interview used in this study is to obtain in-depth, detailed and multidimensional qualitative information about the perspectives, experiences, interests, wishes, expectations, emotions, attitudes and habits of six participants who are speed reading instructors on the subject of speed reading training (Çokluk et al., 2011).

Before starting the focus group interview, consent was obtained from the interviewees to participate in the research, a brief explanation for the purpose was made and a warm and friendly atmosphere was created (Krueger & Casey, 2002). An interactive and positive group communication was provided between the participants. Then the following operations were performed (Cresell, 2012):

- The implementation was carried out in line with a flexible plan and the interviewees were introduced.
- During the interview, questions and answers were recorded with audio and video on the online platform.
- Notes were taken during the interview.
- After the main questions, the probe questions were used to gain more information.

- The interview was concluded in a courteous and professional manner.

Participants

Cresell (2012), emphasizing that focus group interviews can be carried out in groups of four to six people, group interviewing takes place by analyzing the detailed answers of a small number of participants to the questions asked by the researcher. Karacaoglu (2018) stated that focus group interviews could be held with six to eight participants. Bozkurt et al. (2012) state that it would be appropriate to have a minimum of four and a maximum of twelve participants in focus group interviews, while emphasizing that group discussions with a small number of participants would yield effective results. The study group in the focus group interview held within the scope of this research consisted of six instructors trained in the field of speed reading, taking into account the number of participants suggested in the literature. For the needs analysis carried out within the scope of the research, individuals who were entitled to receive the "Certificate of Achievement in Understanding Speed Reading Instructor" from Izmir Institute of Technology and who were speed reading instructors were selected.

Table 1. Characteristics of the instructors with whom focus group interviews were made

Instructor*	Age	Educational Status	Average Reading Speed
I1	44	Graduated	326
I2	40	Degree	240
I3	47	Degree	284
I4	47	Graduated	263
I5	51	Graduated	258
I6	32	Graduated	326

For the ethical considerations, name of the instructors was coded as I1 (Instructor 1) to I6 (Instructor 6)

Data Collection

In the research, focus group interview technique, one of the qualitative research methods, was used during the data collection phase. The participants expressed their sincere and honest views to the questions asked by the researcher on a recorded online platform. In the focus group interview, the following questions were asked to the participants who were certified speed reading instructors:

1. Who needs a speed reading and comprehension curriculum?
2. Who should join the speed reading and comprehension curriculum?
3. What should participants in the speed reading and comprehension curriculum know after the curriculum is completed?
4. What skills and values should participants in the speed reading and comprehension curriculum have after the curriculum is completed?
5. Which methods, technologies and tools should be used in the instruction process of the speed reading and comprehension curriculum?
6. How long should the speed reading and comprehension curriculum be?
7. How many people should groups be in the speed reading and comprehension curriculum?
8. How should the evaluation procedures of the speed reading and comprehension curriculum be done?
9. Is there anything else you would like to mention about the speed reading and comprehension curriculum?

Data Analysis

In the study, evaluations were made on the basis of focus group interview records. The analysis of the data obtained by the focus group interview technique consists of several stages such as examining, categorizing, tabulating the findings, recombining and interpreting. The analysis of the data is based on the focus of the study and the purpose of the research (Krueger & Casey, 2002; Rabiee, 2004). In this research, content analysis was carried out while analyzing the focus group interview data recorded online with audio and video (Çelik et al., 2020). While deciphering the records, the themes were determined and titled by the researcher. In the analysis of the data, the perceptions determined according to the themes it is given by paying attention to keep the spoken language as it is. The determined themes consisted of the following titles. Speed reading training;

- Target group of the curriculum
- The targeted cognitive gains of the curriculum
- Targeted affective gains of the curriculum

- Skills targeted in the curriculum
- The instruction process of the curriculum
- Duration of the curriculum
- Class size in the curriculum
- Evaluation process of the curriculum

Findings and Discussion

Qualitative evaluation findings were obtained by analyzing the data collected as a result of the focus group interview on speed reading training with the instructors, and the findings were interpreted. The following findings were reached by analyzing the focus group interviews with the participants and titled the themes.

