

DEVELOPING A SOFTWARE FOR INCREASING READING RATE AND EFFECTIVE READING COMPREHENSION: READ FAST ENHANCE MEMORY

Asst. Prof. Dr. Nursel YALÇIN
nyalcin@gazi.edu.tr

Gazi University, Turkey

Prof. Dr. Alemdar YALÇIN

mayalcin@gazi.edu.tr

Gazi University, Turkey

Lect. Dr. Ferah BURGUL ADIGÜZEL

Gazi University, Turkey

fburgul@gazi.edu.tr

ABSTRACT

Undoubtedly, one of the best ways of being a successful human being is to read a lot and understand what you read. Reading which is an important criterion for keeping up with the time is one of the main activities of the human brain. These activities are performed in three stages: Perception, storing in memory and reconstruction or structuring. The primary reason for not reading is not to know how to read. If the social and economic reasons prevent the individuals from getting this skill or if the individuals confront the problems such as reading incomprehension and reading slowly, they are discouraged. In addition, it is a known fact that women, for various reasons, enjoy reading more than men. However, the amount of time spent on reading and the amount of text to be read is a problem. It is crucial to read quickly and to have access to more resources to be read by distance learning.

In this very moment, everyone should learn and use the speed-reading techniques which help the individual read fast, comprehend what he read and make accessible to keep in memory, double the reading rate and increase the self-esteem, most of all. To that end, a software called Read Fast Enhance Memory was developed. The software prepared by effective speed-reading and memory enhancement techniques was developed with Delphi programming language. The purpose is, in addition to speed-reading training, to support both educators and learners and to create effective learning. A lot of software about speed-reading exist and are applied. However, this software was not developed in accordance with Turkish Language properties and its grammar.

When it is considered that the information technology gives a chance to get information in education in different ways, to support the skills of obtaining information and to make learning more enjoyable and productive, it is planned that learning speed-reading techniques would be more productive and efficient thanks to this software. As the amount of information multiplies rapidly in this day and age, learning speed-reading techniques is becoming almost compulsory.

Keywords: Speed-Reading Software, Speed-Reading, Effective Speed-Reading, Speed-Reading Techniques, Memory Enhancement.

INTRODUCTION

Reading is a process which starts when the eyes take a picture of the written texts and which continues until the brain makes sense out of these pictures. The eyes move forward by skimming on the lines from left to the right during the reading and pause on a word or the phrases that are included in 2 degrees 56 minutes with an angle that extraocular muscles provide (Yalçın, 2002). Like a camera, the eyes transmit the words to the brain by shooting them during the pauses. The word or phrases that are transmitted to the brain via eye and extraocular muscles reach to image, image recognition, image interpretation area, and reading centers, respectively (Yalçın, 2002: 50). The brain bunches together these symbols that it has learned before by divulging them and completes the reading process by making sense out of these pictures.

When we think of that, we get most of the information by reading and allocate most of our daily time to reading, the concept of reading rate becomes more of an issue. According to research done by a private institution, (www.hizliokuma.com), an average company employee allocates 1,5-2 hours to reading while an individual working in the field of occupation such as strategic planning, law, finance allocates 3,5-4 hours to reading. An individual in our country has to go in for at least 5 examinations (LGS, LYS, DGS, KPSS, ALES, ÜDS, KPSS, etc.) that one has to compete with himself and his peers from primary school to higher education until he enters a profession, and every extra minute that this individual saves in these exams allows him to keep one step ahead. Starting from this indispensable part of time of an individual during the life, the concept of speed-reading may be described as such: the speed-reading is, by activating the extraocular muscles via various exercises, a reading technique that aims to give a rhythm to eye according to the type of the text, that is based on the competency of coordination of the classification, perception, and cognition between the eye and brain by extending the active visual field of the eye and that is predicated on the enhancement of the perception rate and its capacity. The speed-reading is based on these two principles:

- An eye can learn how to discern a word quickly or a phrase at a single glance that taking place in a wider visual field via practices and it can comprehend it.
- The brain, via practices, comprehends the phrases perceived, associates meaningful phrases with each other, classifies and organizes by storing them in the memory.

The speed-reading is a process that is based on the coordination of the brain and the eye, and that makes sense when the concepts of speed and perception combine. The speed-reading does not just consist of solving the code of the text quickly by activating the extraocular muscles. When one scrutinizes the introductions of the speed-reading training or the popular speed-reading books in the same area, it can easily be understood that they talk pretentiously about the speed-reading, they assure impossible reading rates, and they give no information about the development of the understanding rate. The speed which is not integrated with meaning is the indicator of an uncompleted reading process; however, effective reading is to establish a bond among speed, perception, and memory (Akçamete, 1990). One of the points that have been ignored in the books written about speed-reading techniques in our country is that the grammar features of the language and the structure of the text read affect speed-reading. Knowing the grammar features of a language and the structure of the text change the individual's reading rate and comprehension rate.

What is aimed at the end of the speed-reading training is to increase the perception rate and understanding rate as well as the reading rate of an individual. The researches done

show that speed readers have a superior understanding rate compared with the others. (Carver, 1985; Lefevre, 1988; Stanovich, 1988; Duffy et al., 1986; Dökmen, 1990; Coşkun, 2006). At the end of speed-reading training that has been provided to the students of Gazi University, Gazi Faculty of Education Department of Turkish Language and Literature during a term (14 weeks) since 2002, it has been observed that students' comprehension rate and the reading rates have increased directly proportional. The speed-reading training provided within an organized program during 10 weeks, 30 hours enhanced the effective reading index, which shows the individual's reading rate and comprehension rate as 82% (Burgul ve Çeltik, 2010). Brown ve Hirst (1983:140) state that slow reading is a problem for the learners and they have a low comprehension rate, as the short-term memories of these learners cannot hold the details enough to get the whole text and to understand.

The lack of time, in the presence of the abundance of information to read, has pushed people to research speed-reading. The information has been increasing rapidly day by day, and it is achieved by reading simply and in the fastest way possible. The first researches have done about speed-reading date back to 1700s. Firstly, it started when Radonvillers used pictures to teach the meanings of the words, and then it was developed in 1843 by Leclerc whose studies include to reach the general meaning by pre-thinking and to guess for effective reading. In 19878, Sorbonne University, Ophthalmology specialist Dr. Emil Javal discovered that an eye could recognize a word in the quarter of a minute and it moves by skimming and recognizes the words during skimmings in 1930. Dr. William Bates stated the visual field had to be widened for an active vision in 1930. (Akçamete, 1990) After it was discovered that tachistoscope, which was used by English scouts during World War II to perceive the emblems on the German planes in a short time, had enhanced the perception rate of the eye and after this gadget was used for speed-reading training in USA Army in the 1940s, the speed-reading studies have started to extend worldwide (Türkkan ve Türkkan, 2007).

The various developments in medicine nowadays, especially several laboratory tests (MRI, BBT, EEG, EMG) used for diagnosis and treatment period of the illnesses such as epilepsy, alzheimers and migraine within the studies done in the discipline of neurology have revealed how data entry into the brain, how brain perceive the data and how data are reorganized in the brain, and brought out the process of brain-language-perception. The brain examinations confirmed that language skills are a period that is performed through the coordination of different centers in the brain (reading, listening, speaking and writing). In this respect, it can be said that the brain is a very complex system, but it works in harmony like an orchestra (Yalçın, 2002: 24). The determination of the work system in the brain and eye during the reading developed the speed and effective reading (Coşkun, 2006). The discovery that the brain's perception capacity and its qualifications could be improved has had an essential role in applying speed-reading concept as an educational technique.

Various applications about the speed-reading training have been performed from past to present, different techniques have been applied and are still being used. The basic approach for these applications determines the scope and the method of speed-reading training. When it is handled regarding language teaching approaches, the previous approaches are classified as I. Behavioral, II. Cognitive and III. Constructivist approach (Güneş, 2009: 15). According to the behavioral approach, language is a behavior, and it turns into behavior by the frequency of occurrence in the process of time by being learned by imitation. As to this approach, the instructional plan aims to create a behavioral change. In the reading education that is given in parallel with this approach, the practices for increasing the word extensity that an eye can perceive and for providing a rhythm to

the eye are included; however, improving an individual's mental abilities are not focused. According to the cognitive approach, a language cannot be learned but acquired, and a human being has the required device for the acquisition. In the reading education that is developed by this approach, the practices for increasing active visual field of the eye are given importance by considering that a word or the phrases can be recognized as a whole and they can be jogged a person's memory like a picture. According to the constructivist approach, the language is learned by a person's actual experiences and structured in the brain. The aim of the speed-reading training developed in the scope of this approach is to enable an individual to comprehend the information units better considering his previous knowledge and to create new meanings by organizing it. In this way, an individual becomes skillful at synthesis and applying it into daily life by analyzing the information he acquired. Therefore, to structure the information, an individual practices the pre-reading and post-reading activities.

When the books on speed-reading training or the contents of the training performed are scrutinized, either it is understood that the speed-reading training is based on rhythm exercises that aim to give a rhythm to the eye paying regard to behavioral approach or it is considered as mechanical eye exercises concerning cognitive approach. It is seen that the previous approaches concentrate on the speed-reading training from certain points of view but ignore another aspect. The speed-reading includes all of the cognitive, affective and psychomotor periods and what is needed to succeed in these periods is to develop a training programme that provides for exercises about all approaches mentioned above and to apply it. From this point forth, it is thought that a speed-reading software including practices based on behavioral, cognitive and constructivist approaches may improve one's reading rate and comprehension rate.

The Aim of the Research

The aim of the research is to provide information about the function (purpose and method) of the speed-reading software 'Read Fast, Enhance Memory' within the process of speed-reading training as introducing it on account of the fact that common speed-reading programs are not in line with the purposes of speed-reading training.

The Significance of the Research

As it is necessary to consider the scientific datum for each step of it, the success aimed to be achieved in speed-reading training does not only depend on the teacher's endeavor. The quality of preparation of textbooks and the other educational materials to be used affects the results of the training directly. Speed reading training, which includes an important behavioral change, can only reach the desired targets through a systematic and planned training process and use of educational materials (Burgul and Çeltik, 2010). Each step of speed-reading training (practice and assessment-evaluation) should be planned in a way that ensures each learner's active participation. In all these studies, the learners, at the same time, criticize and control themselves and acquire work discipline assessing their improvement in an objective way.

The essential educational material to support speed-reading training which also focuses on individual work besides instructor-based teaching process is the speed-reading software. Studies have shown that progression through software-based speed-reading training has increased the reading rates (Just and Carpenter, 1987). However, as some researchers claimed (McConkie, 1984; Paisley and Chen, 1982), flashing perception increaser exercises are solely insufficient to increase the rate of reading. Wepner and Feeley (1987) stated that even reading a text on a computer screen improves the efficiency of reading in proportion to reading it on paper and raises learner's concentration; also, learners find it more interesting to read it on the screen than paper.

According to a research aiming to determine the influence of computer-aided speed-reading training on children with dyslexia (Irausquin, DrentveVerhoeven, 2005), the experimental group who were supplied with computer-aided training had higher levels in recognition of words, reading efficiency and progress of reading rates than the other group, though there was no difference between the two regarding comprehension.

Computer programs allow readers to study regardless of time and place; independently and as much as, they feel enough. Furthermore, with computer-aided training, a study expected to be hard adapts the individuals to work by providing a gradually progress in parallel with their progression rates, and it keeps them away from distractions (Irausquin, Drent and Verhoeven, 2005). Likewise, it is a fact that software developed imperfectly may lead the learners to gain a wrong reading behavior, affect their reading habits negatively and hinder their adaption to the text.

Concerning its influence on individuals' reading behavior, the evaluation of the speed-reading training regarding both the content and materials to be used is reasonably important. However, as the studies on the contents of speed-reading training released by several private institutions and software-based practices are taken in hand, it is detected that there are several deficiencies or errors on specific headlines. The mentioned insufficiencies can be sorted as:

1. Practices' being especially limited to mechanical eye exercises which were built up as a result of the wrong conception that the speed-reading is a developmental process based only on speed independently of the notion of comprehension.
2. Lack of enough space allocated for the exercises concerning brain and memory in speed-reading training although reading is a process related to brain functions.
3. Training' being oriented only around developing while-reading parts although reading includes the integrity of pre-reading, while-reading and post-reading processes.
4. Monotype texts in programs and the lack of variety of them although one of the facts that affect an individual's reading rate is the type of the text.
5. Lack of the appropriate scaling during the development of programs because of the neglecting age and education levels, which are influent on learners' reading rates.
6. Lack of organizing reading activities upon text structures due to not knowing the effects of the text structures on increasing reading rates and comprehension level by ignoring the correlation between the reading rate and text structure.
7. Not reckoning the connection among the attention, concentration and perception training, which are built upon a completely different technique and the reading process.
8. Negligence of the psychological facts and situations that organizes the reading rates.
9. Negligence of many cognitive processes of reading and the association fact.
10. Negligence of the relationship between reading rate and the structure of the Turkish language and the lack of activities dealing with Turkish language structure in designed programs.

The insufficiencies determined by the results of evaluations of speed-reading programs on hand and the literature on speed-reading and the questionnaire and measurement

studies which have been applied throughout the speed-reading course given to the senior students in Gazi University Gazi Faculty of Education Department of Turkish Language and Literature since the academic year of 2002 have shown that there has been a necessity for a new computer program for speed-reading which focuses on text structures compatible with the semantics and grammar of the Turkish language. Thus, it is considered that the development of the program Read Fast Enhance Memory, which is designed to meet the deficiencies above, is quite important regarding increasing the efficiency of speed-reading training via its components and use.

THE DEVELOPED SOFTWARE: READ FAST ENHANCE MEMORY

The software Read Fast Enhance Memory, which was developed to achieve better results in speed-reading training, was designed by Delphi, Visual Studio 2008 and C# programming languages. Microsoft Office Access database program was utilized for the texts in the activities and Fireworks was used for the visuals in the software. In Figure 1, the main page of Read Fast Enhance Memory can be seen after user login.

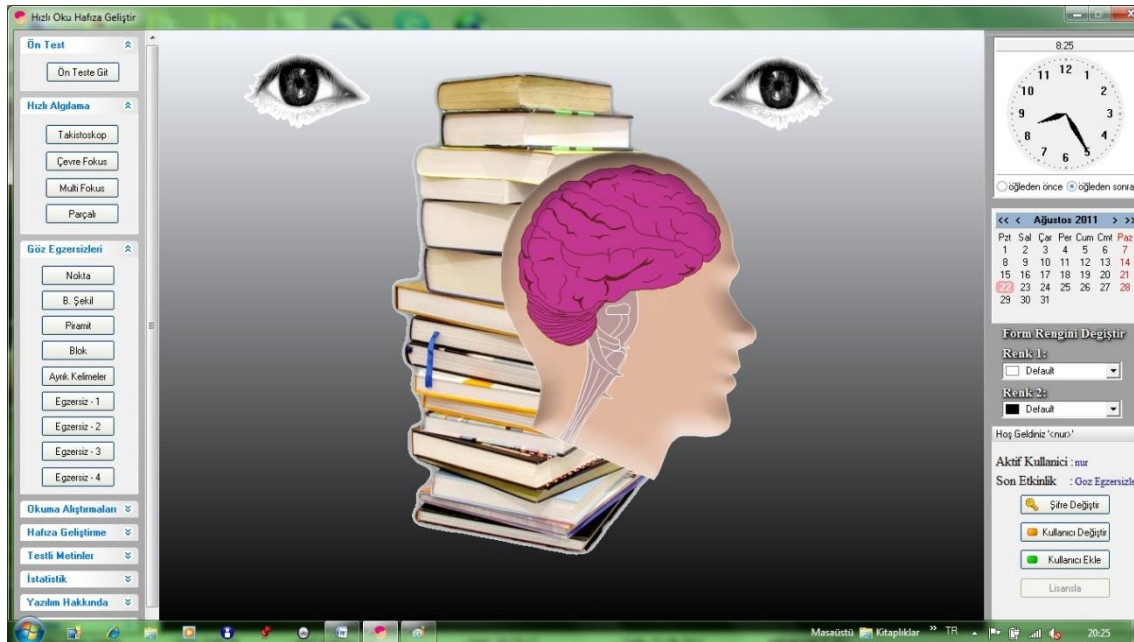


Figure 1:
The main page of Read Fast Enhance Memory after user login

As seen in Figure 1, the computer program Read Fast Enhance Memory consists of 11 separate main parts. Each part has been enriched with sub-studies and activities supporting the topic title. These activities are viewed in detail under section 2.1 in the article. The elements of the program can be sorted respectively:

1. Pre-test
2. Quick Perception Studies
3. Eye Exercises
4. Reading Exercises
5. Memory Enhancement
6. Texts with Tests
7. Statistics
8. About
9. Help
10. User Settings
11. Licensing

The pre-test is the part used before starting to determine the reading rate, comprehension rate and active reading index level of the participant who intends to get the training.

Quick Perception Studies aim to increase the number of words individuals perceived and the rate of perception itself. Dr. Emil Javal's finding that the eye recognizes and apprehends a word in a quarter of a second has shown that speed readers' recognition and apprehension time of a word is shorter (Akçamete, 1990). Therefore, by preparing exercises to increase the eye's recognition speed, this part has been varied with attention and concentration studies.

The aim of the studies in the Eye Exercises section is to make the eye move and perceive faster by working eye muscles and increase the number of words in each skimming by expanding the eye's field and angle of view. In these studies usually, nonsense texts are used so that the learners gain only the psychomotor skill and not concentrate on the meaning of the text during the intended behavioral change process of the individuals. Within the exercises built on meaningless letters, words or collocations, the aim is not to reach the meaning but to improve the eye's capacity and speed of perception at the very beginning of speed-reading training. After reaching the desired level of speed, learners will progress through the exercises with meaningful texts. To begin working with the nonsense word and collocations is an elementary phase for individuals' adaptation to speed-reading training and it is a technique that is utilized in all the speed-reading programs and activities.

