

**TARTU UNIVERSITY
FACULTY OF SOCIAL SCIENCES**

**NARVA COLLEGE
TEACHER OF LANGUAGES IN A MULTILINGUAL SCHOOL**

Jekaterina Mäkinen

**THE MOZART EFFECT (PIANO SONATAS NO 2 AND NO 14) IN
TEACHING READING TO BASIC SCHOOL LEARNERS IN THE ENGLISH
LANGUAGE CLASS: READING COMPREHENSION**

Master's thesis

Supervisor: *Lect. N.Raud, PhD*

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Jekaterina Mäkinen 9.05.2021

PREFACE

The positive effect of various musical stimulations in education and language studies has been studied for decades (Pribram 1982; de Groot 2006; Garfias 1990). Bygrave (1995) states that children who listened to music improved the acquisition of new words, and concludes that music can be an effective language learning tool, especially for students with reading problems. Schellenberg (2014) notes that listening to a Mozart's sonata for 10 minutes positively influenced the physical condition of the participants of his experiment and increased their academic results. Thus, the use of music influences brain activity and enhance learners' abilities to obtain maximum benefit from the learning process.

The research problem is to understand if the inclusion of Mozart's works (e.g. piano sonatas No 2 and No 14) in teaching reading comprehension to basic school learners produces "the Mozart's effect" in reading comprehension, i.e. improves the academic performance of basic school learners in reading comprehension tests.

The aim of the research is to define the Mozart Effect, and how it might be achieved to support the process of teaching reading comprehension to young students. Thus, the study is focused on analysing previous researches about the impact of music on the academic performance of students in English language classes to reveal advantages and disadvantages of the use of classical music in teaching reading to basic school learners. The study is also aimed at exploring the practical possibility of achieving the Mozart effect with Narva Soldino Gymnasium's students in English language classes to develop their reading comprehension skills and their academic achievement in reading comprehension tests.

The paper consists of four parts: the introduction, two core chapters, and the conclusion. The introduction considers the influence of classical music on the learning process of foreign languages and the meaning of the Mozart effect in education. Chapter I "Teaching Reading Comprehension to Basic School Learners of English" examines the topic of teaching reading comprehension to basic school learners of English. Also, the chapter defines the most common English reading comprehension problems. Chapter II "The Influence of Mozart's Sonatas on Reading Comprehension of Basic School Learners of Grade 9" provides the procedure and the results of the experiment examining the Mozart Effect on the students of the 9th grade in experimental and control groups. In addition, the chapter presents a Mozart-music based programme to teach reading skills

to basic school learners. The conclusion summarises the outcomes of the study and comments on the hypothesis.

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INTRODUCTION

Classical Music in the Process of Learning Foreign Languages

The influence of music as such on the learning process has been researched by many scientists and scholars (Weinberger 1998; Bygrave 1995; Palmer 2002; Levitin 2007). To start with, Weinberger (1998) conducted research on the effect of music on the studying process and increased performance of students. The author claims that brain research has shown that listening to music is not only a fun activity, but it also helps to develop the parts of the brain and enhance skills in reading and maths. Bygrave (1995) examined the development of vocabulary skills through exposure to music. In his study, the author concludes that children who had reading difficulties had impressive progress in learning new words and reading comprehension due to participating in two programmes over a 30-week period. However, studies of the influence of music on brain activity became popular with the publication of Levitin's book "This Is Your Brain On Music" (2007). The findings of listening to different types of music were significant. Levitin (ibid.: 9) proved that "through studies of people with brain damage, [they've] seen patients who have lost the ability to read a newspaper but can still read music, or individuals who can play the piano but lack the motor coordination to button their own sweater". Thus, it can be said that music listening involves each part of the brain and makes the brain cells create new neural tissues (ibid.). Leith (1979: 537) stated that "the pedagogic potential of music in foreign language instruction is enormous and has only begun to be realized. As more experimentation takes place and better materials become available, music [...] will probably become an integral part of any sophisticated foreign language instructional program". Hence, it can be assumed that the studies conducted by Leith support Levitin's (ibid.) opinion, i.e. music as such triggers articular parts of the brain and enhances learning abilities.

The effect of listening to classical music in foreign language classes has been researched by Lozanov and Gateva (1988). Lozanov and Gateva (ibid.) proposed "Georgi Lozanov's Method" to stimulate the learning process mostly of foreign languages. Lozanov's method, or, *Suggestopedia*, consists of using music in three distinctive ways – an introductory part, an active concert, and a passive concert. The introductory music plays a significant role in Lozanov's (1988) opinion, as far as it helps students or participants to relax and to relieve stress, thereby unconsciously preparing themselves for the learning process. The active concert refers to the second stage of Lozanov's method where the

teacher is expected to present information to students using expressive classical music instead of teaching in silence. The third stage of Lozanov's theory suggests the applying of the passive concert, which implies that the teacher explains the information more calmly, and sometimes pausing with baroque music playing in the background. The implementation of the passive concert helps to move received information from short-term to long-term memory. Lozanov (ibid.) made a list of selections to use while practising the active and the passive concerts. According to Lozanov (ibid.), the teacher can use *Beethoven, Concerto for Violin and Orchestra in D major, Op. 61*, *Tchaikovsky, Concerto No. 1 in B flat minor for Piano and Orchestra*, *Mozart, for Violin and Orchestra Concert No. 7 in D major*, *Haydn, Symphony No. 67 in F. major; Symphony No. 69 in B. major* or *Beethoven, Concerto No. 5 in E flat major for Piano and Orchestra, Op. 73 ("Emperor")* for the active concert. Based on the theory of Lozanov, for the passive concert the teacher should choose a composition to play to students from the proposed list – *Corelli, Concerti Grossi, Op. 6, Violin and Orchestra in No. 2, 8, 5, 9*, *Handel, The Water Music*, *J.S. Bach, Fantasy in C Minor and Trio in D minor; Canonic Variations and Toccata*, *Corelli, Concerti Grossi, Op. 4, No. 10, 11, 12* or *Vivaldi, Five Concertos for Flute and Chamber Orchestra* (ibid.). Hence, Lozanov's Method still remains a relevant and frequently used method in teaching foreign languages. Galti (2018) investigated the effect of Lozanov's method on teaching vocabulary to school students. The author conducted an experiment "among 18 primary five school age children in Maiduguri-Borno State, Nigeria to examine its effectiveness" (ibid.: 2). Galti (ibid.) concluded that the suggestopedia method is "an effective method to teach vocabulary to primary school pupils" (ibid.: 7).

Other studies have found that listening to classical music can also be an efficient way in increasing students' mood and academic performance in language classes. For example, Giles (1991: 41) noted that background music "could be used to provide a pleasant beginning for the school day, to help keep students quiet and relaxed". Giles (ibid.) mentioned that classical music might be included as a tool to increase students' comprehension of the material. Bucko (1997) argues that classical music remains one of the relevant aspects of how to achieve pleasant classroom conditions. Also, Bucko (ibid.) mentions that classical music contributes to memory and enhances it. The research carried out by Stanton (1973: 224) has shown that results of "the use of background music with students who listened to classical music during test taking and those who did

not. The tendency for the music condition to produce better results overall was apparent, though it did not attain significance”. Consequently, the use of classical music in foreign language classes could be an effective way to support classroom conditions and to increase the academic performance of students.

To conclude, despite the fact that the influence of classical music has not been investigated widely yet, it plays a significant role in the learning process of foreign languages and needs to be more researched in order to understand how to ease and diversify the process of studying languages.

The Mozart Effect in Education

The influence of Mozart’s music on both cognitive and creative abilities, learning process (i.e. the Mozart Effect) has been studied a lot for the last decades (Schellenberg 2014; Colucci 2014; Rauscher, Shaw and Ky 1993). Despite this, the Mozart Effect is still being researched and analysed by many scientists.

Interest in the Mozart Effect has increased significantly with the results of Rauscher’s, Shaw’s and Ky’s research (1993). During the experiment, 36 students were divided into three groups, each of which listened to a certain recording for 10 minutes. The first group listened to Mozart's Sonata for two pianos in D major, K488. The second group listened to a relaxation tape, and the third group sat in silence. Immediately thereafter, students were required to take a spatial reasoning skills test based on the Stanford-Binet scale. As a result, the IQ of the group that listened to Mozart was eight-nine points higher than the results of the other two groups. However, the researchers mentioned that the effect was short-term and lasted no longer than 10-15 minutes. Moreover, it was concluded that uncomplicated music would not have such an impact on the abstract thinking of a person:

It would also be interesting to vary the listening time to optimize the enhancing effect, and to examine whether other measures of general intelligence (verbal reasoning, quantitative reasoning and short-term memory) would be similarly facilitated. Because we used only one musical sample of one composer, various other compositions and musical styles should also be examined. We predict that music lacking complexity or which is repetitive may interfere with, rather than enhance, abstract reasoning. Also, as musicians may process music in a different way from non-musicians, it would be interesting to compare these two groups (ibid.: 611).

A lot of researches into the influence of the Mozart Effect have been conducted by Schellenberg (2014) and Schellenberg & Nantais (1999). Schellenberg (2014) emphasises that the participants who were tested individually after listening to Mozart’s

Sonata for ten minutes felt better than looking at a blank computer screen in silence for ten minutes. Furthermore, Schellenberg & Nantais (1999) conducted research examining the Mozart Effect hypothesising that “spatial-temporal abilities are enhanced after listening to music composed by Mozart” (ibid.: 370). The findings of experiment I demonstrated that “performance on a spatial-temporal task was better after participants listened to a piece composed by Mozart or by Schubert than after they sat in silence” (ibid.: 370). Moreover, the authors claim that increased performance has nothing to do with Mozart and can be substituted for “wide variety of enjoyable pieces of music composed in the Classical (i.e., late 1700s; e.g., Mozart, Haydn) or Romantic (i.e., early 1800s; e.g., Schubert, Liszt) styles” (ibid.: 372). Experiment II indicated that “the advantage for the music condition disappeared when the control condition consisted of a narrated story instead of silence” (ibid.: 370). In addition, “performance was a function of listeners’ preference (music or story), with better performance following the preferred condition” (ibid.: 370). Thus, it can be concluded that the Mozart Effect can contribute to increased performance on spatial-temporal tasks, however, the research implies that “a similar effect might be evident when any positive stimulus (musical or otherwise) is paired with a less engaging stimulus” (ibid.: 372).

As far as positive mood and optimum arousal is a significant part in the learning process (Steele 1999, Thompson, Schellenberg and Husain 2001), it was decided to analyse researches related to the topic of the connection between the teaching process and the elevation of mood with Mozart sonata playing background. Steele (ibid.) conducted a study analysing the Mozart Effect of 125 people. Steele (ibid.) hypothesised that elevating the mood might be due to the type of music. However, the author (ibid.) concludes that listening to classical music does not make difference in making a person smarter and the increased level of intelligence lasts not more than ten minutes. Thompson, Schellenberg and Husain (2001) also examined the connection between the mood and arousal to the Mozart Effect. They compared “a Mozart Sonata, expected to induce heightened arousal and positive mood, and an adagio by Albinoni, expected to induce low arousal and sad mood” (ibid.: 248). The sonatas “consisted of 10 min from Mozart’s (1985, track 1) Sonata for Two Pianos in D Major, K. 448, or 10 min from Albinoni’s (1981, track 1) Adagio in G Minor for Organ and Strings” (ibid.: 248). The conclusion of the experiment shows that after listening to Mozart’s sonata the participants demonstrated higher results than after sitting in silence. The excerpt by

Albioni did not have any effect on the participants. However, “participants who listened to Mozart scored significantly higher on positive mood and arousal (enjoyment rating, mood rating, POMS arousal score) and significantly lower on negative mood (POMS mood score) compared with their counterparts who listened to Albinoni” (ibid.: 250). Thus, based on the two types of research above it can be concluded that the linkage between good mood and a higher level of arousal due to listening to Mozart’s sonata might be used as an approach to draw teachers’ attention to when planning a lesson. Moreover, Mozart’s sonatas can be used not only as a way to enhance students’ performance but also to improve their mood and increase the level of arousal to produce higher results. Giles (1991) also states that the majority of students study harder, concentrate better and feel happier and more relaxed with appropriate music playing in the background. However, Giles (ibid.) notes that the higher results in the students’ performance were achieved due to choosing the music they liked.

Khaghaninejad, Motlagh & Chamacham (2016) conducted research to evaluate the effect of the Mozart sonata on the reading comprehension performance of Iranian English students of both genders. The results of the experiment showed significant differences between two groups as far as “the participants who were taught reading passages with background music outperformed their peers who had experienced learning passages without background music” (ibid.: 10). However, the experiment demonstrated no significant difference between the performance on reading comprehension of male and female participants. Khaghaninejad, Motlagh & Chamacham (ibid.: 10) also argue that “background music in the classroom has a positive effect not just for the individual, but for the class as a whole”. The authors (ibid.) conclude that Mozart’s sonatas during English language classes is an effective tool to teach students:

Music can lower the number of disturbances created by students because the inclusion of music keeps them engaged more of the time [...] and students learn better and cooperate with each other more when there is music playing in the background while they are completing a task (ibid.: 10).

The research made by Su, Kao, Hsu, Pan, Cheng & Huang (2017:101) investigating how the Mozart Effect (K.448 (sonata for two pianos in D major) affects children’s reading skills concluded that “compared with a silent task (reading without the music), this piece of Mozart’s music had positive effect in reducing learning anxiety, and improving the students’ reading rates, reading comprehension and direct process performance”. However, the research (ibid.) also shows that “[the sonata] had a negative effect on the

students' attention for their interpretation process", as far as listening to the sonata distracted from the lesson. Nonetheless, the authors (ibid.:109) state that Mozart K.488 "can be a potential tool to enhance reading outcomes when using e-books".

Continuing with the connection between the Mozart Effect and reading comprehension problems, the study conducted by Rashidi (2011) also demonstrates a positive effect of Mozart's sonatas on reading comprehension of Iranian students. The study investigated two groups on reading comprehension performance over a period of three months. The first group was taught with a Mozart piece background, the second group with no music background. Rashidi (ibid.: 78) noted that "the results of the study showed a significant difference between the performance of the group exposed to music and the performance of the other group not exposed to music. The group taught reading comprehension with a music background outperformed the other taught it with no music background". DeMers (1996) also conducted similar research analysing and comparing two groups. The findings demonstrated that "the experimental group with background music performed significantly better on the reading comprehension test" (ibid.: 5). As the result of the studies by Rashidi (ibid.) and DeMers (ibid.), English teachers can use Mozart's sonatas as a tool to simplify and facilitate the language teaching progress.

