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INTRODUCTION

Vocabulary is an essential part of a language. To assess a learner's English level the size of the vocabulary is an important standard. Without competent vocabulary knowledge, a second language learner's conversational fluency and reading comprehension will meet difficulties. Vocabulary is the foundation of a language. The size of it can make a huge difference in the successfulness of expressing ourselves. Therefore, it is important to try to apply different methods in teaching/learning, to find the most suitable form of it, which can assist the process of acquisition.

In the past, multimedia materials were very limited and it was not an easy task to find proper and useful material for teaching, but as the technical world started to develop a lot of things have become easier to learn and also to teach. Vocabulary is likewise one of these matters. In the 21st century, a diverse amount of multimedia material has been developed, primarily to foster the teaching/learning process, and to be introduced into the classroom. With the popularization of the Internet, the use of modern educational technology and the computer network to facilitate language acquisition has become the trend of educational development.

Acquiring wider and deeper vocabulary knowledge is paramount in the pursuit of becoming a proficient foreign language speaker. It can be argued that lack of vocabulary knowledge often has a more serious influence on clarity and fluency of spoken and written language than insufficient grammatical knowledge or poor pronunciation.

The development of computer-assisted language learning has created the need and opportunity for investigating the use of multimedia in language learning. Therefore, many studies have shown that computerized media and a multimedia environment can be helpful for learning foreign language vocabulary.

The benefit of multimedia-assisted vocabulary acquisition/learning and teaching are a wide field to study. Numerous researchers have found it interesting and have studied the topic. Amai (2012) widely studied this sphere, and his work represents deeply valid and relevant information about vocabulary attainment in a multimedia environment. Besides Amai, HU Hai-peng, DENG Li-jing (2007) and Nan Yue (2017) were also the main influencers of this study. They seek evidence on whether students retain more vocabulary after the double coding input of audio-visual resources or after having only-audio input, also of motivation for students' vocabulary acquisition in a multimedia environment, and the application of multimedia technology in the field of teaching. Furthermore, Marwati (2013) gave inspiration to the research which is presented in Part 3, who investigated the effect of multimedia annotations on the learning process of 8th-grade students.

As a result of the conclusive role of vocabulary acquisition and the developing tendency

of multimedia teaching the following questions concerning this topic arise:

- Why is learning vocabulary so important in learning a foreign language?
- What are some useful learning/teaching tools, concerning the multimedia environment, to facilitate the development of one's vocabulary in the EFL classrooms?
- What opinions arise among students regarding the usage of multimedia?

The main *aim* of the study is to *seek valid answers* to these above-stated questions.

The *object* of the study is vocabulary development in EFL classroom with the help of multimedia.

Therefore, the *subject* of the research is the discussion of vocabulary and its connection with multimedia with the conviction that the latter can assist the preceding one.

Both *theoretical* and *practical/empirical methods* were used during the completion of the study, these include analysis, comparison, and generalization.

The *theoretical value* of the thesis highlights on the main points of vocabulary and its subtypes. There are further studies analysed which particularly focus on multimedia annotations as a helping tool for vocabulary teaching in EFL classrooms.

The *practical value* of the thesis is that it provides an overview of diverse opinions on vocabulary teaching and in Part 2 gives practical advice and suggested tools that can enhance the vocabulary teaching process. Additionally, the research carried out in the last part of the study aims at expanding its practical value by giving an insight into the learners' opinions about the current teaching methods and the usage of multimedia aids, thus providing a map to students' needs regarding what tools they think are the most useful ones and which can be neglected.

The thesis has been divided into an introduction, three parts, a conclusion, a Ukrainian summary, references and an appendix. The first part of the work mainly focuses on providing background information on vocabulary by reviewing the most important literature concerning this topic. Part 2 focuses on providing instructions, applications, and different suggestions on how to successfully integrate these multimedia annotations into a lesson, which can greatly contribute to vocabulary expansion. This part also discusses the probable drawbacks and as well as strong points of such aids. Part 3 is concerned with all the important details of the research conducted in the same part, such as its aim, research design, participants, procedure, results and the discussion of the above-mentioned elements.



PART 1– VOCABULARY ACQUISITION AND TEACHING

To begin to discuss the topic of vocabulary acquisition in all, first, it would be advisable to define the word *vocabulary* itself. *Vocabulary* is all the words and chunks of words that help an individual understand the meaning/s encountered in speech or writing or help him/her produce language (Patesan, et al., 2019). To be more precise in defining the word, see how the Cambridge English Dictionary defines it: "*All the words used by a particular person, or all the words that exist in a particular language or subject*" (Cambridge English Dictionary)

Vocabulary was for long an overlooked aspect of learning a new language. This topic has always been a fascinating subject to observe. Throughout history, humanity has often argued about its importance. This attention is very well-deserved because it is known that vocabulary means not just the words that a language contains, but also their meaning, pronunciation and context— these are all the essence of the language learning process. A person needs to put some notable effort into evolving his/her vocabulary.

There are a lot of myths about vocabulary and a practiced linguist, Folse (2004) disproved some of them. For instance: "*Vocabulary is not as important in learning a foreign language as Grammar or other areas*" (p. 67.). Folse (2004) argued that it is not true. He concluded from his own experience: he did not know well the Japanese vocabulary, and it proved when he went to buy flour in a Japanese store, but he did not know the proper word for it, moreover, he could not circumscribe it. Here is the evidence of why we travel with a word book, not a grammar book. A British linguist David A. Wilkins (1972) defines it as: "*Without grammar, very little can be conveyed; without vocabulary, nothing can be conveyed.*" (p.111.)

Vocabulary is more complex than this definition suggests. First, words come in two forms: *oral* and *print*. *Oral* vocabulary includes those words that we recognize and use in listening and speaking. *Print* vocabulary includes those words that we recognize and use in reading and writing. Second, word knowledge also comes in two forms, *receptive* and *productive* (Kamil and Hiebert, 2005). Enriching vocabulary is a very important issue in the teaching or learning process. one cannot communicate well if their vocabulary is limited.

1.1. Vocabulary Acquisition

This topic has been studied by many language experts and professionals, all of them proposing different theories and ideas for putting them into practice. Vocabulary should be recognized as a central element in language teaching. It is the base of all of the languages whether we like it or not. The quantity of our vocabulary richness refers to our education, literacy, social status, and so on. The target vocabulary of adult foreign language learners should be between 2,000 high-

frequency words (a critical threshold) and 10,000 word families (for comprehension of university texts) (Averianova, 2015).

Laufer (1992) suggested that at a minimum having receptive knowledge of the most frequent 3000-word families is necessary to understand unsimplified text, and Nation (2001) believes that language learners need a minimum vocabulary size of 2000 word families and good knowledge of academic vocabulary to cover about 90% of unsimplified English texts. Nation and Hirsh (2003) think a vocabulary size of around 5000 words family is a threshold for pleasurable reading.

Vocabulary learning strategies have been classified differently by different researchers. For example, Ahmed (2012) classified the 38 strategies his Sudanese students employed into five macro strategies of *memorization*, *dictionary use*, *practice*, *note-taking*, and *group work*. He developed a 91-item VLS questionnaire dividing it into various parts such as metacognitive regulation, dictionary strategies, guessing strategies, memory strategies (rehearsal and encoding), and finally activation strategies. However, highlights the point that learners utilise a combination of strategies rather than only one in learning vocabulary (Ahmed, 2012).

1.2. Vocabulary Teaching

Alqahtani (2015) suggests that teaching vocabulary could be problematic from various angles. He believes that a lot of teachers are not confident about the best practice in vocabulary teaching and often they do not know how to begin to deliver the new vocabulary.

Vocabulary teaching is definitely one of the most discussed parts of teaching English as a foreign language. Teachers often face some problems, for example, the problem of how to teach students to gain fair results. The tutor ought to create and prepare appropriate techniques, that will serve the purpose of teaching. A skilled teacher should be well-versed in a variety of current teaching methods. Teachers need to be able to master the material in order to be understood by students and make them interested in the teaching and learning process in the classroom. The teachers should be concerned that teaching vocabulary is something new and different from students' native language. They also have to take into account that teaching English to young learners is different from adults. The teachers have to know the characteristics of his\her learners. They moreover need to prepare good techniques and suitable material in order to gain the target of language teaching (Al Quahtani, 2015).

Several factors have to be taken into account by English teachers if they want to presenta new vocabulary or lexical items to their students successfully. All of the teachers' aim is that their students do not forget the vocabulary that has been recently studied. Then the topics and vocabulary need to be learned, practiced, and revised to prevent students from forgetting.

All the methods that are used by teachers are conditioned by various factors, such as the content, time availability, and its value for the learners. In presenting one planned vocabulary item, the teacher usually combined more than one technique, instead of employing one single technique, as it could be more successful in teaching. Teachers, furthermore, are suggested to employ planned vocabulary presentations as various as possible (Takač and Singleton, 2008).

According to Patesan, et al. (2019), a foreign teacher has to use selected vocabulary activities in class taking into consideration the students' level of proficiency. If teachers want their students' vocabulary to improve, they should teach vocabulary in a systematic and consistent manner. All strategies can be employed, from guided discovery of new words to using context to guess the word to learners' autonomous study using dictionaries and other resources. The materials utilised should be real so that children are exposed to rich, contextualized language in order to develop the vocabulary necessary to comprehend the content and information they may encounter in their daily activities. Teachers should guide their students to find the appropriate strategies that help them enhance their vocabulary and practice it in situational contexts (Patesan, Balagiu, and Zechia , 2019).

Carter and McCarthy claim (1988), that if someone wants to comprehend the vocabulary then he or she needs to rely on strategies that permit one to understand words and store them, commit them to memory, and use them in appropriate situations. In this case, the first task is to help students understand the new words and to explain their meaning. The teacher needs to assure them that they do not have to know all the new words from the text/ passage, before they can understand its meaning but it is this understanding of the text that will be their greatest aid in deciphering those difficult words:

Context clues

As it is stated in the work of Carter and McCarthy (1988), the most frequent way to learn a word's meaning is to guess from the context of the text. These guessings are guided firstly by the topic. Even a title can show a clue for understanding a new word. Then, there are the grammatical structure, intonation, and also punctuation – these are all can be hints. Although there is a *BUT*. This kind of incidental learning is likely to happen if the amount of unknown words is relatively low. We must have notable word power in order to learn words from the context. So this kind of acquisition can mean a disadvantage for those, who have less vocabulary, but for those who "*know more words are able to use those known words to learn even more*" (Folse, 2004, p. 67).

The following task, according to Carter and McCarthy (1988) in language comprehension teaching, is to help students remember all those words, or even store them appropriately in their memory. Thus, it would be right to discuss some essential characteristics of the connection

between vocabulary and memory.

Most vocabulary-memorizing problems centre around the fact, that there are some concepts (abstract words: adjectives adverbs, nouns, verbs), which occur too infrequently and because of that, we cannot remember them easily. The second fact about the connection between vocabulary and memory is that the form of the given word might be more substantial than the meaning itself. Concerning that, there is research by Carter and McCarthy (1988), where he suggests that the best way to teach vocabulary is to bring all the new words into one so-called "network of associations". These associations can have many types and can be linked with each other in many ways. It can be a very useful method because, in our mental lexicon, all the words are tied to each other not only by meaning, form, and sound, but also by sight, and by other parts of the contexts in which we have experienced them.

Vocabulary use. The main task after learning new collocations, words, and expressions, is to start using them. It is essential to use the newly stored language as quickly as possible, "even though what they produce may stray far from the standard." (Carter and McCarthy, 1988, p.70). Producing a certain degree of fluency in conversations helps to gain the necessary self-confidence to take more chances with the language.

Nation states that knowing how to use a word involves knowing the word's grammatical functions, and collocations, and being aware of constraints on use due to many factors, such as register, frequency, and different cultures. The grammatical function is one of the most important linguistic constraints in choosing a word to use (Nation, 2001).

1.2. Knowing a Word

A person who knows a word knows much more than its meaning and pronunciation. The contexts in which a word can be used to express a particular meaning are a critical component of word knowledge.

Ahmad (2018) points out that the power of word knowing facilitates fluent speaking as well as effective writing. It confirms both the learners' acquisition of knowledge and production of knowledge. It enhances learners' all of the four main language skills such as listening, speaking, reading, and writing.

There are, of course, different levels of word knowledge between complete innocence and complete competence. The recognition vocabulary is much larger than the speaking vocabulary.

Knowing a word by sight and sound and knowing its dictionary definition is not the same as knowing how to use the word correctly and understanding it when it is heard or seen in various contexts (Nation, 2001):

In L1 acquisition, it is very common that learners may know how to pronounce one word in their mother tongue but they do not know how to spell this word, while in Foreign Language acquisition, learners may know the written form of the word, but they do not know how to pronounce it clearly, or learners may know one meaning of a word, however, they do not know other meanings of this word in different contexts. Even learners may know both form and meaning of a word, but they do not know how to use this word appropriately in different contexts.

Therefore, knowing a word is quite a complex cognitive process, and knowing a word involves understanding many aspects of word knowledge. Nation points out that "*words are not isolated units of language*" (Nation, 2001, p.23). Therefore, the question of what is involved in "knowing a word" has attracted considerable attention in the field of vocabulary acquisition.

Knowing a word also implies knowing how that word relates to other knowledge (sometimes called word schema). The more a person knows about a specific concept, the more words one can bring to their understanding of that concept. Because people have individual interests and backgrounds, each of us brings different words to shape that understanding (Nation, 2001):

What's a Word Schema?

A word schema is a network of knowledge related to a word. Word schemas involve both semantic knowledge about the connections of word meanings to specific concepts and linguistic knowledge about words, such as their roots and their relationships to other words with the same roots (Von Sidow, 2015).

In the findings of Laufer (1992), the expert speaks of five categories of the difficulty of knowing a word:

a) *Form* - knowing its spoken forms, being able to recognize it in writing or print and spell it correctly.

b) *structure* - detecting the correct meaning of a word by knowing roots and affixes which is not an easy task as it may lead to false interpretation;

c) followed by *syntactic behaviour* of words- when it comes to errors in trying to translate the foreign word in your mother tongue

d) *meaning*, which includes the referential meaning (homonyms, polysemes, idioms, etc.) affective meaning, and pragmatic meaning.

e) *lexical relations* related to synonymy, antonyms as well as their collocations. " The author comes to the conclusion that these five categories are related to different pitfalls that a learner might encounter, either due to L1 transfer or from misconceptions of words and their different meanings and connotations.

f) *Common collocations*

These concepts have been made more detailed and precise by Von Sidow (2015), who defined vocabulary into a hierarchy of four levels: active recall (being able to use the target word); passive recall (understanding the meaning of the target word); active recognition (recognizing the word when given its meaning); passive recognition (the ability to recognize meaning when given options).