The Reading Exercises aim to provide the eye, which has acquired flexibility by eye and quick perception exercises, a specific rhythm and grouping skill. This is the part where individuals start using the practice exercises in which the mechanical and non-integrated behaviors the eye acquired are started to be used.

The Memory Enhancement studies aim to make the reader organize the data rapidly, store it with classifications and recall it. In other words, it is to make the individual gain the skill of organizing and using the information; because one of the key steps of comprehension is the process of combination of the new and old data in the brain by comparing them.

The aim of the Texts with tests is to test the learners' comprehension rate along with showing them their reading rates. The texts included in this part are the reading passages and comprehension questions chosen among the ones studied throughout the speed-reading course given to the senior students in Gazi University Gazi Faculty of Education Department of Turkish Language and Literature since the academic year of 2002.

The Statistics part is the section in which the results of acquisitions the participants obtained from block reading and speed-reading activities after the reading process determined in pre-test section are calculated by bar graphics.

The About part aims to organize an administrator (aka Admin) rights settings. This is the part in which the administrator can see the users list and operations such as removing users, giving administrator rights to required users and withdrawing administrator rights from required users can be done. The users are also informed of credits, the development date of the program and system requirements in this very part.

The Help section aims to give information about how to use each activity. With an index matching with the key words existing in this part, it is possible to access data of words searched for more efficiently and faster.

The User Settings part aims to do operations as signing up new users, changing users' password and exchanging users. On the main page of the program, the information of the active user at the moment and the last activity done by him is visible.

The Licencing part aims to enable the trial version of the program to be used as a full version by entering the license key for one computer.

One of the most crucial features of the software is its changeable background color depending on the educational environment. This feature is thought to be important in two ways. Firstly, this feature should undoubtedly be among the effective presentation techniques. It makes possible for users to personalize their studies arranging a profile for themselves. Secondly, when the users start the activities, it is important that the background color should be relaxing and not be distractive.

Time is an indispensable element of speed-reading. Therefore, as it is shown in Figure 1, the time can be seen on the right side of the main page of the program. The timer exists in all the activities of the program.

The Sections Used on the Software, Exercises and Outcomes

Pre-test section

The pre-test section indicated with Figure 2 measures the user's reading rate and comprehension level before he starts to do exercises on the software. The feature of the module indicated with Figure 2 is to start the pre-test and calculate how many words can be read in a minute.

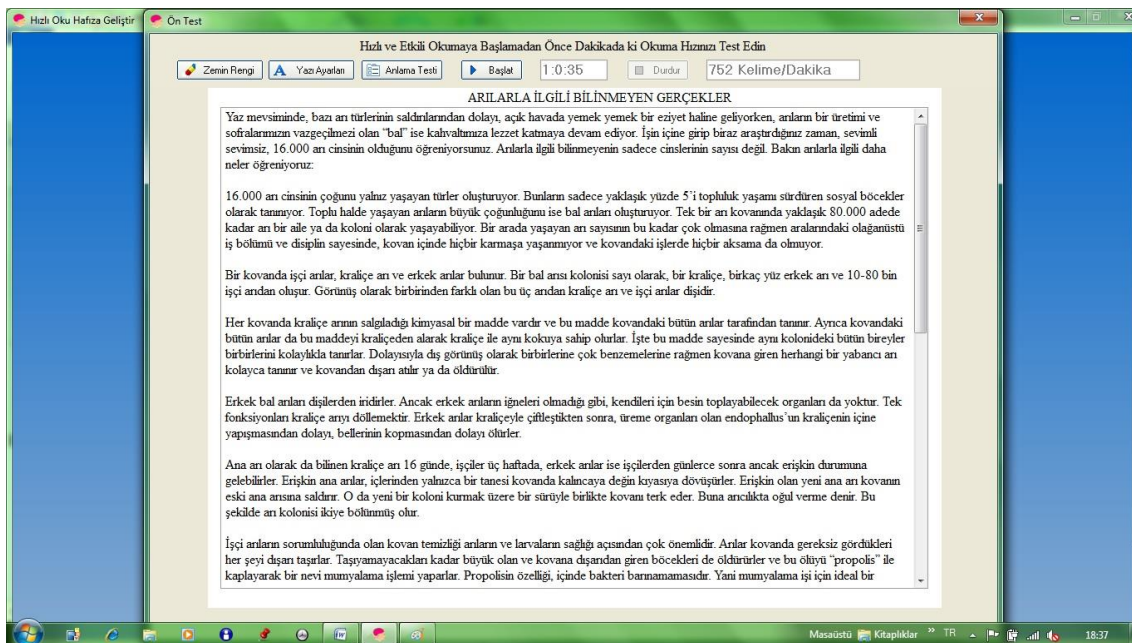


Figure 2:

Determining the reading level before starting the speed-reading training: Pre-Test

Comprehension test module has been added to pre-test to measure one's comprehension level for the reading text, and this module is opened when the user pauses the exercise at the end of a minute. After the user answers the comprehension test indicated in Figure 3,

the speed-reading condition is determined by measuring the rate of the user's reading rate, comprehension rate, and comprehension index.

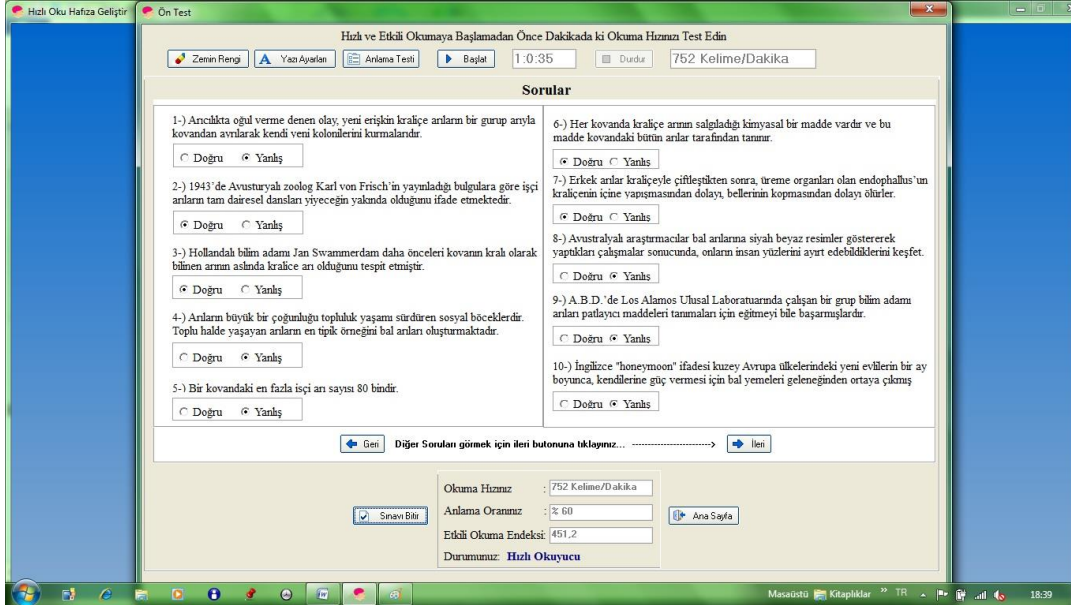


Figure 3:
Pre-Test Comprehension Questions and Statistics of Answer-Result

Almost all the exercises on the program have the view settings. It is also possible that user can change the background color of the objects on the form and the back color of the exercise form and arrange the font, font size, and font color settings effectually. There is a text only in the pre-test section because the programs have been prepared for personal use.

Although the pre-test application is a needed module in a speed-reading software to determine the beginning level of the user and to follow improvement process, this section has never been found on any software analyzed so far.

Rapid Perception Section//Reading and Perception Exercises//Perceive Fast Read Fast

a) Tachistoscope (Look and See/ See Fast/ Rapid Perception): Tachistoscope is a computer application that enables the reader to perceive wide word blocks during pauses by increasing eye's perception rate. The words appear and disappear in a certain time of a second on the screen. Thanks to this exercise, the eye starts to perceive faster. It is the tool, which was developed by Dr. Renshaw of Ohio University during World Wars years and used to improve the agility of the eye. The gadget whose lens is opened and closed in a 1/25, 1/50 and 1/100 of a second has been developed to increase the agility of the eye. Firstly, tower guards of the English Army used it, and then the pilots of the USA Army used it.

As the tachistoscope has an important role in adopting the habit of quick vision, we included tachistoscope exercises. The tachistoscope exercise involved in the section of speed perception of the program has an interface indicated in Figure 4.

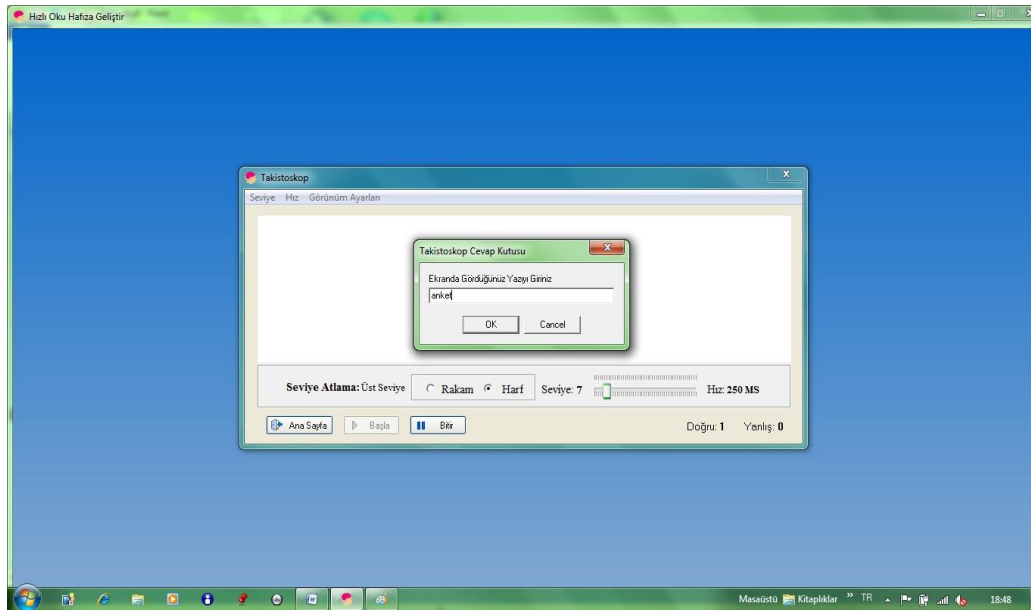


Figure 4:
Speed Perception Test: Tachistoscope

There are two different types of exercise as both a letter and number. The user is supposed to enter the image (words or letters) appearing in a 250 ms speed to "Tachistoscope Answer Box" according to the type of exercise. This exercise includes 50 levels, and its default speed is 250 ms. This level can be adjusted according to the user's reading rate by using the Speed section if the user wishes. Adjustable Speed level ranges between 10 Ms and 800 Ms. As in all exercises, "Right" and "Wrong" answers of the user are calculated in the tachistoscope exercise. The user's level is raised to another level (Figure 5) when he gets 12 right answers, and it is reduced down when the number of the wrong answers reaches 5 (Figure 6).

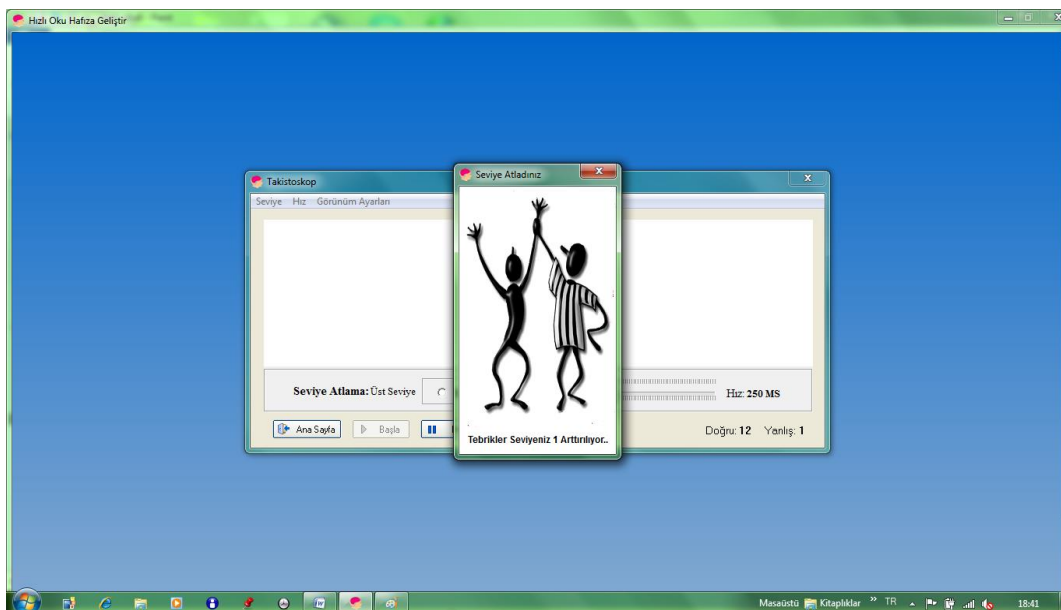


Figure 5:
The user interface indicating level rise on tachistoscope

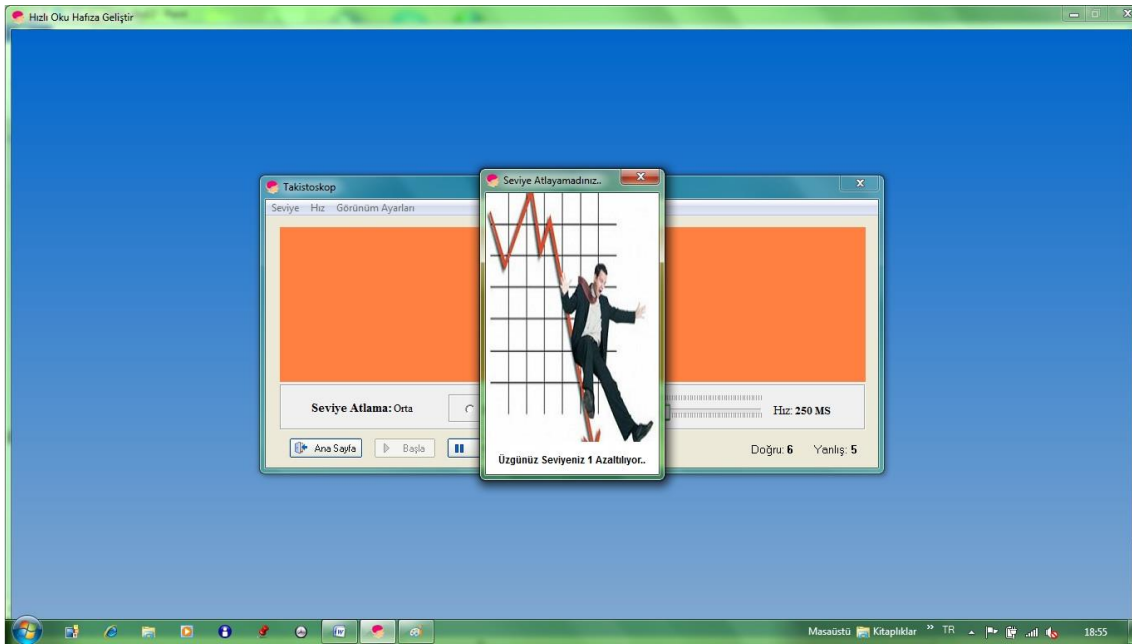


Figure 6:
The user interface indicating level reduction on tachistoscope

The wrong or right answer is reflected on the screen after a user's each wrong or right answer. This process is applied in two ways. The first one is done by the wrong and right images reflected on the screen while the second one is done by an indicator showing the number of wrong and right answers for each level. This application is an important step to enable the user to check his progress. As it is shown in Figure 6 and 7, it is possible to adjust the background color and font via "view settings".

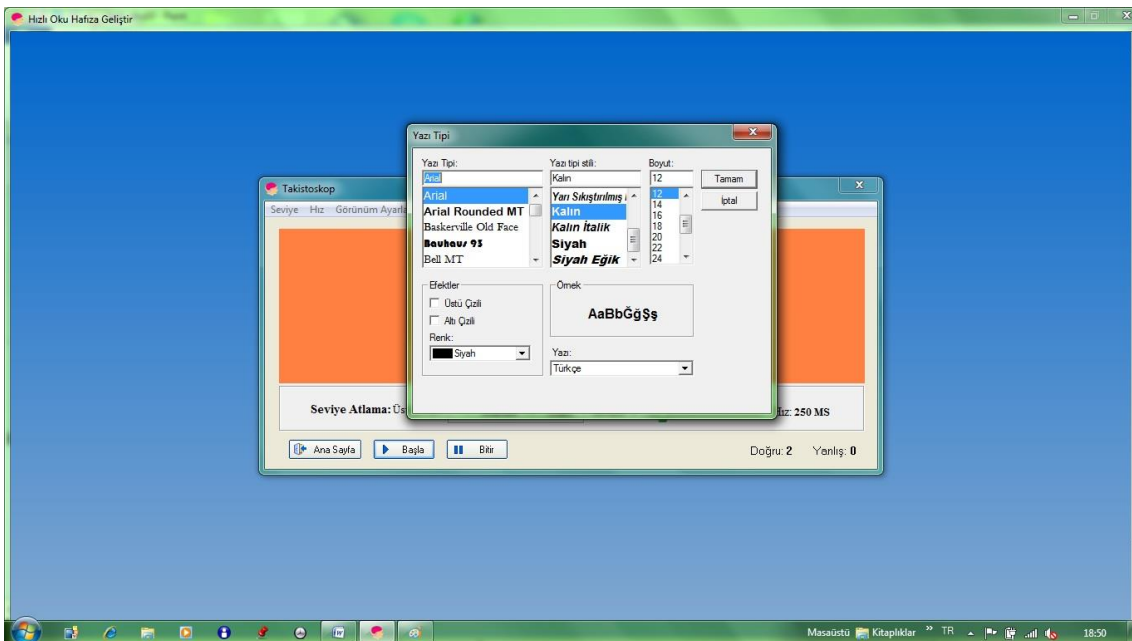


Figure 7:
Adjusting background colors and fonts via view settings

b) Peripheral Focus (Wide Focus): The tachistoscope exercise aims to increase perception rate by focusing on the center of the screen. Peripheral focus exercise aims to improve perception rate of the eye by focusing on a wider space. This is an eye exercise that was prepared to enhance the eye's skimming rate-flexibility and perception rate.