Hence, it can be hypothesised that listening to Mozart's piano sonatas, e.g. No 2 and No 14, during English language classes with young students improves their reading skills and increases the likelihood for them to get a higher grade on a final reading comprehension test in comparison with students' studies and tests conducted without any classical music background in the English language class.

CHAPTER I

TEACHING READING COMPREHENSION TO BASIC SCHOOL LEARNERS OF ENGLISH

Reading comprehension is an important part of teaching any language as far as understanding of the main idea of a text helps to acquire a wide vocabulary to express thoughts, develops an awareness of grammar structures in written texts and builds schematic knowledge (Hedge, 2003). Carrell and Eisterhold (1983: 554) state that reading is a guessing game where “reader reconstructs, as best as he can, a message which has been encoded by a writer”. Orasanu (1986: 11) notes that comprehension is the main purpose of reading, however, “yet we know far too little about the knowledge and conceptual organization needed for advanced reading competence”. Lerkkanen (2007) also mentions that reading comprehension is the ability to read, understand and analyse the text. Thus, it can be concluded that reading comprehension is an inherent part of acquiring foreign languages and needs to be investigated more.

1.1. Reading Skills in the Estonian National Curriculum for Basic School

According to the Estonian National Curriculum for primary and basic schools, language proficiency levels are divided into levels of A1, A1.2; A2, A2.2; B1, B1.2; B2, B2.2 and C1. Each language proficiency level has the learning outcomes for listening, reading, writing, speaking and grammar comprehension (Põhikooli Riiklik Õppekava, lisa 2, 2011: 12-14).

B1 reading proficiency level implies that the students “read and understand fact-based texts on several pages with simple wording (e.g. letters, online texts, brochures, instructions for use); understand the main idea in narrative texts and can follow the plot; can find necessary information in reference sources and online; can use bilingual translation dictionaries” (National Curriculum for Basic Schools, 2011: 27).

B1.2 reading proficiency level suggests that students should “read and understand texts with a clear train of thought on different themes and on several pages (e.g. media texts meant for young people, and adaptations of fiction); find necessary information in longer discursive texts; collect relevant information from several texts; use varied reading strategies (e.g. general reading and selective reading); may not understand details and nuances in texts (ibid.: 28).

As it can be seen, the required level of language proficiency by the end of basic school is B1. The constituent level of language requires knowledge necessary for more free understanding of the language in both reading, writing, speaking and listening. The required B1 level is the intermediate level of language learning; hence, the teaching of students should be focused on particular reading strategies, which allows students to develop their reading skills.

1.2. Approaches to Teaching Reading Comprehension to Basic School Learners

The concept *young learners* is one of the most common and unique terms to describe students of any age. Nevertheless, there are some more terms used to define basic school learners of the 9th grade, e.g. “kids; young learners; secondary; tweens; teens; early teens; teenagers; juniors” (Ellis, 2014: 77). Ellis (ibid.) defines the target group of the 9th grade as lower secondary school pupils aged 11 to 14-15 years old. In the following thesis, such terms as *young learners* and *teenagers* are going to be used to describe the target group mentioned above.

Reading comprehension history has been mainly recorded since 1975, and since that time education research has been investigating such terms as oral reading, reading readiness, what good readers do when they read, balanced comprehension, students’ motivation, assessment criteria etc. (Duke & Pearson, 2002). With the growing popularity of Pressley’s (1995 & 2001) research on good reader’s comprehension, researchers have been examining the question of engaging students in the process of active reading comprehension for two decades. Pressley’s (ibid.) vision of a good reader can be summarised as follows:

- A good reader has a good vocabulary. Pressley (ibid.) concludes that a high level of vocabulary does not necessarily mean high academic performance. The author (2002: para 8) mentions that “when reading educators conducted experiments in which vocabulary was either taught to students or not, comprehension improved as a function of vocabulary instruction”.
- A good reader is an active reader – the reader quickly decides which chapter he or she should read, which paragraph or line he or she can omit, what he or she should not read at all etc.
- A good reader knows the world. Even if the reader does not have a sense of the world, this skill might be developed with “Why” questions.

- Before reading the text, the good reader quickly scans the text, paying attention to the structure of the text and the vocabulary.
- While reading the text, a good reader usually predicts the event that should occur or makes predictions about the upcoming event in the text.
- A good reader thinks about the author of the text, their style, the general sense of the text, the beliefs, the characters.
- A good reader has artistic sense – he or she reacts to the text emotionally and psychologically understanding the feelings and emotions of the protagonists’ or the characters’ of the text, article, book, etc.
- Reading comprehension is a complex and energetically demanding activity, however, a good reader finds it enjoyable and beneficial.

Pressley’s (ibid.) characteristics of a good reader are connected with teaching teenagers as far as the acquisition of at least some of the traits of a good reader allows them to develop reading skills and to understand the text more comprehensibly. Moreover, the above-mentioned feature will help teachers to be more loyal to students as Pressley (ibid.) describes a good reader as a learner with creativity, artistry and sense of the text, which is an integral part of reading, just like the vocabulary. Thus, it can be summarised that comprehension of the text depends on the qualities of a good reader mentioned above, and without them, it is impossible to achieve a high level of comprehending a text.

According to Duke and Pearson (2002), there are six important reading comprehension strategies, which are going to be considered in this chapter. The listed strategies are chosen due to their relevance to the question of teaching reading comprehension to basic school learners. These six strategies have been researched and examined both on young learners and young adult learners. The significant fact to be noticed is that the mentioned techniques are efficient and enhance understanding of texts without a large vocabulary.

The first reading comprehension strategy is *prediction*. This strategy defines the reader as a person who can predict the end of the text or the next event based on pictures, headers, diagrams, titles. A good reader uses prediction as a way to connect knowledge with new information. Hansen (1981) researched the relation between making predictions and activating prior knowledge to enhance the level of students’ reading comprehension. The result showed that “in both instances, students were encouraged to generate expectations about what characters might be based on their own experiences in

similar situations” (ibid: 213). Thus, it can be said that “this technique led to superior comprehension of the stories in which the activity was embedded and to superior performance for younger and less able older readers on new stories that the students read without any teacher support” (ibid.). Besides, Anderson, Wilkinson, Mason, & Shirey (1987) proved that engaging students of different age in the prediction technique increased their interest and memory for reading texts. Haryudin, Padilah & Sumirat (2019) conducted research using the prediction strategy in the seventh grade. The pre-test score was 52.36 and the post-test score was 76.42. Hence, the researchers concluded that predicting by using pictures had a significant influence on the comprehension of reading texts. Thus, the educators suggest using the prediction strategy “at least for narrative texts in which themes and topics are likely to be highly familiar” (ibid: 214).

The second reading comprehension strategy is *think-aloud*. As the term implies, “think-aloud involves making one’s thoughts audible and, usually, public – saying what you are thinking while you are performing a task, in this case, reading” (ibid.: 215). It was proved that the think-aloud strategy boosts students’ reading comprehension both when students themselves participate in practice during reading or teachers think aloud while reading to students (Duke & Pearson, 2002). *The think-aloud strategy* can be divided into two groups – *teacher think-aloud* and *student think-aloud*. In the think-aloud strategy, teachers demonstrate the importance of efficient comprehension strategies. For example, the following excerpt shows such points of teacher’s think-aloud strategy as prediction and visualization:

That night Max wore his wolf suit and made mischief of one kind and another.... Boy, I can really visualize Max. He’s in this monster suit and he is chasing after his dog with a fork in his hand. I think he is really starting to act crazy. I wonder what made Max act like that...Hm-mm...I bet he was getting a little bored and wanted to go on an adventure. I think that is my prediction (Pressley 1992: 518).

Jahandar (2012) mentions that using the teacher’s think-aloud strategy will enable students to become strategic readers. Besides, this strategy provides the teachers with information about the needs of students and helps to learn and improve their reading comprehension (ibid.). Discussing the teacher’s think-aloud strategy, Cassanave (1988: 285) claims that “by applying think aloud strategy, students are able to improve their reading quality by focusing on the main points and ask questions related to main ideas in the text rather than less important details”. The researches conducted on the students’ *students’ think-aloud* strategy have proven effectiveness at improving reading comprehension. For example, Bereiter and Bird (1985) experimented with two groups

of students to prove that the students who were taught the think-aloud strategy showed a better understanding of the text than those who were not trained in the strategy, according to a question-and-answer comprehension test. The experiment conducted by Meichebaum & Asnarow (1979) demonstrates that *students' think-aloud* strategy reduces the level of their impulsiveness. The authors (ibid) also claim that *think-aloud* can lead to more attentive and strategic reading. Rohiman, Nasir & Ys (2018: 151) suggest that the *think-aloud strategy* is “useful because students are verbalising all their thoughts to create understanding of the reading text”. Hence, *think-aloud* helps students to make predictions, link information with prior knowledge and develop into independent readers.

The third reading comprehension strategy is *story structure*, or as it is commonly called, a story grammar or a story map, “which includes categories such as setting, problem, goal, action, outcome, resolution, and theme” (ibid.: 216). In story structure, students learn to classify the problems, setting, solutions, characters, resolution of the text. Duke and Pearson (ibid.: 216) also mention, that “[story structure] instruction typically consists of modelling, guided practice, and independent practice in recognizing parts of the stories under discussion that instantiate, or “fill,” each category”. The author also states even though *the story structure strategy* is not suitable for all texts and situations, it is often appropriate for students of different ages, from kindergarten, high school students, to emigrants and students with reading problems.

The fourth reading comprehension strategy is *informational text structure* which refers to the organization of information in a text. It is generally accepted that there are five types of informational text structure – *sequence* (information or events are given in a chain), *comparison/contrast* (describes the differences and similarities between events, objects, information in a text), *description* (describes or explains the topic. The text is broken into passages or sections, where each passage contains the main idea and details), *cause/effect* (usually is focused on an occurrence of events; connects the relationship between the cause and effects), and *problem solution* (describes, explains the problem and presents possible solutions) (University of Tennessee Center for Literacy Studies, 2012). According to research carried out by Barlett (1978), where the author examined the importance of text structure, it was concluded that students who are more educated in the field of text structure memorise more textual information than those students who have less knowledge in this field, respectively, have more problems with reading

comprehension. Duke and Pearson (ibid.: 217) mention that the approaches to teaching text structures have been investigated for many years by educators and scientists (Barlett 1978, Graves, & Piche 1985, Geva 1983, Armbruster, Anderson, & Ostertag 1987, etc.), starting with “general attempts to sensitize students to structural elements, extending to hierarchical summaries of key ideas and to visual representations of key ideas, such as conceptual maps, semantic networks, charts, and graphs”. It should be pointed out that any approach to teaching the textual structure helps to improve not only the understanding of reading but also the recall of the main information from the text.

The fifth reading comprehension strategy is *visual representations of text*, which means presenting reading comprehension material, text, information, visually. Duke and Pearson (ibid.: 218) cite that “a visual display helps readers understand, organize, and remember some of those thousand words”. There are many distinct types of visual representation, for example, graphical representations, charts, bar graphs, etc. To illustrate the difference between the visual representation and the verbal representation of the text describing the digestive process, the authors provide the following example:

When you eat, you use your teeth to break food apart into tiny particles. These pieces mix with saliva to become a kind of mush. When you swallow, the food goes through a tube into your stomach, where it is digested. During digestion, your body breaks down the food into smaller and smaller bits. The food contains things your body needs, which we call nutrients. As the food passes from the stomach into the intestine, the nutrients pass through the walls of intestine into your bloodstream. Your bloodstream carries these nutrients to all parts of your body. The part of the food that is not digested, which we call waste, passes out of the body through the intestine (ibid.).

The given example clearly demonstrates the difference between visual and verbal representations. Compared to the visual text, the verbal text is abstract and easily forgettable. The important point to be noticed about visual representations of written texts is that they allow presenting the same information more efficiently comparing to a verbal text. It also should be added that choosing one particular visual representation does not make much difference in acquiring the knowledge or achieving the goal of a lesson. It does not really matter what representative type is going to be. According to Duke and Pearson’s research (ibid.: 2019), the significant point is to use visual tools which would “improve comprehension to also enhance knowledge of text structure and vocabulary acquisition”. Thus, using visual representations allows to activate the process of acquiring, comprehending and memorising information in a more effective way than using verbal representations.

The last reading comprehension strategy is *summarization*. Summarising a text is probably the hardest strategy to teach students as far as “the ability to summarize information requires readers to sift through large units of text, differentiate important from unimportant ideas, and then synthesize those ideas and create a new coherent text that stands for, by substantive criteria, the original” (Dole, Duffy, Roehler & Pearson 1991: 244). Summarising a text is a complex task and requires certain knowledge and experience. It is interesting to notice that according to Pearson and Duke (*ibid.*), the strategy of summarization improves two skills – summarising and the ability to comprehend texts and recall them. One of the main approaches to teach students how to summarise a text is the rule-governed approach by McNeil and Donant (1982):

These are (a) deleting unnecessary or trivial material, (b) deleting material that is important but redundant, (c) substituting a superordinate term for a list of items, (d) substituting a superordinate term for components of an action, (e) selecting atopic sentence, and (f) when there is no topic sentence, inventing one (Bean & Steenwyk 1984: 298).

The best way to practice the approach by McNeil and Donant (*ibid.*) consists of a group practice or individual practice to help students to create short and informative summaries.

To conclude, a good reader is a student or a person who has developed the majority of reading comprehension strategies mentioned above, more precisely, the prediction, think-aloud, story structure, visual representation, informational text structure and summarising strategies. A great deal of research demonstrates that reading comprehension is quite complex to accomplish, however, it can be achieved and improved by choosing suitable reading comprehension strategies.

1.3. English Reading Comprehension Problems of Basic School Learners

Reading is one of the most important skills taught at school because it is closely related to writing, speaking, listening, and developing vocabulary. Students must read a lot of teaching material to improve their knowledge and academic results. According to Hickman, Pollard-Durodola and Vaughn (2004), daily reading enhances students’ skills to build new vocabulary in a foreign language and develops reading comprehension skills. However, Nutall (1982) concludes that five difficulties usually occur with reading comprehension. In this thesis, the five aspects of examining English reading comprehension problems researched by Nutall (*ibid.*) are going to be considered.