Nation (2001) points out that knowing the meaning of a word includes connecting form and meaning, concept and referents, and word associations. Normally the word form and meaning are learned together. It means that when learners hear and see the word form, the meaning of this word will be retrieved, in the meantime, when they want to express the meaning of the word, the form of this word will be retrieved as well. He points out that the same form in the target language and first language makes learning the word meanings burden light. For example, English has some loan words from Japanese; this helps the Japanese learn some English words easier. In terms of concepts and referents, each word has got a core concept, while other meanings vary. It means a word has got a lot of meanings depending on the different contexts. The researcher claims that there is a fuzzy boundary in the meanings of a word. One of the main reasons is that schema is different in different contexts. Knowing a word involves knowing word association. Word associations are the links that words are related to each other in people's minds. One word is given to a learner; some others that are similar or opposite, and related words easily come to mind (Nation, 2001):

Nation (2 0 0 1) proposes the following list of the different kinds of knowledge that a person must master, in order to know a word:

- *the meaning(s) of the word*
- *the written form of the word*
- *the spoken form of the word*
- *the grammatical behaviour of the word*
- *the collocations of the word*
- *the register of the word*
- *the associations of the word*
- *the frequency of the word*

These are known as types of word knowledge, and most or all of them are necessary to be able to use a word in the wide variety of language situations one comes across.

1.4. Knowledge and Learning

According to Hede (2002), the relationship between knowledge and learning is shown in four main points: intelligence, reflection, long-term storage, and learning. He explains that intelligence consists of seven distinct bits of intelligence and the greater amount of these are invigorated by a multimedia bundle the more efficacious it will be.

The first element, the reflection process, is a self-directed process. It leads students to think carefully or even critically about a given experience, their current knowledge, and even their studying strategies. As stated by Nattress (2006) reflection in education aims to lead one's students to think about what they are learning and doing during the class and not just be a passive attendant of the lesson. They have to have the experience and at the same time get the meaning of the information that is to be presented.

The following component is long-term storage where our knowledge is buffered. Processed information from working memory goes to long-term storage and the former is supplied with a kind of basis for cognitive linking by the latter. Thus, a connection is generated between new content and the information basis that the person has already possessed. As per Hede (2002), we can differentiate between conditional, declarative, and procedural knowledge. All these three pieces of knowledge are involved in the conscious learning process.

The last component in any model of multimedia impacts is learning. The theoretical component of learning includes the quick degree of perception of material accessed through multimedia annotations in addition to the capacity to review and apply one's gained information. (Hede, 2002).

1.5. Passive and Active Vocabulary

The mechanics of vocabulary learning are still something of a mystery, but one thing we can be sure of is that words are not instantaneously acquired, at least not for adult second language learners. Rather, they are gradually learned over a while from numerous exposures.

When someone is able to recognize and understand a word when he/she sees it in a text or hears it in a conversation, but not being able to use it ourselves, shows that there are different degrees of knowing a word. Being able to understand a word is known as receptive knowledge and is normally connected with listening and reading. If a person is able to produce a word of its own when speaking or writing, then that is considered productive knowledge (passive/active are alternative terms) (Schmitt, 2000).

It is essential to clarify that the vocabulary has two subtypes. The passive and active, or receptive and productive vocabulary. Webb (2005) defines these words as passive vocabulary

refers to words that learners understand but are not yet able to use, but the active vocabulary is the words that learners understand and use in speaking or writing. Webb (2005) suggests that anything we cram or learn against the grain is only going to stay in our short-term memory. Things that we acquire through the longer-term and enjoyable engagement will stay with us longer. That is why a language-learning method that is based on lots of listening and reading will ensure long-term retention of the language. If someone has a large passive vocabulary, then he/she will feel more convenient when it comes to listening to what another person is saying. But this passive/receptive vocabulary is going to be activated when that someone starts to speak more. It is not enough just to do a lot of listening and reading, it has to be activated by speaking.

Webb (2005) studied the active and passive vocabulary. His study showed that there is a notable difference between the richness of receptive and productive vocabulary. The researcher obtained his results with the help of two instruments – receptive and productive translation tests – which were used to measure the participants' vocabulary size at three-word frequency levels.

Relatively often students use receptive knowledge to recognize all the aspects of vocabulary knowledge through reading as well as listening. However, for speaking and writing, students need productive knowledge. The prospects of either understanding a text or expressing oneself entirely depend on the coverage to which a student expanded their receptive and productive vocabulary knowledge base. It can be said that the most recognized measure of vocabulary assesses both receptive and productive vocabulary and the correlation between these two variables that stand out in most literature. Typically, receptive vocabulary benefits if a series of pictures are presented. The student hears a word and points to the correct picture. Therefore, in productive vocabulary, the learner hears the word and provides its verbal definition. Both receptive and productive knowledge domains are important in learning not only new vocabulary but the entire language discourse (Mthethwa, 2018).

Other studies conducted by Fan and Waring (1997) have also shown that receptive vocabulary was noticeably bigger than productive vocabulary. Receptive knowledge was measured using the Vocabulary Level Test whereas productive knowledge was measured using the Productive Vocabulary Levels Test (Mthethwa, 2018).

How much vocabulary do you need to use in another language?

Studies of native speakers' vocabulary seem to suggest that second language learners need to know very large numbers of words. While this may be useful in the long term, it is not an essential short-term goal. This is because studies of native speakers' vocabulary growth see all words as being of equal value to the learner. Frequency-based studies show very strikingly that this is not so, and that some words are much more useful than others (Nation, 2001).

1.6. Incidental and Intentional Acquisition

Incidental learning of vocabulary can be described as words being acquired when engaging in an activity with another purpose than learning vocabulary, such as reading a book, listening in on a native-speaker conversation, or trying to decide together with a peer the order of furniture in a room. *Intentional* learning is defined as an activity where learning vocabulary is the purpose or emphasis of a task (Von Sidow, 2015).

According to Hulstijn (2001) most of the words we know in a foreign language, they are acquired incidentally, because whenever we are engaged in something like reading, listening, speaking, or even in a writing activity, it helps us to learn new words. And there is the other half of the coin: intentional learning. Hulstijn (2001) says that it is the phenomenon when a person starts to learn the vocabulary of a foreign language by learning a specific bilingual vocabulary list.

As far as Hulstijn (2001) is concerned, it is still an open question how all this incidental learning takes place. They mention some points about the main possible causes of the contribution of conversation with adults, watching television, classroom discussion, school reading, and free reading. Yet the pedagogical thrust of their argument has been that vocabulary growth is largely determined by reading and that students must be encouraged to spend much time on reading: "*Incidental learning of words during reading may be the easiest and single most powerful means of promoting large-scale vocabulary growth*" (Hulstijn, 2001, p. 15).

Hulstijn (2001) claims, that students require a theory-based instruction, that is connected with the role of processes, cues, and moderating variables involved. To put it simply, it means that vocabulary acquisition will benefit from reading only when the text does contain cues allowing the meaning of unfamiliar words to be inferred.

Ahmad (2018) also investigated the topic and concluded that incidental learning is a process by which we learn one thing while expecting to learn another. This learning form motivates learners for extensive reading while it involves the learners' ability to guess the meaning of the new words. Krashen (2003) observed the *comprehension hypothesis* and he claimed that comprehensible input is a crucial and acceptable condition for vocabulary enriching and extensive reading programs aim to develop reading fluency, and reading skills in general, while at the same time to consolidate knowledge of previously met grammatical structures and vocabulary.

Incidental vocabulary involves and supports deep mental processing. According to Ahmad (2018), the learners are fully involved in the process of analysing the definition of a given word through the given clues in a text. Learners thus need to think about the newly occurring elements by involving cognitive process, while it enhances the opportunity to

retain the words for a longer period of time. It could be very useful because the process of vocabulary acquisition by incidental learning promotes the understanding of not only the meanings of units in a given text but also the related grammatical patterns and associating of the words with the context. He also defines the intentional one, which he claims is based on "*synonyms, antonyms, word substitution, multiple-choice, scrambled words, and crossword puzzles, regardless of context, is not so effective, because learners are more prone to rote learning*" (Ahmad, 2018, p.71). It is stated that only a few words learned employing this method will be used in the active process, so they will not typically be used in further speaking activities.

How difficult is it to acquire a new word?

There is a process by which we gradually acquire a new word, it contains five main steps:

- *First encounter with a new word.*
- *A clear image of the form of the new word – either visual, auditory, or both.*
- *Learning the meaning of the word.*
- *Making a strong memory connection between the form and the meaning.*
- *Using the word.*

It is inevitable to go through these steps in order to move from a so-called not knowing to being able to use it properly. Also important to mention, that the learning of the word usually progresses from knowing the word *receptively* to knowing the word *productively* (Team, 2018). That means that we first learn to recognize and also to comprehend the word, just after that comes the usage of the word.

Part 1 generally deals with the vocabulary itself. Part 1 supports the idea that the recognition vocabulary, or to call it passive vocabulary, is notably larger than the speaking part of it, specifically the active vocabulary. Words, collocations, and other elements of speech that are acquired through longer-term and enjoyable engagement will definitely stay in the mind longer. That is why the multimedia method creates a perfect setting for multi-sensory processing by using listening and reading tasks or supplements, it gives an opportunity to reach the learners by involving different sensors. These conditions create the right environment for an in-depth language learning process.

Furthermore, it is discussed what characteristics of a word make it harder or easier to recognize it. The word schema, which is a specific network of knowledge related to a word, shows the difficulty of knowing a given word.

Moreover, the chapter deals with ways of acquiring a word: it is either incidental or intentional. The findings of Hulstijn (2001) highlight the fact that most of the words that we manage to acquire are picked up incidentally. Based on this theory, this method could be the

easiest and probably the most powerful way of promoting widely colourful vocabulary growth without putting any effort into it.

There is a process of how we gradually acquire a word, although the main goal is to achieve the level of knowing a word insomuch, that it can be used freely in active speech.



PART 2- MULTIMEDIA ASSISTED VOCABULARY TEACHING

Vocabulary learning is a fundamental part of language learning. To promote vocabulary learning, involves great efforts in many aspects. Both time and techniques are needed to solve this problem. On the one way, it is the instructor's responsibility to give students to learn and help them learn more effectively; another way is that students need to develop their learning skills in vocabulary and make the best use of the strength they prefer when learning a new word (HU Hai-peng and DENG, 2007).

The presence of multimedia assistance with regard to language learning has become very popularity gaining sphere in the field of philology and among researchers. The following part of the present study is mainly dedicated to the analysis of the sphere of multimedia annotations viewed as a tool in the teaching or learning process of foreign languages.

2.1. Vocabulary Learning with CALL and CALT

With the emergence and popularity of Computer-Assisted Language Learning and Teaching (CALL and CALT), many English teachers have shifted their focus from teacher-centred to students-centred. From the educational point of view, it is clear that computers and the Internet promote a student-focusing way of learning, and in this particular sense, we might say that the teacher is no longer the key factor in the learning process (Kim and Gilman, 2008).

2.1.1. Origin and Development

The use of computers in the field of assessment and testing practice dates back to 1935 when the IBM model 805 was used for scoring objective tests in the United States of America to reduce the labour-intensive and costly business of scoring millions of tests taken each year. As the schooling provisions rapidly expanded in the USA during the 1920s, the possibility of incorporating of "new-type tests" in the assessment was tested and utilised to meet the need of the time.

According to Al Quahtani (2015) in the 1980s, as the microcomputers came within reach for many applied linguists and item response theory (IRT) also appeared at the same time to make use of this new technology, a lot of research work took place to test the possibility of the use of computer technology for innovating the existing assessment and testing practice. The first outcome of this research work was witnessed in the form of the first Computer-Adapted Test (CAT) technologically advanced assessment measures, in 1985.

Today the use of computer technology, in the field of language assessment and testing,

has become so widespread and so inclusive that it is regarded as an inseparable part of today's education system (Al Quahtani, 2015).

2.1.2. Typical Features of CALL and CALT

There are several new features frequently used in CALL and CALT, including *hypertext*, *hypermedia*, and *multimedia*. *Hypertext* refers to links among textual items, often indicated by keywords set in underlined blue type. *Hypermedia* refers to similar links as those used in *hypertext*, but instead of simply linking text to text, *hypermedia* involves linking various media such as sound, images, animation, and/or video. *Multimedia* refers to many of the same ideas associated with *hypermedia*, but hypermedia might only use two types of media (e.g., text + sound or text + photographs). Multimedia tends to feature several media types including text, images, sound, video, and/or animations.

Multimedia is an excellent and interesting technique for improving vocabulary acquisition and engaging learners in the learning process for all learners. Multimedia can help children learn more vocabulary by enhancing their ability to learn independently. It can also make kids less mindful of their teacher's feelings in the classroom. The use of multimedia in language instruction brought up several good considerations. For starters, learners respond to multimedia in a sophisticated way, giving the impression of experiencing rather than simply obtaining information. Furthermore, the man-machine relationship is more pleasant. Finally, multimedia makes learning more enjoyable for students, and learning becomes a joyful experience. (HU Hai-peng and DENG, 2007).

According to Khiyabani, et al. (2014), researchers and practitioners in the field of machine-supported vocabulary instruction have been trying to figure out how to connect CALL and CALT with vocabulary development and how to better use CALL and CALT in vocabulary training. Khiyabani, et al. (2014) also note: "*we remember images better than words; hence we remember words better if they are strongly associated with images*" (p 45.).

2.2. Multimedia Annotations

Concept of multimedia. Multimedia means multiple media, which is a combination of "multiple" and "media". Multimedia implies that besides conventional media, computer material can be conveyed utilising audio, video, and animation. Media is the carrier and expression of people's transmission of information.

In accordance with international standards, the media can be divided into (Nan Yue, 2017).

- *sensory media;*
- *presentation media;*

- *display media;*
- *storage media;*
- *communication media.*

Characteristics of multimedia. Multimedia is a companion to the rapid development of computer technology, which has (Nan Yue, 2017):

- a) *Diversity.* Diversity refers to the diversification and multiple dimensionalization in information transmission of multimedia technology.
- b) *Interactivity.* Interactively represents the ability to conduct interactive communication with the audience. The goal of interactivity is to enable users to control and use the information more effectively.
- c) *Integration.* Integration includes two aspects, one being the integration of media devices and the other being the integration of multimedia information.
- d) *Real-time.* Real-time means that audio, video, animation, and the like in multimedia are all connected in time to make the audience feel consistent in their senses.
- e) *High-quality.* The multi-media technology based on digitization can guarantee the high quality and accuracy of information transmission.

The development of information technologies in recent years has engendered an increasing application of instructional technology in education. Multimedia annotations could be very useful in teaching a foreign language. For learners, it is way easier to remember any kind of word with the help of some implement. It is beneficial for both the teacher and the students too. There is a learning theory based on the observations of. Hu Hai-peng and DENG (2007). The theory categorizes the input information into two main types: verbal and non-verbal. The new information is then merged into an existing system. Therefore, the teacher should properly, and attentively prepare the presentation to create the circumstance for effective learning.

The solution for this may be the usage of multimedia annotations for instance. Vocabulary learning may be insufficient if it is made only by using textual definitions. Thus, it is conducted by some additional aids such as visual ones it would construct stronger meaning representations. As these innovative elements of multimedia are more entertaining and supportive for learners, and definitely activate students' both visual and auditory senses as well as motivate them by providing them with more effective vocabulary learning strategies (HU Hai-peng and DENG, 2007).