Findings Regarding the Target Group of the Speed Reading and Comprehension Curriculum

In the light of the analysis of the focus group interview data, it has been found that those with attention deficit, adults and students at different levels can participate in speed reading training. In the focus group interviews, different instructors expressed that especially the students who are preparing for the exam need speed reading training more. It is also emphasized in other studies that students who take the exam need to read fast because they have limited time to answer all the questions (Chung, 2010). Although there are different opinions about the age limits of the students, the instructors have reached a consensus on the point that this education can start at an early age. It was emphasized that it can be more useful especially after primary school. Durukan's (2020) emphasis on speed reading training at primary school level supports this finding. Krumian (1999) also suggested that speed reading training courses should be opened in primary and secondary schools in order for students to reach higher reading rates and better comprehension skills. It has been emphasized that adults who have time problems are also included in the target group of the speed reading and comprehension curriculum. In the study conducted by Yalçın et al. (2017) with law faculty students, the emphasis that speed reading training should be taught as a compulsory course rather than an elective in law faculty and high school supports this result. A few of the views expressed by these findings are given below:

I1: Those with attention deficit should attend. It will be more effective from 6th grade onwards. On the other hand, anyone can participate as soon as they start reading and comprehension. Comprehension first, speed can be improved from behind

I2: Both students and adults can participate. I myself started this trainer to improve my own speed. It should be started after you enjoy reading. I think this age is the end of primary school and the beginning of secondary school. As he grows up with the new generation games in the digital age, he will enjoy speed reading exercises and will be more successful. More comprehensive play-based eye exercises should be developed for younger children. I am the best example. Anyone who wants to be able to manage my time well, read quickly and get into what they are reading and comprehension. Those who want to eliminate the dream gaps. Those who need fast scanning techniques while doing research.

I3: Speed or reading races at very young ages can distract from the point of comprehension. For this reason, after gaining reading skills, it may be appropriate especially when it comes to the age that is preparing for the exam. I think the seventh grade is an important class especially for the sake of speed reading and comprehension. Students who want to reach the speed of working more in less time. Those who need more reading and study, such as a teacher or academic.

I4: Anyone who wants to read fast can join this curriculum. Younger students can participate in game-based exercises, and older students can participate in a curriculum with texts. We cannot enroll all age groups in the same curriculum. Perception and comprehension skills also change with age and mental development. Four different curricula should be opened: primary school, secondary school, high school and adults. It can start from primary school. It can be anyone who wants to read more books. Students who want to save time for exams.

I5: Everyone who can read and students preparing for the exam. Two groups need quite a lot. Students preparing for exams. Secondly, those in the busy business world, especially managers, should participate.

I6: Individuals of all ages who will feel the pleasure of reading can participate. It can also be for adults.

Findings Regarding the Targeted Cognitive Gains of the Speed Reading and Comprehension Curriculum

The instructors who participated in the focus group interview explained the purpose of speed reading, how to do eye exercises, how to pay attention during reading and how the environment should be, the text and different types of reading, the importance of memory and memory usage, the importance of reading, after the curriculum is completed. They stated that they would know how to measure the speed. The instructors emphasized that those who complete the speed reading and comprehension curriculum can establish a figure-ground relationship, use the brain's completion feature and memory correctly, discover the capacity of the eye. Instructors think that speed

reading training increases focus and concentration, contributes to memory use. According to the participants, those who complete the speed reading and comprehension curriculum can use their visual memory, memory development techniques and methods of suppressing of their inner voice. It is seen that the cognitive gains expressed by the instructors' overlap with some of the gains in the speed reading and comprehension course curriculum accepted by the BoED (2021). The opinions expressing these findings are given below:

I1: Knows the purpose of speed reading and comprehension. He knows how to do eye exercises. Knows how to measure reading speed. Learns to read critically. He knows how the reading environment will be. Realizes the power of the brain and memory. The figure can establish a ground relationship. The law of proximity uses the brain's complementarity by knowing the laws of similarity, continuity, simplicity, and completion.