Based on some researches conducted by Nutall (ibid.), Hidayati (2015), Jumiaty (2014), Aarnoutse & Van den Bos (1988), etc. about English reading comprehension problems both of young school learners and university students, it can be noted that reading comprehension problems are divided into five the most common subgroups – determining the main idea, locating reference, understanding vocabulary, making inference and detail information. In practice, young students of basic schools are most likely to experience difficulties with the above-mentioned factors. Therefore, the understanding of the most common reading comprehension difficulties can help teachers to improve students' reading level and to generate interest in reading.

According to Nutall (ibid.), the first reading comprehension problem is *determining the main idea*. As Hidayati (2015: 11) mentions, the main idea is “a statement that tells the author's point about the topic”. Also, the understanding of the main idea of the text, article, passage, excerpts, etc. is the crucial part of reading comprehension as far as finding of the main idea helps the student to understand the paragraph or excerpts. Vener (2002) notes that the main idea is usually the first sentence of the paragraph or it is located in the last sentence or in the middle of the text. Hence, it might be confusing and difficult for students to find the main idea of the passage.

The second reading comprehension problem is *locating reference*. Hidayati (ibid.: 12) cites that “in identifying reference, the students are expected to understand for what the pronouns in the sentences are used such as the pronouns that are used to show people, place, or situation”. Thus, locating reference is hard, especially for the young learners of the 1-4 grade, as far as they can confuse the pronouns and their level of knowledge about pronouns are not as high as expected.

The third reading comprehension problem is *understanding vocabulary*. The question of understanding vocabulary is the most relevant nowadays. In order to understand the significance of understanding vocabulary both in writing, speaking or reading, the Swedish polyglot Gunnemark (1997) conducted research. The author (ibid.) concludes that understanding vocabulary is associated with reading comprehension, e.g. the more person reads the more he or she acquires a larger vocabulary. Gunnemark (ibid.) states that a person who acquires 400-500 words can communicate using simple words at the basic level; acquiring 800-1000 words allows to read at the basic level; knowing 1,500-2,000 words helps to communicate throughout the day or prepares a person for a steady

reading; 3,000-4,000 words are enough for free reading of newspapers or literature and only acquiring about 8,000 words provides a full communication for the average European. Gunnemark (ibid.) claims that it is almost impossible to know more words to communicate freely, both orally and in writing, and to read literature of any kind. Thus, expanding vocabulary is a great opportunity to enhance reading comprehension during reading, the student unwittingly pays attention to the words and their spelling as well as their meaning, which triggers both acquiring and understanding the words much more. Hidayati (ibid.: 13) also mentions that “the student expands their knowledge of vocabulary while he is reading a passage, such as by finding out new words meaning in dictionary and guessing the meaning from the context”. Thus, both Gunnemark (ibid.) and Hidayati (ibid.) share a similar idea of the influence of reading on vocabulary. Moghadam, Zainal and Ghaderpour (2012) state that the understanding and the knowledge of words meaning is the most important factor that prejudices the likelihood of comprehension of the text, article or passage, etc. Moghadam, Zainal and Ghaderpour (ibid.) also mention that when a reader does not know, understand or recognize the meaning of the words in the given text, the lack of vocabulary would decrease the efficiency of reading on vocabulary expanding and prevent the text processing. The authors (ibid.: 52) conducted research the aim of which was “to find out the role of vocabulary knowledge in reading comprehension. In doing so, a comparison was made between the participants’ reading comprehension performances when reading in L1 and L2 with regards to their performances on the vocabulary in context tests for the same reading texts”. The results of the experiment provide that a reader’s level of vocabulary knowledge and understanding plays a significant role in academic performance on reading tests. Thus, understanding vocabulary seems to be the biggest problem while reading as a result of small vocabulary or the lack of vocabulary.

The fourth reading comprehension problem is *making inference* which means that “the students are expected to comprehend the text to find the conclusion of the statements in the text” (Hidayati ibid.: 12). As Jumiatiy (2014: 224) states, inference in reading comprehension means that “the reader uses knowledge and facts from the text and from earlier experiences as base or premises for their own logical conclusion”. Moreover, the author (ibid.) mentions that texts usually provide enough information about inferences, “often quite different of character, depending on what premises will be used or active”. Jumiatiy (ibid.) conducted research to find out whether the use of inference strategy

improves students' academic performance in literal comprehension and the results of the research proved the hypothesis. Moreover, Jumiatty (ibid.) concluded that even though making inferences was hard to teach, this strategy definitely helped in increasing reading comprehension results. According to Zweirs (2005), the main difficulty of making inferences for students consists of making a logical guess. Zweirs (ibid.) and Kopitsi (2007) claim that the students make inferences when they are able to combine their own experience with the information from the text. Therefore, the success of making inferences in reading comprehension mainly depends on the constant practicing of connecting experience with information from a reading assignment.

The fifth reading comprehension problem is *detail information*. According to Jumiatty (ibid.: 13), detail information is usually “used to check students’ ability to understand material that is directly stated in the text”. The biggest challenge for students to find the detail information from the text consists of choosing the appropriate strategy to answer a detail question. As it is suggested by Nutall (ibid.), one of the best strategies to teach students to find particular details from the texts is scanning. For example, to teach this strategy teacher can ask such questions as “According to the passage, who were fighting for the conversation in the forest?”, “All of the following are the true except...” and “A person, date, or place is...” (Jumiatty: 14), students can underline, mark or note the key words that help in finding the right answer and then reread the passage again to find the synonyms for the underlined words. Therefore, scanning is the greatest strategy in teaching how to find detail formation.

However, there are factors that can also be challenging for students with reading comprehension problems, such as some external and internal factors. Rahim (2006) mentions that the list of external factors includes family and school, while Fajar (2009) notes that internal factors include difficulty in understanding long sentences, limited background knowledge, difficulty in using reading strategies and in concentration. For example, Freeman and Long (1990) claim that every child needs attention and support from their parents while teaching English language to reach their learning goal and increase academic performance. The lack of learning media such as modern and appropriate learning material can be the reason for low grades and motivation to learn (ibid.). Shaw (1959) notes that the results of text comprehension depend on reading with concentration. Usually, two factors influence the level of concentration – psychological factors and external factors such as noise, distraction, etc. According to Jumiatty (ibid.),

students who feel lack of reading strategies are usually confused while reading because they do not know which reading tool to choose to complete the reading task. Jumiatty (ibid.: 14) provides the example of the student who lacks knowledge in reading strategies: “First, the students read word by word within the text, relying too heavily on their visual information, which greatly impedes their reading speed and hampers their reading comprehension. Second, the students spent a lot attention on detail with the result they often miss the main idea of the text. Third, they just focused too much attention on form of the expense meaning”. Thus, it can be supposed that the students with partial or total lack of reading strategies knowledge can have difficulties with reading tests.

The positive affect of classical music, and Mozart’s sonatas in particular, is going to be considered as a way to solve some reading comprehension problems, such as determining the main idea, locating reference, understanding vocabulary, making inferences and detail information, and develop the most important reading comprehension strategies in basic school learners, such as the prediction, think-aloud, story structure, visual representation, informational text structure and summarising strategies.

CHAPTER II

THE INFLUENCE OF MOZART'S SONATAS ON READING COMPREHENSION OF BASIC SCHOOL LEARNERS OF GRADE 9

To study the Mozart Effect in developing reading comprehension strategies of a good reader while addressing reading comprehension problems, an experiment was conducted among basic school learners of grade 9. *Determining the main idea* is the first reading comprehension problem which is going to be addressed in the experiment with the test administered with Mozart's music background because finding the main idea helps to understand the whole idea of the text and makes the reading process easier. *Understanding vocabulary* is the second reading comprehension problem to test in the experiment since the lack of enough vocabulary influences the understanding of the text and decreases the likelihood of comprehending the information. The *making inferences* comprehension problem should also be tested as far as this reading issue demands developing a logical guess which is hard for students to do (Jumiaty (2014), Zweirs (2005). Also, taking into account the requirements of the Estonian National Curriculum for Basic Schools (2011), it can be said that examining of the *making inferences* problem helps students to evolve such skill as finding the relevant information and connect it with experience from their real life. The last aspect to be considered in the experiment is *detail information* because this reading comprehension problem mainly depends on choosing the most appropriate strategy to find the right information in the text. *Locating references* is not going to be tested in the experiment because Hidayati (ibid.) noted that this problem is more common for the students of 1-4 grades and associated with their insufficient knowledge of English pronouns. Hence, the experiment is going to demonstrate how all or some reading comprehension problems can be better addressed using the Mozart Effect.

To design reading comprehension tests, ten authentic articles were selected with the level of difficulty appropriate for young learners of grade 9 in accordance with the language proficiency requirements set by the Estonian National Curriculum for Basic Schools, i.e. the intermediate level of B1. The topic of all articles is 'social media', one of the topics of the National Curriculum for Basic Schools. The articles cover such aspects as the values of social media, the influence of social media on teenagers' mental and physical health, FOMO (Fear of Missing Out), emojis and history of Instagram & Facebook. The sources of the articles are The Guardian newspaper, psychological and educational

websites (LearningEnglishTeens, ManWrites). The texts were shortened for the purposes of the test, but they remained in their authentic forms.

Each reading comprehension test consists of from one to three reading comprehension tasks aimed at developing good reader's reading comprehension strategies and solving possible reading comprehension problems. The tasks include a) a true/false task; b) a summary-type task; c) a synonyms-type task; d) an answering questions task; e) a word-formation task; f) a giving titles task. A 'True/false' task develops one of the parts of the informational text structure reading comprehension strategy called *sequence* (University of Tennessee Center for Literacy Studies, 2012). A 'Summary' task increases student's ability both to comprehend and recall text (Duke & Pearson, 2002). A 'Synonyms' task develops such points of Pressley's (1995 & 2001) good readers' vision as having a good vocabulary and being an active reader. Also, Pressley (ibid.) mentions that "a good reader knows the world", i.e. even if the student does not have a sense of knowing the world, "why" questions might be helpful in achieving this goal.

The topic of composing a short summary task was researched by McGinley and Denner (1987) where they asked their students to write short narratives using keywords from a story. It was surprising that this experiment triggered foreign language teachers to implement this part of informational text structure reading strategy to their language classes. Durkin (1978), Yopp (1988) and Raphael (1983) claim that questioning is one of the best approaches to teach young learners reading comprehension. Moreover, questioning is directly connected with informational text structure reading comprehension strategy. As it is suggested by Durkin (1978), questioning is a pervasive activity to make students understand the main idea of the text they read before they start to read, during they read and after they read. Durkin (ibid.) mentions that the impact of questions on reading comprehension is extremely significant and encouraging. Moreover, Yopp (1988) concludes that when students learn to ask question about texts, their comprehension improves. Using the type of task of making the correct form of the word is used in basic school examination in English, and it is connected to reading comprehension strategies as well. First of all, this task develops students' sense of understanding a text and the general sense of the text (as it was mentioned by Pressley (1995 & 2001) and, secondly, this type of task improves the perception of English grammar of the learners of the second language. As Wonnacott (1985) suggests, giving titles to paragraphs is one of the parts of the informational text structure strategy called *description*. Therefore, this type of task was used in some tests. Based on several

researches by Raphael (Raphael & McKinney 1983; Raphael & Pearson 1985; Raphael & Wonnacott 1985), it can be concluded that the devised model of QAR (Question-Answer-Relationships) improves young adults' reading comprehension results. Thus, Raphael (1983: 221) divides the model into three subgroups:

(1) *Right There* QARs were those in which the question and the answer were explicitly stated in the text, (2) *Think and Search* QARs had questions and answers in the text, but some searching and inferential text connections are required to make the link, and (3) *On My Own* QARs were those in which the question was motivated by some text element or item of information, but the answer had to be generated from the students' prior knowledge.

As far as the QAR model is directly connected with the informational text structure reading strategy, it is important to notice that tests 5, 6 and 7 (in test 5 – *On my own* QARs, in test 6 – *Right There* QARs, in test 7 – *Think and Search* QARs) are similarly designed in order to check the efficiency of QAR strategy.

2.1. Reading Comprehension Experiment: Procedure, Analysis, and Results

Procedure

The experiment was conducted with two groups of 9 graders with approximately the same level of English proficiency. The students' reading comprehension skill was previously tested with English State Exam 2019 for basic schools using the 'word-formation' and the 'synonyms' tasks from the reading part of the exam. The 'word-formation' task was selected in order to test the level of students' reading comprehension, the 'synonyms' task was chosen in order to evaluate the understanding of vocabulary. 20 students were doing the same printed out reading comprehension test in the classroom on the 2nd of February, 2021 for 60 minutes.

The students (totally 20) were divided into two groups – control and experimental, 10 students of different gender in each group. The control group was solving the reading comprehension test in non-music study environment while the experimental group was doing the same task with Mozart's sonatas 2 and 14 playing in the background. 45 minutes were allocated for accomplishing each reading comprehension test. The students were not allowed to use any dictionaries during reading comprehension tests. The first part of the experiment without music was conducted on the 15th of February, 2021, and the second part with Mozart's sonatas no 2 and no 14 was performed on the 17th of February, 2021.