Texts, pictures, animations, films, and also sounds could be applicants for the place of multimedia annotations, these methods were/are the most frequently used as tools for non-verbal vocabulary teaching and learning. As one can see in the work of Yoshii and Flaitz (2002), they started to use pictures and textual definitions combined, and this technique became effective.

Later these were carried out on computers.

2.2.1. Video Annotations

The use of videos in English Foreign Language (EFL) classes is becoming more and more common and the value of audio-visual materials to enhance the instruction of foreign languages has been highlighted by many scholars (HU Hai-peng and DENG, 2007).

A study (HU Hai-peng and DENG, 2007), carried out on the practical aspects of using videos in foreign language instruction, showed that audio-visual aids enhance the information that students of foreign languages receive. Using video, students receive the message through two different channels: through the oral channel as the information is provided through words, and the visual channel due to the information that the images offer.

2.2.2. Videos vs Pictures

Chih-cheng Lin and Yi-fang Tseng (2012) investigated whether videos, compared with pictures, better assist English learners to learn difficult words. Three intact classes, a total of 88 students, were recruited in a junior high school in northern Taiwan, each of which was randomly assigned to one of the three groups. These learners were beginners in English, and had four hours per week. All participants took the pre-test two weeks before the experiment, the immediate post-test after reading the text, and the delayed post-test two weeks after the experiment. The result revealed significant differences between the three groups, in which the video group outperformed the other two groups.

2.2.3. Text Annotation vs Pictures

Based on the assumption that visual aids such as pictures can facilitate second language vocabulary learning, studies have been carried out to compare picture annotation to text annotation. The findings are, however, inconsistent, despite the fact that dual annotation of text and picture was unanimously argued to be better than single annotations, especially better than text-only annotation. The effect of dual annotation of text and picture on L2 reading comprehension is not clearly established due to the scarcity of studies (Zhaohui, 2006).

Multimedia learning is designed in accordance with the cognitive process of the human mind. Dual-coding theory argues for two subsystems of information processing, one for verbal information and one for visual materials. It also reflects the cognitive theory of multimedia learning proposed by Zhaohui (2006) that claims that meaningful learning engages learners in both verbal and visual cognitive processing systems.

Zhaohui (2006) defines multimedia as the "*presentation of material using both words and*

pictures" (p. 2). Words refer to materials that are presented in verbal forms, such as printed text or spoken text; pictures refer to materials that are presented in a pictorial form such as static pictures, video, or animation.

It was discovered, that when a written or spoken passage is not clear in the context where it is emitted, deeper processing of the information might fail to support students learning and that might produce the incorrect learning of words. Thus, multiple-channel support can be crucial in those situations to help students understand successfully (Amaia, 2013).

The effectiveness of multimedia in the teaching scope was mainly attributed to its similarities in structure to the information processing theory, which postulates that people generally remember 10% of what they read, 20% of what they hear, 30% of what they see, and 50% of what they hear and see at a time. Finally, Amaia (2013) suggested that different information has to be coded in different media in order to be the most effective for people to learn.

2.3. Multimedia Tools in English Language Teaching

Since the 1980s, developed countries such as Britain and the United States have tried to apply multimedia technology to education. With the use of audio, video, text, slides, and other materials, students' interest in learning is enhanced (Nan Yue, 2017). „*PowerPoint, games, and computer-assisted video learning are the examples of the multimedia tool strategies in a variety of content areas.*” (Marwati, 2013, p. 33)

Teachers as well as individual learners have responsibility for successful learning. The characteristics of language learners and their individual differences that influence the overall trajectory of the acquisition process. While teaching progress, the most important task of multimedia is to assist the teacher. The appropriately-designed instruction media could not only facilitate teaching but also promote the learning effect (Hu, 2001).

Multimedia technologies' application in teaching makes it possible to enhance and facilitate students' comprehension, and at the same time, it can also improve students' vocabulary learning (Amaia, 2013).

There were described two different views about how to integrate technology/multimedia into the class. First, in the cognitive approach, learners get the opportunity to increase their exposure to language meaningfully and make their own knowledge. Second, in the social approach, learners must be given opportunities for authentic social interactions to practice real-life skills. This objective can be obtained through the collaboration of learners in real activities (Ahmad, 2018).

According to the researcher, basic changes have come in classes besides the teaching

methods because the chalk and talk teaching method is not sufficient to effectively teach English. Ahmad (2018) states that with a well-planned classroom setting, learners learn how to learn efficiently. Technology-enhanced teaching environment is more effective than a lecture-based class. Teachers should find methods of applying technology as a useful learning instrument for their learners although they have not learned technology and are not able to use it like a computer expert.

As a result, students see the actual use of the language, in a real context and in a natural way, and besides, "*students feel more fun from multimedia and learning becomes a happy process*" (HU Hai-peng and DENG, 2007, p.56). So, multimedia also improves students' motivation toward vocabulary learning (Ahmad, 2018).

The results conducted by Amaia (2013) prove that using audio-visual materials instead of regular only-audio listening is more effective in terms of vocabulary retention immediately after exposure. In fact, the effect of this kind of input is not sustained in time since both, the experimental and control groups, did equally well in the 4 weeks delayed post-test. Vocabulary recognition results with pictorial vs. written annotations seemed to point to the superior nature of images for word recognition. Students from both groups recognized better the original English words with images than with translations (Ahmad, 2018).

Kim and Gilman (2008) conducted from their study, and thus their study supports the idea that the use of visual media supports vocabulary acquisition. It means that it, at the same time, helps increase achievement scores. The study demonstrates by its results that using graphics to illustrate definitions can be a very effective tool to improve the learning of English vocabulary. This implement was favourable for students because they were more motivated to succeed and achievement in vocabulary learning when the visual text was presented with graphics. The main accountability for this is the fact that text alone did not usually translate in a manner that is meaningful to the learners, however, the graphics allowed them to visualize the definition in a more meaningful way.

2.3.1. Making Multimedia Annotations Effective

- 1) To effectively learn vocabulary with multimedia, students' attention must be focused in a proper way. The attention split occurs when the learners are required to absorb information that is visually not displayed during the lesson since the human mind should concurrently merge the contrasting elements of information. (Marwati, 2013).
- 2) The extrinsic and unnecessary elements of information should be excluded when they are demonstrated to the learners. The reason behind this is that the brain is not able to process a lot of information at the same time, that is, it has limited information-processing resources. Therefore, an efficient learning/teaching process takes place only when the relevant and

interesting information remains.

- 3) It is also very important, when we are in search of effective multimedia learning methods, for the lesson to be interactive and to be under partial control of the learner. Learners have not got the same rate and level of learning speed, so it would be enough to supply such technology by which the pupils are able to control the presentation at the same time interacting with it. In consequence, they could slow down the multimedia annotation or even stop it if they need additional time to process the information given by the teacher.
- 4) Learning structures need to be activated before the exposure of the multimedia content to reach the expected outcome, in other words– to be effective. Learning from multimedia presentations is strengthened when it activates the organization of information. One can activate it by discussing the content review with the students, or even demonstrating it, or by other suitable methods.
- 5) According to Marwati (2013), multimedia instruction that includes animation can better improve learning in contrast to those instructions which do not comprise animation. In the case when animation is used effectively, by means of adopting narration and letting the students have some control over its use so that they can stop it or slow it down, it can ameliorate learning.

2.4. Useful Tools and Software for Facilitating Multimedia Teaching

In order to make the teaching process as effective as possible, the teacher must definitely research the appropriate tools and programs that can best help their work.

Nádori and Prievara (2012) suggest that such tool can be the interactive whiteboard. It is like a computer-connected large touch screen projector. It is difficult to expect such a tool to fundamentally change the learning-teaching process, yet it is as if this demand is articulated on several fronts. There are a lot of interactive whiteboards which are good for numerous tasks, but not for every activity. If teachers are aware of its benefits and limitations, it can be used as an effective tool. In addition, the use of an interactive whiteboard allows making frontal lessons better by adapting to the needs of students. Working on an interactive whiteboard makes it easy to work on a pre-made presentation, we can write in it, we can add a new sheet, thus we can adapt to the needs of the students (Nádori and Prievara, 2012).

When teachers realize that ‘interactivity’ is not between students and the blackboard, but between teacher and blackboard, it can be disappointing. That is, the presence of the interactive whiteboard will not make the education more interactive, but will make it more spectacular (Nádori and Prievara, 2012).

There is several software that can be immensely helpful in manufacturing multimedia

annotations (Nan Yue, 2017) (Nádori and Prievara, 2012):

- 1) *Video and audio synthesis software*: Adobe Premiere; UleadMediaStudio; Super Audio Pa; Goldwave; Soundforge; DVD Video Soft Free Studio; Movie Maker; Live Movie Maker, Jamendo (Best copyright free music collector page).

Making movies is an easier pastime activity than it seems at first glance. Every Windows computer has a video editing program that meets all the needs of the ordinary user. This is *Movie Maker*, there are two versions, the previous one is simply called *Movie Maker*, while the newer one is *Live Movie Maker*, their interface is quite different (the latter version is already built in the newer Office programs), but neither is difficult to learn.

- 2) *Image editing software/ cartoon making*: Adobe Photoshop; PhotoImpact, which can be used to process static images; Dvolver.

With the help of the application called *Dvolver* very funny cartoons can be made in a very short time and previous training is not required. Cartoons can be used in lot of areas, for example, with smaller children while dictating in language lessons.

- 3) *Multimedia manufacturing software*. Multimedia manufacturing is the core of manufacturing courseware, and the commonly used software includes PowerPoint, Macromedia Flash, and Dreamweaver.

Macromedia Flash

“*Macromedia Flash is a software that can be used also for adding dynamic aspects of a web or create interactively animated films in addition to the ability to make animated, flash is also used to make the learning media*” (Wahyu, 2020, p. 37). According to Wahyu’s (2020) preliminary research and its results conducted in 2019, 30 students were given questionnaires and it showed that they required a more elaborate and exciting learning media and practically all of them agreed with the usage of Macromedia flash as a learning multimedia tool in EFL classroom. It has the possibility to create animated images, animations, images, cartoons, and games as well. Students can directly see demonstrations and simulations that take after genuine occasions so students can get a handle on the ideas of material and can be applied in everyday life.

PowerPoint

PowerPoint is a widely used presentation and teaching software in the education sphere. Nowadays most modern schools have classrooms and technology that can provide and establish conditions for such a learning environment. According to Masoud Hashemi, et al (2012), the software can be used to present new ideas, concepts, and even vocabulary items to the class. It is easy to utilise PowerPoint and is practically free, only a minimal reprinting cost can be associated with it. Each slide can represent new ideas or even ideas that are connected. One

requirement is that it should be as clear as it is possible and should not be overcomplicated. Extraintformation can be highlighted, thus drawing the attention of the audience. Students can themselves make presentations, covering the learned material. Teachers are able to present the information for the purpose of reviewing ideas, which have previously been taught in order to see everything clearly, collected into only a few slides for perspicuity (Masoud, Masoud and Masoumeh, 2012). The great advantage of presentations is that we can share them with students, either after class or before it. It is even more useful not to share a presentation but to take it in a note-taking format we publish. *OneNote, Microsoft Interactive Classroom*, is best suited for this and the program can work with teacher PowerPoint and student OneNote (Nádori and Prievara 2012).

- 4) *Subtitling: Overstream*. It is worth to think about whether it is possible to make video a more interactive activity. *Overstream* for this provides an excellent opportunity. The idea is simple: make a YouTube video, link it, and add captions.

Nádori and Prievara (2012) enumerate different utilisation techniques regarding the above-mentioned video and picture editing software:

a) Preparation of infographics

Roaming the internet or even just looking at more demanding magazines more and more often graphics come across that are some kind of topic, phenomenon, data set together with their context, they are processed in a spectacular, graphical form. After proper preparation, it can be issued to our students the task of making such a diagram of something.

b) Documentation of experiments

Class experimentation is very exciting, but often there is no time for doing that. In this case, teachers can assign the students the task to complete the experiment themselves (if possible) and record a video-explanation.

c) Making definition videos

An excellent way to record what you learn is to have students to make a video in which the concepts that occur in the curriculum are defined.

d) Campaign films

Teaching is often just as important a part of teaching as knowledge and teaching skills. Environmental awareness, health care, patriotism, social sensitivity, all of which are among the purposes of teaching. In this case, it is often more effective for students to identify with the topic than only talk about it.

2.4.1. Vocabulary Development with Multimedia Games

To pick up vocabulary, pupils have to be challenged and focus their attention through new strategies. It is believed that games stimulate students and provide them with the opportunity to play an active role in their own learning. As a consequence of the continually increasing variations of video games, the investigation of the relationship between the media and language acquisition has been problematic. Many genres of commercial and educational games have been recognized. The games can be different in such aspects as theme, intended audience, human-computer interface, graphical fidelity, hardware, and interaction between players (Ghanbaran and Ketabi, 2014).

The result of the study demonstrated that learning vocabulary through multimedia games led to a change in the attitude of learners towards language learning. Ghanbaran and Ketabi (2014) investigated the effect of 20 language games on English learning improvement. The results of the study indicated the effectiveness of games in learning English in middle schools .

A huge advantage could be that, in the context of a game, vocabulary skills can be acquired without pressure. Besides, games can provide language learners with a platform for practicing skills. The researchers conducted a study on Japanese (as a foreign language) students who played a baseball video game for a month. Despite anecdotal positive learning outcomes, the participant reported that he could not completely focus on the game and that he was distracted by listening to and reading Japanese (Ghanbaran and Ketabi, 2014).

WordWall

The online game is a follow-up to school courses, with the goal of strengthening and supporting memory through real-world applications. The online game has a function that keeps track of each student's vocabulary achievements. According to Syafiquah et. al. (2021), Wordwall is the best game tool for practicing vocabulary. It offers a diverse range of gaming styles that are both beneficial and interesting to the target audience, which in this case is elementary school students. In fact, it is critical to choose a game which is engaging while also satisfying the learning objectives, since there are games that have educational benefits but minimal fun aspect. The vocabulary is delivered in the form of images, and the word's pronunciation can be heard and viewed in the form of audio or video. Online games stimulate involvement through repetition, resulting in improved vocabulary comprehension and the ability to recall spelling fast. The researchers involved 121 students into their study. The goal of the study was to see how far students' language skills have improved using WordWall. A pre-test took place before the research and a post-test followed the study. Participants were evaluated on how to spell the new words, how to associate them with pictures, and how to use the vocabulary in conversations according to different topics. The results of the study show, that students were

highly motivated by *satisfaction*, *attention*, and *relevance*. Their *self-belief* and *freewill*, on the other hand, were moderate. The findings could teach students how to use a variety of technologies to improve their learning, such as online educational games, mobile apps, and consciousness (Syafikuah et. al., 2021).

Learning with Virtual Reality

Virtual reality (called VR) – is a computer-generated reality and technology, that submerges people in a simulated world. This term is used to name the complete group of media that, by means of technology and digital facilities, place you in a seemingly real world or location.