I2: Knows the text types. Learns different types of reading. Gains the habit of reading correctly.

I3: Learns to focus and concentration. Knows memory and memory usage.

I4: It can transfer information from short-term memory to long-term memory. It uses its visual memory.

I5: Learns correct reading habits. Discovers the capacity of the eye. He knows the power of the eye. Learns the points to be considered while reading.

I6: Learns and uses memory improvement techniques. He learns to suppress the head voice, which we call his inner voice.

Findings Regarding the Targeted Affective Gains of the Speed Reading and Comprehension Curriculum

In the study conducted by Kaçar (2015), although it was stated that speed reading training has a positive effect on reading speed and comprehension level, but it does not have a positive effect on reading attitudes, the instructors who participated in the focus group interview stated that those who participated in the speed reading and comprehension curriculum would like to read after the curriculum was completed, while reading. They emphasized that they would be sensitive to distracting factors, and they would gain reading habits and correct reading awareness. The opinions expressing these findings are given below:

I1: I lived with one of my students the other day. He said that I read the words quickly, thinking that I did not understand. I saw that I was beginning to understand, and I began to enjoy reading. So the speed reading and comprehension curriculum develops the love of reading.

I2: It increases the love of reading if he can understand while reading quickly.

I4: Be sensitive to distracting factors while reading.

I5: Knows the types of reading. Distinguish between correct and incorrect reading habits. Develops awareness to pay attention while reading. Recognizes distracting factors while reading.

Findings Related to the Skills Targeted in the Speed Reading and Comprehension Curriculum

The instructors who participated in the focus group interview stated that the participants in the speed reading and comprehension curriculum, after the curriculum is completed, will improve their skills in reading at different speeds in different texts, critical thinking, making connections between what they read, time management, effective reading, empathy, attention, focus and visual reading. Studies emphasizing the relationship between reading comprehension skill and reading speed, cognitive achievement, learning outcomes, thinking and self-expression skills can also be seen when examining the literature (Bozan, 2012; Chung, 2010; Coşkun, 2010; Çam, 2006; Demirel & Epçaçan, 2012; Şen Baz & Baz, 2018; Karacaoglu, 2020). The opinions expressing these findings are given below:

I1: Gains the ability to adjust reading speed according to text types.

I2: Develops critical thinking skills. Develops intertextual relationship skills as he reads more sources.

I3: Gains the ability to use time effectively. In addition to speed reading, he gains the ability to read and comprehension. It gives time management skills especially to students who are preparing for the exam. Even I started reading more books after taking speed reading training.

I4: Develops reading habit. It improves attention and focusing skills.

I6: It brings empathy and different perspectives. As he understands what he reads, his self-confidence increases and his test anxiety decreases. Visual perception skills develop. As it reduces forgetfulness, the ability to remember improves

Findings Regarding the Instruction Process of the Speed Reading and Comprehension Curriculum

Instructors emphasized that eye exercises should be used mostly in the learning and teaching process of the speed reading and comprehension curriculum. It was stated by the instructors that text reading, text editing, comprehension exercises, memory tests, block reading, grouping, shadowing, column reading, text completion, text editing, active reading, multi-focus exercises and environmental focus exercises should be used. It is considered by the instructors that the Sherlock memory palace activity is beneficial in improving memory by

combining story, space and emotion. Studies emphasizing that such different activities and text types should be used in reading education are found in the literature (Chung, 2010; Dedebali, 2010; Demirel & Epçaçan, 2012; Durukan, 2020; BoED, 2021). Among the instructors, there were those who emphasized that the online speed reading training process and comprehension is more beneficial. Speed reading instructors, whose opinions were consulted, emphasized that methods and techniques such as lecturing, invention, research, direct instruction, demonstration, demonstration-performance, simulation, question-answer, self-study can be used regarding the teaching strategies and methods that can be used in the instruction process of the curriculum. Instructors stated that concept and mind maps, various images and videos, drill and practice software can be used in the instruction process. Maltepe & Gültekin (2017) and Mohaidat (2018) mind maps; the findings of Çakıroğlu et al. (2018) regarding the positive contribution of software to reading and comprehension are in line with the views of the instructors. Ensuring active participation in speed reading training by the instructors; it is thought that the use of hints, reinforcements, feedback and corrections is important. The opinions expressing these findings are given below:

I1: I can use the methods I have seen in the training. Eye exercises form the basis of the curriculum. These eye exercises should not be kept long. Different eye exercises will be more interesting. It should not always be the same. Sherlock memory palace event. We need to develop memory by bringing together story, place and emotion. Concept maps should be used. While applying these, we use demonstration and question-answer methods. Monitoring tests should be done in the process.

I2: Lecturing, invention, research strategies should be used in this order. Lecture, question-answer and research methods can be used. Presentations, various images and videos should be used. Being online has many benefits. It is very useful, especially in terms of time and space. But it has some limitations for online. I think young people will be more prone to this and are used to it. Limited for those with snooze feature. Especially asynchronous will be very limited. The teacher's follow-up and interest, the communication he establishes will increase the effectiveness and efficiency of the lesson. The focus should be on applying speed-reading techniques correctly and comprehension.

I3: Practices should be made to make reading a habit, positive and negative factors affecting reading habits should be known, and the curriculum should be arranged according to these factors. The dynamics and characteristics of the participants in the speed reading and comprehension curriculum are extremely important. What are their needs? These must be determined. Age group is also extremely important. Particular attention should be paid to visually in younger age groups. After secondary school groups, emphasis should be placed on education with texts. For older age groups, activities and methods that enable establishing relationships and analyzing should be used. Speed reading and comprehension is itself an effective way of learning. Teaching methods and technology that will increase attention and focus should be used. Question-answer method should be used especially in order to increase questioning.

I4: It can be used effectively by adjusting the variables according to time and student level. Methods such as visual reading, question-answer, text completion, text editing, active reading, and mind map preparation should be used in the learning and teaching process of the speed reading and comprehension curriculum. These methods should be supported by appropriate computer programs or software. In particular, repetition and practice simulations should be used.

I5: Effective participation must be ensured in the speed reading and comprehension curriculum. Hints, reinforcements, feedback and corrections are very important. Technological tools should be used. Text reading, text editing, comprehension exercises, memory tests, block reading, grouping, shadowing, column reading activities should be used. Multiple focus exercises and peripheral focus exercises will also be helpful.

I6: Many advantages can be provided online in speed reading curricula. We can use more technological software and tools. In the practical part of the training, it is also important that the student completes his/her own exercises with the self-study method.

Findings Regarding the Duration of the Speed Reading and Comprehension Curriculum

Speed reading instructors expressed different views on the duration of the curriculum. The instructors stated that the total course hours of the curriculum can vary between twenty and seventy hours depending on the level, age and student needs. According to the instructor recommending the seventy-hour program, the duration of this education should be twenty-two hours. The remaining forty-eight hours represent individual work related to exercises and practices. The duration expressed by different instructors is that it should be forty lesson hours and not less than twenty lesson hours. Durukan (2020) supports this finding; in his research, he was able to complete the work consisting of exercises to speed up eye movements, recognizing and selecting words in the text, speed reading and comprehension the text in 20 hours. According to the opinions of the instructors who emphasized the application part of the speed reading training, it was emphasized by the instructors that time should be allocated to self- study outside the classroom as much as the duration of the curriculum during the course. Another issue that the instructors emphasize on time is that there should not be more than one or two lesson hours in a day

because eye exercises are tiring. This finding is stated in the BoED (2021) course curriculum as "The course curriculum is applied with a maximum of 8 course hours per day." contradicts the statement. The opinions expressing these findings are given below:

I1: There should not be too many hours in a day. Eye exercises are tiring. The application part should be more. It is quite effective over forty hours.

I2: Considering the topics to be covered in total, 40 hours would be appropriate. Half of this should consist of theoretical and practical lessons with the teacher, and the other half should consist of exercises that the student will do by himself/herself with the method of self-study. Because reading is an individual skill and individual study should be emphasized.