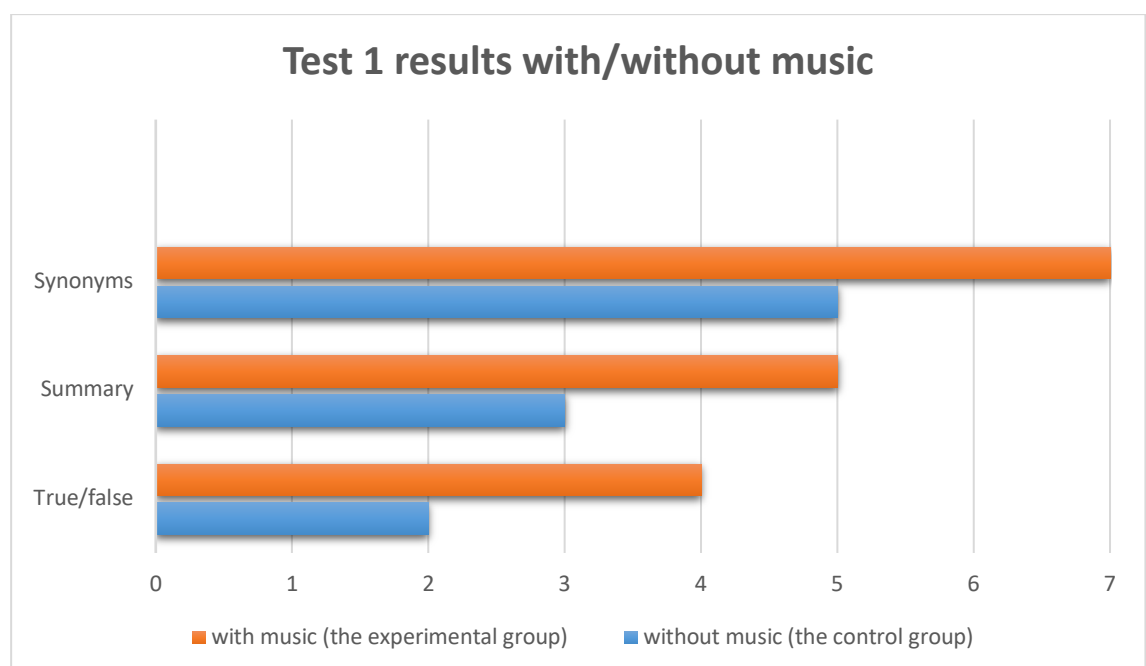
While doing reading comprehension tests, Mozart’s sonata no 2 in F, K. 280 (lasting 14 minutes) and no 14 in C minor, K. 457 (lasting 17 minutes and 45 seconds) were being played at low volume. Since the total duration of Mozart’s sonatas was 31 minutes, it was decided to play sonata no 2 in F, K. 280 twice. Both groups had 45 minutes to accomplish reading comprehension tests; two students from the control group completed reading comprehension tests 7 and 9 minutes earlier. Other students from the control and experimental groups were doing tests for 45 minutes.

Analysis

The analysis of the data of the experiment describes the experiment by comparing the two groups of young learners considering the category of students doing reading comprehension tests with Mozart’s sonatas no 2 and no 14 and students doing the same reading tests without sonatas in the background.

Reading comprehension test 1 (appendix No 1) offers a reading text on the topic “Social Media” and includes three types of tasks: synonyms, summary, true/false statements. Table 1 below presents the results of each type of task. Numbers 1-7 in the horizontal axis demonstrate the maximum score in points for each type of task, scored in the two groups (the ‘orange’ bar for the experimental group with Mozart’s music background, and the ‘blue’ bar for the control one without a music background) of 10 students each.

Table 1. Reading comprehension test results per all tasks “Test No 1” with/without music



As it can be seen from the table above, the main difference in the results of the first reading comprehension test between the experimental and the control groups in the three types of tasks - *true/false*, *summary* and *synonyms* – is that the result with Mozart’s music as a background is higher, i.e. in all tasks it is 2 points higher on a scale of 1 to 7 than in the experimental group. For example, the students from the experimental group accomplished the ‘synonyms’ task better by 2 points; the same result can be seen in the ‘summary’ and ‘true/false’ tasks because the results differ by 2 points.

Reading comprehension test 2 (appendix No 2) offers a reading text on the topic “Social Media” and includes two types of tasks – questioning and summary. Table 2 below presents the results of each task type. Numbers 1-13 in the horizontal axis demonstrate the maximum score in points for each type of tasks gained in the two groups of 10 students, i.e. the experimental (the orange bar) and the control groups (the blue bar).

Table 2. Reading comprehension test results per all tasks “Test 2” with/without music

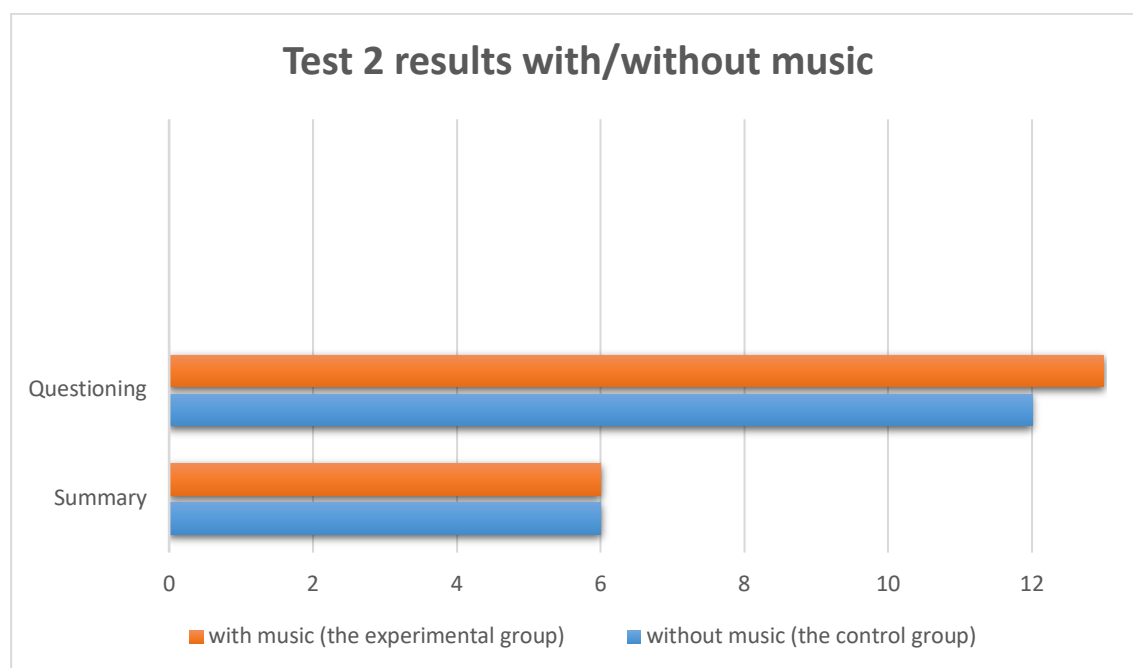


Table 2 demonstrates that the number of correct answers in the summary task with both control and experimental groups is the same (6 points per ‘summary’ in both groups), but in the ‘questioning’ task students performed better while working on it with Mozart’s sonata No 2 playing as a music background.

Reading comprehension test 3 (appendix No 3) offers a reading text on the topic “The Value of Social Media” and includes three types of tasks: synonyms, questioning and

summary. Table 3 below presents both groups' results in each type of task. Numbers 1-7 in the horizontal axis demonstrate the maximum score in points per each type of task gained in the two groups of 10 students, i.e. the experimental (the orange bar) and the control groups (the blue bar).

Table 3. Reading comprehension test results per all tasks “Test 3” with/without music

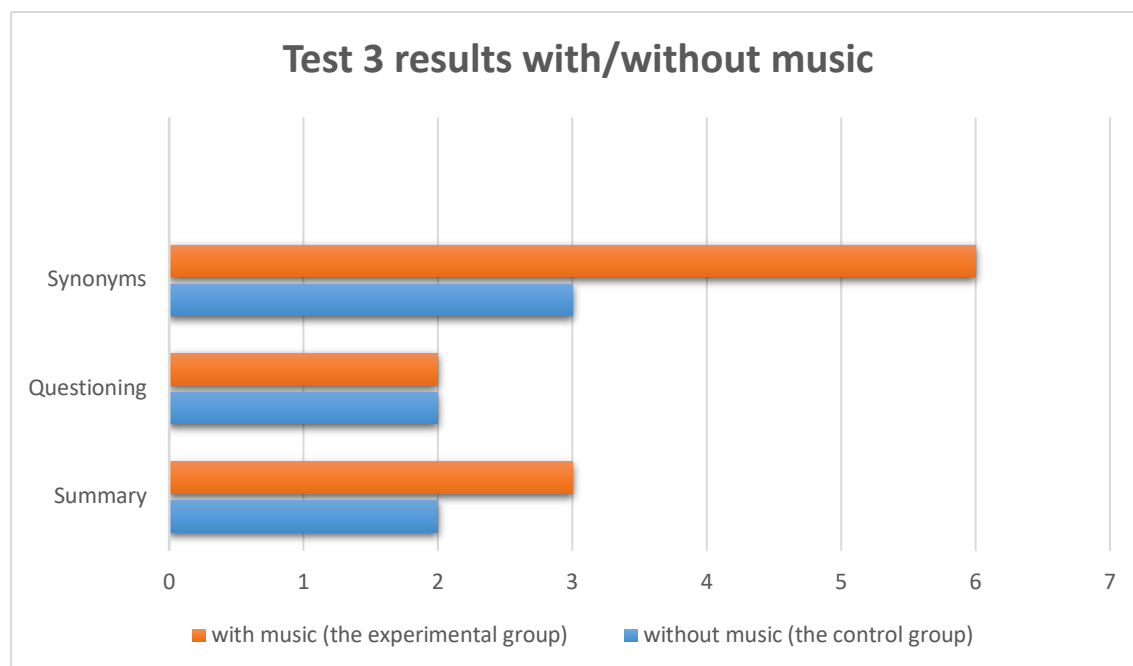


Table 3 demonstrates that the most significant difference can be seen in the ‘synonyms’ task because the group of participants received 7 points per this task under the music condition in comparison with students from the control group who got 3 points. However, the table shows that the number of correct answers in ‘questioning’ task is the same (2 points in both groups). Also, Mozart’s music increased results per ‘summary’ task 1 point higher in the experimental group.

Reading comprehension test 4 (appendix No 4) offers a reading text on the topic “The Values of Social Media” and consists of one task which is the word-formation. Table 4 below presents the results for this task. Numbers 1-5 in the horizontal axis demonstrate the maximum score in points for this task scored by the experimental and the control groups.

Table 4. Reading comprehension test results per all tasks “Test 4” with/without music

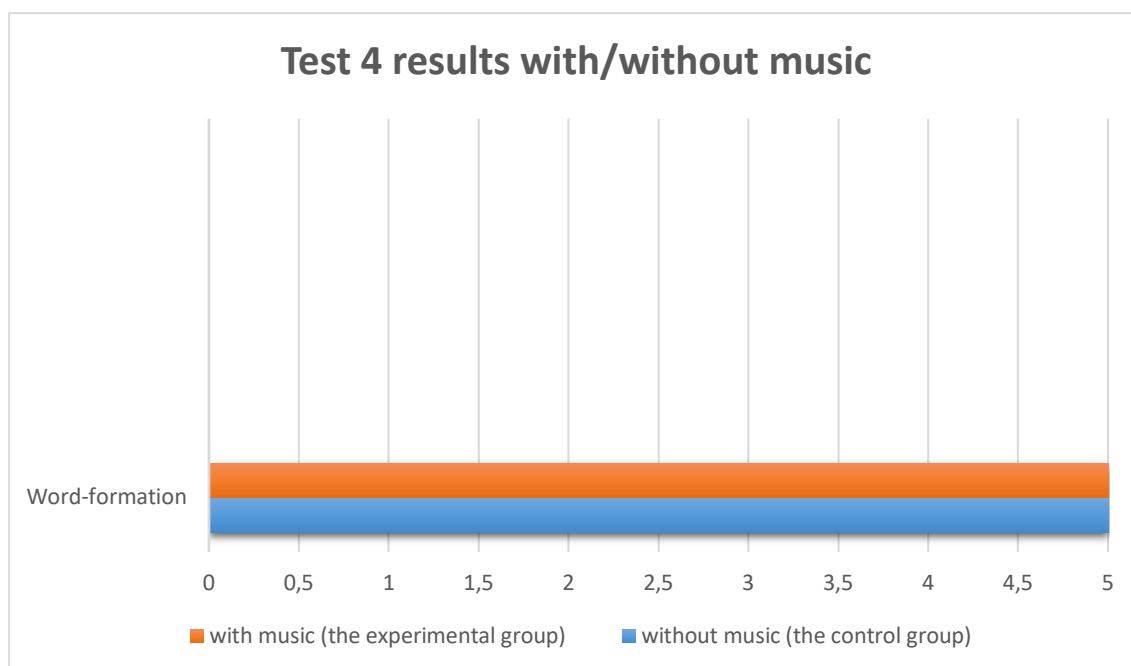
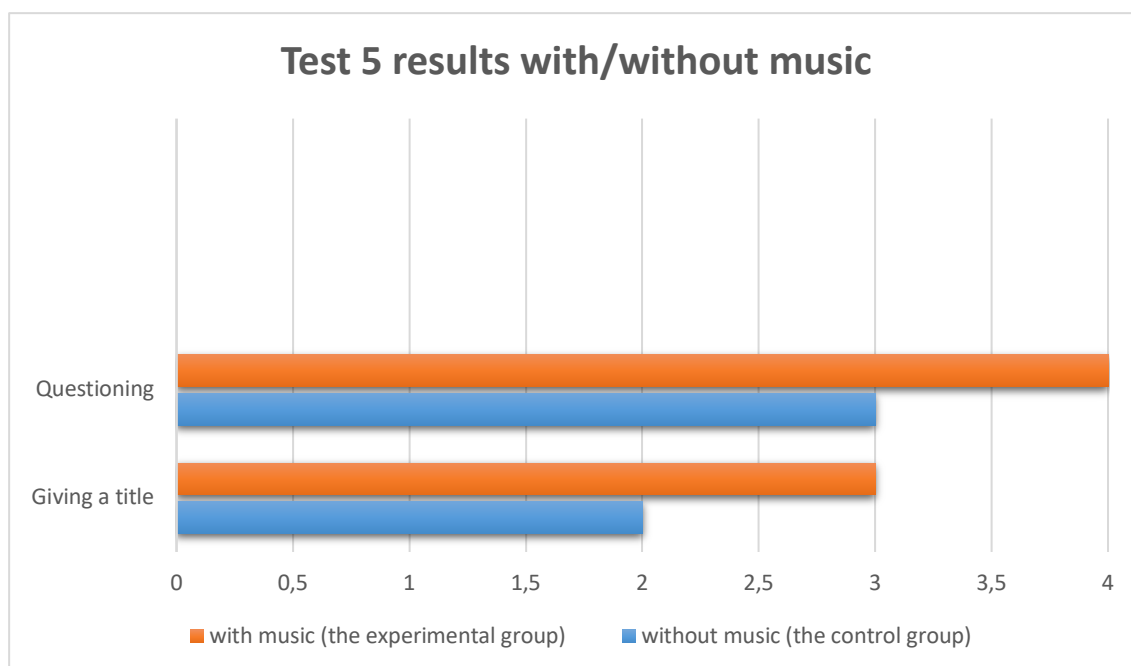


Table 4 shows that the reading comprehension test consisted of one task. Therefore, it can be seen that the academic performance in both experimental and control groups stayed the same, i.e. the results for both reading tests indicate that each group received 5 points per ‘word-formation’ task.