Peripheral Focus exercise is showed in Figure 8. In this activity, the type of exercise can be changed as a number or letter as in the tachistoscope test. Peripheral Focus exercise consists of 30 levels. The default speed is 250 ms as in the tachistoscope. If the user wishes, he can change speed level via "Speed" menu and adjust view settings.

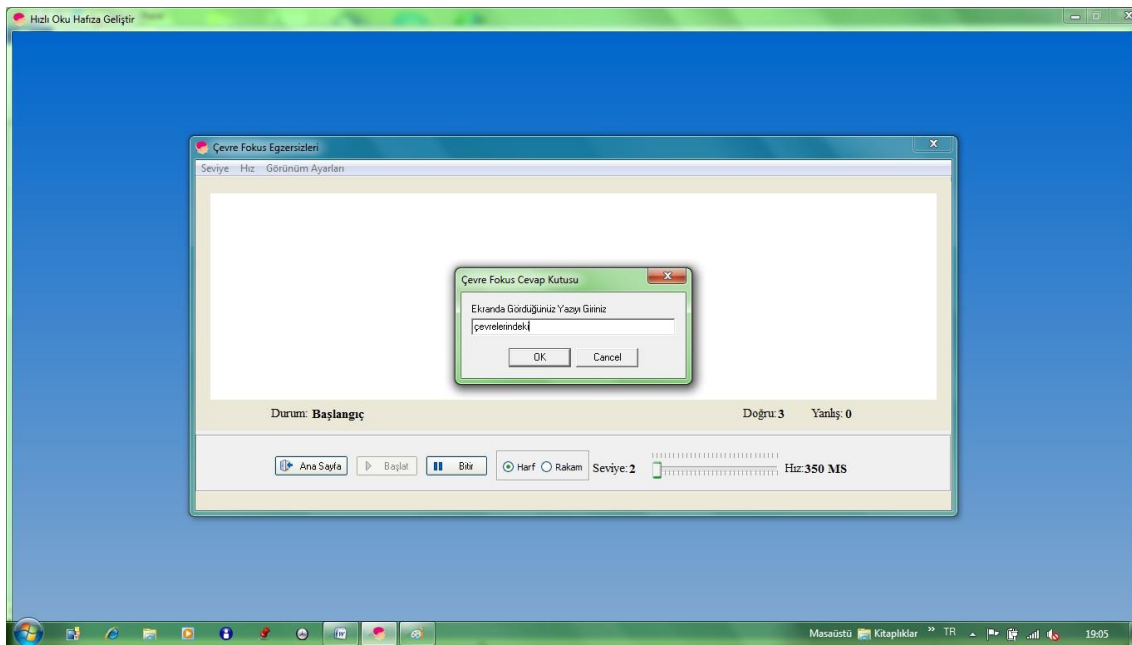


Figure 8:
Peripheral Focus

The level rise and reduction features of the peripheral focus are same as in tachistoscope. As it is shown in Figure 9, the wrong or right answer is reflected on the screen via visuals and an indicator showing the number of wrong and right answers as in the tachistoscope test.

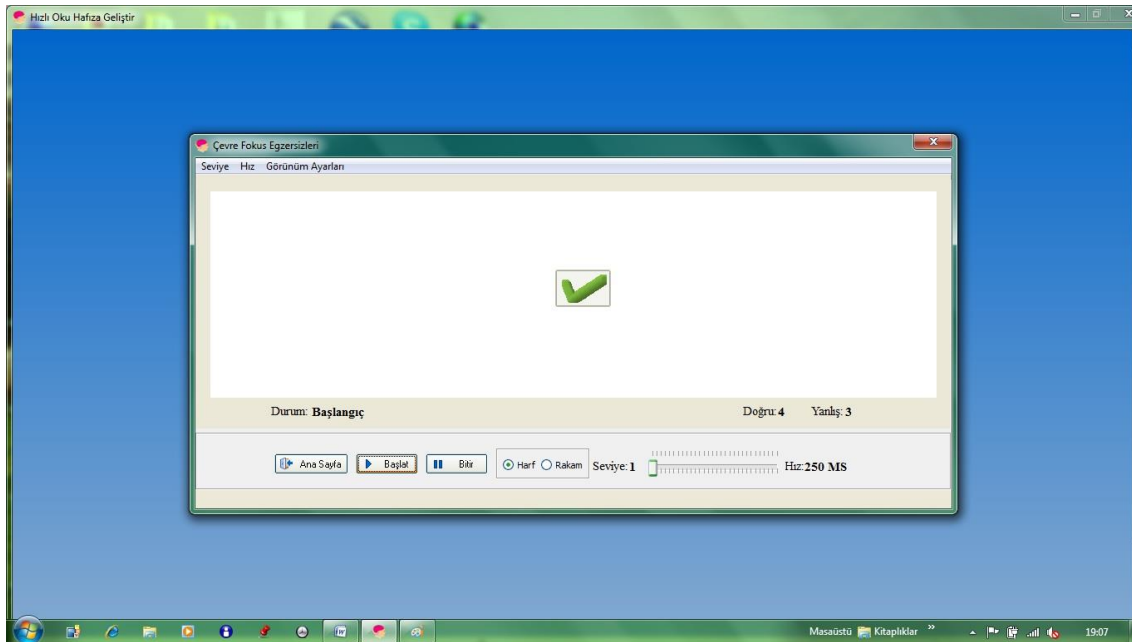


Figure 9:
The confirmation of the right answer in Peripheral Focus exercise

c) Multifocus (Quick Perception): One of the vital reading mistakes affecting the reading rate is attention. Attention deficit reduces the reading rate and the comprehension of the text emerging during the reading as follows: mixing similar words, mixing similar letters, ignoring punctuation marks, etc. Multifocus exercise is an application helping to improve the interpretation competence between the eye and brain by increasing eye's perception capacity. This exercise was designed to improve the reader's attention, concentration and interpretation skills. The same and similar exercises aim to group and perceive fast the same and similar words without mixing them each other.

A multifocal exercise is indicated in Figure 10. If the words appeared on the screen of multi-focus application are different from each other the user should press right key, if they are the same user should press left key, and the type of exercise is divided into two as "Same" and "Different". Multifocus consists of 30 levels. The rules for the level rise and reduction are the same as in tachistoscope and peripheral focus. The reading rate and level can be adjusted appropriately in the application.

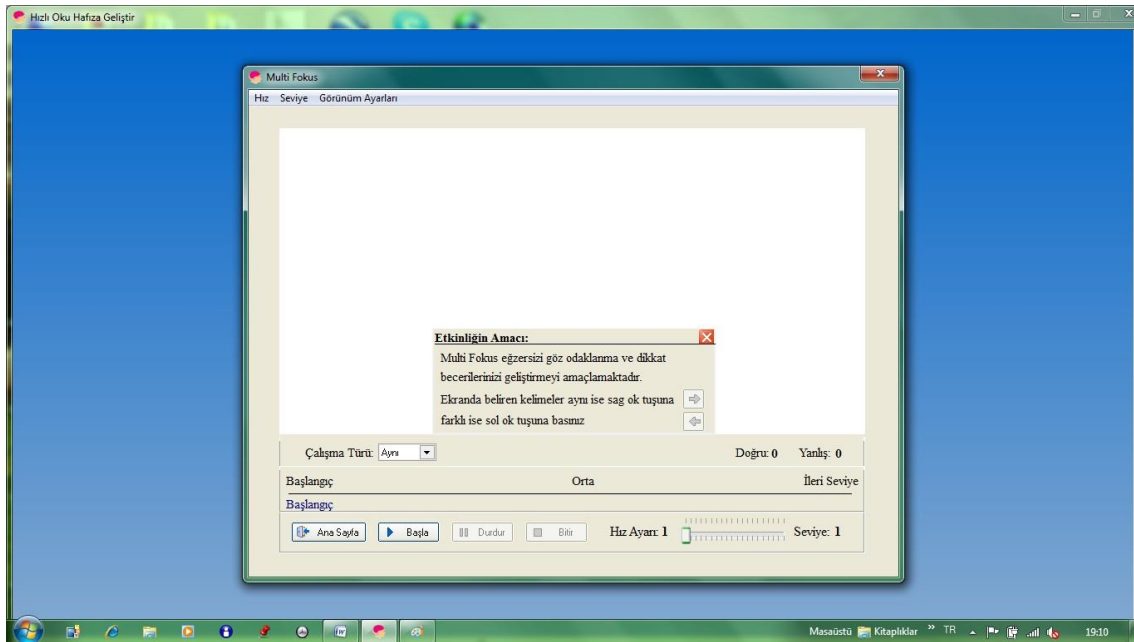


Figure 10:
The homepage of the multifocus exercise

When the type of exercise is "Same" as indicated, in Figure 11 the user should press the left key, as the words "gölet" and "böyle" are different from each other, and then the number of the correct answers increase.

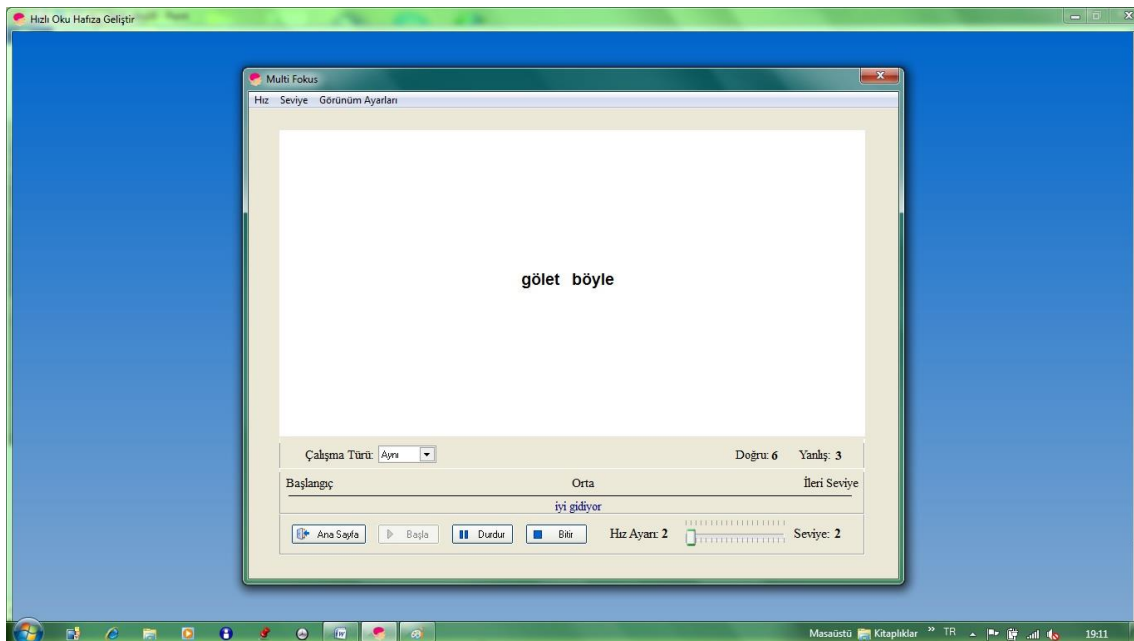


Figure 11:
Active Multifocus application

The view settings, fonts and the form color of the activity can also be changed in Multifocus exercise.

d) Partial (Part completion): If the visual field of the eye is improved in both vertical and horizontal directions, the number of the words perceived during a pause increases and the user's comprehension of the reading text improves. The purpose of the application is to widen the vertical perception field of the eye and to increase the perception rate.

The "Partial" application is indicated in Figure 12. This application consists of 10 levels. When the number of the correct answers reaches 12, the level is raised or after the user's incorrect answers reaches 5 the level is reduced. The level rise and reduction warnings are reflected on the screen via visuals.

The reading rate and level can be increased or reduced thanks to menus. In the Partial Exercise (Figure 12), when the user clicks on the "start", the word whose reading rate is determined is reflected on the screen in three lines, one of them is the full word, and the others are the different parts of it. Therefore, the exercise of increasing user's vertical perception field and the rate is performed.

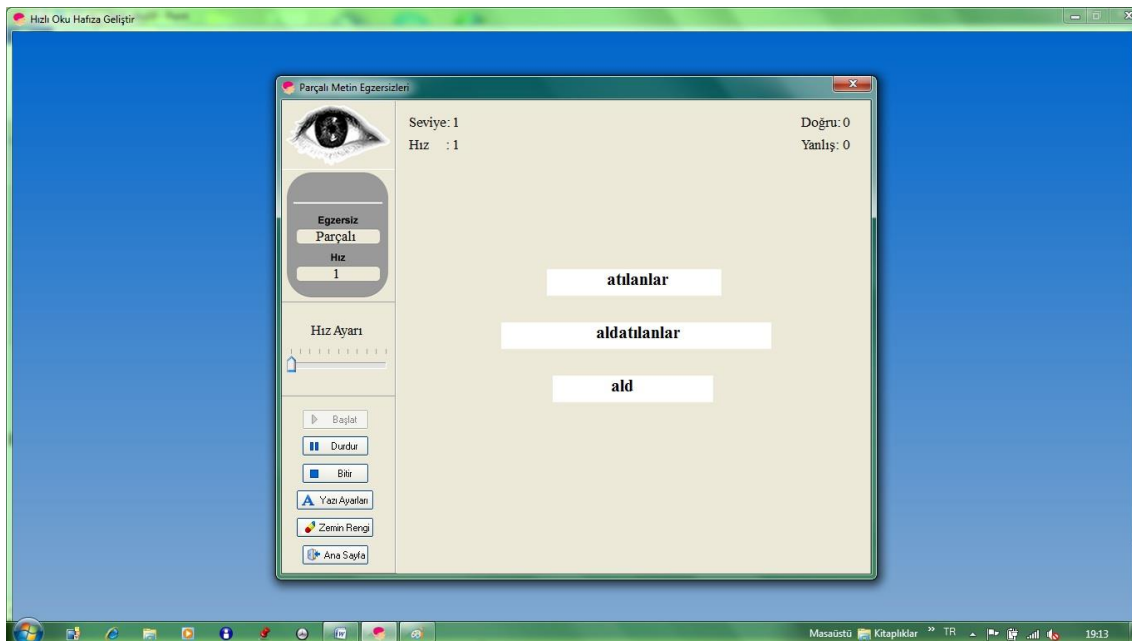


Figure 12:
The Active Partial Exercise

The user is supposed to fill three words via text boxes as indicated in Figure 13. "Check" button is used to check whether the answer given in control monitor of the Partial exercise is correct or incorrect. The correct or incorrect image is reflected on the screen according to the user's answer. If the user cannot remember or see what is reflected on the screen in a previous partial reading panel, he may press the "Skip" button. This situation does not increase the number of incorrect answers.

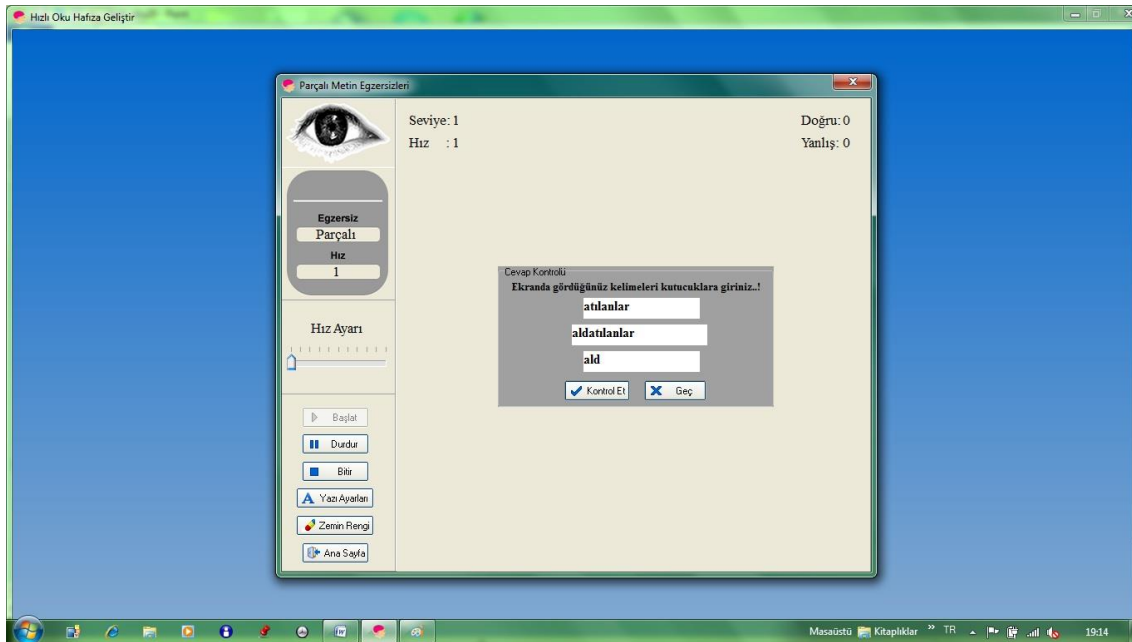


Figure 13:
The answer control panel in Partial exercise

Eye exercises

a) Point: This is one of the mechanical eye exercises. It aims to provide the eye speed and elasticity by activating extraocular muscles. The eye will be elastic and gain speed by following the flashing light on the monitor in order and rhythm.

In Figure 14, Mechanic Exercise Main page is indicated. In this activity, eye-skimming (transmission) exercises are being held according to the determined rate and given duration. In mechanic point exercise, there are 10 different transmission points. With this type of transmission which flashing pointers determine the direction, eyes make the skimming according to changing pointer direction (the direction of red color turning into yellow). If the random feature is selected, eye skimming will be enabled randomly. Thus, transmission number reaches 11. Time is adjusted from 1 minute to 4 minutes. Also, this activity can be arranged without a time limitation. That is, the user can start an activity, which does not strain the eyes. This duration can be less than 1 minute. Whichever time is selected, when clicking on the stop button above or clicking upon activity, the activity can be stopped.