The main requirement for providing such an interesting language learning environment is a VR headset. Its aim is to create a more entrancing learning scenery. One of the main characteristics of such a learning environment is that it proves to be interactive. This means one can modify what occurs in their virtual world, it is possible to move, change your location, make decisions, talk, and also engage with those reproduced conditions. This can be a huge benefit for those, who seek methods that can take their or their students' language skills to a whole new horizon. Although, one must know that it is an expensive and time-consuming resource, but the more effective. (Shofner, 2018)

Second Life

Virtual reality language learning gained great strength when in 2003 an online virtual world was launched, named Second Life. Since its appearance, it has drawn the attention of researchers and teachers as well, due to its „user-created and community-oriented” characteristics. This simulation game offers a range of possibilities: students can create their avatars (digital portrayals of themselves), which can be highly effective in the matter of dealing with introverted students. Also, it creates a cooperative and contextualizing learning environment. (Murat, 2012)

The world of the game is a multi-user-created one, where people from around the world interact with each other for different purposes, mainly for business, and education. A real-life communication-based environment is provided by the game. The input varies in everyday contexts. Communication can be conducted in two ways: either by text chat or live voice chat. Teachers can organize the communication for individual students or a group as well. People can interact with one another in real-time.

SL enables teachers in EFL classrooms to record the entire lesson taking place in the cyber environment. Now it is possible to evaluate themselves by just rewatching what has been recorded during the interactive lesson. Other colleagues can also evaluate their performance and give relevant feedback on the lesson.

All in all, this VR game offers such useful features for language teaching as real-time virtual interaction among a group, the opportunity to teach students about the target culture, the peculiarity of 3D environment immersion, and contextualization by playing and creating content. There is only one major problem with it, namely the need for high and frequently updated technology, which is indeed expensive, and not all family has the opportunity to allow such expenditure (Murat, 2012).

AltspaceVR and LectureVR

Platforms such as Altspace VR and LectureVR offer completely modern feasibilities for teachers and their students. Similarly as in Second Life, where one can create their avatar and connect with other real people in real-time, who are as well logged in that certain virtual world. One can attend absolutely free presentations and at the same time practice the English language. (Brooks, 2020).

Michael McDonald, a TEFL English language teacher from the UK, has completed over 150 lessons in AltspaceVR. McDonald shared his experiences, thus helping future teachers to utilise this modern way of teaching. According to the teacher, this new method requires as well a new level of commitment. Any teacher can use this new technology, but it takes time to fall into the habit of lecturing in a completely new reality. He suggests that one can take their pupils even to New York or Paris in just one lesson, also showing them a 3D model of anything and at the same time introducing the proper vocabulary for it. It is also possible to divide them into groups to talk about their travel observations and experiences, afterward end the lesson by gathering them in a virtual departure lounge in a virtual airport to summarize and overview the new vocabulary elements. Following McDonald's (2021) report: *„it can be a huge stimulus for not just contextual learning, but supports collaborative learning and social interactions.”* (42. paragraph)

Class VR

Class VR is an educational virtual reality-based platform with a huge number of immersive lessons for language learning and enables to closely get acquainted with the target culture as well. Basically, it was intended for teachers, yet has an autonomous learning program with lesson plans that were made in advance. Teachers can choose from a variety of daily life lessons that are relevant in English-speaking countries and show them in front of the classroom. Students can explore London, and other sites of England with only a headset not having to travel anywhere. This software can highly motivate students to continue their studies and remain motivated.

Immersive VR Education

The above-mentioned virtual environment education program is an alternative technique that

opens the chance for diving the FL student into life-like recreated virtual conditions without the need to physically displace anybody. In the study of Palmeira et al.(2020) the effectiveness of this software was investigated by studying different research. In this research, the IVR method was compared to traditional ones such as memorization using flashcards, word pairing exercises, association exercises, and also text-only learning. A headset can be substituted in these cases by Google Cardboard „boxes”, these are compatible with smartphones and there is no need to buy cheap appliances. For the sake of interacting with the objects, such tools were used as a joypad, controllers, tracking devices, VR mouse, and a conventional mouse and keyboard. In the case of IVR, there was high long-term memory retention. So, it proves to be more effective, since the aim of vocabulary acquisition is finding the best way to learn as many as possible words with the most enjoyable methods. Furthermore, the use of IVR via kinaesthetic movements. the learning process becomes more memorable. It creates a direct association between what the student learns and the movements he performs during the usage of this software. Accordingly, the software assimilates real-life experiences with the learning course, and thus, it proves to be efficacious for the FL learning by allowing the visualization of the objects that are seen in the artificial reality (Palmeira, et. al., 2020).

2.4.2. Basic Requirements for Multimedia Software

From a scientific point of view, it is required that the concepts involved in the teaching software should not be biased. Error elimination and accuracy are of utmost importance. The knowledge should be valid and even the slightest ambiguity should be avoided.

There are also some technical standards that must be followed in order to effectively implement the teaching with the assistance of multimedia. Such qualities must be taken into account as good compatibility, easy operational system, connection to the internet, proper interaction. Also, right after the completion of new teaching software, help documentation should be provided in order to operate it well and demonstrate the ideas correctly, without being lost in the software's possibilities/features. The teacher must surely know how to use that software and what features will be used in that specific technology, to take its full advantage.

Another important aspect that needs to be satisfied is: simplicity but effectiveness. These are maybe the highest requirements. The software should be easily run on different browsers, to avoid different lagging problems. An equally relevant aspect is the openness of the program, it needs to be sharable between the users and the teachers. Also, to have the possibility to present one's ideas practically and effectively. The software should provide timely feedback on information that it has previously received, which contributes to the awareness of the student's progress both for teachers and students themselves.

Last but not least, these programs need to be modern. It is inevitable to update them frequently by adding new teaching materials, new multimedia elements, also, not just update the content, but the design also, because it highly contributes to students' motivation and learning performance. This creates the aspect of high update frequency. (Miao Zhi Fang and Xun Lu, 2015)

The students' requirement for multimedia programs is to have access to the audio/video segments but also a measure of control over their delivery. It is very important to be able to select and overlook the material because it enables them to learn at their own pace. Therefore, an instinctive navigation system is extremely required. Its task is to sequence and reorder the significant and more difficult points in for example a presentation. There should be also a feature that allows them to get some clarification on points which are not understood (Cutts, Davies, Newell and Rowe, 2009).

The basic requirement of teachers towards various software, is the possibility of minimum effort and time input that is necessary for preparing the learning material. An engine, that is adaptive within any system and will extract the suitable text and data from the multimedia annotations (video or audio) and distribute all this to the display panels (Cutts, Davies, Newell and Rowe, 2009).

2.5. Comparison of the Traditional Classroom and Multimedia Classroom

From the obstacle of comparing the traditional teaching methods with the one that is assisted by modern technology there should be stated the following advantages:

- a) The changes in the teaching process and methods have only begun a few decades ago, it means that barely anything had changed for thousands of years, just some new methods were altering and some other not so much important tools were introduced during those times. With the era of technology, a completely new period has started, and since it continues to expand its territories and introduced new applications and technology that can help implement new teaching models. Teachers do not necessarily have to stand anymore in front of a blackboard and dryly shout the lectures to the students that have left without any passion. It really inspires the learners and gives more enthusiasm to them than any pre-technology era teaching method or design could ever give. (Wenhui Dai, Ling Fan, 2012)
- b) The usage of multimedia annotations provides a relaxed and rich input environment for pupils. It creates a colourful atmosphere for students by bringing out the echoism of the content, and also by the diverse expressions of the learning materials. The terminal product of the studying process, namely the „double t” tension and tiredness, can be both partially eliminated so that the interaction can promote common development in a better condition.

- c) Multimedia annotations can significantly increase the teaching time of the teachers at the same time improving the quality of the lessons. Alongside the benefits, it creates a challenging area for teachers because it is more time and effort consuming throughout the lesson planning period than the usual, conventional methods. (Wenhui Dai, Ling Fan, 2012)
- d) In comparison with the traditional teaching method, which is mainly focuses its attention on face-to-face interactions between students and teachers, and also small class lectures are possible just without using any tool, while multimedia teaching can easily be used in larger areas, and most importantly – in remote teaching sessions. The topic of online/remote teaching is more controversial than ever, but the main message here is that during such difficult times that are faced by us nowadays due to the global pandemic, multimedia is of utmost importance in the teaching/learning processes. (Wenhui Dai, Ling Fan, 2012)
- e) In a classroom without modern technology, it is highly difficult for teachers to communicate with each of the students. Fortunately, it is now possible with multimedia. Teachers can take advantage of the functions of computers to create a bidirectional classroom. The computer can give useful feedback, thus the learning stage- the strengths and weaknesses- of each student can be seen on a display.
- f) Interaction is the most outstanding difference between multimedia and traditional instructional method. Multimedia learning ensures an interactive environment and develops interaction between the pupil and the learning content, and vice versa. Several research suggests that when this kind of interaction takes place, any learner’s attention towards the need to be learned subject significantly increases. *“Interaction is commonly viewed as stimulus-response reinforcement encounters action, an integrated form of between the learner and the instruction”*-it means that the whole learning process is made receptive and active as well by interactivity. Students are not just passive recipients of the information but also active participants in the lesson, by governing their studying process. (Teoh and Neo, 2007, p. 2)
- g) Most importantly, with the help of multimedia teaching, the abstract knowledge can be converted into concrete, so as simple to difficult, thus enhancing the effectiveness of the teaching process. (Wenhui Dai, Ling Fan, 2012)
- h) According to Min Pun (2013), multimedia-assisted vocabulary teaching in the EFL classroom widens students’ perception and knowledge about the culture of English, namely the content which is related to the target culture. It gives the students much more information than usual textbooks, at the same time enabling them to become familiar with

new cultural backgrounds and language materials, which are driven by real-life situations. This aspect itself already is enough to attract learners' attention and preserves it for a longer period. Along with becoming familiar with the cultural aspects, students can effectively improve their listening skills. It offers them an „information-sharing opportunity” between students and at the same time allows them to not passively, but immensely actively be a productive participant in the lesson it leads us to see that these help the learners acquire the language quickly (Wenhui Dai, Ling Fan, 2012).

- i) Multimedia teaching effectively develops students' communicative competence. It is not simple to accomplish the goal of having one's students speak the English language through the usage of usual methods. The fact is, that it detains their capability to comprehend all the necessary structures along with their meanings and functions. Multimedia teaching offers a truly helpful aid to integrate teaching and learning, contributing to students' future ambitiousness and aspiration at their workplaces. For instance, the application of a PowerPoint template activates students' both thinking and capacity to successfully comprehend the language. Its audio and visual effects help them to transform English learning into capacity cultivation. Such annotations create a positive atmosphere for the lesson activities such as group discussion, subject discussion, and debates, which can offer more chances for verbal contact among students and between teachers and students (Min Pun, 2013). Thuswise, as stated by Min Pun (2013) “*Multimedia technology encourages students' positive thinking and communication skills in learning the language.*” (p. 32)

2.6. Probable Drawbacks and Limitations in Multimedia Teaching

As in the previous parts, the emphasis was put on the advantages of multimedia annotations and was defined as a completely useful and helping aid in the field of both teaching and learning. However, we should also consider the occurrent disadvantages as well, to see the subject in whole, knowing its strengths and weaknesses.

The first occurring problem is that most of the time teachers can not completely apprehend what is the main point of multimedia. They should understand that it is simply an immensely beneficial auxiliary tool, but it does not substitute the teacher's supplement. Some of them simply move the contents of the textbook into their PPT not changing anything at all. And during the presentation, the difficulties were neither pointed out nor explained by the instructor. This leads to overlapping and repetition of knowledge and does not play the auxiliary role of multimedia. Therefore, students are confused and bored (Zhang and Zhang., 2013).

The problem of losing the students' logical thinking arises when we talk about the use of

multimedia technology in teaching. However, it makes the students understand the content easily, although it restricts their abstract thinking, and thus, their logical thinking would be faded away.

Firstly, at the beginning of the process of acquiring a language, the information goes through perception, and just after that comes the rational stage. Min Pun (2013) interpreted it as that while we maximize the beneficial interactions, we develop critical thinking and autonomous learning. Therefore, teachers need to acknowledge „*Knowledge of something from perceptual recognition to rational apprehension is very important in the students' learning process.*” (Min Pun, 2013, p. 35). With the emergence and integration of technology into the teaching process, it is not a secret that textual words are mostly replaced by sound and pictures, also handwriting is replaced by keyboard writing. Now, it should be clearly seen that the multimedia technology, that is getting updated day by day, should be used not as a replacement for the dominant teacher roles, but as an assisting tool for the course of English language teaching. Also, it should be mentioned that it is not a mechanical imitation of the teaching, but rather an integration of visuals and texts with the teachers' experience (Min Pun, 2013).

Another disadvantage is that the presenter in this case the teacher is relying too much on multimedia. It means that they have become computer operators who just easily grasp the mouse and demonstrate the contents of the courseware. As a consequence, English teachers have shifted from active knowledge communicators to passive PPT readers. By that, students become passive recipients of knowledge and it seriously limits students' creative potential and critical thinking, so they frequently fall asleep in the class (Zhang and Zhang, 2013).

According to Du Zhen (2013) using such annotations could become a source of distraction and disturbance. In his study, he has criticized that some teachers use too many videos, cartoons, music, pictures, and other filling elements on the courseware. The problem is that it makes the background screen cluttered and flashy and students become distracted from their studies.

Probably the most disillusioning thing about the limitations of multimedia is the fact is the interaction between teachers and students has become reduced. To learn English well, learners must put their language knowledge into practice to communicate with teachers and students. Compared with the traditional classroom which is full of emotional communication and interaction the modern multimedia classroom with full of artificial machine dialogue (Zhang and Zhang, 2013). As a communication-aimed language course, the reduction of classroom interaction is very harmful to cultivating students' practical language ability.

It is also worth mentioning, that using multimedia technology in EFL classrooms for language teaching is really an expensive way of conducting language classes, this demand in

many cases may not be fulfilled. According to Min Pun (2013), lawmakers' and administrators' duty is not just to aid language teachers to achieve the possible advantages of innovation, and brief them to figure out how to utilise innovation in their education but they also need to see the role of technology so they encourage the learning interaction by giving the fundamental structures, backing, and infrastructure. Over the long run, it will in general bring about higher costs however it will help make more viable training. The language learning programs start with costs that are identified with executing innovations in training. The costs ordinarily involve equipment, programming, staffing, training and at the lowest estimate one organized PC lab where teachers and learners can come and utilise it. It is frequently the situation in inadequately supported language classes that the actual equipment comes in through a one-time award, with little financing left for software update, staff preparation and upkeep. (Min Pun, 2013).

Teachers can complete online technology courses. For instance, the Dominican University of California offers a wide range of interesting and useful classes online (Dominican University of California- online catalogue, 2021). These courses are all relatively affordable, accredited and one can complete these from anywhere and anytime. Also, the classes last for several semesters, so teachers can acquire an immensely thorough knowledge in this field.

As finding an interesting and entertaining way to learn new words could be very difficult, the studies taken into account in Part 2 have shown some really interesting and helpful methods which are more practical based ones and all achieved by using the multimedia itself. The results were conducted by some acknowledged researchers.

Furthermore, there are the multimedia units compared to one another and viewed one by one, as to see how and in what way they can influence the learning course. There are several useful technologies to aid learning stated by Nan Yue (2017), Nádori and Prievara (2012) with their possible and suggested ways of putting them successfully into practice.