Reading comprehension test 5 (appendix No 5) offers a reading text on the topic “Social Media and Teenagers” and consists of two tasks – questioning (*on my own* questions) and giving a title to each paragraph. Table 5 below presents the results for this task. Numbers 1-4 in the horizontal axis demonstrate the maximum score in points for each reading comprehension task were received by the students in both groups – the experimental (the orange bar) and the control one (the blue bar).

Table 5. Reading comprehension test results per all tasks “Test 5” with/without music



Based on the results of Test 5, it can be noted that the experimental group showed better results with Mozart’s sonatas background than the control group. More precisely, in both tasks (‘questioning’ and ‘giving a title’) the experimental group received 4 points per the ‘questioning’ task while the control group received 3 points; also, the experimental group got 3 points for the ‘giving a title’ task while the test group received only 2 points for the same reading task.

Reading comprehension test 6 (appendix No 6) offers a reading text on the topic “How Does Social Media Affect Teenagers Mental Health” and consists of two tasks – questioning (*right there* questions) and giving a title to each paragraph. Table 6 below presents the results for this task. Numbers 1-5 in the horizontal axis demonstrate the maximum score in points for each reading comprehension task scored by the experimental and the control groups.

Table 6. Reading comprehension test results per all tasks “Test 6” with/without music

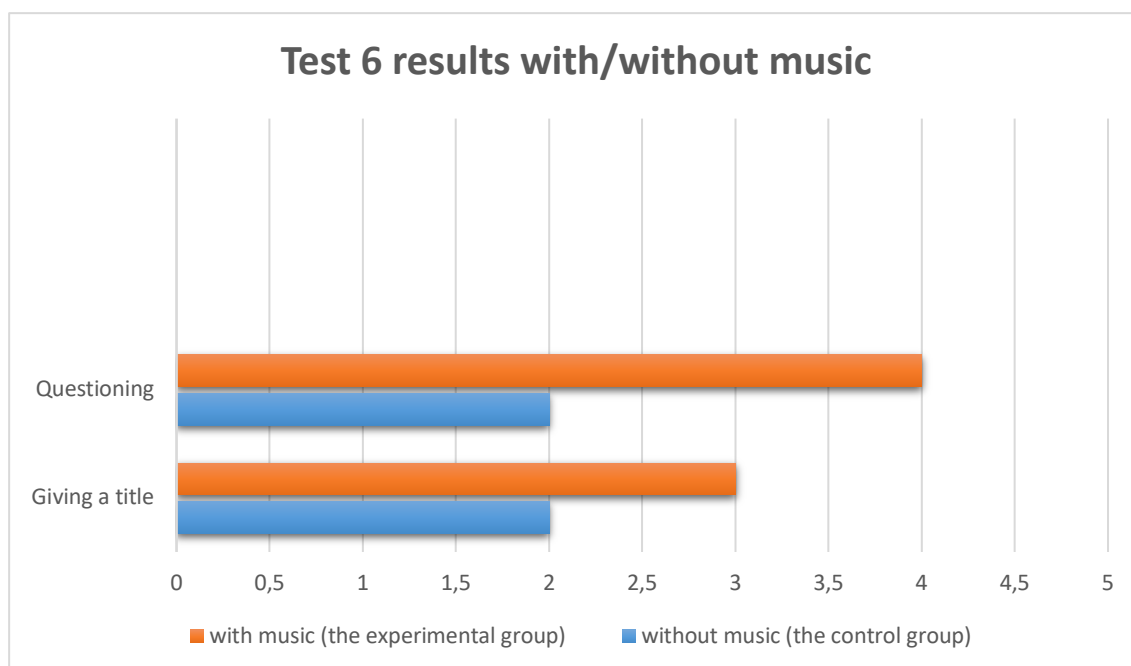


Table 6 indicates that the number of correct answers with Mozart’s sonatas is higher in both tasks. Especially it is seen in the ‘questioning’ task with the experimental group since the result differs by 3 points in comparison with the control group. The results of the ‘giving a title’ task also demonstrate a small difference between the groups of students, i.e. the experimental group exceeded the control group by one point.

Reading comprehension test 7 (appendix No 7) offers a reading text on the topic “FOMO” and consists of two tasks – questioning (*think and search* questions) and filling the gaps. Table 7 below presents the results for this task. Numbers 1-8 in the horizontal axis demonstrate the maximum score in points for each reading comprehension task, scored by the experimental and the control groups.

Table 7. Reading comprehension test results per all tasks “Test 7” with/without music

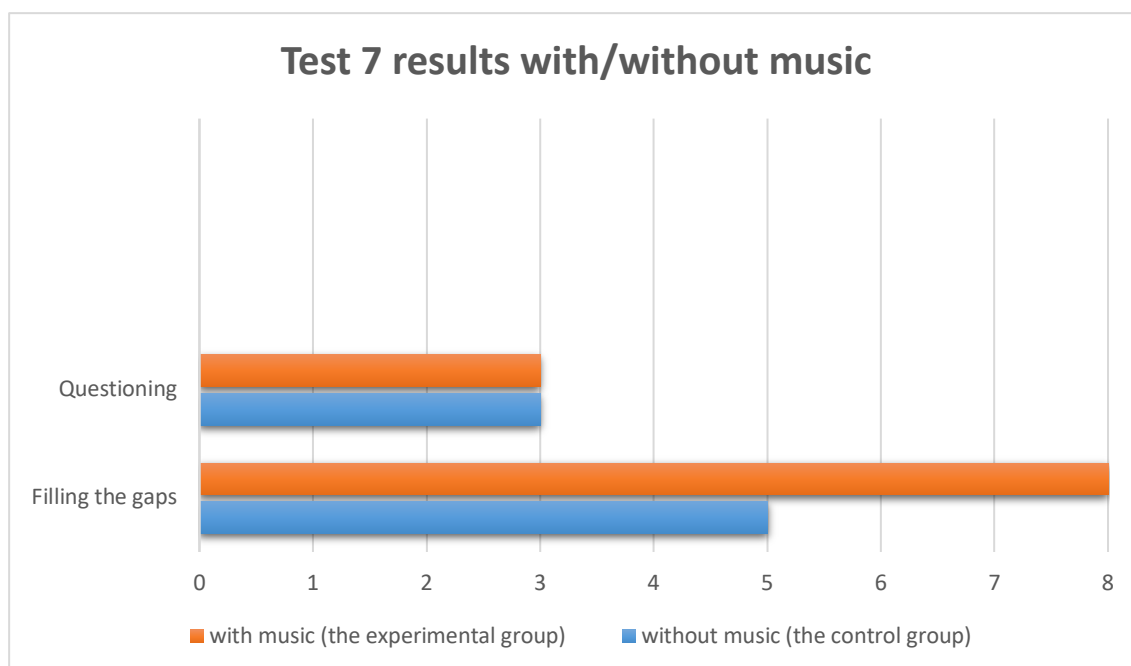


Table 7 shows that the results in the ‘questioning’ task did not change – the both groups of participants have similar results (three points per a task). Although the table indicates that the ‘filling the gaps’ task was accomplished better by the experimental group with Mozart’s sonatas background (three points higher than in the test group).

Reading comprehension test 8 (appendix No 8) offers a reading text on the topic “EMOJIS” and consists of three tasks – questioning, filling the gaps and summary. Table 8 below presents the results for this task. Numbers 1-5 in the horizontal axis demonstrate the maximum score in points for each reading comprehension task, received by the experimental and control groups.

Table 8. Reading comprehension test results per all tasks “Test 8” with/without music



Table 8 illustrates that the results in the ‘questioning’ task in both groups stayed the same (two points per a task in each group). ‘Filling the gaps’ (one point higher) and the ‘summary’ (one point higher) reading tasks were done better in the experimental group.

Reading comprehension test 9 (appendix No 9) offers a reading text on the topic “History of Instagram” and consists of one task, which is word-formation. Table 9 below presents the results for this task. Numbers 1-6 in the horizontal axis demonstrate the maximum score in points for each reading comprehension task, received by the students in the experimental (the orange bar) and the control groups (the blue bar).

Table 9. Reading comprehension test results per all tasks “Test 9” with/without music

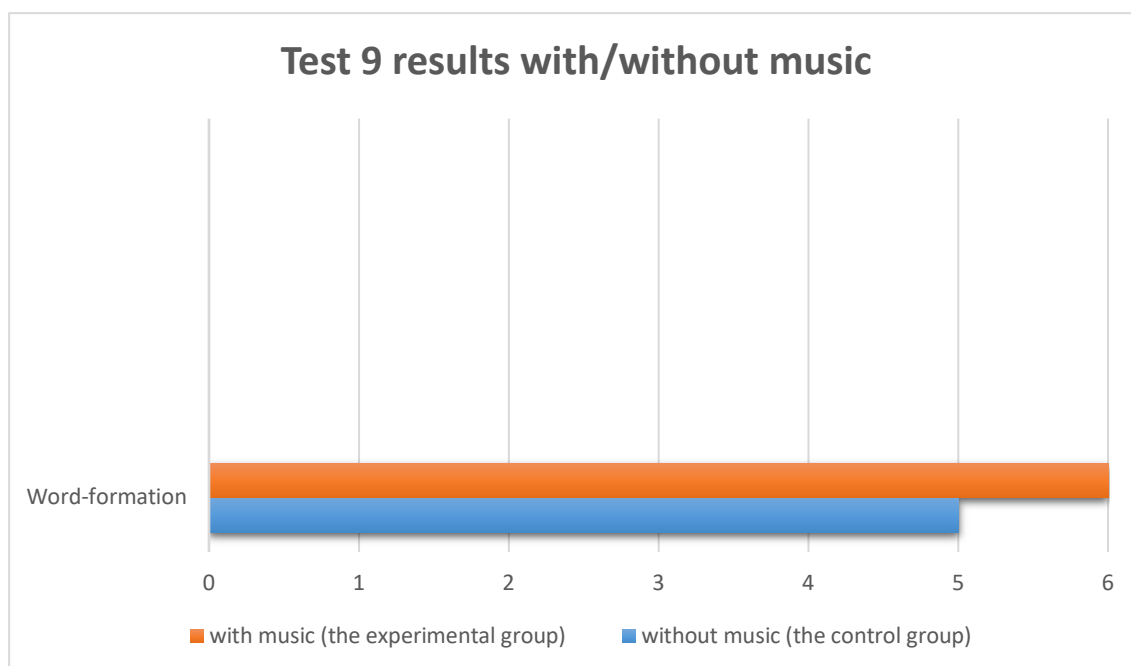


Table 9 illustrates that the results of accomplishing the ‘word-formation’ task changed insignificantly. More precisely, the experimental group did this task one point better than the control group, i.e. the result in the test group was five points and in the experimental group – six points.

Reading comprehension test 10 (appendix No 10) offers a reading text on the topic “History of Facebook” and consists of two tasks – true/false statements and defining the sequence of events in the sentences. The results of the test completion by both groups of students are presented in Table 10. Numbers 1-4 in the horizontal axis demonstrate the maximum score in points for each reading comprehension task, received by the experimental (the orange bar) and control groups (the blue bar).

Table 10. Reading comprehension test results per tasks “Test 10” with/without music

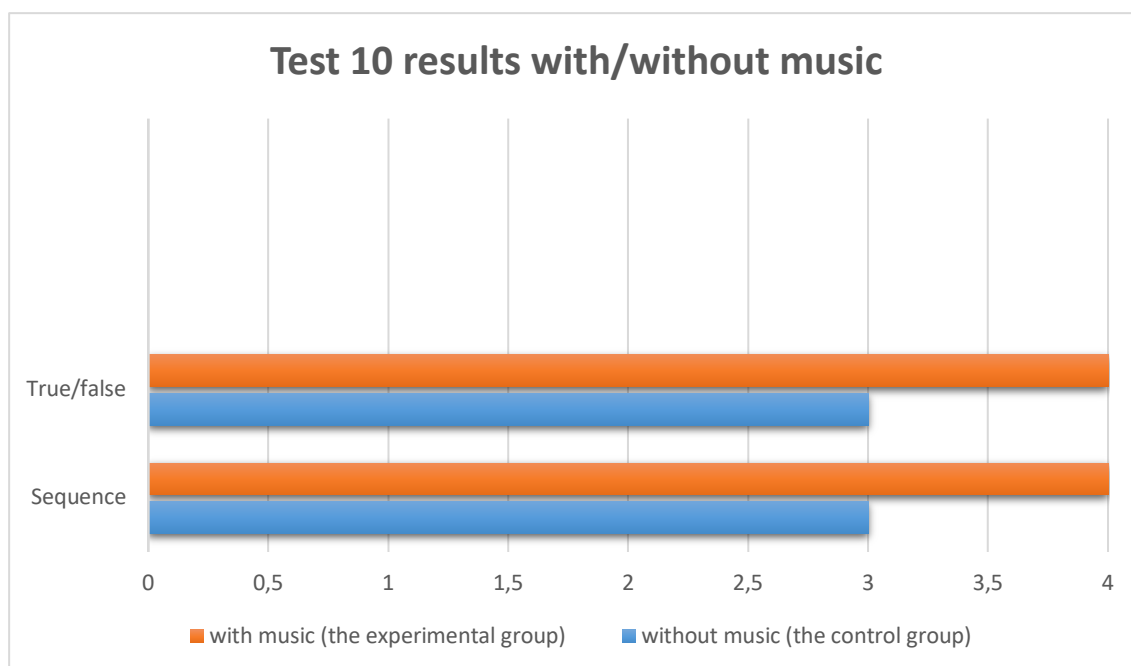


Table 10 illustrates that the experimental group demonstrated better results in both ‘true/false’ and ‘sequence’ tasks. More specifically, the ‘true/false’ task was done one point higher (4 points out of 4) in comparison with the test group (3 points out of 4) and the ‘sequence’ task was also done one point higher than in the control group (4 points per task in total).

Based on the data presented in the charts, it can be observed that the results of the experimental group on reading comprehension tests while accomplishing reading tasks with Mozart’s sonatas no 2 and no 14 background were higher than the control group’s results doing the same tests in the non-music condition. It is also important to comment on the number of students who passed the reading comprehension tests. Each reading test was accomplished by two groups of 10 students in each. Further information is going to demonstrate the results of the control and the experimental groups of students.