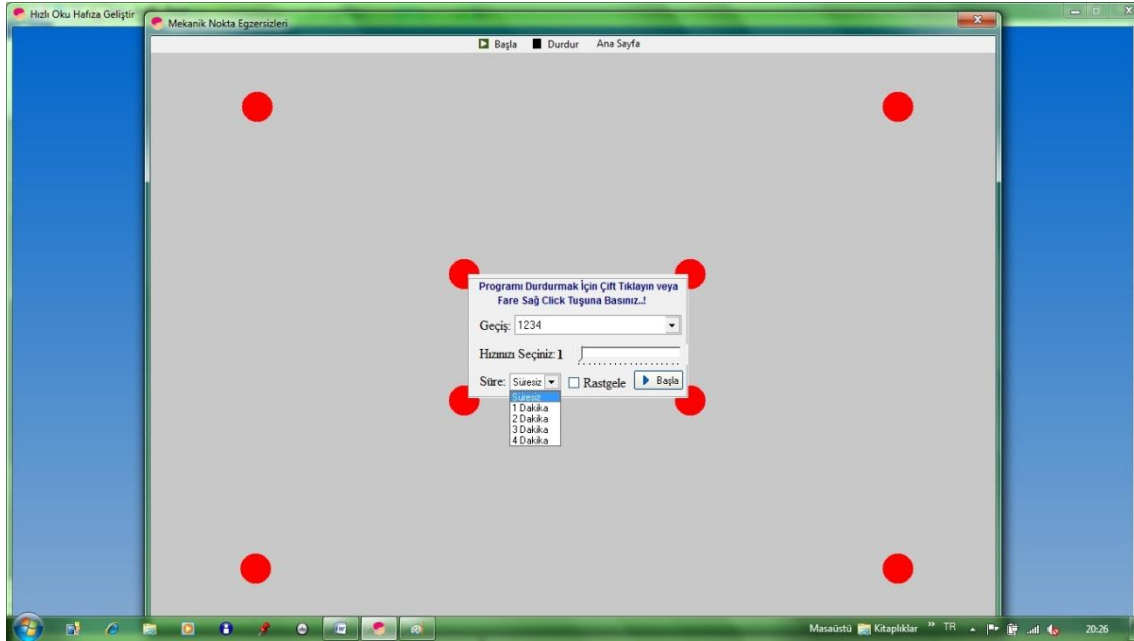


Figure 14:
Mechanic Point Exercises

b) Growing Figure: This exercise aims to follow the figure that grows gradually with eyes by focusing on the point in the middle. It is one of the exercises that helps the eye focus on one point, make easy to concentrate on and pay more attention.

In Figure 15, the monitor on which Mechanic Growing Figure Exercises are done is indicated. There are two different kinds of figures as circle and square in this activity which aim gathering attention by looking at the focal point of Growing figure and enlarging the visual field. The focusing time of eye, that is, the expanding growing feature of figure starts from 30 seconds and it can be arranged up to 150 seconds with 30 seconds intervals. If any time requirement is not chosen, from the moment of pushing "start" button the figure works 30 seconds as "default". In addition, the movement rate of the figure can be determined by the user.

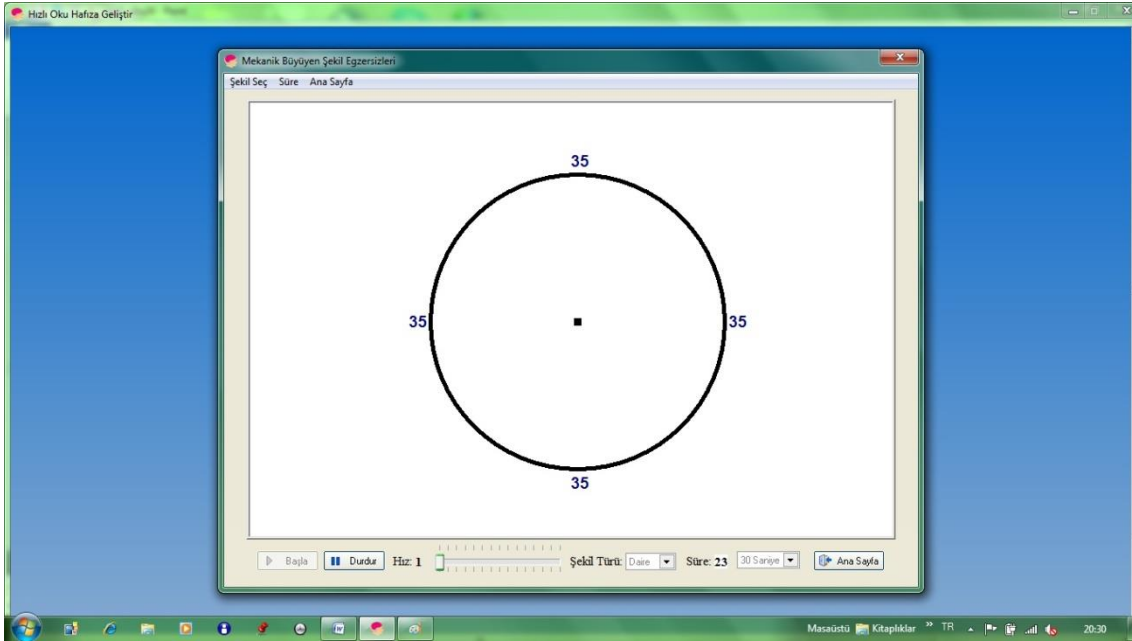


Figure 15:
Mechanic growing figure exercises.

c) Exercise (Pyramid): This activity aims to expand the peripheral vision area of the eye and improve the number of letter-word that the eye perceives in a pause. Active vision field is the area, which the eye has a clear view in a pause after each skimming. The eye also perceives the words, which take place in peripheral vision area that is out of the clear vision area but does not see them. Active vision field is standard and cannot be extended but peripheral vision area (perception- realization area) can be improved with the help of exercises, and it changes according to readers. This study aims to enable the eye to perceive the word blocks from two letters to twenty-two letters step by step.

Pyramid Eye Exercises monitor is indicated in Figure 16. This activity is one of the most important sections of the "Read fast Enhance Memory" software.

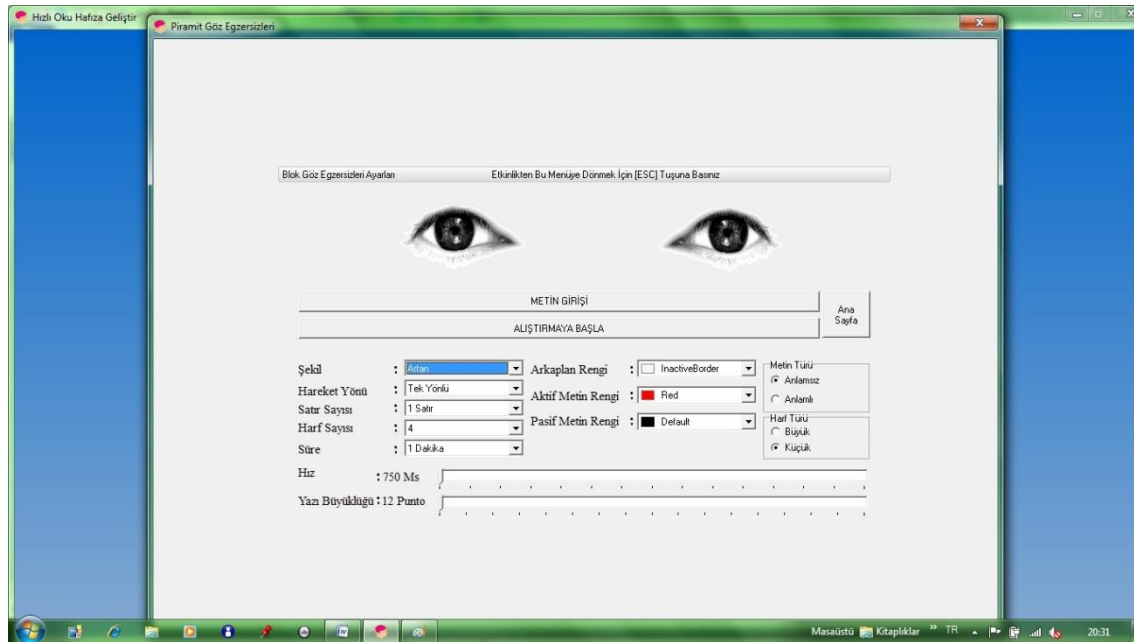


Figure16:
Pyramid eye exercises

In the activity, there are some adjustments to be done according to the exercise type. It is possible to explain these adjustments in this way:

Figure: There are two different types of Pyramid exercise. These are a single line and increasing lines applications. This feature is used to choose one of these options. "Increasing" feature is arranged as default.

Movement Direction: There are two movement directions used in the activity. These are single and double direction options. One of these two options can be chosen from the movement direction menu.

Line Number: It is used to determine how many lines will be activated in the movement area. In here, there are options from one to six lines.

Letter Number: It is used to determine how many letters will be chosen to go further during the activity. The numbers of letters that can be selected are between four and thirty-six.

Time: It is used to determine the duration of the activity. The period can be changed between 1 minute and 5 minutes and also it can be arranged without time limitation. While doing the exercise, without waiting for expiring one can leave the application by using [ESC] button.

Speed: It is used to arrange the rate of activity.

Type Size: It is used to adjust the type size used in activity.

Text Type: It enables you to choose a nonsense text or meaningful text.

Letter Type: It is used to determine whether the letters are capital or not.

Color options: It is used to determine background color, the background color of activity, active text color, marked text color, and unchecked text color.

These arrangements are used for the Pyramid Eye Exercises indicated in Figure 17: Figure: increasing, Movement direction: one-side, Line number: 1, Letter number: start from 4, Time: 1 min., Text type: meaningful, Letter type: capital, Background color: btnface, Active text color: red, Unchecked text color: black Speed: 400ms, Type size: 12.



Figure 17:
Pyramid eye exercises meaningful capital letter exercise

In Figure 18, data entry can be made for the words which don't exist in Pyramid exercises database. These words can contain capital or small letters. This data entry can be adjusted from the "add text" menu. As shown in Figure 18 clearly, text entry will be limited with only chosen letter number. That is, from 4 letter texts to 36-letter texts. This is one of the features that is not included in the analyzed software.

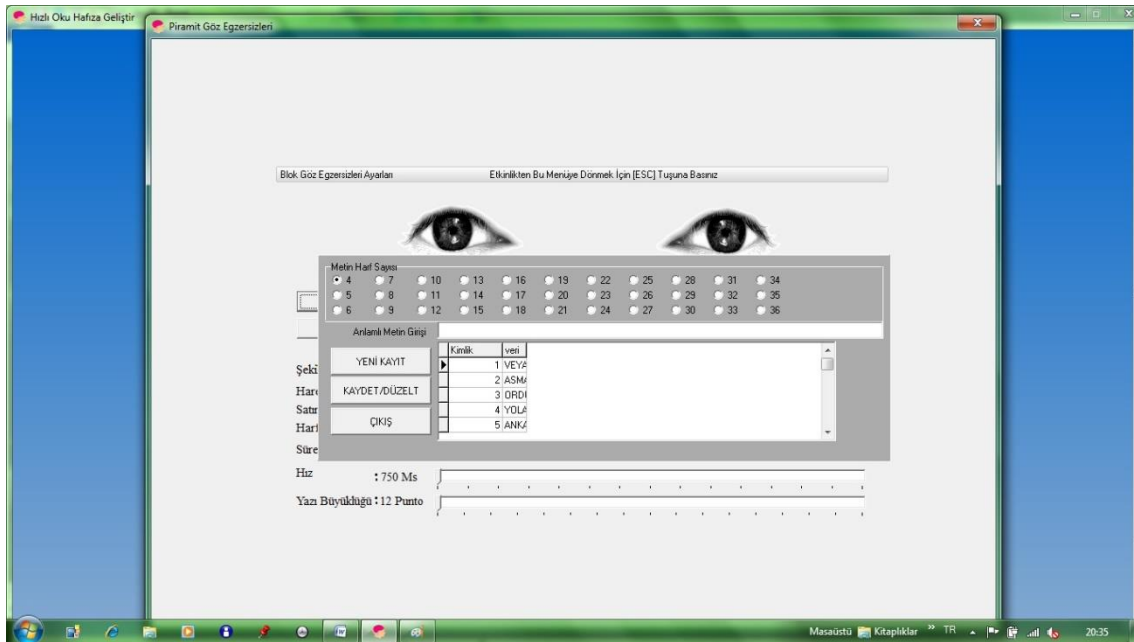


Figure 18:
Pyramid eye exercises meaningful data entry

d) Exercise (Blocking-Reading Blocks and Perception): It is one of the activities that enable the eye to gain block-reading habit by grouping the words. The eye focusing upon the middle of word groups, read the texts as the block. This habit prevents the eye from sticking the words and reading word by word.

In Figure 19, Block Eye exercise monitor is shown.

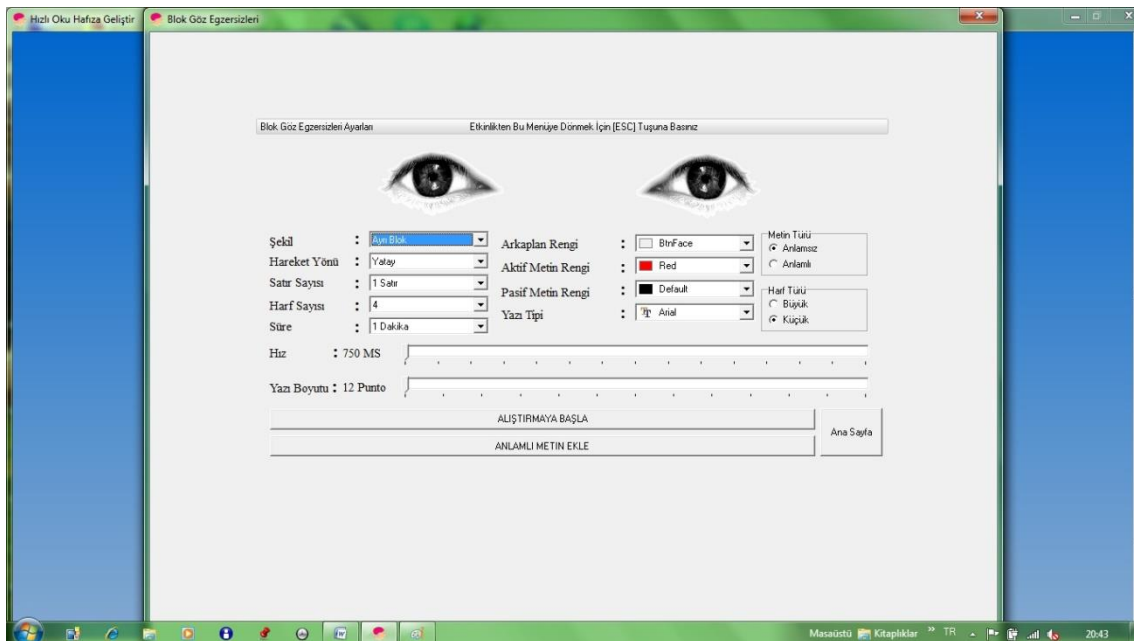


Figure 19:
Block eye exercises

In activity, there are some adjustments to be done according to exercise type. It is possible to explain these adjustments in this way:

Figure: There are two different types of block activity. These are adjoint or separate blocks. To choose one of them, the Figure menu is used.

Movement Direction: There are three movement directions used in the activity. These are: horizontal, vertical and zigzag.

Line Number: It is used to determine how many lines will be activated in the movement area during the activity. In here, there are options from one to six lines.

Letter Number: It is used to determine how many letters will be chosen to go further during the activity. The numbers of letters that can be selected are four, six, nine, twelve, eighteen and thirty-six.

Time: It is used to determine the duration of the activity. The period can be changed between 1 and 5 minutes and also it can be arranged without time limitation. While doing the exercise, without waiting for expiring with [ESC] button one can leave the application.

Speed: It is used to arrange the rate of activity.

Type Size: It is used to adjust the type size used in the activity.

Text Type: It enables you to choose a nonsense text or meaningful text.

Letter Type: It is used to determine whether the letters are capital or not.

Color options: It is used to determine background color, the background color of activity, active text color, marked text color, and unchecked text color.

These adjustments are used for the block exercises shown in Figure 20. Figure type: separate, Movement direction: horizontal, Line number: 3, Letter number: 6, Text type: meaningful, Letter type: capital, Time: 1 min. It is important for the pyramid and block exercises that background color should be adjusted according to the educational environment.