The emerging disadvantages concerning multimedia annotations are being discussed in Part 2 as well. They are needed to be taken into account and prevent multimedia from ruining or weakening the quality of the learning process



PART 3- EMPIRICAL RESEARCH

The usage of technology in today's world is inevitable and highly useful. Technology has been built into every area of modern life. The human race has reached the point where life without technology would now become unimaginable. Thus, the case is the same regarding teaching and learning.

This study deals with the topic of how Transcarpathian students consider the importance and effectiveness of multimedia in their vocabulary learning process. This way, it will give a clearer image of what programs should be used in the future to achieve a better enhancement in language teaching and vocabulary expansion.

3.1. Aim of research

This study aims to investigate that CALL, CALT, and multimedia-assisted language learning/teaching can enhance the vocabulary learning and teaching process. Another purpose is to identify whether the students enjoy and can benefit from the vocabulary exercises and interpretations which are assisted by computers and multimedia. Finally, it aims to investigate which program/programs is/are the most used one/ones in the recent teaching processes, according to the students' opinions.

3.2. Research Design

A questionnaire was used to conduct the necessary information for the study. The quantitative method appeared to be the best choice in this research because it is more valid, objective, and can be better reproduced. Furthermore, for students who filled out the questionnaire, it was easier and more convenient. The questionnaire used different types of questions, such as two open-ended questions (which were targeted to find out background information including their age and previous mark that they had been given by their teacher), multiple-choice questions, and a scale system from 1 to 5, where 1 stands for strongly disagreeing and 5 for strongly agreeing. The questions were all mandatory. It was completely anonymous and confidential. Each of the participants was given the link to the survey and was asked to fill it out. The language of the questionnaire was Hungarian for better understanding.

3.3. Participants

The data collection method involved one part, a questionnaire. This targeted different group of high school students from grades 8,9, 10 and 11, aged 14-17 from different Transcarpathian schools. All in all 77 students filled the survey blank. The rationale for selecting this age group is that they are rather capable of deciding which method suits their learning style and strategies, and they are more conscious about their learning than younger students.

3.4. Procedure

To make the research transparent and clear, it was advisable to separate the research data. Therefore, the analysis of the research data will be divided into four parts: analysing the data separately of the classes 8,9,10 and 11. There were 21 questions in the online survey. It was highly advisable to analyse all the incoming answers separately and see their data one by one to produce a more detailed analysis.

3.5. Results

The study involved 77 participants/responders, including (as it can be seen in the Diagram 1 below) 18 (23 %) 8th grade; 16 (21%) 9th grade; 18 (23%) 10th grade and 25 (33%) 11th grade Transcarpathian high school students. So, the first two questions were concerned with their age and grade.

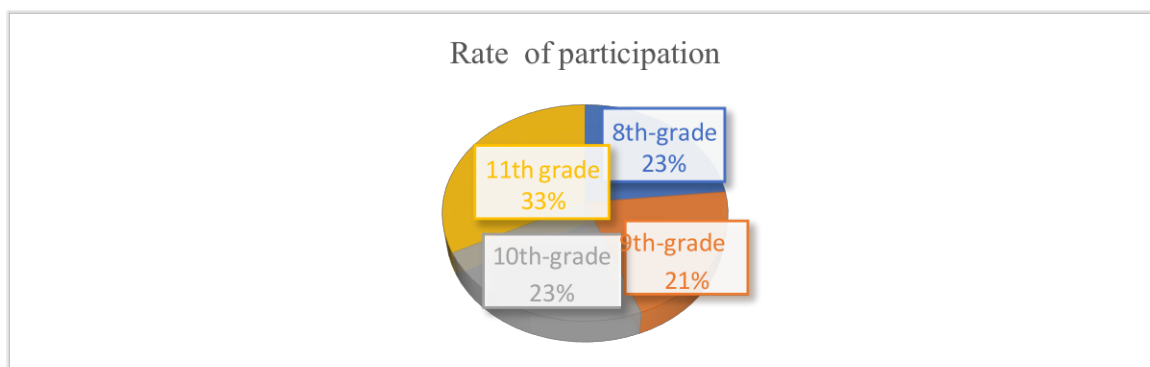


Diagram 1. Rate of participation

3.5.1. Analysis of the answers of 8th-grade students

Question 3: *On a scale of 1-12, what mark did the teacher give you in English language at the end of the last semester?* (open-ended) and Question 4: *How would you rate your vocabulary in English?* (multiple-choice: *Weak, I understand little of the class; I know quite a few words, expressions; In class, I can easily deduce new words from the context and I can easily learn them*) were focusing on their background knowledge. These questions gave us a view of how students describe their own knowledge and to what extent the lesson is clear for them. To the 4th question 9 out of 18 participants (50%) answered: *In class, I can easily deduce new words from the context and I can easily learn them*. These students got 6-8-9-10-11 marks. It was surprising, that even though the responder who got 6, he/she can easily deduce new words from the context.

The remaining 50 % (9 students), who selected “*I know quite a few words, expressions*” got good 8(1), 9 (2); nearly excellent 10 (2); or excellent 11(2) and 12 (2) marks. Again, strangely enough, those with the highest marks, according to their own answers, cannot easily deduce the meanings from context.

The next group of multiple-choice questions *What tools does the teacher use to present audio materials in class?* and *What programs does the teacher use to conduct the lessons?* 94% of them answered that their teachers use laptops/computers to conduct lessons, 6% selected speakers and projectors and 67% (12 students) of them answered that their teachers use PPT presentations, 6 students reported that their tutor uses Prezi presentations, 11 (61%) of them selected YouTube video-sharing interface as well. An interesting fact was that two students answered that their teachers do not use any multimedia programs in their lessons, just books. It was surprising to see these results, especially in today’s world where it is inevitable to use such aids.

The answers to the next question *How often does the teacher use each technology-enhanced multimedia in an average lesson?* clearly show that presentations are the tools that are the most rarely used ones during English classes and the Internet, communication tools and sound annotations are the most used ones, these are followed by videos and finally the internet itself. The numbers in the chart indicate the number of answers to each item, as it was a multiple-choice pairing question.

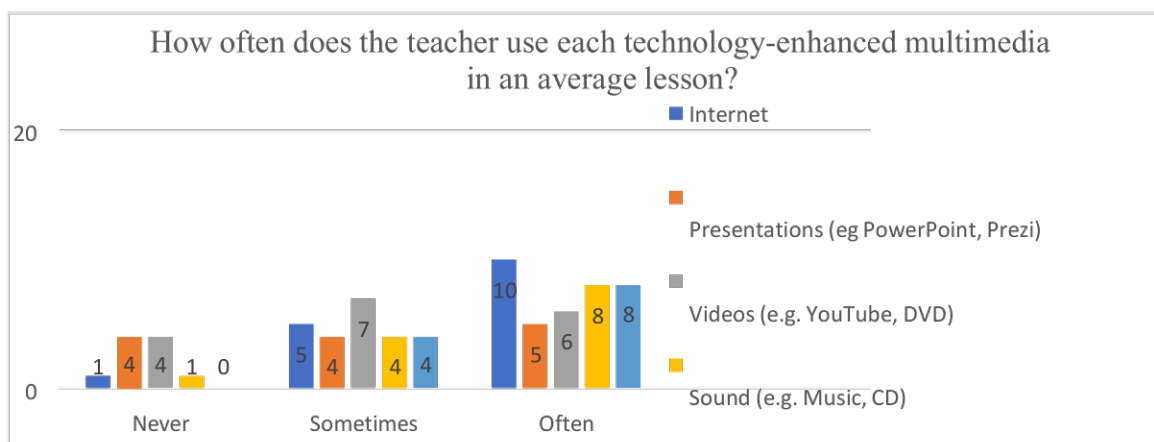


Diagram 2. Frequency of using different technologies 8th-grade

The next group of questions focused on getting information about whether it is easier for the students to learn with multimedia-assisted material or without it, and how can it help them memorize the new words. The participants used a scale system from 1 to 5, where 1 stands for strongly disagree and 5 strongly agree. Here are the results:

Statements	Strongly disagree	Disagree	Not sure	Agree	Strongly agree
1. It's easier to learn from books than using a computer.	0%	11%	50%	17%	22%
2. I like when the teacher uses electrical devices to run the lesson.	0%	6%	17%	28%	50%
3. There is not enough good multimedia material to teach English.	50%	0%	28%	11%	11%
4. I prefer to take an active part in the class if the teacher uses visual- and audio-material or a computer game to conduct the lesson.	0%	11%	28%	17%	44%
5. Teaching using multimedia is more effective.	0%	6%	39%	28%	28%
6. It is more interesting to learn new words / phrases using a computer.	6%	22%	17%	17%	39%
7. I am more motivated to learn new terms using a computer.	6%	17%	39%	17%	22%
8. The teacher then remains just as important in deriving the lesson, not becoming redundant.	0%	6%	6%	17%	71%
9. I can memorize more words if the teacher uses pictures and audio material, a machine game, and a tutorial to lead the lesson.	0%	11%	22%	22%	44%
10. In the long run, words will remain in my memory if we use multimedia tools and programs in a class.	0%	17%	33%	17%	33%

Table 1. Effectiveness of multimedia annotations in 8th grade

The collected data in *Table 1*. shows the precise percentages for each scale of the items selected by the respondents. In the analysis, the first two and the last two columns will be combined, which means that they *strongly agree* and *agree* columns will be analysed as combined, as well as the *strongly disagree* and *disagree* columns in order to present more overall and clearer data.

In response to Statement 1 from the column, *It is easier to learn from books than using a computer*, the majority of those surveyed indicated that they are not sure about the answer, namely 50% of them selected this answer, the remaining 11% disagreed and 39 % agreed with it. Moving further to statement 3, it can be clearly seen that half of them (50%) think that multimedia materials are good enough to be used in the classrooms, but there are still 28% who

are not sure and 22% who think that it still needs some improvements.

Also, to a similar statement *Teaching using multimedia is more effective* 39% of them selected the *Not sure* section, and a low, 6% data showed that they disagreed with this statement, the remaining percentage (55%) agreed. Not surprisingly, 56% of the students think that learning with a computer could be more interesting than that of without it, and 17% cannot decide whether they are more motivated when their teachers use computers during lessons or not, not to say that 28% of them disagreed that it could motivate them better.

The 9th and the 10th statements intended to investigate whether they *can memorize more words if the teacher uses pictures and audio material, a machine game, a tutorial to lead the lesson*, and whether they *remember the new words for a longer period of time* if they use multimedia in the class. With the former statement 66% agreed, which means that multimedia annotations can really help them memorize the words better. With the latter it is somewhat different, 33% of the surveyed were not sure whether it can help them remember the words for a longer period or not, but still, comparing the “agree” and “disagree” rates it can be seen that 50% agree that it can really foster their learning course. Another 67% of them agreed with the statement that *“I prefer to take an active part in the class if the teacher uses visual- and audio-material or a computer game to conduct the lesson.”*

The frequency column reported that participants expressed their highest agreement with paragraphs 2 and 8. Seventy-eight percent of students agreed that they like it when their teachers use electrical devices to run the lesson. The highest agreement rate was achieved in question 8, where 88 % of the respondents agreed that *the teacher remains just as important in deriving the lesson, not becoming redundant*. The data was pleasantly surprising.

It is obvious, that when learning a language, teachers need to use as many as possible different materials in order to help to maintain their students’ attention and don’t let them get distracted. The materials should be diverse and interesting. In the light of this, the next question aimed to find out what learners find effective and which are proved to be less effective. To the question *“How do you evaluate the effectiveness of each multimedia in teaching foreign languages?”* were listed multimedia annotations such as *CD recordings, Computer programs, Video recordings, and Websites*. The highest effectiveness rate was achieved, according to the surveyed students’ opinion about the *Multimedia presentations* (9 votes), and *Video recordings* (7 votes), also with the same rate for *CD recordings*.

In sequencing order, the last question comes with the title *“If it were up to me, I would make the following changes.”* 3 statements were written, namely: *I would use videos to teach English (44%); I would teach English with online/offline games (33%); I would stick to books (22%)*. Clearly, it proves that students enjoy learning by watching educational videos.

3.5.2. Analysis of the answers of 9th-grade students

As it was previously highlighted, sixteen 9th-grade students filled in the questionnaire from different Transcarpathian high schools.

It would be right to start to analyse the students' previous performance according to the data that they indicated in Question 3. (*On a scale of 1-12, what mark did the teacher give you in English at the end of the last semester?*). Three out of 25 surveyed indicated that their mark in the preceding semester was relatively low, 7. The remaining incoming responses show that five students got '8' two as well got '9', and three of them were graded as "very good" and 2 of them as "excellent" with mark '11'. It was interesting, not only how their teacher assessed them, but also how would they describe their own performance and knowledge, therefore Question 3 was of utmost help in this matter. It was revealed that 50% of them think that their knowledge is poor, which they showed with the answer: *Weak, I understand little of the class*. Even students, who got marks 10 and 9 at the end of the semester, admitted that they understand little and their knowledge is weak. The remaining 44% (7 students), who got '7', '8' and '11' believe that they *know quite a few words, and expressions*. Surprisingly, even the student who got '11' did not estimate his/her own knowledge as excellent, namely that he/she can easily deduce new words from the context and as well easily learn them. Only one student, who got a mark of 10 replied that she/he can easily deduce the meanings from context and understands almost everything.

Moving further on, it turned out that most of their teachers (75%) use laptops/ computers to conduct their lessons and present audio-materials through these gadgets, only two students indicated that they use MP3 players during lessons and another one admitted that their instructor does not use any of these above-mentioned tools, only books. To the multiple-choice question '*What programs does the teacher use to conduct the lessons?*' most of the surveyed (67% = 11 people) answered that they use YouTube to support their lessons and PPT (10 students) and Prezi presentation software (3 votes), it proves that their teachers like to use presentations for better understanding.

The following question was aimed at finding an answer to *how often do their teachers use the different multimedia resources*. The question contained multiple-choice items, so the participants could select several items according to what they had experienced during lessons. When the subjects were asked about the matter the majority of them, 8 students, answered that videos are the most used aids. Seven students answered that communication tools such as Zoom, Google Meet, Skype, etc., are often used in classes. As the diagram is analysed more deeply, it can be seen that the usage of presentations and the internet is also common, 6-6 of them thought so and are equally often used, as it can be seen in the section "often" indicated with blue and red colours. The most rarely used aid in every column is sound effects, like music, and CD recordings.