The *true/false* task was used in two reading comprehension tests (No 1 and No 10), and in both tests the results with Mozart’s sonatas playing in the background were better than without music. *Summary* tasks appeared in four reading comprehension tests and showed a little bit higher results under the music condition only in two reading tests out of four. Different types of questioning tasks were used in six reading comprehension tests of the experiment and showed unimportant small differences in two tests with Mozart’s sonatas; i.e. the second test with pre-, while- and post-reading questions & the fifth test with *My*

Own type of questions. *Synonyms* tasks were used in two reading comprehension tests and in both tests with Mozart's sonatas background the academic performance was significantly higher than without background music. *Word-formation* tasks were used in tests twice, and in both reading tests the difference between results was small, only one point higher under the music condition. *Giving titles* tasks showed an unimportant difference in two reading comprehension tests both with and without music; tests with Mozart's sonatas background increased students' academic performance only by one point in comparison with the non-music condition. *Filling the gaps* tasks with Mozart's music improved reading comprehension results in two tests out of two. The *sequence* task was used only once, in the last 10th test, and demonstrated that the result under the music condition was only one point higher than in silence.

As it can be seen from the results of all types of tasks of all 10 reading comprehension tests with Mozart's sonatas no 2 and 14 presented in Table 11, Mozart's music supports such reading comprehension strategies as informational text structure and its different parts, such as *sequence*, *description*, *true/false*, *questioning*, *filling the gaps* and *giving the titles* since all the above-mentioned parts of informational text structure imply understanding of the text, which are broken into passages. Table 11 demonstrates the total results in points for each type of a reading comprehension task in all tests of the students from the experimental group who worked on them with Mozart's sonatas as a background. Table 12 demonstrates the total results of each reading comprehension task in points in the non-music study environment of the participants from the control group. Table 11 and 12 show the difference in the academic performance between the two groups of young learners in music and non-music study environment.

Table 11. The results of all types of tasks with Mozart’s sonatas as a background

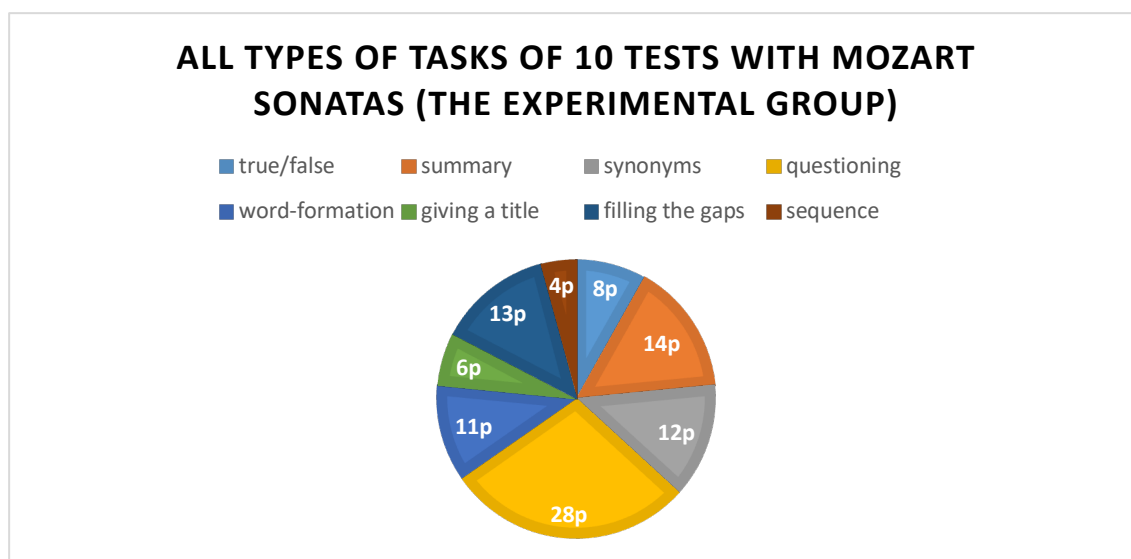
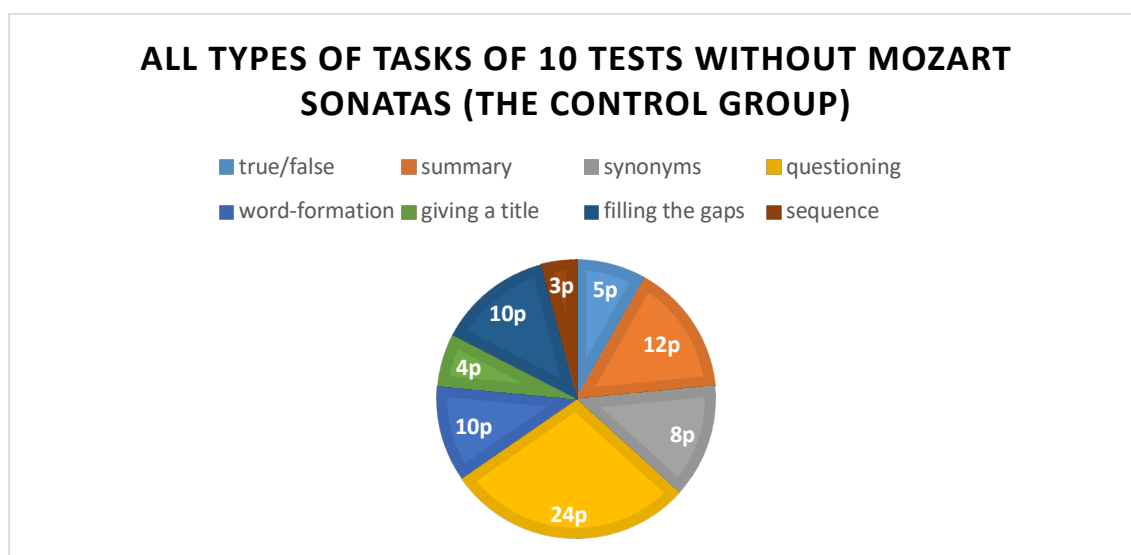


Table 12. The results of all types of tasks without Mozart’s sonatas as a background



Moreover, with Mozart’s sonatas no 2 and 14 playing as a background, students performed better and demonstrated a better application of the summarisation reading strategy. The *synonyms* task improves Pressley’s vision of a good reader, especially considering the point of developing vocabulary and being an active reader. The *word-formation* task was designed similarly to the task of the English National Exam paper, and it also shows that results with Mozart’s sonatas in the background were higher. Thus, it can be concluded that Mozart’s sonatas no 2 and 14 mostly influence informational text structure reading comprehension as far as this strategy has many sub-strategies. Hence, the positive results in reading comprehension tests with Mozart’s sonatas in the background comparing to non-music study environment can be explained by the fact that

Mozart's sonatas might enhance concentration on doing particular tasks by stimulation a corresponding function of the brain making the process of reading comprehension more efficient.

Results

The difference between the results of the experimental group and the control group in doing some types of test tasks is significant.

To summarise the results of the experiment on Mozart's sonatas no 2 and no 14 as a tool in teaching reading comprehension to basic school learners of the 9th grade, it can be concluded that using Mozart's sonatas improve reading comprehension academic performance, i.e. successful completion of reading comprehension tests, in such types of reading tasks as *true/false*, *summary*, *pre-*, *while-*, *post-* & *on my own* reading questions, *synonyms* and *filling the gaps*.

In other types of test tasks the results remained the same or increased insignificantly by one or two points higher comparing with non-music test delivery, which can be explained by the fact that summarisation demands constant practice of recalling texts, and it is a difficult task even for adult learners; *word-formation* requires not only a reading activity but also comprehending of complex grammar and perhaps, new vocabulary (Schmid, 2015); *giving titles* is linked with summarisation as far as academic performance of these tasks depends on practising summarisation.

Considering the influence of Mozart's sonatas no 2 and no 14 from the aspect of developing reading comprehension strategies, it may be concluded that the Mozart Effect increases both many points of Pressley's (1995 & 2001) vision of a good reader and some points of improving or strengthening some of reading comprehension strategies such as informational text structure and summarisation. More exactly, using Mozart's sonatas (e.g. no 2 and no 14) develops such features of a good reader as being an active reader, knowing the world as a reader, scanning the text and thinking about the general sense of the text. All mentioned-above features of a good reader are extremely significant in increasing the level of understanding texts. More importantly, these traits of a good reader help students to maintain not only comprehending texts but also developing such qualities as a feeling of a text, asking and answering questions based on a text, widening the general perception of the world, protagonists, authors etc. On the one hand, Pressley's view of a good reader influences only students, but, on the other hand, his vision pushes teachers

to use his strategy of a good reader as an opportunity to make positive differences in English Language as a Foreign/Second Language reading comprehension routine. Especially, such qualities as scanning the text and thinking about the general meaning of the text are notably important for teachers to teach their students as far as *scanning* prepares students for quick evaluation of the text, and *thinking about the general meaning* teaches students to react to the text emotionally, considering own experience and feelings. Thus, Mozart's sonatas, for example, no 2 and no 14, play a major role in expanding the reading comprehension strategies and the strategy of a good reader.

Nevertheless, the finding of the study implies that English teachers can make use of Mozart's sonatas no 2 and no 14 while teaching reading comprehension to their students. The results of the experiment show that applying Mozart's sonatas to all types of reading comprehension tasks does not give the desired improvement in facilitating students' ability to comprehend all texts, however, applying Mozart's sonatas to some types of reading tasks is beneficial. It is true to highlight that this phenomenon might be explained by Levitin's (2007) opinion that listening to Mozart's sonatas stimulate the tissues in the right hemisphere of the brain and thus assists the progress of the learning process. Hence, it is reasonable to design a reading comprehension programme based on the tests using Mozart's sonatas no 2 and no 14 to teach reading to basic school learners of grade 9.

2.2. A Mozart-Music Based Programme to Teach Reading to Basic School Learners of Grade 9

Observing the Mozart Effect while testing reading comprehension in the experimental group of the basic school learners of the 9th grade, it was decided to design a Mozart-music based programme to teach reading to basic school learners of grade 9 in order to increase students' academic performance in reading comprehension tests and develop some or all traits of a good reader in them. Developing both of the skills would help to raise students' motivation to learn harder and decrease the number of disturbances as far as Mozart's sonatas playing in the background make students concentrate better than in silence. Hence, the teachers of any foreign language can make use of the Mozart-music based programme and implement the programme with appropriate learning materials.

The Mozart-music based programme can be a beneficial learning material for exam preparation in the 9th grade for teachers of any age and working experience. The aim of the Mozart-music based programme is to develop the reading comprehension strategies.

The learning outcomes of the Mozart-music based programme are that the students upon completion of the programme 1) are familiar with reading comprehension strategies and can apply them successfully; 2) have acquired some traits of a good reader and 3) are able to independently solve distinct types of reading comprehension tasks. The content of the Mozart-music based programme consists of ten reading comprehension authentic texts on the topic of “Social Media”, and each text has follow-up reading comprehension tasks to develop and test skills of a good reader. The following structure of the programme is recommended for exam preparation.

The Mozart’s sonatas are an essential part of the Mozart-music based programme, i.e. *Piano Sonata No. 14 in C minor, K. 457*, 17 minutes 45 seconds (<https://www.youtube.com/watch?v=CKtxbloW-ZQ>, accessed March 22, 2021) and *Piano Sonata No. 2 in F, K. 280*, 14 minutes 7 seconds (<https://www.youtube.com/watch?v=J9866zX07iw>, accessed March 22, 2021).

1. The first reading comprehension section on the topic “Social Media” has three types of reading comprehension tasks, i.e. true or false, filling the gaps to finish summary of the text and matching the underlined words from the text to their definitions.

Accomplishing the ‘true or false’ and the ‘filling the gaps’ tasks usually take the most of the lesson (the experiment showed that students in both groups were doing these reading tasks on average about 29-34 minutes). Thus, it is reasonable to turn on *Sonata No. 14* twice and turn off at the 30th minute of the lesson. Then, the teacher should turn on the Adagio part (4.19 - 11.20) from *Sonata No. 2* at the 31st minute of the lesson and play it twice until the end of the lesson.

2. The second reading comprehension section on the topic “Social Media” consists of two types of tasks, i.e. composing a 5-sentence summary of the text using the following keywords from the text and filling the chart with questions to the text. It should be pointed out that the ‘questioning’ task includes three types of questioning, i.e. pre-reading-, while-reading- and post-reading questions. The pre-reading questions shall be written on the basis of the previous knowledge of the topic. While-reading questions shall be made while reading the text and post-reading questions shall be made after reading the text.

When students just started doing the reading tasks, the teacher should turn on *Sonata No. 2* two times (the sonata length is approximately 28-29 minutes), then switch to *Sonata No. 14* and leave it at a low volume until the end of the lesson.

3. The third reading comprehension section on the topic “The Value of Social Media” consists of three different types of tasks – writing a one-sentence summary of each paragraph, answering two *On My Own* questions on the basis of the text and finding the synonyms.

The instructions on applying Mozart’s sonatas while using the third reading comprehension test from the Mozart-music based programme are similar to the previous section.

4. The fourth reading section on the topic “The Values of Social Media” has only one reading task, i.e. a ‘word-formation’ task which means that the students have to use the correct form of the words in brackets to complete the text. The greatest advantage of this task is that it can be easily connected to any grammar rule or a grammar structure. Hence, while adapting this reading comprehension task to any English language class, the teacher not only improves students’ reading comprehension strategy but also develops either grammar or word-formation skill(s).

The first option is to play either *Sonata No. 2* or *No. 14* three times during the whole lesson and the second option is to switch the sonatas. For instance, to start the lesson with *Sonata No. 2* (14 minutes), switch to *Sonata No. 14* (17 minutes) and finish the lesson with *Sonata No. 2* (14 minutes).

5. The fifth reading comprehension section on the topic “Social Media and Teenagers” includes two types of tasks, i.e. giving a title for each paragraph and answering *On My Own* questions. As far as the ‘giving a title’ task requires students to be particularly attentive to the structure and the vocabulary of the text, it is rational to apply a full version (17 minutes) of *Sonata No. 2*. Then, the teacher should turn on the full 14-minute *Sonata No. 14* twice until the end of the lesson.
6. The sixth reading comprehension section on the topic “How Does Social Media Affect Teenagers’ Mental Health” includes two types of tasks such as giving the correct title for each paragraph and answering the questions according to the

given text. It is recommended to use only *Sonata No. 2* during the 45-minute lesson without changing the sonatas as far as the results of the experiment showed that applying only *Sonata No. 2* as a background to the sixth reading comprehension test increased the academic performance.