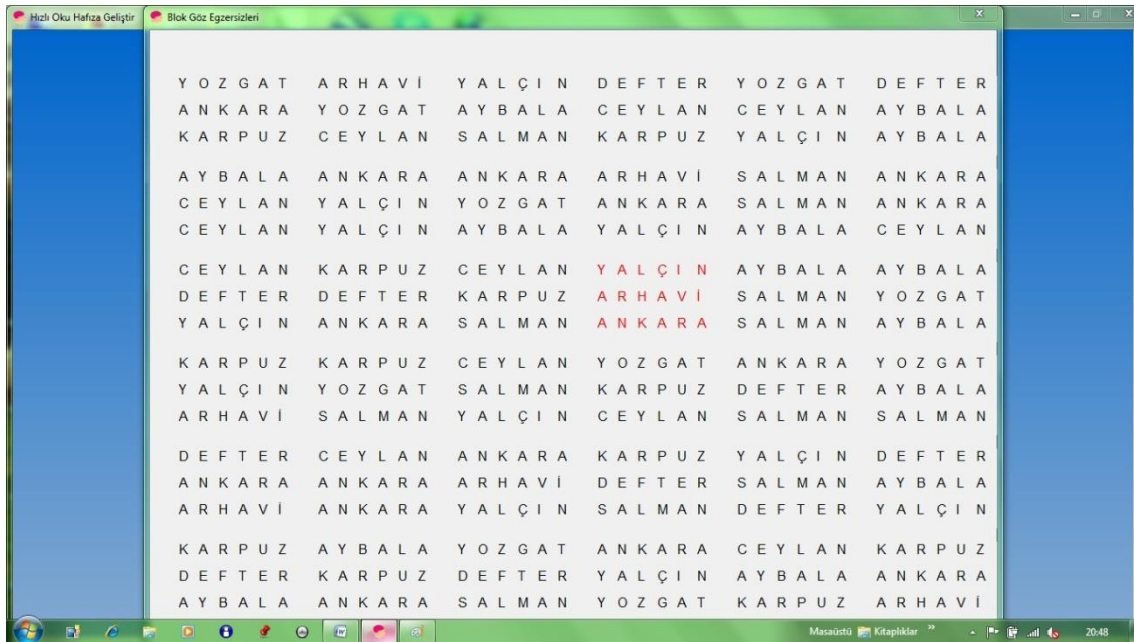


Figure 20:
Block eye exercises: meaningful, separate blocks

In Figure 21, a meaningful, adjoint activity, which has small letters and zigzag type, is shown.



Figure 21:
Block eye exercises: meaningful, adjoint block

The words in block eye exercises are related to the database but by clicking "Add Meaningful Text" button one can add new words, which are not in the database. (These can be four-letter, six-letter, nine-letter or twelve letter words.)(Figure 22). It is easy to

start a more dynamic activity with this feature because one can add new words, which are required to practice to the database of the program.

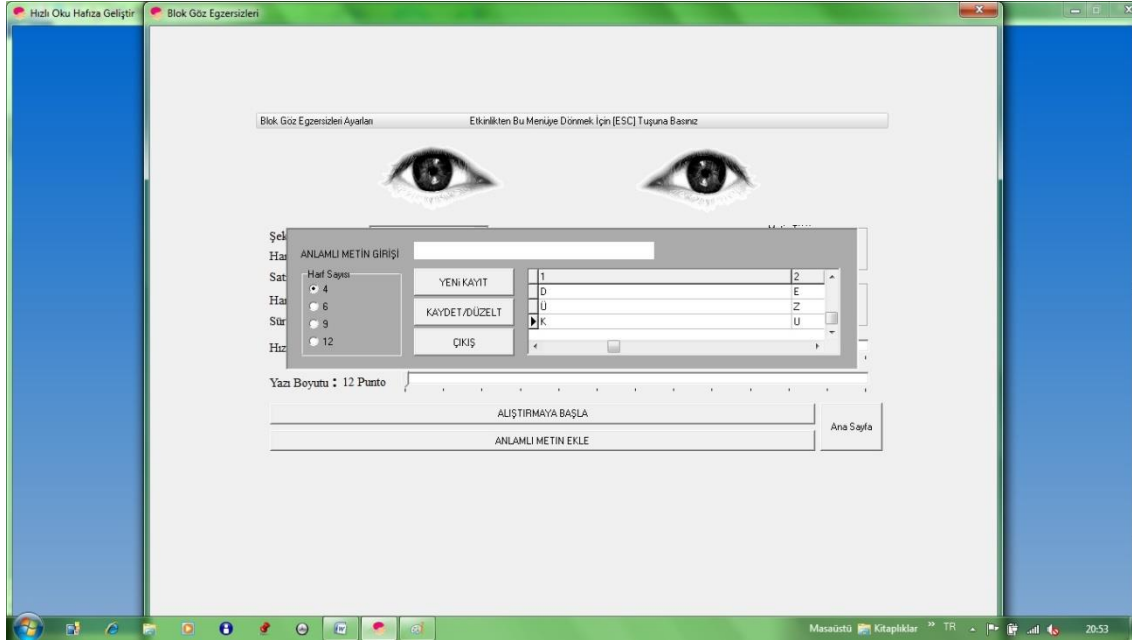


Figure 22:
Meaningful data entry for the database of block eye exercises

e) Separate Words: Emil Javal identified that an eye moves with skimming, in the meantime of this skimming process it recognizes the words, but it doesn't analyze each word in detail. Instead, it perceives them as a whole. Even if none of the words is seen, or the words are not completed, brain completes them. One of the reasons that speed up the reading process is eye's quick perception and brain's guessing and completion of the perceived word. The aim of this activity is, by focusing on the column appearing in the middle, to perceive the words, which diverge gradually from the column. The final aim of this exercise is to increase the noticed area by expanding the skimming distance and perception rate of an eye.

As seen in Figure 23, in separate words eye exercise, there are 5 levels and 5 distance points. As the level increases, the word numbers that are shown on the monitor also increase. Thanks to the distance tab, it is possible to increase or decrease the space among word blocks.

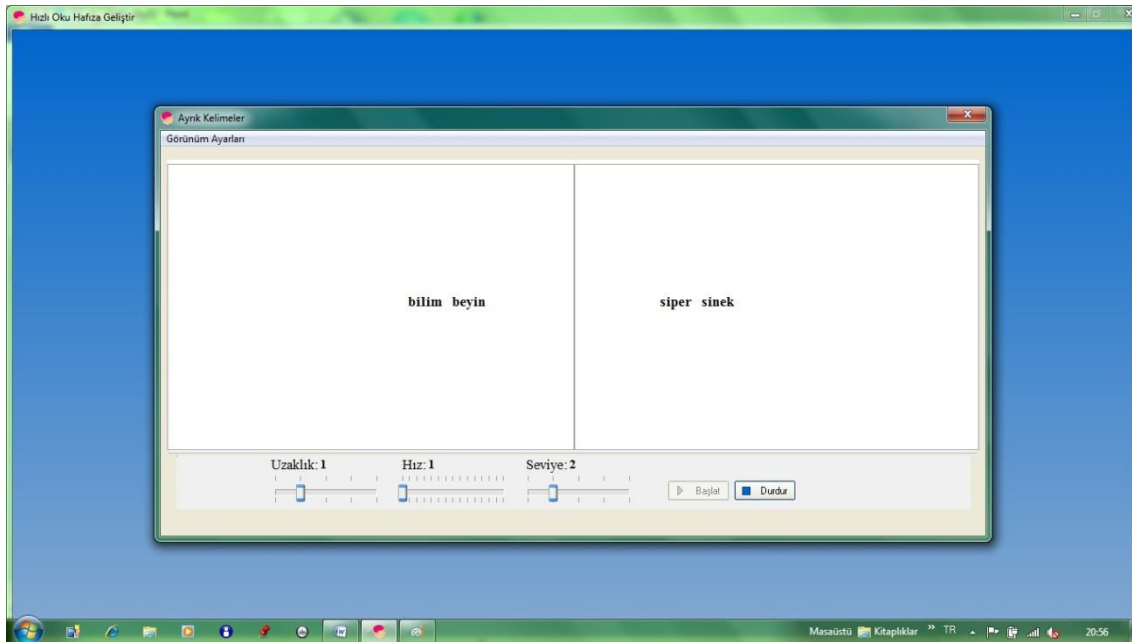


Figure 23:
Separate words

f) Eye Exercises-1: The aim of this activity is to enable the eye to gain the habit of moving faster by following the flashing line in the text from top-down and bottom-up.

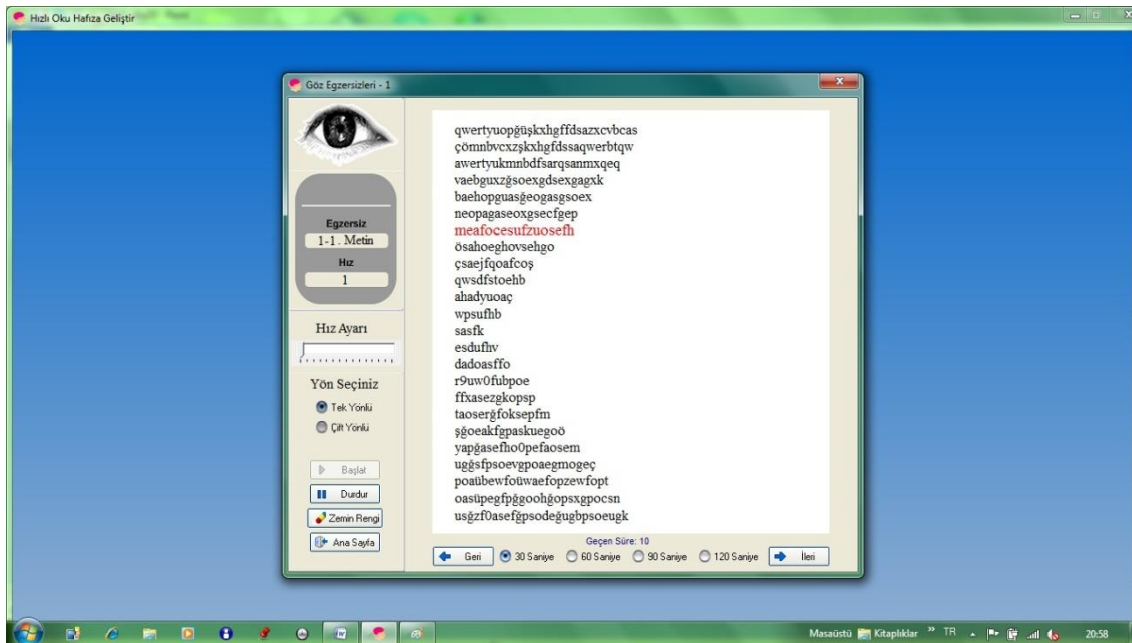


Figure 24:
Eye Exercises -1

As seen in figure 24, in total, there are 6 different texts in this activity. With the options of one-way or double-way, the movement adjustments of flashing line can be made. With the back and forward buttons, the texts can be chosen. Doing exercise with each text within a determined time is possible. The duration in here is between 30 seconds and 2

minutes with 30 seconds lag. As in other activities, the word and background color adjustments can be done in this activity.

g) Exercise (Beginnig/End): The aim of this activity is, to enable the eye to move faster and flexible by activating extraocular muscles. The eye only perceives quickly the word groups colored in line's beginning, and end and one can check how long it takes to reach the end of the text. In this activity, there are 5 different texts and three pages for each text. There are 15 exercise pages in total. (Figure 25). The eye is expected to follow the marked line, which takes place at the beginning and the end of each line, at a determined rate. Also, the changes in view settings can be done in this activity.

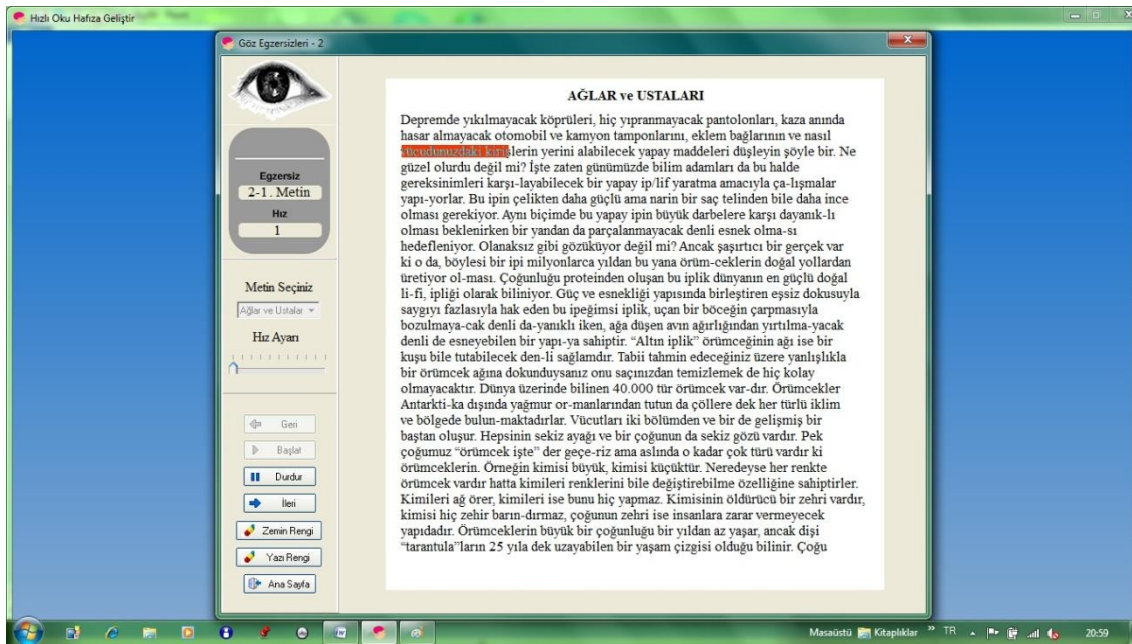


Figure 25:
Eye Exercises -2

h) Exercise (Column): This exercise aims to provide the eye the ability of flexibility. By focusing on the red light in the middle of the word, the eye will perceive the word. Column activity is one of the activities that increase eye rhythm and enlarge peripheral vision field. The readers expected to read the whole line by focusing on the point in the middle of the columns.

In Figure 26, a three column-eye exercise is shown. In this activity, there are two parts as text and sub-text. In the text group tab, how many columns the exercise to be done consists of is chosen: one column, two columns or three columns. In the sub-text group, there are three exercise pages arranged according to the chosen column. In total, it is possible to do a nine-page exercise by adding three worksheets for each column type. With pointer direction, the direction of the moving red points in exercise will be determined.

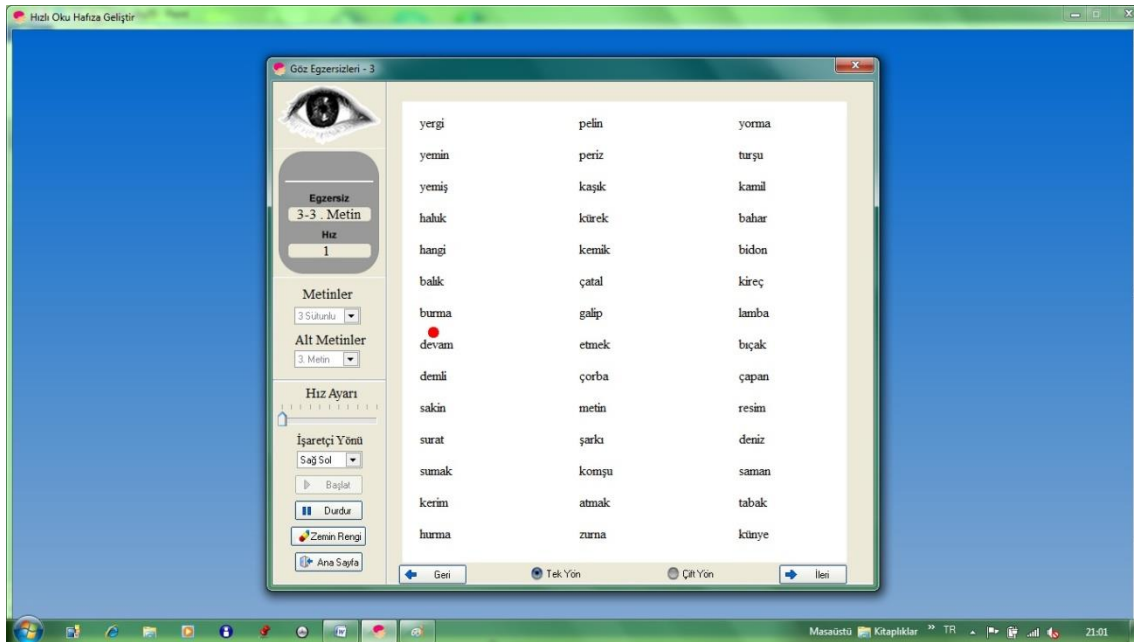


Figure 26:
Eye Exercises -3

1) **Eye Exercises-4:** The aim of this activity is to enable the eye to read the word groups, which have the same origin, as blocks from 3 lines to 5 lines according to determined movement speed. In Figure 27, an eye exercise belonging to four-line word groups is indicated.

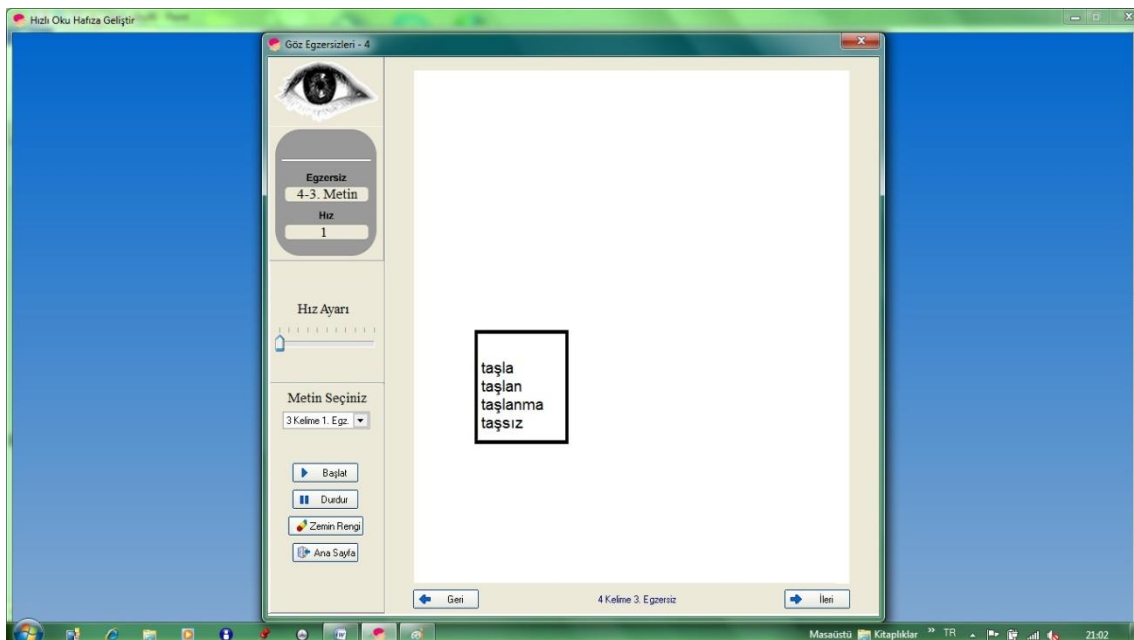


Figure 27:
Eye exercises – 4

Reading Exercises

In this section, users are aimed to increase their reading rate by the eye movement habits they got in the previous parts. There are three different eye exercises in this section of reading exercises. One of these is block-grouping reading, the second one is flowing reading- flowing text, and the third one is shading.