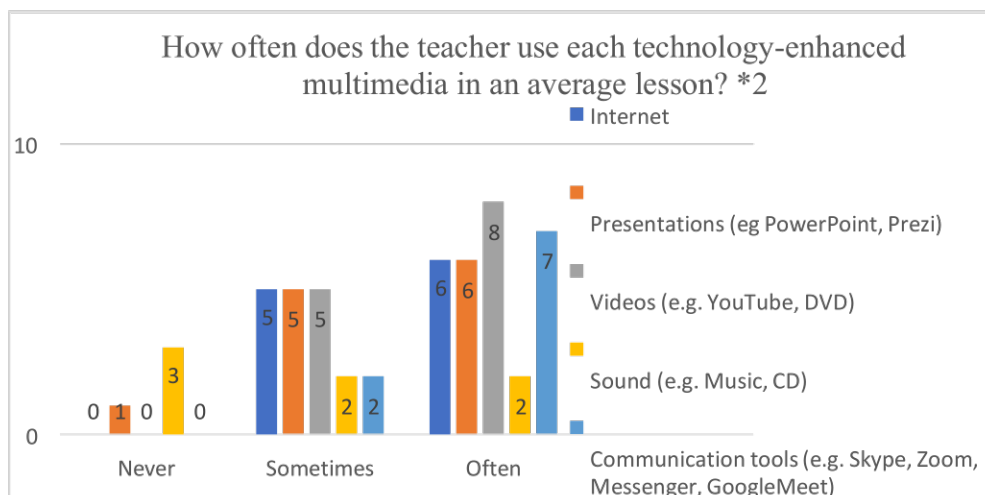


Diagram 3. Frequency of using different technologies in 9th-grade

The next set of statements were put in the questionnaire in order to see how students agree or disagree with commonly acknowledged facts about multimedia. The participants used a scale system from 1 to 5, where 1 means strongly disagree and 5 strongly agree. Here are the results:

Statements	Strongly disagree	Disagree	Not sure	Agree	Strongly agree
1. It's easier to learn from books than using a computer.	6%	19%	31%	31%	12%
2. I like when the teacher uses electrical devices to run the lesson.	0%	0%	19%	31%	50%
3. There is not enough good multimedia material to teach English.	25%	19%	44%	6%	6%
4. I prefer to take an active part in the class if the teacher uses visual- and audio-material or a computer game to conduct the lesson.	6%	6%	19%	19%	50%
5. Teaching using multimedia is more effective.	6%	0%	31%	37%	25%
6. It is more interesting to learn new words / phrases using a computer.	6%	0%	26%	37%	31%
7. I am more motivated to learn new terms using a computer.	6%	6%	25%	31%	31%
8. The teacher then remains just as important in deriving the lesson, not becoming redundant.	12%	0%	25%	37%	25%
9. I can memorize more words if the teacher uses pictures and audio material, a machine game, a tutorial to lead the lesson.	6%	0%	37%	25%	31%
10. In the long run, words will remain in my memory if we use multimedia tools and programs in class.	0%	6%	24%	37%	32%

Table 2. Effectiveness of multimedia annotations in 9th-grade

For the purpose of obtaining a clearer image of what data has been collected in this table, it would be right to use the same procedure for this analysis as for the similar table in the previous subsection. So, *disagree* and *strongly disagree* sections will be united during analysis, as well as *agree* and *strongly agree* sections.

The highest disagree rate was achieved with statements 1 and 3. 25% of the surveyed think that it is easier for them to learn using any kind of multimedia-assisted teaching aid, but still, 31% are not sure whether it is true for them or not. It can also mean that they like it when their teacher uses both of the methods to teach them. The highest number here was achieved in the agree rates, 44% (6 students) of the questioned think that it is easier to learn from books only.

With most of the statements, students agreed. The highest agreement rate was achieved (if we consider the *strongly agree* column as a guiding principle in deciding with which statements they agreed most) in statements 2, 4, 6, and 10. It was discovered, according to statement 2, that they '*like when the teacher uses electrical devices to run the lesson.*' 81% of them agreed with this one. A likewise high rate was achieved with statement 4 (*I prefer to take an active part in the class if the teacher uses visual- and audio-material or a computer game to conduct the lesson.*), where all in all 69% agreed, 19% were not sure, and the remaining 12% did not agree. When analysing Statement 5 '*Teaching using multimedia is more effective*' it is clear that 62% agree and still a 31% ratio was not sure in this matter. Results in statement 6 show, that 68% of those polled agree, that it is more interesting to learn new words using a computer. In statement 10 (*In the long run, words will remain in my memory if we use multimedia tools and programs in class.*) 69% agreed.

With regard to the statement '*I am more motivated to learn new terms using a computer.*' the agreement rate is 76%, only 12% disagreed and 12% as well was not sure, these data of the last 2 items is relatively low, but still, it is there

In statement 8, it can be seen how would students define the role of the teacher during multimedia assisted lessons. Do they think that the teacher remains just as important, or not? Sixty-two percent agreed, but from this only 25% strongly. Another 12% disagreed, and there were 25% who could not decide the importance of the role of the teacher. With regard to memorization, 56 % of the surveyed think that they can learn a lot more words when their teacher uses pictures and audio material, a machine game or even a tutorial to lead the English lesson, but 37% still could not decide. Supposedly, for them it does not have such an impact on their performance concerning memorization of the new vocabulary. This data clearly indicates that teachers have to balance all the materials and make the lesson as colourful as it is possible.

The following question '*How do you evaluate the effectiveness of each multimedia in*

teaching foreign languages? is focused on getting info about what learners think are the most effective annotations to integrate into lessons. The question was a multiple-choice element and enabled them to select several items as ‘not useful’, ‘a bit useful’, ‘useful’, and ‘extremely useful’. The next items are enumerated to select from: *CD recordings*, *Computer programs*, *Video recordings*, *Websites*, *Multimedia presentations*. The highest *extremely useful* rate (4 votes) was achieved by the *Websites* option, thus being the most beneficial of all aids in teaching foreign languages (as compared to the rest enumerated getting *extremely useful* marks in the questionnaire). When the lines of *useful* and *extremely useful*, as ‘not useful’, ‘a bit useful’ are combined, new data emerges, namely, 6 voters think that *Computer programs* are useful, another 6 of them reckon that the most beneficial tools are *Multimedia presentations* and *Videos*. Concerning *CD recordings*, the vast majority of the surveyed think that it is *not/a bit useful* (5 people).

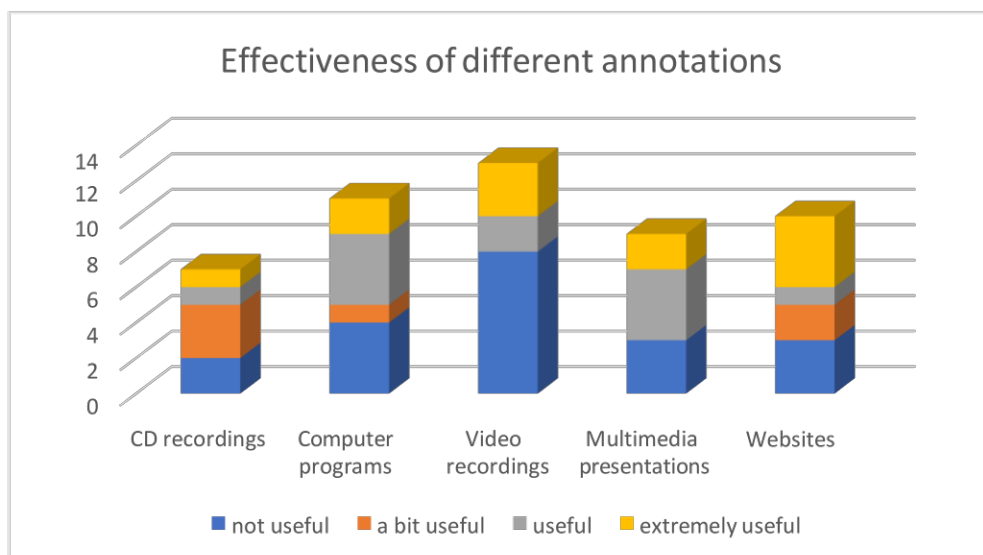


Diagram 5. Effectiveness of different annotations in 9th grade

In the last multiple-choice question ‘*If it were up to me, I would make the following changes*’ a relatively high number of the questioned (37%) considered that they would use online/offline games to teach English and they would like to study with the help of them and with the same ratio, 37% would use videos to teach English. The remaining 25 % would stay with the books.

3.5.3. Analysis of the answers of 10th-grade students

The number of 10th-grade participants is exactly 18. They are all, as it has been previously mentioned, Transcarpathian students, from different schools.

The level of the students’ knowledge has been evaluated according to the given grade in the previous semester. They can (almost equally) be divided into more advanced and slightly

weaker students. Eight students got marks between 7-9, and the remaining ones, ten students got 10-12 marks. According to their own assessment, to the question *How would you rate your vocabulary in English?* mediocre students were in majority, because 44 % of the respondents reported that *I know quite a few words, expressions*. The remaining answers are shown below in the chart.

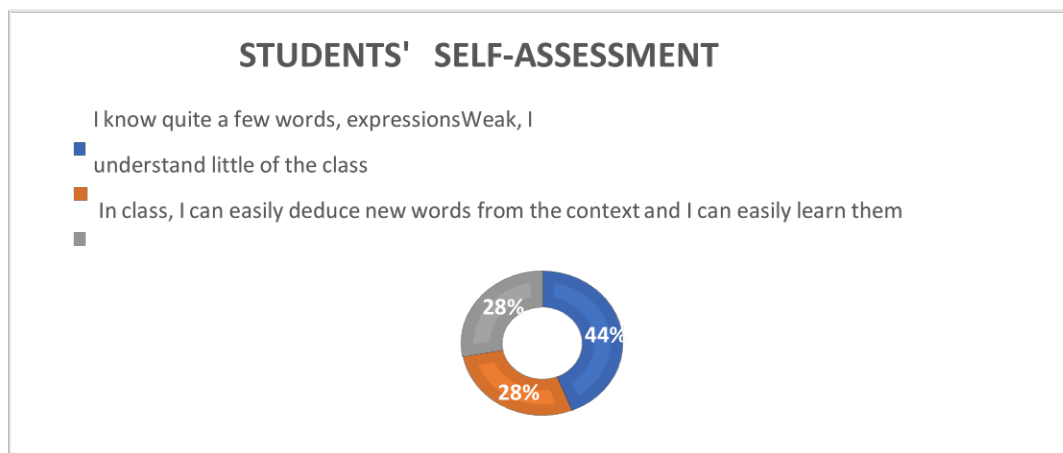


Diagram 6. Student's self-assessment 10th-grade

The purpose of the next question *What tools does the teacher use to present audio materials in class?* was to inquire whether the teacher supports his/her listening materials with photo or video annotations ultimately making it multimedial. 61 % of them answered that their teacher works with computers, theoretically giving space to multimedia annotations. But there is the other group of answers, which presents that 39 % of the teachers still use only MP3s and Radios. These gadgets do not allow to reach students' mind through multi-receptors. Regarding the programs teachers use during the lessons, 67% of the respondents replied that their instructors use YouTube and 28% said that PPT presentations are used during the lessons. Only one pupil reported that there is no computer-program assistance used in the lessons. Four students replied that their teacher uses a site called WordWall, which seems to be very interactive, see Part 2. These two students reported that they enjoy English lessons and assessed their knowledge as they can easily deduce new words from context and easily learn them. It might have some connection with the WordWall program.

To the question *how often do their teachers use the different multimedia resources* the outcome is quite surprising. One would think, that all the teachers like to use PPT presentations. They are convenient, easy to monitor and create and in lot of cases effective. In the *Never* column PPT presentations achieved the highest rank, sharply 12 out of 18 students responded in such way. The other side of the balance shows us that the most often used programs are communication tools such as Zoom, Skype, etc. and also sound annotations, like audio materials connected to the topic. Another factor surprising fact that teachers, according to 7 students,

almost never use YouTube or any video annotations.

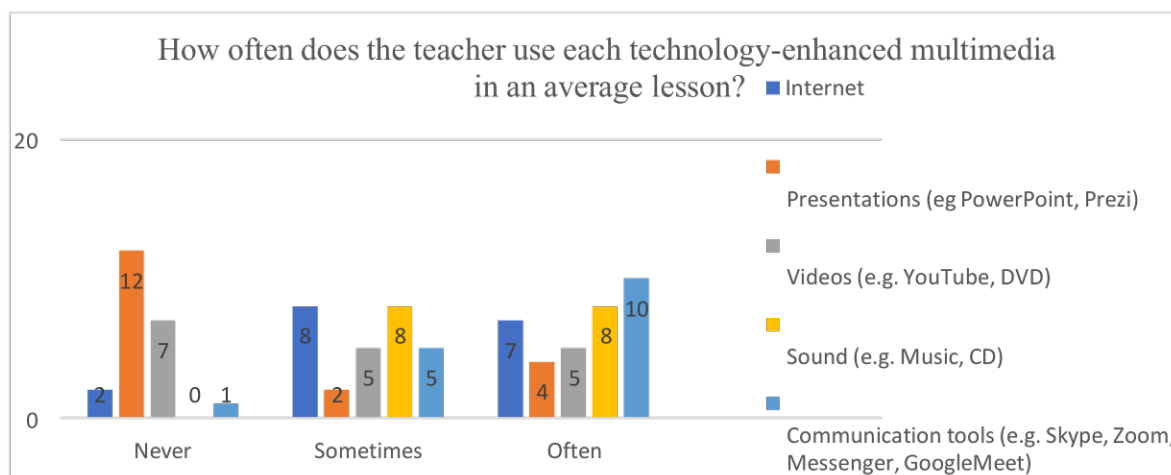


Diagram 7. Frequency of using different technologies 10th-grade

The next set of questions will be treated as in the previous subsections, they will be presented in a table, to see the overall results.

Statements	Strongly disagree	Disagree	Not sure	Agree	Strongly agree
1. It's easier to learn from books than using a computer.	28%	33%	28%	0%	11%
2. I like when the teacher uses electrical devices to run the lesson.	6%	6%	11%	22%	56%
3. There is not enough good multimedia material to teach English.	11%	50%	17%	17%	5%
4. I prefer to take an active part in the class if the teacher uses visual- and audio-material or a computer game to conduct the lesson.	6%	17%	11%	22%	44%
5. Teaching using multimedia is more effective.	6%	17%	22%	22%	33%
6. It is more interesting to learn new words / phrases using a computer.	17%	11%	11%	28%	33%
7. I am more motivated to learn new terms using a computer.	11%	22%	22%	28%	17%
8. The teacher then remains just as important in deriving the lesson, not becoming redundant.	6%	6%	39%	22%	28%
9. I can memorize more words if the teacher uses pictures and audio material, a machine game, a tutorial to lead the lesson.	11%	22%	6%	17%	44%
10. In the long run, words will remain in my memory if we use multimedia tools and programs in class.	11%	39%	6%	22%	22%

Table 3. Effectiveness of multimedia annotations in 10th-grade

As before, the strongly agree and agree columns will be analysed as a whole, and likewise the strongly disagree and disagree columns.

To start with, the statements with which the respondents agreed the most: 2,4,6,9. It is not so surprising that 79% of the questioned pupils *like when the teacher uses electrical devices to run the lesson*. With the previous two classes, the result was nearly the same. The disagree rate here, at the same time, is the lowest: only 12 % of them do not like the usage of devices by teachers during lessons. Results of the 5th statement prove this previous result, where the majority of students (55%) think, that *teaching using multimedia is more effective*. According to the analysis of *statement 4*, 66% of the response giving students are rather active participants of the lessons when there are some multimedia annotations used as aids in conducting the lesson. But still, there is the remaining 34 %, where 23% disagree with the statement. Those students answered this way, whose teachers rarely or never use any devices or multimedia annotations during lessons. So, it can be concluded that the teachers' attitude should be changed in order to fix the problem. The next high-ranking agree statement to be analysed is *It is more interesting to learn new words / phrases using a computer* 61% percent (11 students) of respondents reason that they enjoy the lessons more if they are assisted by computers.