7. The seventh reading comprehension section on the topic “FOMO” has two types of reading comprehension tasks, i.e. filling the gaps and questioning. The best option to use Mozart’s sonatas doing this reading test is to switch them. More precisely, the teacher should turn on *Sonata No. 2* (0.00 – 11.07), then play the *Sonata No. 14* twice until the end of the lesson.
8. The eighth reading comprehension section on the topic “Emojis” consists of three types of reading comprehension tasks – composing a one-sentence summary of each paragraph, filling the gaps and answering the questions. The sonatas should be played three times, i.e. to start the lesson with the full version of *Sonata No. 2*, switch to the full version of *Sonata No. 14* and finally to play *Sonata No. 2* one more time.
9. The ninth reading comprehension section on the topic “History of Instagram” consists of one reading task, i.e. the ‘word-formation’. Similarly to the fourth reading comprehension test, there are two choices – to play either *Sonata No. 2* or *No. 14* three times during the whole lesson, or to switch the sonatas (see above).
10. The tenth reading comprehension section on the topic “History of Facebook” has two types of reading tasks such as defining the sequence of events and deciding if the sentences are true or false according to the text. The first option is to play the Adagio part (4.19 - 11.20) from *Sonata No. 2* during the whole reading test. The second option is to start the lesson with the Adagio part from *Sonata No. 2* and continue with *Sonata No. 14* until the end of the class. The choice depends on the teacher’s vision of the learning process.

The following guidelines can help teachers to implement the Mozart-music based programme in the classroom:

1. First of all, the teacher has to be familiar with the definition of the Mozart Effect and its role in the learning process of foreign languages since the Mozart Effect is

not just listening to particular Mozart's sonatas – it is the field in education and educational psychology which has been researched by many scientists, neuro-psychologists, etc. in order to understand how to enhance, develop, ease and unconsciously motivate students to increase their academic performance in different areas – listening, speaking, writing and reading. Therefore, having a clear vision and comprehending of what and what for the Mozart Effect is, can be the first and the most important step for teachers.

2. The second step is to define the aim of the programme: whether it is a part of the exam preparation class routine, or an activity for conducting formative assessment, or a part of self-assessment, etc. The teacher must understand what the targets of applying Mozart's sonatas in English language classes are.
3. The third step is to choose Mozart's sonatas to teach reading comprehension. As Mozart composed many music compositions, the task is to find the one to play in the class. However, there are two essential factors to draw attention to, i.e. the time and the length of sonata(s). Firstly, the teacher has to decide when he or she is going to start sonatas – at the beginning, in the middle or at the end of the lesson. Perhaps, the teacher would like to teach reading comprehension with Mozart's music being played in the background during the whole duration of the class, i.e. for 45 minutes. Thus, the teacher has to take into account the length of sonatas and choose how many times sonata(s) is/are going to be played in the class.
4. The next step is to choose the required types of tasks to teach or test reading comprehension – true/false, summarisation, synonyms, different types of questioning, word-formation, giving a title, filling the gaps or sequence. The teacher can select any type of reading tasks according to the aims of the class and the students' language level.
5. The fifth part is to conduct the lesson with selected reading comprehension tasks and Mozart's sonatas.
6. The final step of the lesson based on the Mozart-music based programme is the evaluation of the tests.

As it can be seen from the step-by-step guide, a Mozart-music based programme is designed for exam preparation for basic school learners of the 9th grade, however, the

programme might be used not only for one particular aim but also as a part of any English language class for developing reading activities in the 9th grade.

Both for beginning and experienced teachers the Mozart-music based programme to develop reading comprehension strategies may soon become commonplace. As it was previously mentioned, the teacher has to choose the topic of the reading comprehension texts/materials and then to follow the instructions. It must be noted that the sequence of tasks can be changed, however, it is recommended to use only those particular types of tasks that were presented in the Mozart-music based programme. Also, the level of complexity and the volume of all types of reading tasks depend on the teachers' point of view and their students' language proficiency level.

To conclude, the Mozart-music based programme to teach reading comprehension to ninth-graders was designed in order to ease the learning process both for students and teachers. Perhaps, the idea of playing Mozart's sonatas in English classes might be weird, however, the experiment and previous researches conducted on the Mozart Effect demonstrate its beneficial effect on children of any age and even with mental disorders. Thus, the Mozart-music based programme to teach reading comprehension to basic school learners of the 9th grade is worth applying it in teaching reading comprehension as a part of preparing for exam in the 9th grade.

CONCLUSION

Reading comprehension is an essential part of teaching English language since it helps to acquire reading strategies and become a good reader, develops vocabulary and increases academic performance. In order to achieve consistently good results in reading comprehension tests, it is necessary to trigger particular parts of the brain to commit students to the learning process and also to create an appropriate study environment.

Background sources' analysis (Levitin (2007), Schellenberg (2014), Rauscher, Shaw & Ky (1993) demonstrates that using classical music as a background facilitates the behaviour of students and improves their academic performance in accomplishing different types of reading tests. Moreover, studying under Mozart's musical condition helps students to concentrate on the task and reduce distractions, thus making the reading process more efficient. However, the most common reading comprehension problems the young learners face are determining the main idea, locating reference, understanding vocabulary, making inferences and detail information. Hence, the practical part of a Mozart-music based programme considers evolving of the reading comprehension strategies in the 9th graders, such as the prediction, think-aloud, story structure, visual representation, informational text structure and summarising.

The results of the empirical research (i.e., the study of the Mozart effect in reading comprehension tests with young learners of grade 9, and design of a Mozart music based reading comprehension programme) show that the academic performance in accomplishing similar reading comprehension tests between the control and the practical groups of young learners in music and non-music study environment is higher with Mozart's sonatas no 2 and no 14 as a background.

To conclude, the present Master's thesis has revealed that applying Mozart's music, namely, piano sonatas no 2 and no 14, improves the academic performance of basic school learners in reading comprehension tests. The author of the Master's thesis recommends teachers to use Mozart's sonatas in English language classes since the conducted experiment and the theoretical part demonstrate the positive influence of the Mozart's music (Mozart's effect) both on the learning process of foreign languages and the results in the reading comprehension tests.

SUMMARY IN ESTONIAN

Loetust arusaamine, erinevate lugemisstrateegiatega kasutamise oskus on võõrkeele õpetamisel oluline osa, see aitab kujuneda heaks lugejaks, laiendada sõnavara ja parandada õppeedukust. Püsivalt heade tulemuste saavutamiseks on vaja käivitada ajutööd luues läbi selle sobivad õpitingimused.

Teoreetilises osas antakse ülevaade selle kohta, kuidas taustana klassikalise muusika kasutamine inglise keele tundides parandab õpilaste käitumist, meelt ja suurendab erinevat tüüpi lugemistest sooritavate õpilaste õppeedukust. Pealegi Mozarti sonaatide kasutamine tundides aitab õpilastel keskenduda ülesandele ja vähendada segavaid tegureid, muutes seeläbi lugemisprotsessi tõhusamaks. Kuid kõige levinumad mõistmise probleemid, millega noored õppijad puutuvad kokku, on põhiidee määramine, olulise info leidmine, sõna tähenduse mõistmine, järelduste ja analüüsi tegemine. Seega eeldatakse Mozarti muusikal põhineva programmi praktilises osas 9. klassi õpilaste lugemisstrateegiate, näiteks ennustamise, valjuhäälese mõtlemise, jutustruktuuri, visuaalse esituse, informatiivse teksti struktuuri ja kokkuvõtete arengut.

Empiiriliste uuringute tulemused näitavad, et muusika saatel kontrollrühmal on akadeemiline tulemuslikkus kõrgem, kus taustaks olid Mozarti sonaadid nr 2 ja nr 14.

Kokkuvõtteks võib öelda, et käesolevas magistritöös on selgunud, et Mozarti klaverisonaatide nr 2 ja nr 14 kuulamine keeletundides parandab põhikooliõpilaste lugemisoskuse tulemusi ja loetu mõistmist. Magistritöö autor soovib õpetajatel kasutada Mozarti sonaate inglise keele tundides, kuna läbiviidud eksperiment ja teoreetiline osa näitavad Mozarti efekti positiivset mõju nii testide soorituskoorile kui ka võõrkeelte omandamisele tervikuna.

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APPENDICIES

Appendix No 1

SOCIAL MEDIA

The digital landscape has put increased pressure on teenagers today, and we feel it. There are so many social media channels: Facebook, Twitter, Instagram, Snapchat, Tumblr, you name it. I made a conscious decision to avoid Snapchat and Instagram because of the social pressure I saw them putting on my 14-year-old little sister. If my mum turned off the WiFi at 11pm, my sister would beg me to turn my phone into a hotspot. She always needed to load her Snapchat stories one more time, or to reply to a message that had come in two minutes ago because she didn't want her friend to feel ignored. If I refused, saying she could respond in the morning, I'd get the "You're ruining my social life" speech. Even as a teenager as well, I sometimes find this craze a little baffling.

A new study has found that teenagers who engage with social media during the night could be damaging their sleep and increasing their risk of anxiety and depression. Teenagers spoke about the pressure they felt to make themselves available 24/7 and the resulting anxiety if they did not respond immediately to texts or posts. Teens are so emotionally invested in social media that a fifth of secondary school pupils will wake up at night and log on just to make sure they don't miss out. Perhaps the worst thing about this is that teenagers need more sleep than adults do, so night-time social media use could be detrimental to their health. A lack of sleep can make teenagers tired, irritable, and depressed.

During the summer holidays, I lost my phone. And for the week that I was phoneless, it felt like a disaster. I love my phone. It gives me quick access to information and allows me to be constantly looped in with my friends, to know exactly what is going on in their lives. So when I didn't have my phone for a week, I felt a slight sense of FOMO, or if you're not up to speed with the lingo, fear of missing out. By the end of the week, I'd got used to not having a phone and I'd quite enjoyed the break from social media. But there was still a sense of sadness at the back of my mind that there would be conversations I had missed, messages that had been sent, funny videos shared and night-time chats that I would probably never get to see.

Udorie J.E, 2015. *Social media is harming the mental health of teenagers. The state has to act.*

<https://www.theguardian.com/commentisfree/2015/sep/16/social-media-mental-health-teenagers-government-pshe-lessons>, accessed February 10, 2021

a. Decide if the sentence is true or false according to the text

1. The author decided to avoid social media because of the incident that happened with his sister.
2. The use of social media at night has a positive impact on the psychological well-being of teenagers.
3. Lack of sleep due to use of social media can cause apathy and even depression.
4. The author was afraid if he did not have a telephone for a long time.

b. Fill in gaps to finish summary

1. The author decided to avoid social media due to
2. If her mother turned off the Wifi, she ...
3. Studies have shown that the night use of social media causes such health problems as
4. of students wake up at night to check their social media accounts.
5. The author experienced a sense of when he was without a phone for a week.

c. Match the underlined words from the text to their definitions

1. _____ - a talk between two or more people in which news and ideas are exchanged.
2. _____ - a person aged between 13 and 19 years.
3. _____ - the local dialect the vocabulary or jargon of a particular subject or group of people.
4. _____ - impossible to understand.
5. _____ - having or showing a tendency to be easily annoyed.
6. _____ - the ability to express thoughts and feelings by articulate sounds.
7. _____ - the use of persuasion or intimidation to make someone do something.

Appendix No 2

SOCIAL MEDIA

Several decades ago when the concept of internet use was barely conceivable, people all over the world had to contend with boring methods to exchange information. The situation has dramatically changed since of the invention of computer technology.

Today, millions of people across the globe can easily share volumes of data and interact in real-time through social networks. A combination of complicated technology and the desire to achieve globalization can be attributed to the internet evolution in social networks.

In the early 1990s when social networking was gaining popularity there was a notable emergence of chat sites which allowed users to communicate in real time with friends and families across the globe. However, the need to exchange more than just basic text communication drove innovators to design more viable applications.

This led to the rise of more technologically unique sites which offered wider and more attractive services. The introduction of video and web cameras ushered in a new aspect to social networking. The internet evolution in social networks from the 1990s onwards introduced the concept of doing business through virtual platforms.

In 2000, some of the biggest names like Facebook, Twitter and Mezee were invented. The amount of time people spend on social media is constantly increasing. Teens now spend up to nine hours a day on social platforms doing a variety of things like, filling in their personal profile, commenting on videos, posting photos, chatting etc.

Christakis, N. *How The Internet Changing The Way You Think*.
<https://www.edge.org/responses/how-is-the-internet-changing-the-way-you-think>,
accessed February 9, 2021

1. Compose a 5-sentence summary of the text using the following keywords from the text (*Summary*)

boring, data, interact, social networks, 1990s, the Internet evolution, today, invent, teens

2. Fill on the chart with questions to the text

Pre-reading questions shall be written on the basis of the previous knowledge of the topic. While-reading and post-reading questions shall be made while reading/after reading the text. (*Questioning*)

Pre-reading questions	While-reading questions	Post-reading questions

Appendix No 3

THE VALUE OF SOCIAL MEDIA

For digital natives who never knew life before social media, the world seems like it has always been the same but for digital migrants, the present looks nothing like the past. If you were born in the late 1990s onwards, just try to imagine what your life would be like without Facebook, Twitter or Instagram. Does it look appealing to you? Probably not. Your social interaction depends so much on social media and keeping up with friends requires you to be online most, if not all, of the time. This is why your parents and friends probably keep urging you to get away from your computer or put your smartphone down and spend more time with them.

Write a one-sentence summary of this paragraph:

This obsession with social media is well reflected in statistics. According to a website specializing in statistics, 51% of worldwide Facebook users who make new friends at least once a week are between 18 and 33 years of age. However, when it comes to younger users between 13 and 17 years of age, 72% of them make at least one new friend per week. This percentage gains more significance when we learn from Facebook that its monthly active users worldwide as of the second quarter of 2015 reached some 1.5 billion. This number barely reached 750 million monthly active users in the second quarter of 2011. In the same period of 2009, this number was roughly 250 million.

Write a one-sentence summary of this paragraph:

What do young users spend their time doing on social media? There are a number of things but the top activities are finding out what friends are doing, sending them messages and knowing what they are watching or listening to. This is for 16–24-year-olds, followed in second place by 25–34-year-olds, who come first in keeping in touch with relatives.