In Figure 28, you see the screenshot of reading exercises. In this section, the user can do practice with three hundred different texts. However, if the user wishes, he/she can add new texts by setting up a new section and new sub-sections below the added sections, to the reading exercises. Moreover, he/she can make an edit to the section he/she added. These features make the programme more important.

In the reading texts, the database can be used in five groups being: newspaper texts, liberal texts, scientific texts, journals and a group of reading texts, which is a mixture of all, the above. In general, the programme has features of both being appropriate for a University, high school, secondary school students and the evaluation of these student groups. As Speed Reading and Memory Developing exercises are also among the self-development training, other adolescents can use them, too.

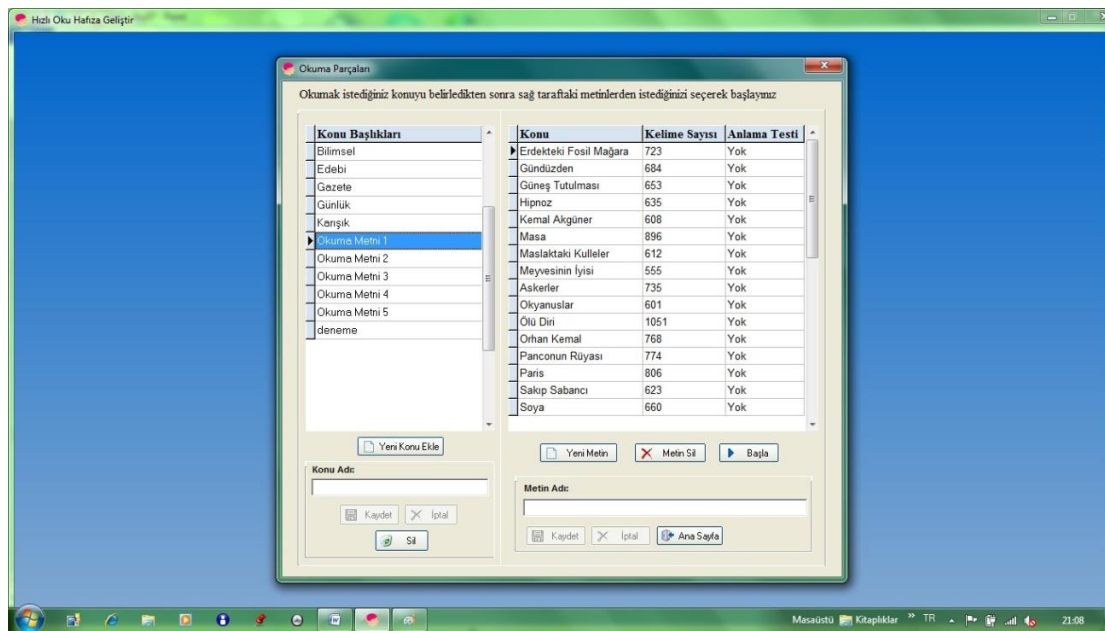


Figure 28:
Reading Exercises

a) Block Reading(Grouping/ Group Reading)

An uneducated eye will make pauses on lines and in every pause, it will send the picturized word to the brain. This study aims to make it possible for the eye to perceive more than one word in each pause. With the study, the ability to see a wide group of words in one pause will improve by enhancing the field of view. With the acceleration option included in the programme, the eye will be forced to read much faster. In the study, trying to perceive the number of words, by focusing on groups of words, is aimed (Figure 29).

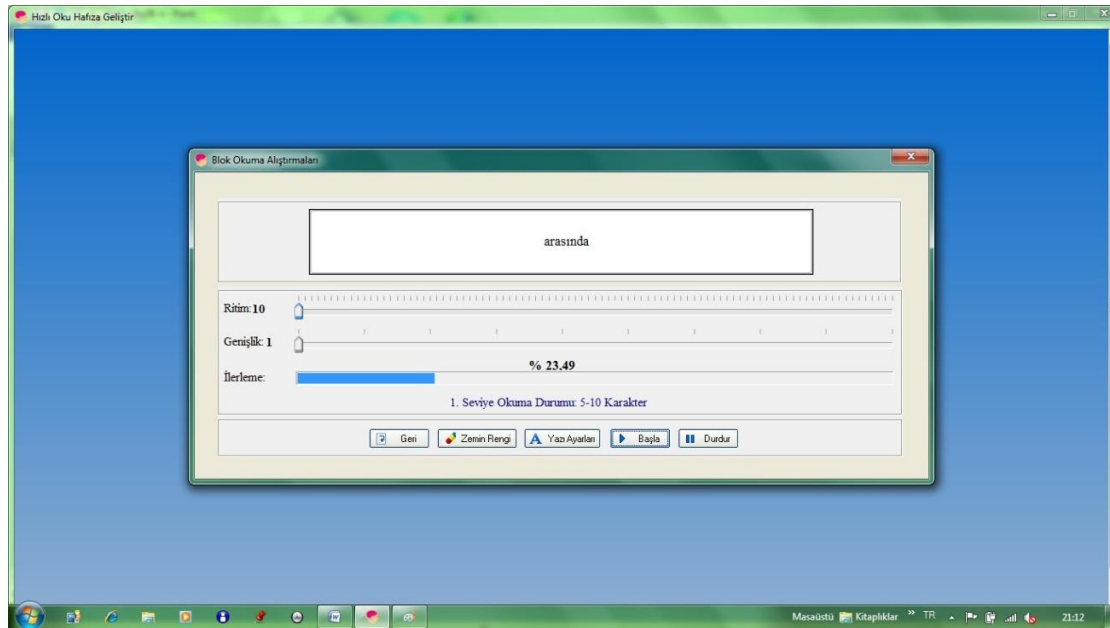


Figure 29:
Block Reading Exercises

b) Speed Reading - Flowing Reading/ Flowing Text:

In this section, When the text line slides up and down, the eye is aimed to get the habit of reading faster by picturizing the sliding texts as a group of words in the brain.

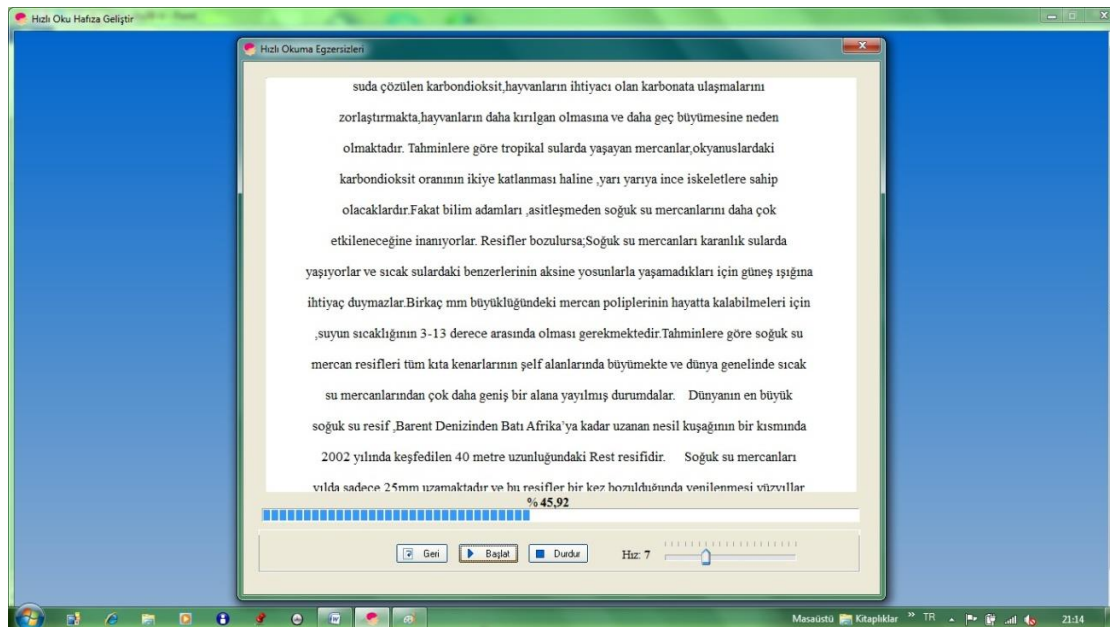


Figure 30:
Speed Reading (Flowing reading/Flowing text) Exercises

When the reading is completed in the block reading and flowing reading exercises, the information of the time the user took and the information of the number of words read is displayed on the screen. In the attention message seen in figure 31, if the "save" option is chosen, the statistics of reading information will be kept in the form of graphics.

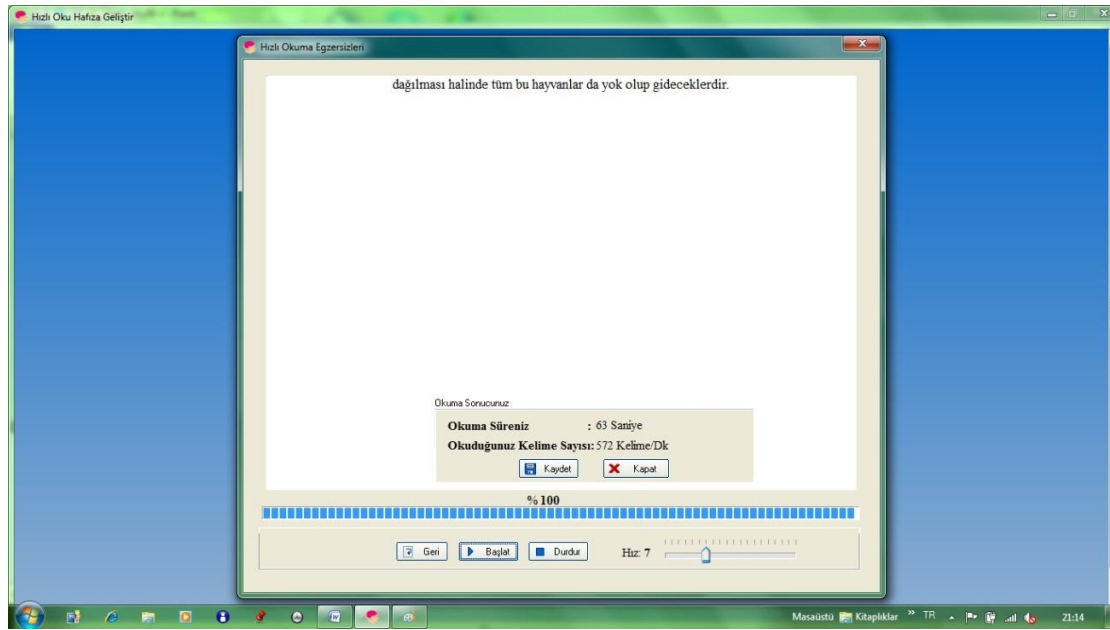


Figure 31:
Users reading information of the flowing text reading exercises

c) Blocking:

An uneducated reader will read word by word; however, a human eye can see one to three words (changing according to the number of alphabets) at once. With these exercises, the eye is aimed to acquire the habit of seeing groups of words instead of one word. Learning to read by dividing texts into word groups, the eye will perform the same dividing activity in the daily life texts as well, and there will be an increase in his/her rate of reading. The acceleration section of the study will enable the eye to move faster and more rhythmically among the grouped texts. The disguised text is grouped according to the rate and the reader chooses level. When the reading starts, the word group that is supposed to be read is revealed, and at the same time, the programme will give the order to the brain and eye about the pace and the number of words that should be perceived in the proceeding process according to the word group and rate. The eye that gets used to the said rhythm and width performs reading with the same rhythm and width in the normal texts.

In Figure 32, there are three different types of reading in reading exercises. These are normal reading, skipping reading and easy reading.

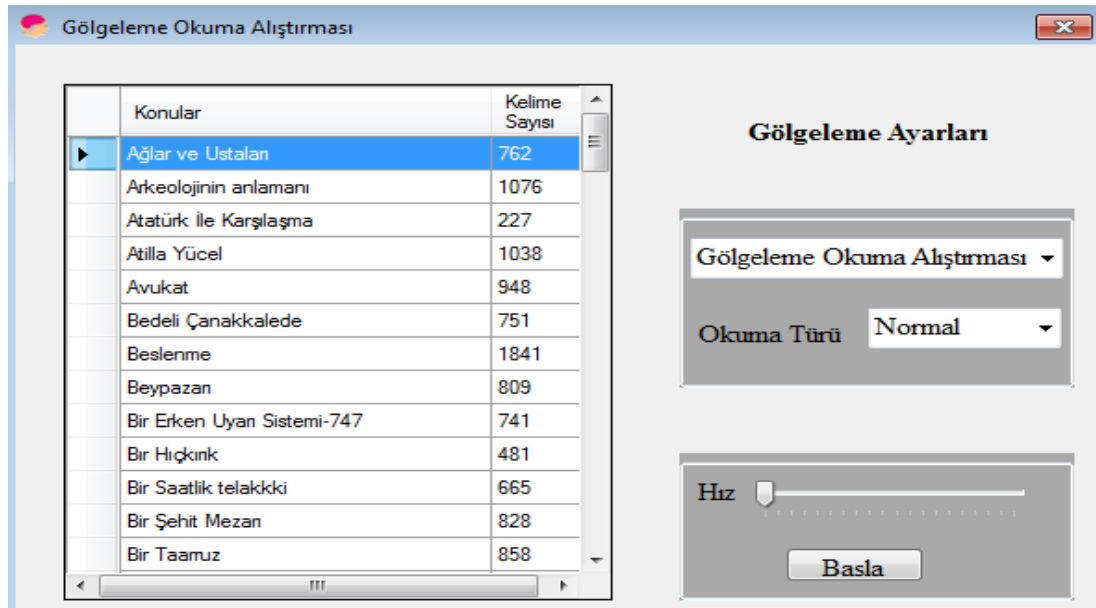


Figure 32:
Shadowed reading exercises

Memory enhancement

In this section, some exercises keep the individual's memory sharp and increase his attention and concentration so that he can use memory techniques effectively. The section is aimed for such processes as remembering important grades (exams etc.), important chapters of a previously read book or essays, matching people's faces and names, telephone numbers or remembering formulas, words and their meanings in foreign language teaching, etc. There are seven different activities in this section.

a) The Number Game

The activity is aimed at the individual to improve his/her visual scanning ability. The event seen in Figure 33 contains mixed numbers from 1 to 84, and among these numbers, the individual is aimed to find the number 84, in the shortest time possible. By this way, the eye will get the ability to look at the whole rather than searching for the number one by one.

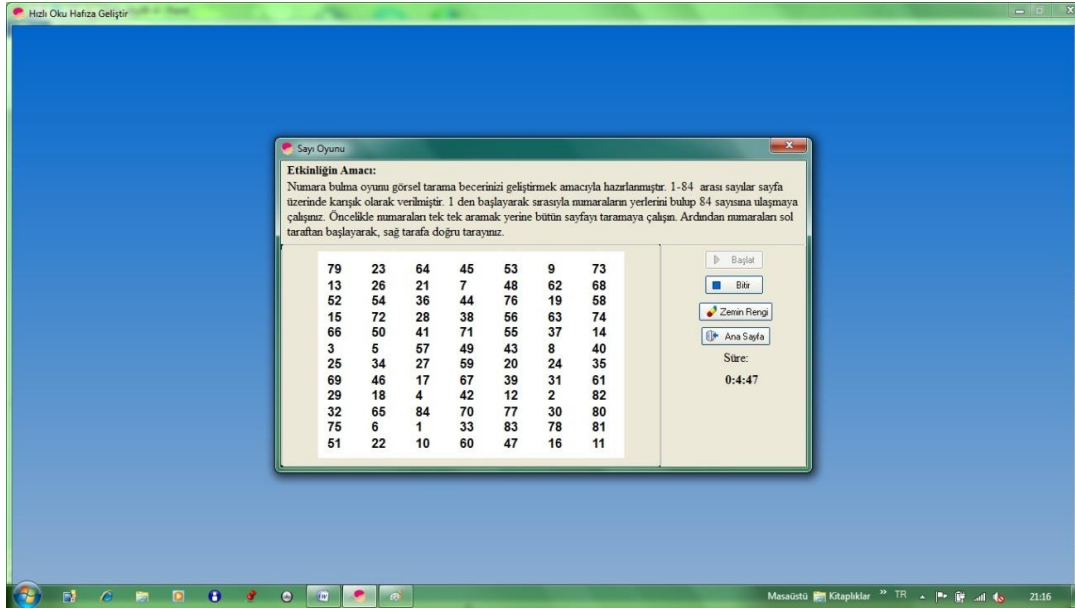


Figure 33:
Number Game

b) Matching name with picture

As seen in Figure 34, in this activity, the users are asked to look at the pictures and the names under the picture and memorize them in the given time, and at the end of the given time, they are expected to write the names under the pictures that are mixed. Here, there are five categories of picture types. In the activity, there are looking duration options that change by tens, from 10 to 60 second; and studies are consisting of pictures of 12, 8 and 4 according to the primary and adolescent age groups. The given time for the answer changes from 1 minute to 4 minutes and if you like, you can choose the unlimited time option.