I3: Since it is a training with intense exercise, it should not be too long, spread over the days of the week. For example, one hour two or three days a week would be more appropriate. In this way, exhausting exercises can be avoided. In total, it should not be less than 60 hours with practices, exercises and assignments. At least one-third of the curriculum should be devoted to individual practice, as individual work is required for exercises and homework.

I4: Even while I am training, I can get tired during the exercises. An hour a day could be three or four days a week. A total of 30 hours of training may be sufficient. Depending on the level, it may be 40 hours. With a group whose reading speed is not very low, 30 hours if it is three days a week, and 40 hours if it is 4 days a week with a group with a low reading speed, it can take ten weeks. A reading speed of 100 words can be accepted as a criterion for low or high reading speed. Reading speed below 100 words can be considered low.

I5: If it is not under 20 hours, students reach a certain level. It should be a 70-hour curriculum. Lessons in 22 hours. The remaining 48 hours should be in the form of exercise and practice. With such a curriculum, the reading speed can be increased to over 300 words.

I6: 40 hours will be enough. Let me tell you about the curriculum I use at my school. I practice with a group of 20 minutes 4 times a week for a total of 80 minutes. 14 weeks' total.

Findings Related to Class Size in the Speed Reading and Comprehension Curriculum

Speed reading instructors emphasized that the number of students according to the education groups should be ten to fifteen according to the age and level of the students. The instructors stated that the number of students may vary according to the ages and levels of the students, they stated that fifteen students for adults should be less for younger age groups and ten students are the ideal class size. In the speed reading course curriculum prepared by BoED (2021), it is stated that there should be a trainer for every fifteen students. The opinions expressing these findings are given below:

I1: It may be fifteen for adults, but less for students.

I2: If the training will be online, the number of students in the group should be less. I think it should not exceed ten people. Because some exercises need to be done by each student in turn. If it's face-to-face and each student has a computer in front of the classroom, then the group may be a little more crowded. Even in this case, the number of students in the group should not be more than twenty people.

I4: As the age gets younger, the number of students in the group should decrease.

I6: The number of students in the groups should not exceed ten. The number of students is important for us to practice the exercises.

Findings Regarding the Evaluation Process of the Speed Reading and Comprehension Curriculum

A few of the instructors emphasized that formative tests should be used in the measurement and evaluation process of the speed reading and comprehension curriculum. It is understood that formative evaluation should be done with formative tests. Instructors stated that students' reading speed should be measured before and after the curriculum. They stated that reading speed is the number of words read per minute and how to calculate it. It is understood that by measuring the inputs and outputs, a summative evaluation should be made for the achievement and the product. The instructors stated that not only the reading speed but also the comprehension level of the students should be measured with materials containing open-ended questions about the reading texts. In the researches, the methods of measuring and evaluating the reading speed and comprehension level and the views of the instructors' overlap (Babayiğit, 2018; Coşkun, 2003; Coşkun, 2006; Durukan, 2020; Saracaloğlu et al., 2011). In his research with high school students, Coşkun (2006) determined the reading speed as 155.9 words in newspaper news text and 140.4 words in scientific text. He determined the level of comprehension as 77.5% in the newspaper news text and 63.9% in the scientific text. The opinions expressing these findings are given below:

I1: Formative tests should be performed. First entry behavior and reading speed should be measured. This velocity should then be measured frequently. Training should be shaped according to the participants of the curriculum by comparing the results of these formative tests, which are frequently performed in order to monitor the progress. Participation in eye exercises should be observed. It is necessary to evaluate whether you understand what you read with open-ended questions.

I2: How many words he reads in a minute should be measured both at the beginning, during the process and at the end of the curriculum. In the process, student progress should be followed with formative tests.

I4: The number of words of the texts read should be determined beforehand. Then the text should be read to the student. Let's say the text is 300 words, if it is read in 100 seconds, the reading speed is 180 words. We calculate it like this: Number of words read X 60 / reading time will give us reading speed.