A relatively high rate was achieved in the statement regarding the connection between the memorization and multimedia assistance, 61% (11 students) agreed that they can memorize more expressions and words this way. Unexpectedly, 33% percent did not agree with this statement, according to them their memorization ability is better off without any aid. Confirming the latter position, according to *statement 10*, 50% believe that it will not keep the words in their memory in the long run if their teacher utilises multimedia tools during the teaching process.

Concerning motivation, only 45 % feel that they are more motivated in lessons where there is audio, video or graphics and other materials are used. Nine out of 18 students agree with the assumption that *the teacher then remains just as important in deriving the lesson, not becoming redundant*.

The next question aimed at focusing on the learners' language learning habits in their free time. Nine pupils answered that they learn English with the help of films and series, but an interesting result here, that 8 more students responded that they learn English from books. The option that became the third most voted is *with the help of computer games*. Then, with the same percentage internet sites and videoclips 33%-33%. It was important to know, because that way it will be clear according to what students find some aids more effective than others, and to understand why and what changes do they want in the teaching process in the future.

Each teacher wants to know the key to successful language teaching and the variety of teaching aids to use in order to achieve success. The succeeding question *How do you evaluate the effectiveness of each multimedia in teaching foreign languages?* wants to find an answer to it from the students' point of view. Thus, the results are quite interesting. *Video recordings* got the most points together in *extremely useful* and *useful* sections, 11 students (61%) out of 18 think this way. *Computer programs* and *Websites* got 10-10 votes. Multimedia presentations got 8 votes being in the third place on the scale of effectiveness. As it can be seen, CD recordings got the least votes in the sections of being useful and the most in being not useful or just a little useful. It means that only 38% believe in its effectiveness.

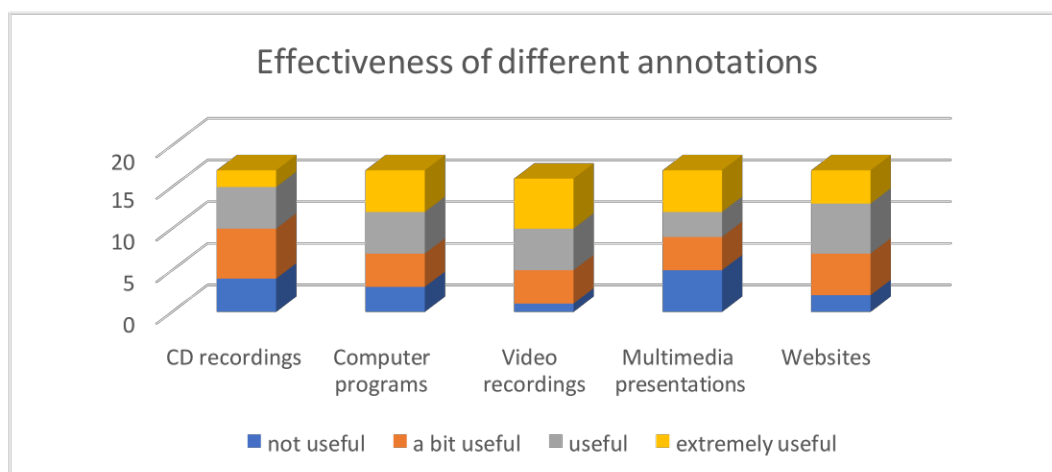


Diagram 8. Frequency of using different technologies in 10th-grade

The last question in sequence *'If it were up to me, I would make the following changes'* shows us that students (44%) would rather learn English with the help of video annotations. Those who answered that they learn English with the help of online games and video games at home, they (28%) advice to teach English with the help of *Offline/Online games*. The other 28% think that it would be the best option to stay with books.

3.5.4. Analysis of the answers of 11th-grade students

Twenty-five 11th-grade students filled out the questionnaire, which means that 34% of all the pupils are graduate students.

In order to understand what kind of students the research is dealing with it was necessary to observe their level of knowledge with the help of a relatively objective (the grade they were given by their teacher) and a subjective (their own opinion) question. Thus, the results of the subjective *How would you rate your vocabulary in English?* question are the following:

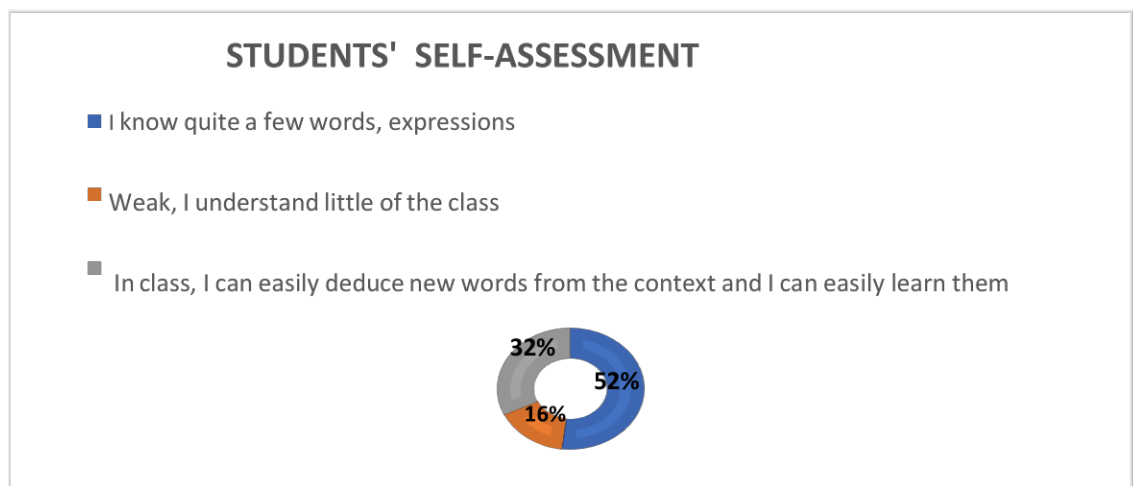


Diagram 9. Student's self-assessment in 11th-grade

A clear distinction can be made between weaker and stronger students as it was previously done. 52 % of the class were given 5-9 marks in a 12 number scale. The other 48 % got 10-11 marks, which probably indicates their higher-level knowledge.

To the multiple-choice question *What tools does the teacher use to present audio materials in class?* 40 % answered that their teachers utilise MP3 players for presenting audio-materials. It indicates, that the majority of them do not support their audios with proper picture/video aids, which would help them acquire the material better. Laptops are the second most commonly used gadgets, according to the responses. It enables the teachers to use picture annotations at the same time. It was surprising, that some teachers still use radios as well. It should be noted, that 80% reported that sound effects are used during lessons and 64% said that their tutor uses YouTube in the lessons. It was surprising to see, that a student answered, that they use Second Life game in the lessons. It makes the lessons more interesting and engages students more than a normal lesson.

The frequency rate of the usage of different multimedia indicates, that the majority of respondents (15 people) answered that the Internet is the most used tool in teaching English vocabulary. Then comes the YouTube and other video annotations (36%) and Communication tools such as Zoom, Skype, etc. (32%). Surprisingly, in the never column PPT presentations scored the maximum, meaning teachers rarely use such aids.

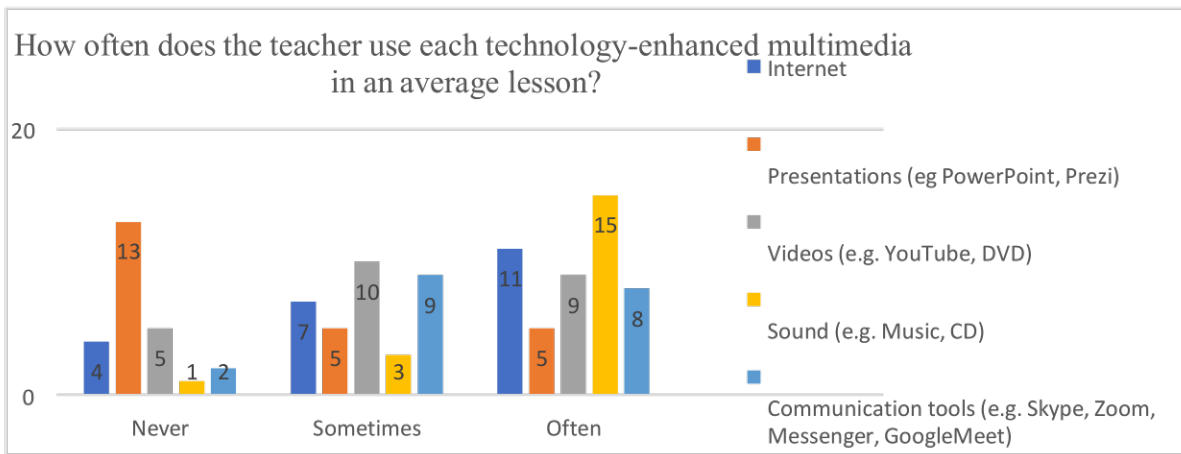


Diagram 10. Frequency of using different technologies 11th-grade

The following 10 questions will be treated as usually, presented in a table:

Statements	Strongly disagree	Disagree	Not sure	Agree	Strongly agree
1. It's easier to learn from books than using a computer.	16%	4%	11%	20%	16%
2. I like when the teacher uses electrical devices to run the lesson.	0%	4%	20%	24%	52%
3. There is not enough good multimedia material to teach English.	32%	36%	20%	4%	8%
4. I prefer to take an active part in the class if the teacher uses visual- and audio-material or a computer game to conduct the lesson.	4%	4%	28%	20%	44%
5. Teaching using multimedia is more effective.	0%	8%	28%	24%	40%
6. It is more interesting to learn new words / phrases using a computer.	4%	12%	20%	20%	44%
7. I am more motivated to learn new terms using a computer.	8%	20%	32%	12%	28%
8. The teacher then remains just as important in deriving the lesson, not becoming redundant.	0%	4%	4%	24%	68%
9. I can memorize more words if the teacher uses pictures and audio material, a machine game, a tutorial to lead the lesson.	0%	0%	24%	20%	56%
10. In the long run, words will remain in my memory if we use multimedia tools and programs in class.	4%	4%	12%	32%	48%

Table 4. Effectiveness of multimedia annotations in 11th-grade

The statements, which the majority agreed with are the following ones: 8, 10, 9,2. The highest score got the statement according to which the *teacher remains just as important in deriving the lesson, not becoming redundant* when she/he uses multimedia assistance. Eighty percent think, that words will remain in their memory for longer period, if they learn with the help of multimedia annotations. Also, 76 % - 76 % answered that they *like when the teacher uses electrical devices to run the lesson and can memorize more words if the new vocabulary is presented through videos, pictures, with the help of games, or some kind of tutorial.*

The statements, which scored the highest disagree rate are 3, 7 and 1. Most students (68%) reported that they do not agree with the statement that *there is not enough good multimedia material to teach English.* It probably means that they have already encountered such good materials and have been proven to be effective. The second in the row is statement 7 where pupils disagreed that they are *more motivated to learn new terms using a computer.* Those pupils gave this answer, who rather learn from books at home and in the lessons as well. The last statement which earned the 3rd place among the highest ranking disagree scores is that *it's easier to learn from books than using a computer.* With this, at the same time 36% agreed. In conclusion students prefer to learn with the help of a visualised or audio-visualised material rather than just a raw material without any helping aid.

Students' free time activities can really show how they possibly learn English, and what works for them best. To the multiple-choice question *In my free time I learn English with the help of...* 16 out of 25 students answered that they learn new words and expressions by playing computer games. Seventeen respondents answered that they watch English series or movies, also 17 respondents learn English by watching videos or listening to songs. Fourteen people admitted, that they use the Internet and visit English websites to improve their knowledge. Only 8 out of 25 use books to learn the language. It shows, that our generation starts to abandon books in their everyday lives, because everything is accessible through the internet, basically any kind of knowledge.

Pupils evaluate the effectiveness of each multimedia in their foreign learning process differently. In the chart it can be clearly seen (in the *extremely useful* section) that *Websites* (10 votes), *Video recordings* (9 votes) and *Computer programs* (8 votes), according to the students' opinion, are the most useful ones. *CD recordings* achieved the highest vote rate (5 votes) in the *not useful* section and the lowest (1 vote) in *extremely useful* section. Surprisingly, multimedia annotations got the lowest (4 votes) vote rate in *useful* figure, and the second lowest (4 votes) in the *extremely useful* scale. It shows, that students are either not so familiar with multimedia presentations or these presentations were not brought to effect properly.

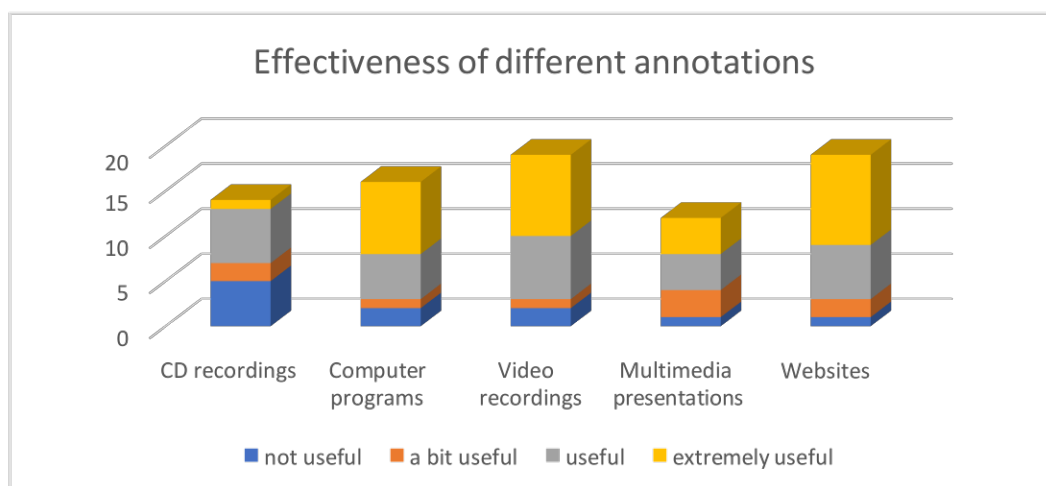


Diagram 11. Effectiveness of different annotations

Pupils are glad when they can make a difference in what and how they are learning. The last question was aimed at finding out what students want to change in the future regarding teaching methods and aids. To the statement ‘*If it were up to me, I would make the following changes*’ the majority (48%) of all 25 answerers replied, that they would rather learn English with the help of *videos*. Other 36% think that *online/ offline games* are the most effective in teaching/learning English and finally, only 16 % would stick with books.

3.6. Comparison of the Results of Younger and Elder Students

For the sake of comparison of the results of elder and younger pupils, 8th and 9th-grade students will be combined also the 10th and 11th- grade students’ answers. It will provide us an overview on what different age groups prefer in their vocabulary/ language learning process.