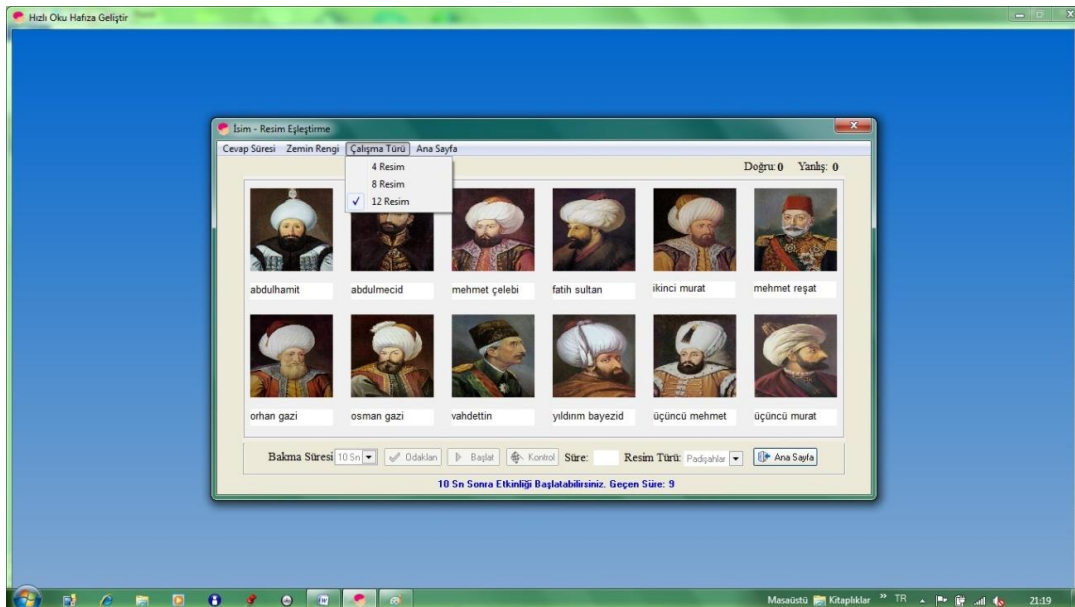


Figure 34:
Picture matching of twelve parts

c) The Picture Game

In this section, the user is asked to find the same pictures, in the given time (Figure 35). The study level consists of 32, 16 and 8 pictures. It is the most popular memory improvement activity, and it includes study levels that are appropriate for every age group.

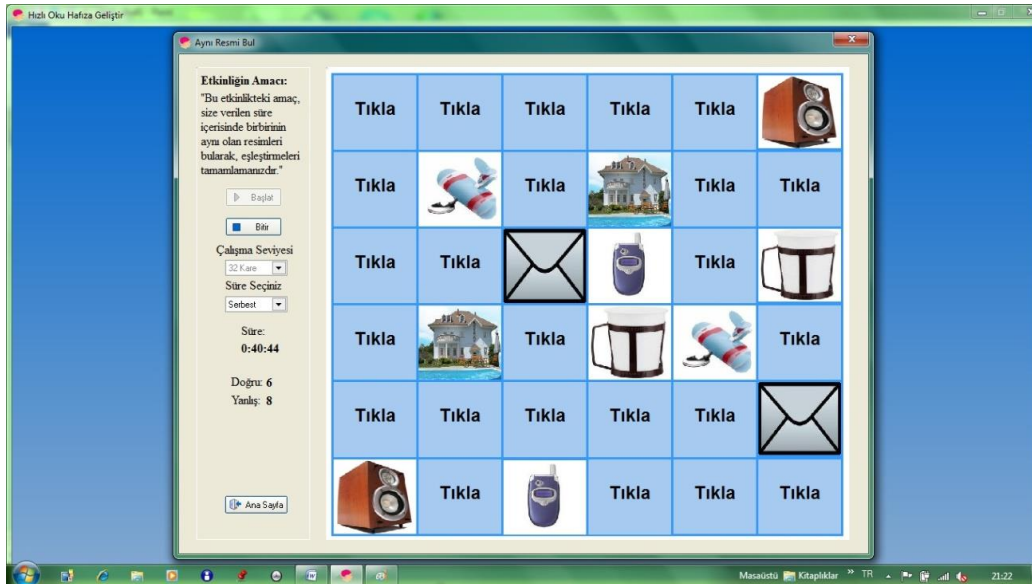


Figure 34:
The Picture Game

d) Memory Improvement

The activity aims to develop the users' eye-brain coordination. In the activity that consists of 8 levels, as seen in figure 35 (according to the chosen level) the place of the white boxes that flash on the green ones are expected to be found according to the selected level.

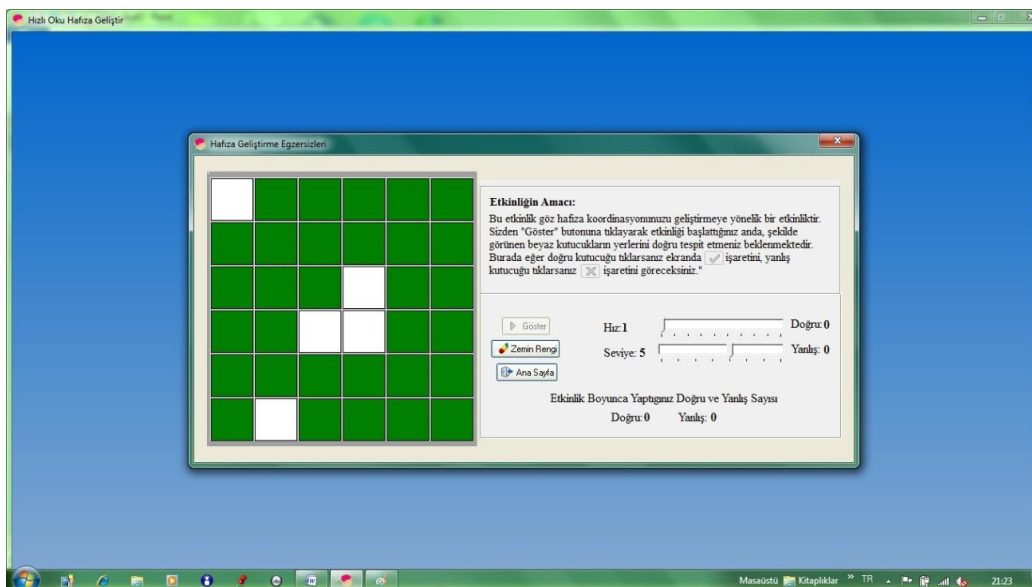


Figure 35:
Memory Improvement

e) Maze

In the activity maze, which is one of the best in memory improvement, there are seven different levels. It is an activity that has been developed with the aim of starting from the starting point and getting to the "end" in the shortest time possible (Figure 36).

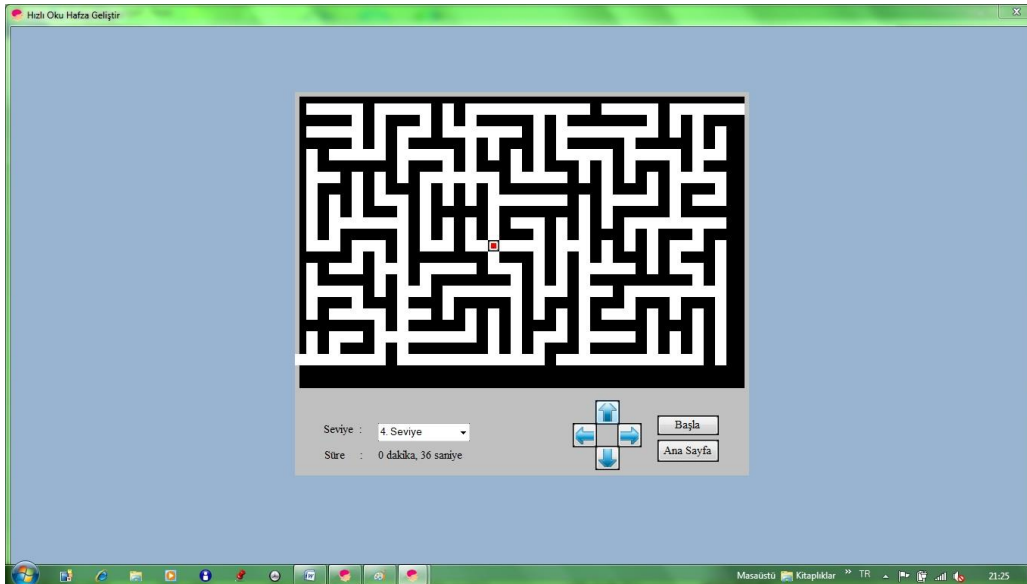


Figure 36:
Maze, the activity of level four

f) Find the Number

There are two different types of study in this activity. The first one is finding the number of the digits in the line that is given mixed, and the second is finding the number of the alphabets, both in the given time (Figure 37). The allowed time changes from 10 to 20 second.

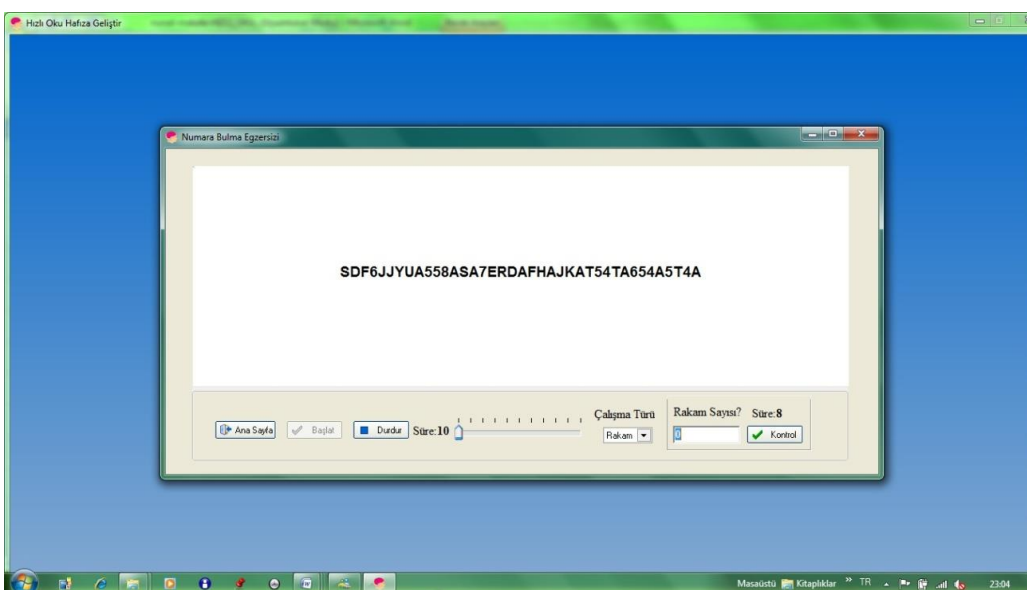


Figure 37:
"Find the number" activity

g) Strip

The activity is designed to increase the power of perception and attention of the individuals. As seen in figure 38, by looking at the flowing pictures and names on the screen, the user is expected to find the picture that did not appear on the screen.

There are five categories of pictures in the activity. Two different types of study consisting of 10 and 6 pictures and two different levels of transition exist.

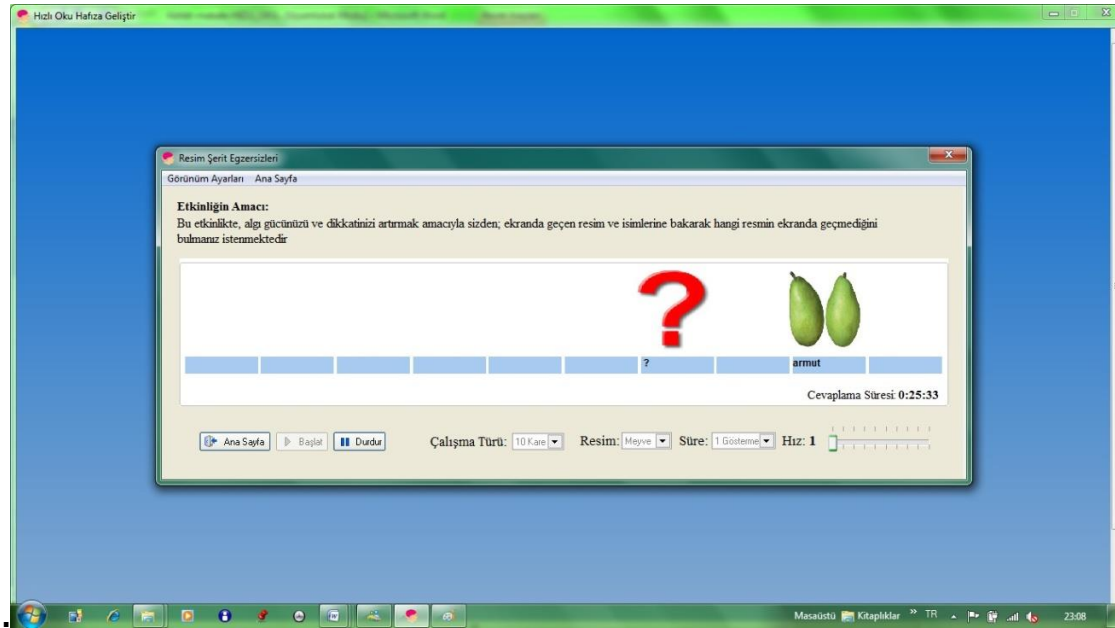


Figure 38:
Ten pictures of picture strip with one unknown

Reading passages with tests

This section aims to define the reading and comprehension rate, according to the text. With the help of the multiple-choice questions prepared after the passages with tests, the comprehension rate of the individual is defined. Through passages with tests, by showing the rate of reading and comprehension of the individual, the number of the words he/she reads per minute, the comprehension rate and the reading efficiency are estimated.

There are two different types of reading exercises. These are normal reading and flowing reading. Here, first, the text that is a comprehension test is chosen from the section of reading exercises, it is read, and then the user is tested for the calculation of his/her reading comprehension.

Here, in this test, there are: true-false, fill in the gaps and multiple-choice exercises.

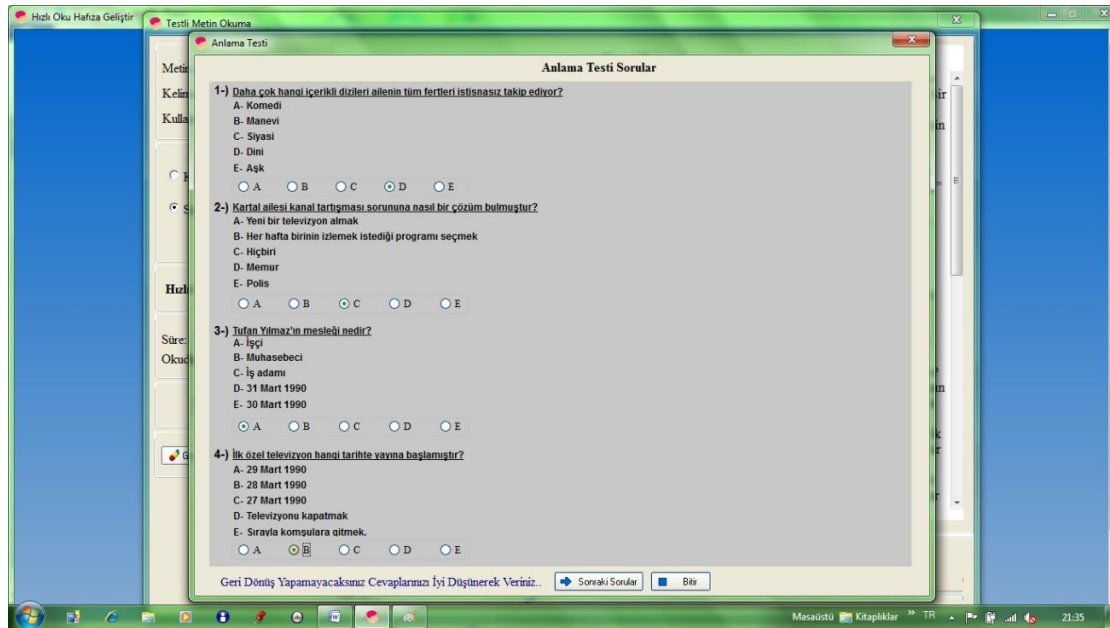


Figure 40:
Comprehension test of the chosen text

After the user completes the test, the results of the comprehension test in Figure 41 are calculated. (Comprehension rate, reading efficiency, the number of correct and incorrect answers, the rate of his/her silent reading, and the number of words read).

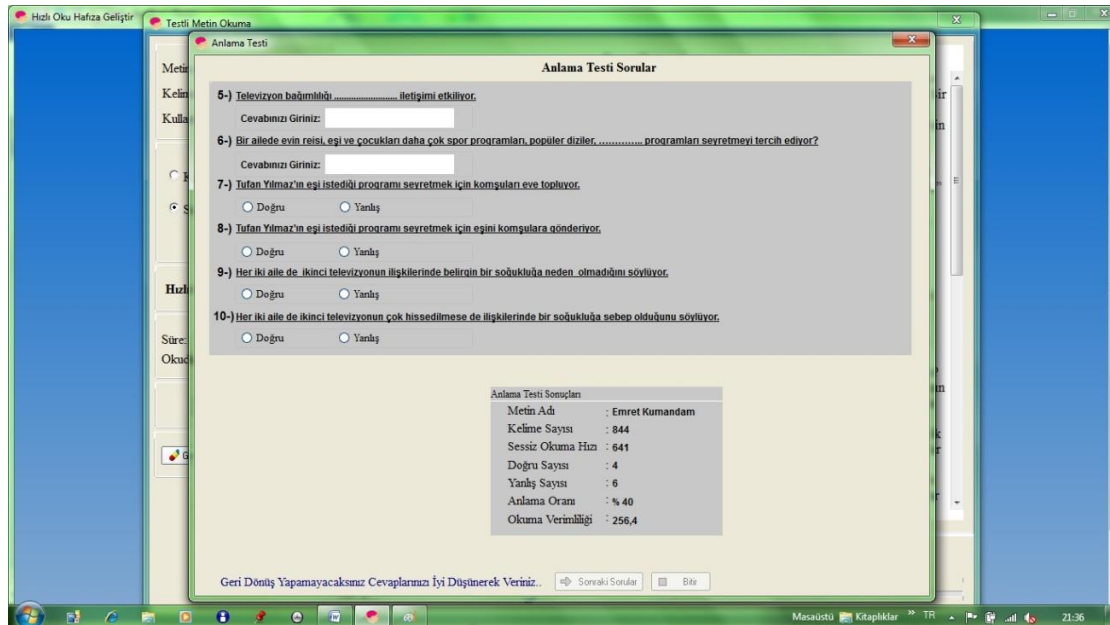


Figure 41:
User's comprehension test results of the chosen text

Statistics

In this section, the statistics of the active readers in speed-reading and block reading exercises is kept in the form of graphics. In figure 42, the statistics of the user named "Nur" can be seen.