Write a one-sentence summary of this paragraph:

Some people argue that young people's overuse of social media represents an addiction that threatens their real-life communication skills. Moreover, this addiction can distract them from their studies and affect their concentration, especially given the many cases of use of social media during class that have been reported. Meanwhile, overuse of social

networks by adults can harm their relationships. Other disadvantages include wasting time, identity theft, cyberbullying and crimes against children.

Grinspoon P., 2020. *Social Media Addiction: The Impact On Mental Health*.

<https://addictionresource.com/addiction/social-media/>, accessed February 9, 2021

1. Answer these questions:

1. Are you a social media addict?
2. Why do you think teenagers are addicted to social media?

2. Find a word that means ...

1. Communication (paragraph 1)
2. Mania (paragraph 2)
3. Importance (paragraph 2)
4. Member of a family (paragraph 3)
5. Discuss (paragraph 4)
6. A mature (paragraph 4)

Appendix No 4

Use the correct form of the words in brackets to complete the text

THE VALUES OF SOCIAL MEDIA

With this in mind, let's turn to technology, and more specifically, social media. I think that *the unexamined technology may not be worth using*. We need to be 1) _____ (thought) about our use of Facebook, Twitter, Pinterest, Instagram, and the rest. Like any technology, social media has both positive and negative features. It can foster 2) _____ (grow) in character, or undermine it.

Certain 3) _____ (value) are embedded within social media: convenience, 4) _____ (easy) of communication, brevity, and perhaps a bit of egocentrism as well. But communication with others is often difficult, requiring effort and time. We are not the center of the universe. Moreover, we need time for solitude, silence, immersion in the natural world, and face-to-face 5) _____ (interact) with other human beings. We need, as William Powers tells us in his book, *Hamlet's Blackberry*, 6) _____ (deep). These ideals, these values, must be protected.

We must find ways to enjoy the benefits of social media, while 7) _____ (avoid) the downside of this technology. To do this, we need to carve out time to be unplugged. It might be 8) _____ (use) to have a technology-free zone in your house, or an IT-free time, such as dinner. Each of us can think through what works best in our particular circumstances. It is wise to think about 9) _____ (this) issues. We should live in such a way that our values dictate how we use any given technology, rather than letting it dictate its values to us.

Austin, M., 2013. *The Values of Social Media*.

<https://www.psychologytoday.com/intl/blog/ethics-everyone/201305/the-values-social-media>, accessed February 10, 2021

Appendix No 5

a. Read the text and write a title for each paragraph

SOCIAL MEDIA AND TEENAGERS

Teenagers cannot go one day without any of their preferred social media apps. Look at any teenager on the street, on a bus or simply idling time waiting for a friend and you will see them with their head down facing the screen of their smartphone. Teenagers have always had secrets. Long before social media, teenagers liked to chat with their friends after school, catching up on all the news and gossip going on in their circle of friends. All the juicy details kept far away from the ears of their parents.

1) _____

Teenagers kept diaries and journals – little notebooks where they wrote their darkest secrets and thoughts and stored them in private places. Under their beds, on top of a wardrobe. Somewhere where their mothers would not find them. But now social media allows teenagers to chat with their friends all the time. They no longer have to wait until after school and gather at the school gates to catch up on the latest piece of news. They can write their deepest and darkest thoughts on social media apps, share them with select groups of people, and not have to worry if these thoughts can be discovered by one of their parents.

2) _____

Phone passwords or hidden folders on their phones can hide the apps away from the prying eyes of grown-ups. There are benefits to social media for teenagers. It can help them practice and improve their social skills. This can help them later in life when they join the workforce and for life as an adult. It can help them maintain better relationships with their friends. What parent doesn't want that for their own children? The thought of their own son or daughter being alone and isolated is not something to bear.

3) _____

A harmless photograph is sent around and within minutes a teenager can become a laughingstock – or worse. There are now reports of several teenagers committing suicide or suffering from depression. Certain images or messages circulated around that are not suitable for a young mind. Girls gaze at the perfect bodies of Instagram influencers and then have negative opinions of their own bodies.

4) _____

Buckley, D. *Social Media and Teenagers — a Talking Points lesson plan for English reading and speaking*. <https://manwrites.com/social-media-and-teenagers-a-talking-points-esl-lesson/>, accessed 10 February, 2021.

b. Answer the questions

- 1) What are the pros of social media for teenagers? (name at least 5)
- 2) What did students like to do when they did not have any social media accounts?
- 3) Why did teenagers keep diaries before social media?
- 4) What are the reasons of teenagers committing suicide?

Appendix No 6

a) Read the text and write the correct title for each paragraph

How Does Social Media Affect Teenagers' Mental Health

Results from a separate study from the University of Pittsburgh School of Medicine showed that the more time young adults spent on social media, the more likely they were to have problems sleeping and report symptoms of depression. And another small study of teens ages 13-18 from the UCLA Brain Mapping Center found that receiving a high number of likes on photos showed increased activity in the reward center of the brain. Further, teens are influenced to like photos, regardless of content, based on high numbers of likes.

1) _____

Too much time spent scrolling through social media can result in symptoms of anxiety and/or depression. Here's how social media can be destructive:

The need to gain "likes" on social media can cause teens to make choices they would otherwise not make, including altering their appearance, engaging in negative behaviors, and accepting risky social media challenges.

2) _____

Teens girls in particular are at risk of cyberbullying through use of social media, but teen boys are not immune. Cyberbullying is associated with depression, anxiety, and an elevated risk of suicidal thoughts.

3) _____

Even with privacy settings in place, teens can collect thousands of friends through friends of friends on social media. The more people on the friend list, the more people have access to screenshot photos, Snaps, and updates and use them for other purposes. There is no privacy on social media.

4) _____

Social interaction skills require daily practice, even for teens. It's difficult to build empathy and compassion (our best weapons in the war on bullying) when teens spend more time "engaging" online than they do in person. Human connection is a powerful tool and builds skills that last a lifetime.

Hurley, K. 2020. *Social Media and Teens: How Does Social Media Affect Teenagers' Mental Health*. <https://www.psychom.net/social-media-teen-mental-health>, accessed February 10, 2021.

b. Answer the questions

What are the results of the research conducted by the University of Pittsburgh School of Medicine and the UCLA Brain Mapping Center?

What can cause the need to gain likes?

Who are at risk of cyberbullying?

What are the disadvantages of less face-to-face interaction?

Appendix No 7

FOMO

Everybody knows how important it is for students to get a good night's sleep every night. You aren't able to do your best and keep up with all of your responsibilities unless you sleep well. I'm sure you already know that you should go to bed at a reasonable hour. Most experts agree that the optimum number of hours is eight, and this has been accepted as common sense for as long as I can remember. However, I was young once and I know that most of you get much less sleep than that – and in some cases it will be affecting your schoolwork.

I read an interesting article in a teachers' magazine recently. They did a study of 848 students in Wales. Worryingly, the results showed that teenagers are facing a new problem. They may go to bed and get up at appropriate times but a growing number are waking up in the middle of the night, not to use the bathroom or have a snack but because of a new phenomenon: *FOMO* – *fear of missing out!*

According to the article, schoolchildren are suffering because of a growing trend to wake up during the night to check social media. Afraid of missing a comment or opportunity to take part in a chat, teenagers are waking at all times of the night, going online and getting involved. All this when they should be sound asleep.

Experts are worried about this growing trend and the report reveals some worrying statistics that I'd like to share with you:

- **23% of 12 to 15-year-olds** wake up nearly every night to use social media. Another 15% wake up at night once a week for the same reason.
- **One in three students** are constantly tired and unable to function to their full capacity.
- **Students who use social media during the night** are more likely to suffer from depression and anxiety.

So, I'd like to ask you to be responsible when it comes to social media. Be brave! Switch off your devices at night. The world won't end and your social media will be waiting to greet you in the morning! I give you my word that you won't have missed anything important.

British Council. LearnEnglishTeens. *FOMO*.
<https://learnenglishteens.britishcouncil.org/skills/reading/upper-intermediate-b2-reading/fomo>, accessed 9 February, 2021.

a. Fill in the gaps

The research of _____ showed that school students face a new problem called _____. _____ is a fear _____. Students suffer because they _____. Teenagers afraid to _____ while they asleep. These students are more likely to suffer from _____ and _____. _____ your device at night is not the end of the world.

b. Answer these questions

- 1) What is the suggested number of hours to sleep? What happens if students sleep less than that?
- 2) What is the main reason of the growing number of FOMOs?
- 3) People of what age wake up every night to check their social network accounts?

Appendix No 8

EMOJIS

1. Write a one-sentence summary of this paragraph:

Getting the emoji you want can be a more serious problem than not finding exactly what you had for breakfast. Emojis do not always represent the people that use them. However, after many years of public anger and campaigning, things are changing. Instead of just cartoon-yellow people and faces, we now have the option for five different skin colours. Recent updates also included opposite gender pairs, so we have ‘Mrs Father Christmas’, a smartly dressed ‘man in tuxedo’, as a partner for the bride, and a ‘dancing man’, to match the dancing lady. Soon there will be a redhead emoji, by popular demand, and a woman wearing a headscarf, after German teenager Rayouf Alhumedhi campaigned for an emoji to represent her.

2. Write a one-sentence summary of this paragraph:

Can emojis help to change society for the better? Did you know that the ‘eye in speech bubble’ or ‘I Am A Witness’ emoji represents speaking out about online bullying? It was created by Apple and the Ad Council for their ‘I Am A Witness’ campaign. Companies such as McDonalds have also tried to use our love of emojis to their advantage. In their ‘good times’ campaign they use a series of emojis on a billboard to tell a story of a frustrating day given a happy ending by a visit to McDonalds. Unfortunately for McDonalds, the blank white space after the end of the story was too tempting for British graffiti artists. Can you guess what they added? That’s right ... the vomiting emoji was a popular choice!

3. Write a one-sentence summary of this paragraph:

What is the future of emojis? They are already shaping social media as existing and new platforms evolve to incorporate and respond to their use. Is emoji evolving so rapidly that it will soon compete with English as a global language? Or is technology changing so fast that emojis will soon be forgotten when the next big thing comes along? It is hard to predict and even technology and language experts are divided on the subject. What do you think? Keep your eyes open for new developments!

British Council. LearnEnglishTeens. *EMOJIS*.
<https://learnenglishteens.britishcouncil.org/uk-now/read-uk/emojis>, accessed February 10, 2021.

b. Fill in the gaps

1. Getting the emoji is not that easy because emojis do not
2. There are the option for
3. campaigned for an emoji.
4. ‘.....’ emoji represents speaking out about online bullying.
5. tried to use emojis for
6. It is to the of emojis.

c. Answer the questions

Can emojis help to change society for the better? Why do you think so?

What is the future of emojis in your opinion?

Appendix No 9

Use the correct form of the words in brackets to complete the text

HISTORY OF INSTAGRAM

Instagram **1)** _____ (**found**) by Kevin Systrom and Mike Krieger in October 2010. Systrom and Krieger initially wanted to create an application for mobile photography called Burbn, but found that it **2)** ____ (**be**) too similar to the existing search-result app called Foursquare. They tweaked their original idea until they came up with a photo-sharing app. The name “Instagram” is a **3)** _____ (**combine**) of “instant camera” and “telegram.” From the outset, Instagram proved extremely popular. Only two months after its launch, it achieved a million users and **4)** _____ (**reach**) ten million users in its first year. The simple idea of sharing photos in a social media setting appealed to a wide variety of phone users. As time went on, Systrom and Krieger began making a series of technology-related **5)** _____ (**improve**) to the app—making it compatible with Android and Windows phones. In 2012, Facebook purchased Instagram for one billion dollars. In November 2012, Instagram launched web versions of user profiles, **6)** _____ (**give**) desktop users the ability to access Instagram profiles. However, the website profile lacked a search bar; the feature was **7)** _____ (**redesign**) in 2015. Later in 2016, the app underwent major aesthetic changes; the app itself revamped to a black-and-white theme, while the app icon changed to a rainbow-colored design. Today, Instagram **8)** ____ (**boast**) 800 million users. Every day, 55 million photos are uploaded and 1.2 billion likes are recorded.

MrNussbaum.

Blystone, D. 2020. *History of Instagram*. <https://mrnussbaum.com/history-of-instagram-reading-comprehension-online>, accessed February 7, 2021.

Appendix No 10

HISTORY OF FACEBOOK

Mark Zuckerberg, 23, founded Facebook while studying psychology at Harvard University. A keen computer programmer, Mr Zuckerberg had already developed a number of social-networking websites for fellow students, including Coursematch, which allowed users to view people taking their degree, and Facemash, where you could rate people's attractiveness.

In February 2004 Mr Zuckerberg launched "The facebook", as it was originally known; the name taken from the sheets of paper distributed to freshmen, profiling students and staff. Within 24 hours, 1,200 Harvard students had signed up, and after one month, over half of the undergraduate population had a profile.

The network was promptly extended to other Boston universities, the Ivy League and eventually all US universities. It became Facebook.com in August 2005 after the address was purchased for \$200,000. US high schools could sign up from September 2005, then it began to spread worldwide, reaching UK universities the following month.

As of September 2006, the network was extended beyond educational institutions to anyone with a registered email address. The site remains free to join, and makes a profit through advertising revenue. Yahoo and Google are among companies which have expressed interest in a buy-out, with rumoured figures of around \$2bn (£975m) being discussed. Mr Zuckerberg has so far refused to sell.

The site's features have continued to develop during 2007. Users can now give gifts to friends, post free classified advertisements and even develop their own applications - graffiti and Scrabble are particularly popular. This month the company announced that the number of registered users had reached 30 million, making it the largest social-networking site with an education focus.

Phillips, S. 2007. *History of Facebook*.
<https://www.theguardian.com/technology/2007/jul/25/media.newmedia>, accessed February 7, 2021.

1. Define the sequence of events

- a. Facebook continued to develop during 2007 ()
- b. The address Facebook.com was purchased for \$200,000 in 2005 ()
- c. Within 24 hours, 1,200 Harvard students had signed up ()
- d. In 2004 Zuckerberg launched "The Facebook" ()

2. Decide if the sentence is true or false according to the text

- a. Mark Zuckerberg founded Facebook when he was 25.
- b. Zuckerberg founded Facebook while studying psychiatry.
- c. Yahoo and Google wanted to buy out Facebook.
- d. Facebook's interface continued to develop during 2007.

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