I5: Reading speed from a text should be evaluated frequently by the method of the number of words read per second multiplied by sixty. Whether students understand what they read or not should be measured with reading comprehension materials supported by open-ended questions.

Conclusion

The results obtained in the light of the findings are presented according to the research themes. In line with the findings, a speed reading and comprehension curriculum was designed. Within the scope of the curriculum design, the target audience, duration, number of participants, targeted gains, content, learning-teaching process, evaluation process was determined. Every individual who can read and understand what she/he reads constitutes the target group of the speed reading and comprehension curriculum. Those with attention deficit, adults and students at different levels can participate in speed reading training. Especially students who are preparing for the exam need more. Adults who have time problems are also included in the target group of the speed reading and comprehension curriculum.

The **targeted cognitive gains** of the speed reading and comprehension curriculum, which was found to increase focus and concentration and contribute to memory use, were determined as follows as a result of the research:

- Knows the purpose of speed reading and comprehension.
- Knows how to do eye exercises.
- Knows text types.
- Knows different types of reading.
- Knows the importance of memory and memory usage.
- Knows how to measure reading speed.
- Figure establishes a ground relationship.
- Knows what to pay attention to during reading and how the environment should be.
- Uses the completion feature of the brain.
- Uses memory correctly.
- Discovers the capacity of the eye.
- Uses visual memory.
- Uses memory enhancement techniques.
- Uses inner voice suppression methods.

The **targeted affective gains** of the speed reading and comprehension curriculum, which was emphasized in the research to increase the love of reading, were determined as follows:

- Enjoys reading.
- Be sensitive to distracting factors while reading.
- Gains the habit of reading.
- Correct reading develops awareness.

As a result of the research, **the targeted skills** of the speed reading and comprehension curriculum, which were found to have significant contributions to attention and focus, were determined as follows:

- Reads different texts at different speeds.
- Reads efficiently and effectively by questioning.
- Makes connections between what they read.
- Manages time effectively.
- Critical thinker.
- Empathetic thinker.

Ensuring effective participation in speed reading training; it was concluded that the use of hints, reinforces, feedback and corrections should be given importance. The activities, methods and techniques, tools and materials to be used in the **instruction process**, where it was determined that eye exercises should be used most in the speed reading and comprehension curriculum, are listed below:

Activities. Text reading, text editing, comprehension exercises, memory tests, block reading, grouping, shadowing, column reading, text completion, text editing, active reading, multi-focus exercises, environmental focus exercises and memory development

Methods and techniques. Lecturing, invention, research, direct instruction, demonstration, demonstration-performance, simulation, question-answer, self-study

Technology and tools. Online platforms, web-based applications, concept maps and mind maps, images and videos, drill and practice software

It has been determined that the total course hours of the speed reading and comprehension curriculum can vary between twenty and seventy hours depending on the level, age and student needs. In the light of the research findings, it has been determined that the part of the speed reading training that will be done online or in the company of a face-to-face instructor should not be less than twenty lesson hours. It has been determined that for an average level group, applications can be made with the method of self-study for twenty lesson hours in the classroom and twenty lesson hours out of the classroom. It has been determined that there should not be more than one or two lesson hours in a day in the lessons to be held in the classroom with the instructor. It has been determined that the number of students in the learner group in speed reading training and comprehension should be between ten and fifteen participants according to the age and level of the students. Fifteen students in adults were found to be the ideal class size of ten students in younger age groups. Curriculum can be applied in smaller groups or even with one-on-one training. It has been determined that formative tests should be used in the **evaluation process** of the speed reading and comprehension curriculum. Formative assessments have an important place in the speed reading and comprehension curriculum. It has been determined that measuring inputs and outputs in speed reading curricula and making an achievement-based evaluation will provide important feedback about the curriculum and student development. Measuring students' reading speed before and after the curriculum will provide an opportunity to evaluate the effectiveness of the applied curriculum. In the speed reading and comprehension curriculum, it has been determined that summative evaluations can be made as well as achievement-based evaluations. Students' reading speed as well as their comprehension levels should be evaluated with open-ended questions about the texts read.

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