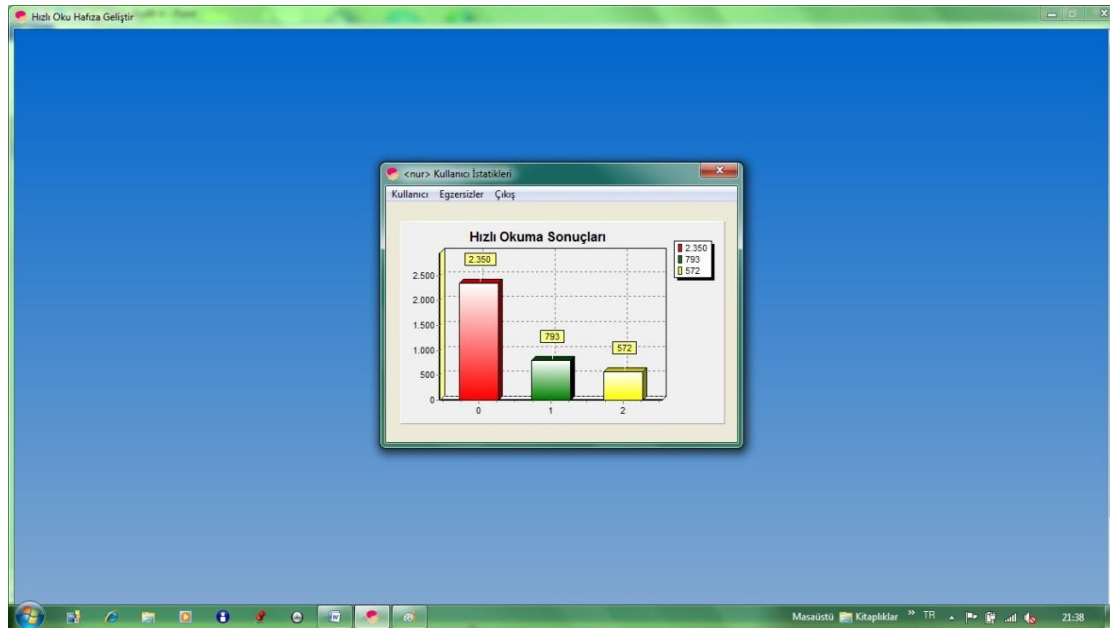


Figure 42:
The statistics of the user "Nur"

About the software

This is a section that consists of three tabs: the first one is by whom and where the software was developed, the second is explanations of the minimum software requirements and the third is where you can do the management setups. The most important feature of the section is the "management setup" in the "setup" tab.

a) Management Setup

In this section, it is aimed for the administrator of the computer the programme was installed, to be able to give authority to any user he/she wants and delete any user he/she wishes. As shown in figure 43, it displays the user list registered to the programme. The users who have administrative authority can access this form.

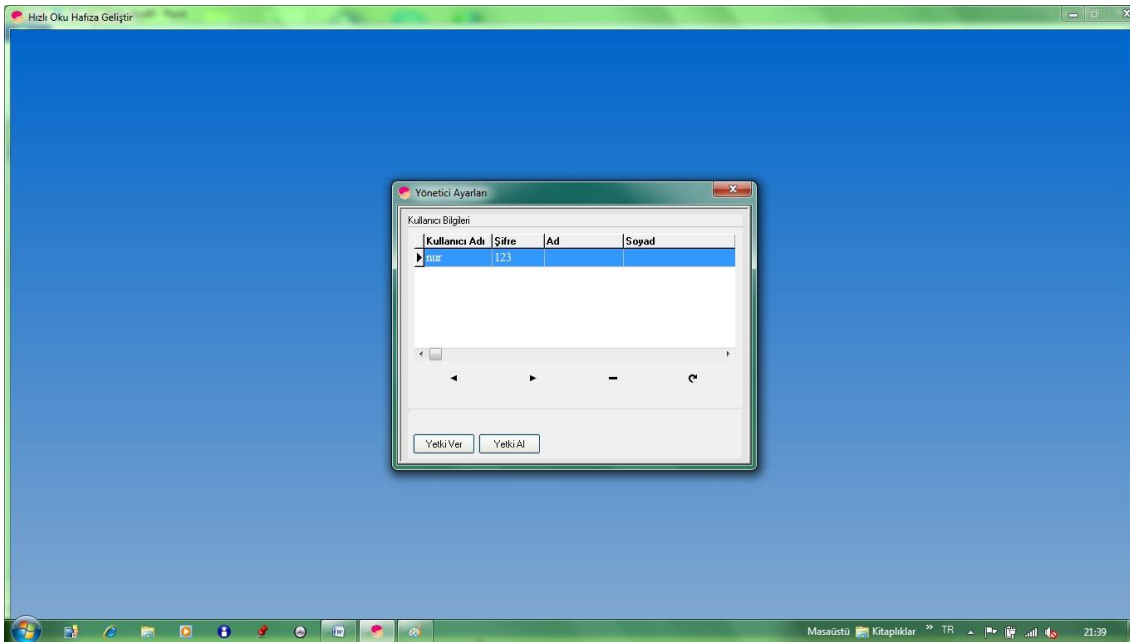


Figure 43:
Management Setup

Help

In this section, information is given about how the programme is used. As well as looking up a word in the programme, one can also access information about the programme, within the index prepared (Figure 44).

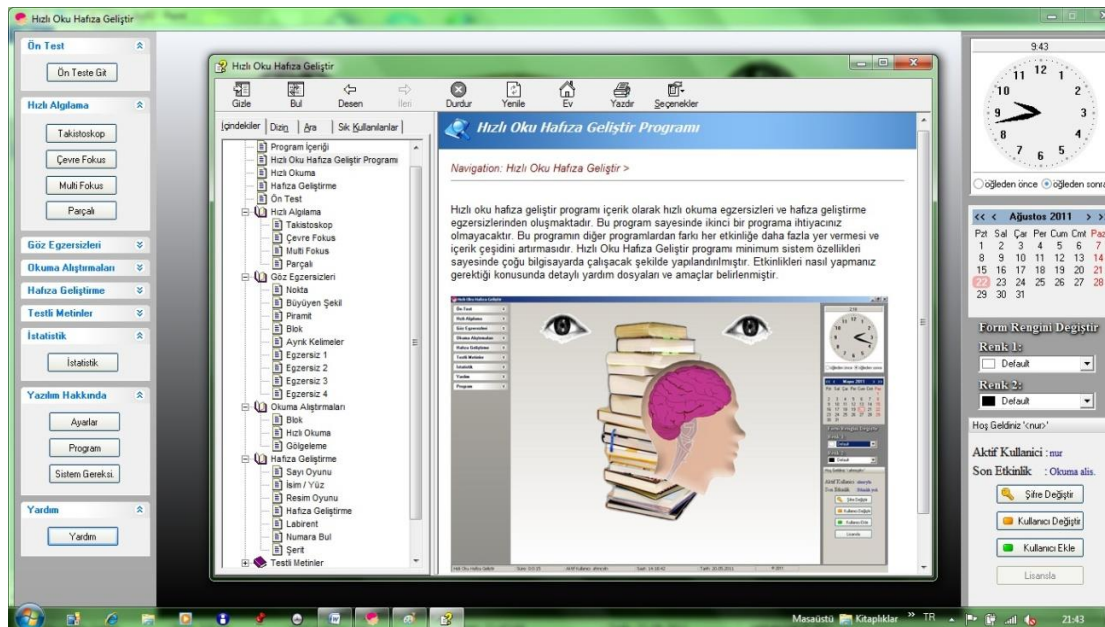


Figure 44:
Help section of the "read fast, enhance memory"

User operations

In this section, operations such as adding a user, changing user (Figure 45) and changing password are performed.



Figure 45:
Changing User



Figure 46:
Changing Password

In the homepage of the programme, the information of who the active user is and the last activity he/she studied is given.

Licensing

The software "read fast, improve memory" can both be used licensed and non-licensed. Licensing the non-licensed programme to preserve its feature of being installed only once to the same computer, is aimed in this section. After clicking the licensing button on the homepage and entering the license key to



Figure 47:
Licensing module of the software "read fast, enhance memory"

CONCLUSIONS

Speed-reading is a method that has cognitive, structural and psychomotor aspects and can be developed through education. However, it can be seen that in many of the speed-

reading programmes used in our country (being a simple version of the ones in the West) are prepared without taking into consideration the language features of the Turkish language, and they focus only on a specific psychomotor aspect.

The speed-reading study that is prepared by focusing only on the psychomotor aspect is not enough in making an attitude change because "speed-reading" is a cognitive process that is reinforced with the concepts of "memory, attention, perception, and concentration". On this account, with the programme "read fast, enhance memory", the defects above have been tried to be removed.

- Through the programme "read fast, improve memory" the individual is enabled to widen his/her active visual angle and read faster by benefitting from the associations, in the course of reading.
- By activating the concepts of memory, attention, and coordination together, speed-reading enables the rate of keeping in mind.
- It enables the trained individual to acquire the discipline of working individually, regularly checking his/her development by evaluating it in terms of study duration and types of activities and studying in accordance with his defects.
- Through the enjoyable memory studies, it increases one's motivation by developing a positive attitude, and as a result, it increases one's study duration.
- By enabling the trained individual to read other texts as well in the same rate and type, it makes the individual keep on doing reading exercises and improve practice.
- Widening one's active field of vision, it enables one to see words as groups, by studies based on width and rhythm, to evaluate himself and check his development through the reading texts and comprehension questions, to develop cognitively through the attention studies, to acquire a positive attitude to speed-reading through enjoyable activities and to do the exercises without getting bored.
- Due to the more and more frequent reading of women in our country, the reading rate with the speed-reading software will be increased.
- The developed program, the use of distance learning modules, is essential to reach more people.

REFERENCES

Akçamete, G. (1990). Üniversite Öğrencilerinde Okumanın Değerlendirilmesi ve Geliştirilmesi. A.Ü.Eğitim Fakültesi Yay. 22(2), 735- 753.

Akçamete, G ve Güneş, F. (1992) Üniversite Öğrencilerinde Etkili ve Hızlı Okumanın Geliştirilmesi. Ankara Üniv. Eğitim Bilimleri Fakültesi Dergisi, 25(2), 463-471.

Brown, P. & Hirst, S.B. (1983). Writing Reading Courses: The Interrelationship Of Theory and Practice. In Brumfit, C.J. (ed) (1983). Language Teaching Projects For The Third World. ELT Documents 116. British Council English Teaching Information Centre.

Burgul, F. ve S. Erdoğan Çeltik. (2010). Hızlı Okuma Dersinin Türk Dili ve Edebiyatı Öğretmeni Adaylarının Okuma Hızları ve Anlama Oranları Üzerine Etkisi. III. Uluslararası Türkçenin Eğitimi-Öğretimi Kurultayı. 01-03 Temmuz 2010. İzmir.

Carver, P.R. (1985). How Good are Some of the Word's Best Readers? Reading Research Quarterly. Vol.20. No.3.

Carver, R.P. (1983). Is Reading Rate Constant or Flexible? Reading Research Quarterly. 18. 190-215.

Coşkun, E. (2006). Lise Öğrencilerinin Okuma Hızı ve Anlama Düzeyleri Üzerine Bir Araştırma. Milli Eğitim, 172, 29-39.

Duffy, G., L.R.Roehler, M.Meloth, L.Vavrus, C. Book., J. Putnam, R.Wwsselman. (1986). The Relationship Between explicit Verbal Explanations During Reading Skill Instruction and Student Awareness and Achievement: A Study of Reading Teacher Effects. Reading Research Quarterly. Vol. 21. No.3.237-252.

Dökmen, Ü. (1990). Lise ve Üniversite Öğrencilerinin Okuma Becerileri, İlgileri, Okuma ve Kütüphane Kullanma Alışkanlıkları. Eğitim Bilimleri Fakültesi Dergisi, 23(2), 394-418.

Güneş, F. (2009). Hızlı Okuma ve Anlamı Yapılandırma. Ankara: Nobel Yayınları.

Güneş, F. (1993). Hızlı Okuma Teknikleri. Ankara: Ocak Yayınları.

Irausquin R. S., J. Drent, L. Verhoeven. (2005). Benefits of Computer-Presented Training for Poor Readers. Annals of Dyslexia, Vol.55, No.2, 246-265.

Just, M. A. & Carpenter, P.A. (1987). The Psychology of Reading and Language Comprehension. Boston:Allyn and Bacon.

Lefevre, J.A.(1988). Skills as a Source of Individual Differences in the Processing of Instructional Texts. Journal of Educational Psychology. Vol.8/3. 312- 314.

McConkie, G. (1984). The Readers' Perceptual Processes. In G.G. Duffy&L.R.Roehler (Eds.), Comprehension Instruction: Perspectives and Suggestion. 10-25. New York: Longman.

Paisley, W. & Chen, M. (1982). Children and Electronic Text: Challenges and Opportunities of the New Literacy: An Explanatory Study. Standford, CA: National Institute of Education, Grant No. 81-0098. (ERIC Document Reproduction Service No. ED 225 530)

Stanovich, E., K. Ruth, G.Nathan, J.E. Zolman. (1988). The Developmental Lag Hypothesis in Reading. Longitudinal and Matched Reading Level Comparisons. Child Development.59. 71-86.

Wepner, S., J. Feeley. (1987). College Students' Reading Efficiency With Computer-Presented Text. İnternational Reading Association Conference Anaheim, California, May 5, 1987. (ERIC Document Reproduction Service No. ED 281190)

Yalçın, A. (2002). Türkçe Öğrenim Yöntemleri. Ankara: Akçağ Yayınları.

www.hizliokuma.com

BIODATA and CONTACT ADDRESSES of the AUTHOR

Asst. Prof. Dr. Nursel YALÇIN was graduated from Gazi University, Faculty of Industrial Arts Education, and Department of Computer Education in 1994 as the top scoring student in the department and faculty. She was appointed as a Research Assistant in July 1994 to the department where she was graduated. She did her master degree with her work "Software Quality Standards in Software Development Process" in the same department. In 2006 February, commencing her Ph.D. with her thesis "Developing a Software for Teaching Elementary First Grades First Literacy via Speech Recognition Technology" in Science Institution Industrial Technology Education Department she was promoted as an Assistant Professor right after becoming an academician. Since

2013, she is an academic member of Gazi University, Gazi Faculty of Education, Department of Computer and Instructional Technologies Education.

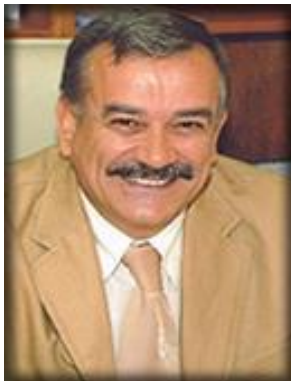
Nursel YALÇIN (Asst. Prof. Dr.)

Gazi University, Faculty of Gazi Education, 05600, Ankara, Turkey

Phone Office: +90 312 202 17 34

E-mail: nyalcin@gazi.edu.tr

URL: <http://www.websitem.gazi.edu.tr/site/nyalcin>



Prof. Dr. Alemdar YALÇIN was born in Kayseri in the year 1950. He completed his primary and secondary education in this city. He graduated from İstanbul University, faculty of literature, department of Turkish language and literature in 1974. After teaching at Edirne teacher's training school for boys and Kırıkkale high school, he was appointed to Gazi education college in 1979. He completed his thesis named "Western Belief and Blank Fanaticism in The Novels That Written Between 1920 – 1928" in 1977 and his Ph.D. thesis named "Social Matters In Theatre Of Second Constitutional Era" in 1982. He was appointed as assistant professor to Gazi University faculty of the education department of Turkish language and literature in 1984. He became an associate professor in 1992. He became a professor in 1997. He

performed managerial duties in Gazi University as assistant manager, manager, head of the department, vice- dean, and dean. He performed duties in Abant İzzet Baysal University as vice-chancellor and as the dean in the faculty of literature at the same University between the years of 2006-2008. From 2006 to 2017, he performed as the head of Turkey Scientific and Cultural research center (also known as TÜBIKAM).

Alemdar YALÇIN (Prof. Dr.)

Gazi University, Faculty of Gazi Education, 05600, Ankara, Turkey

Phone Office: +90 312 202 18 46

E-mail: mayalcin@gazi.edu.tr

URL: <http://alemdaryalcin.com/>



Lect. Dr. Ferah BURGUL ADIGÜZEL was born in Antalya on 19.11.1980. She was graduated from the department of Turkish language and literature teaching at Çanakkale Onsekiz Mart University. She started to work as a research assistant at Çanakkale Onsekiz Mart University Institute of social sciences. She completed her master's degree at Çanakkale Onsekiz Mart University Institute of social sciences with her thesis named "effects of using story maps on understanding what's read in story teaching" in 2003. For her Ph.D., Ferah Burgul appointed to Gazi University, Institute of education sciences as per article 35 of higher education law no. 2547, she worked at Gazi University faculty of the education department of Turkish language and literature teaching. She completed her Ph.D. with her thesis named "speech specifications of high executives according to their education level in Turkish language and literature" in 2011. She still works as an academic in the department of Turkish language and literature teaching.

Ferah BURGUL ADIGÜZEL (Lect. Dr.)
Gazi University, Faculty of Gazi Education, 05600, Ankara, Turkey
Phone Office: +90 312 202 18 92
E-mail: fburgul@gazi.edu.tr
URL: <http://www.websitem.gazi.edu.tr/site/fburgul>