In general, 8th and 9th grade pupils prefer learning from books, but at the same time like it when teachers use innovative programs, and multimedia assistance. They think that the most effective tools are videos (YouTube interface), communication tools and PPT presentations.

Meanwhile the answers of 10th and 11th-grade students point out that they rather learn with the help of computers and rather active partakers of the lesson if the teacher colours the lesson with multimedia aids. YouTube, communications tools and sound effects are the most often used aids. Students believe that presentations, YouTube, online games and other video presenting programs help with the memorization of new words better than just learning with books. Also, WordWall can be a very effective tool, that offers a diverse range of possibilities, ranging from mini-games to even interactive quizzes. It is good to see how learners like to learn languages in their free-time, because it gives ideas to teachers on how to teach languages. If they had the possibility to change anything, the majority would teach English with the help of videos and games.

As the results show, elder students enjoy learning with multimedia tools a bit more than younger ones. Teachers should implement both traditional and modern, multimedia assisted teaching methods and seek innovative tools that make the lessons interactive enough for all the

students in the classroom. They should educate themselves, if it is possible, go on training courses in technology, and be up-to-date not fearing from including new methods into our teaching practices.

3.7. Findings and Discussion

Online and hybrid teaching sessions became popular and even inevitable with the outbreak of COVID-19. Since then, multimedia assisted teaching helped teachers in numerous ways, enabling to continue their work and allowed the smoothness and fluency of the process as well. The present study's topic is extremely important and now widely studied. Due to the changes in today's world, it has come to the forefront of every language teacher's concern. Tutors can rely on the researcher's findings, also they can find new ways and techniques of interpreting their lessons' contents using diverse and modern multimedia tools enumerated in this study. The main objective of the paper was to find effective ways of vocabulary expansion using multimedia aids. Also, completing the research, the results could provide evidence to the previously discussed literature.

The results of questionnaire justify, that multimedia annotations are very useful and that most high-school students, who filled out the questionnaire, like to learn with such aids. It is also evident, that different age-groups adjudge various topics differently. For instance, the matter with the possible changes in teaching as it is the most widely studied field. Younger students cannot really decide what would they change or what learning method is the most effective for them. Eighth grade students think differently but the answers were distributed among traditional teaching methods as well as among new ones, such as teaching with offline/online games and multimedia. On the contrary, older students find it more obvious as they think that with online/offline games it would be the most appropriate to teach in the future. This opinion is more and more common in the present, because nowadays almost everyone plays games and it is a good idea to connect learning with such activities, making the learning process a fun and entertaining process.

As Nádori and Prieara (2012) studied the contributions of multimedia annotations to the vocabulary enhancement and teaching process, we can drive a parallel with the results of the above-presented and analysed questionnaire. Presentations are useful tools that can be used during, before and even after the lesson, because the teacher can share it with the students anytime. This convenience might be the number one factor and reason why students like it. Regarding video annotations, the works of HU Hai-peng and DENG (2007) and Nádori and Prieara (2012) provide us an overview on how this annotation can help students in vocabulary

expansion. They highlight on the fact (pages in the present study: 24, 28-29) that since videos offer double-input by allowing students to experience the new material through their sight and hearing as well (multi-receptors), can become a much more satisfying process. The mentioned researchers even advise to assign video-making homework. In line with these findings, the present research and the survey answers prove that students enjoy, for instance, the usage of YouTube interface during lessons. Furthermore, WordWall application is also proved to be effective in teaching unknown vocabulary, as several students indicated it in the questionnaire and its effects were discussed in Part 2.

However, there were students who still want to stay with books, but it is just the matter of how the teacher implements different aids into his/ her teaching course. The fact is, strange as it may seem, that the teachers of such students rarely or almost never use computers and different aids to teach them. It may occur because of various reasons, among them emerges the problem of *“I do not know what tools to use or how to use them”*, in other words the problem of the fear from unknown. This is why students in their answers could not decide with what method to stay with. The implementation of such aids really has an impact on how learners evaluate the teaching process and the whole teaching matter regarding multimedia. Referring back to the literature reviewed in the previous part (page 38), in these cases teachers need to receive some additional training, or educate themselves on how to properly use such technology and software.

To meet the present generation's desire for technology-enhanced learning, instructors must embrace the technology-immersed classroom. Simultaneously, there is a pressing need to utilise proper online game-based learning that corresponds to national syllabuses and stated criteria in order to facilitate the integration of innovations and pedagogical focus in the educational system.

All in all, it is advisable to use both traditional (as the usage of books, traditional blackboards, exercises on paper, etc.) and modern methods (computers and multimedia) to teach young and not so young learners as well, or students in general. They should know how to correctly implement modern technical aids into their learning methods, but at the same time they have to know how to use books, for example, for learning purposes. After that they will know each method's limitations and advantages and decide which of them suits their learning strategies better.



CONCLUSION

The first and second part of the work focused on the vocabulary acquisition and its connection to different kinds of multimedia. From the discussed literature it can be concluded that multimedia is a gainful aid to the learning progression and is an effective tool for raising the student's attention. It has been discovered that one can enlarge their vocabulary through the enhancement of word recognition ability merely under the condition of multimedia environment. So as not to forget to mention it is an extremely beneficial instrument to improve the motivation as well.

Multimedia-assisted teaching provides a new teaching method to overcome the shortcomings of traditional classroom teaching. It is an important approach to optimize English teaching resources to train students' listening, speaking, reading and writing while developing their creativity and critical thinking in classrooms.

The findings of researchers' works suggest that multimedia is more effective in the acquisition and learning of unknown vocabulary than traditional methods. The results manifested that students who used multimedia generally did better than those, who used traditional methods in recalling vocabulary items.

Regarding *pedagogical implications*, the study provides helpful suggestions on how to effectively conduct a lesson with modern techniques. By getting valuable feedback from high-school students on the usefulness of different multimedia annotations, tutors can benefit from the conducted results, and prepare their lessons taking into account the achievements published above.

With the factors of text, graphics animation, sound, and video, multimedia annotations and consequently CALL and CALT tend to have the characteristics and functions as rich image performance, powerful human-computer interactive ability and hypertext function, that are really meaningful with regard to language learning and teaching.

During vocabulary acquisition process one should bear in mind that in order to start speaking that definite language, firstly the passive vocabulary part needs to be continually improved, these new elements should be practiced by communicating in that foreign language, then consequently from passive vocabulary the active vocabulary could as well emerge. From not being able to speak, the phenomenon of communicative competence evolves by simply starting to use the newly learnt elements.

From the literature review and the research, which was conducted by an online questionnaire, it can be concluded that multimedia annotations are better and more useful in a lot of cases than traditional methods of teaching, but the latter should not be overlooked as it also has some positive effects on vocabulary learning and some students still insist on their usage.

Traditional vocabulary teaching methods have their place even in the recent classrooms. Multimedia annotations, CALL and CALT cannot actually replace the classical outline of teaching and the knowledge inference as well as the problem analysis that is mainly made by the interference of the blackboard. And as the two-way feedback is a crucial element of the classroom learning, it should be preserved and not to dropped out from the teaching process. Also, training should be provided for teachers to learn how to use and teach with it effectively.

This paper also illustrates that there are still some limitations in this learning/ teaching method, such as the demand for excellent software and courseware, and expectation of language teachers to be familiar with the relevant technology, but we should be confident about the future of multimedia teaching and learning, and make this new technology play a more constructive role in language teaching and learning. These issues are needed to be fixed somehow to improve the multimedia interference, and make it more suitable for the teacher and student interaction.

Thus, in order to improve the teaching process somehow and implement it right, teachers need to understand that it isn't right to consider the PC screen as writing board or whiteboard as certain educators do. Such teachers often have put-up lesson plans, exercises, questions and answers as well, programmed into their computers all they need to do is just present it in front of the class. They do not need to compose anything on the chalkboard or whiteboard. The educators should make a setting for instructing and spur the students to speak and try to talk in English.

The management system for improving the multimedia teaching should be further studied and enhanced due to the fact that it is not completely elaborated. It still needs sufficient improvement before reaching the state of actual perfection, if it is possible. For *future research* it would be important to interview teachers' point of view as well, what multimedia tools do they use when presenting new words and find helpful working with.



REFERENCE LIST

- Аніщенко О.В. (2007). Сучасні педагогічні технології: курс лекцій. Навч. посібник / Яковець Н.І. За заг. ред. Н.І. Яковець. – Ніжин: Видавництво НДУ ім. М. Гоголя, 199 с.
- Корж В.В. Роль мультимедійних технологій у навчанні іноземної мови [Електронний ресурс] / В.В. Корж. – Режим доступу: http://www.confcontact.Com/2008oktInet_tezi/iy_korzh.htm
- Ahmad, A. (2018). The Use of Technology in English Language Learning: A Literature Review. *International Journal of Research in English Education*, 3 (2).
- Ahmed, J. (2012). Intentional vs. incidental vocabulary learning. *ELT Research Journal*. 1(1), 71–79.
- Al Quahtani, M. (2015). The Importance of Vocabulary in Language Learning and How to be Taught. *International Journal of Teaching and Education*, 3 (3).
- Amaia Gómez P. (2013). *Teaching Effectively with Multimedia*. Public University of Navarre.– Spain,.
- Averianova, I. (2015). Vocabulary acquisition in L2: does CALL really help? In Critical CALL. *Proceedings of the 2015 EUROCALL Conference*, Padova, Italy.
- Brooks, L. (2020). The 4 Best Virtual Reality Apps for English Learners of Tomorrow. [Online]. Available: <https://www.fluentu.com/blog/english/virtual-reality-english-learning/> [2021, March 20]
- Cambridge English Dictionary. [Online]. Available at: <https://dictionary.cambridge.org/ru/%D1%81%D0%BB%D0%BE%D0%B2%D0%B0%D1%80%D1%8C/%D0%B0%D0%BD%D0%B3%D0%BB%D0%B8%D0%B9%D1%81%D0%BA%D0%B8%D0%B9/vocabulary> [2019, October 20]
- Carter, R., and McCarthy, M. (1988). *Vocabulary and Language Teaching*. New York: Pearson Education Limited.
- Chih-Cheng Lin, and Yi-fang Tseng. (2012). Videos and animations for vocabulary learning: A study on difficult words. *TOJET: The Turkish Online Journal of Educational Technology*. 11 (4). Available: <http://www.tojet.net/articles/v11i4/11434.pdf> [2020, April 20.]
- Cutts, S., Davies, P., Newell, D. and Rowe, D. (2009). *Requirements for an Adaptive Multimedia Presentation System with Contextual Supplemental Support Media*.
- Doiminican University of California (2021) School of Liberal Arts and Education. *Elevate Your Insructional Practice*. Online catalog of courses. Available: <https://dominicancaonline.com/course-catalog/> [2021, May 5]
- Du Zhen. (2013). On the Application of Situational Teaching Method in Junior Middle School

- English Teaching. *Reading and Writing*. 28(5), pp. 89-94.
- Folse, K. (2004). *Vocabulary Myths: Applying Second Language Research to Classroom Teaching*. University of Michigan Press, p.67
- Ghanbaran, S., and Ketabi, S. (2014). Multimedia Games and Vocabulary Learning. *Theory and Practice in language Studies*. 4 (3), pp. 489-496.
- Goundar, P.R. (2015). *Vocabulary Learning Strategies of English as Foreign Language (EFL) Learners: a Literature Review*. Prashneel Ravisan Goundar Fiji National University, Fiji.
- Hede, A. (2002). An Integrated Model of Multimedia Effects on Learning *Journal of Educational Multimedia and Hypermedia*, 11(2),177-191
- HU Hai-peng and DENG. (2007). Li-jing.Vocabulary acquisition in multimedia environment, 5 (8).
- Hu, Z. (2001). *Linguistics: A course book*. Beijing: Perking University Press.
- Hulstijn, J. H. (2001). *Intentional and incidental second-language vocabulary learning: A reappraisal of elaboration, rehearsal and automaticity*. (Ed. P. Robinson). Cognition and Second Language Instruction. Cambridge: Cambridge University Press, pp. 258- 286
- Involved In Knowing A Word. 2017. UKEssays.Com. [online]. Available at: <https://www.ukessays.com/essays/english-language/involved-in-knowing-a-word-english-language-essay.php>. [2019, November 25].
- Jinping, Z., and Qiuping, Z. (2013). *The Limitations and Application Errors in Multimedia Teaching of College*. Atlantis Press, China.
- Kamil, M. L., and Hiebert E. H. (2005). *The teaching and learning of vocabulary: Perspectives and persistent issues*. (Eds. E. H. Hiebert, M. Kamil). Teaching and learning vocabulary: Bringing scientific research to practice. Mahwah, NJ: Erlbaum.
- Kaufmann, S. (2019). Active And Passive Vocabulary In Language Learning [online]. Available at:<https://medium.com/the-linguist-on-language/active-and-passive-vocabulary-in-language-learning-9d7ec939cdb0> [2019, November 25].
- Khiyabani, H., Ghonsooly, B., and Ghabanc, Z. (2014). *Using Multimedia in Teaching Vocabulary in High School Classes*. Islamic Azad University, Qeshm, Iran.
- Kim, D., and Gilman, D. A. (2008). Effects of Text, Audio, and Graphic Aids in Multimedia Instruction for Vocabulary Learning. *Educational Technology and Society*, 11 (3). pp. 114-126.
- Krashen, S. (2003). *Explorations in Language Acquisition and Use: The Taipei Lectures*.— Portsmouth: Heinemann
- Laufer, B. (1992). *How Much Lexis Is Necessary for Reading Comprehension?* (Eds. P. J. L. Arnaud, H. Bejoing) *Vocabulary and Applied Linguistics*. London: Macmillan, pp. 129-

132.

- Marwati (2013). *Using Classroom Multimedia Tools To Improve English Speaking Learning Process For The Students Of Grade 8 At Smpn 1 Bantul In The Academic Year Of 2011/2012*. English Language Education Department Faculty Of Languages And Arts Yogyakarta State University.
- Masoud, H., Masoud A., and Masoumeh F. (2012). Power Point as an innovative tool for teaching and learning in modern classes, *Procedia - Social and Behavioural Sciences*, 31, pp. 559-563.
- Mayer, R. E. (2001). *Multimedia Learning*. New York: Cambridge University Press.
- McDonald, M. (2021, January 21). Lessons Learned from Over 100 VR English Lessons. Educators in VR [Online]. Available: <https://educatorsinvr.com/2021/01/26/lessons-learned-from-over-100-vr-english-lessons/> [2021, March 18].
- Miao Zhi Fang and Xun Lu (2015). On Multimedia Teaching and Multimedia Software. Paper presented at the *International Conference on Education, Management, Commerce and Society (EMCS 2015)*. Jiangsu, China, 2015.
- Min Pun. (2013). The Use Of Multimedia Technology In English Language Teaching: A Global Perspective. *Crossing the Border: International Journal of Interdisciplinary Studies IS*. [Online] 1(1); 15 December 2013. 29-38. Available: <https://www.researchgate.net/publication/272871799> [2020, March 20]
- Mthethwa, P. (2018). Teaching Vocabulary Using Multimedia: The Case of U.S. International Students. *Global Journal of Foreign Language Teaching*, 8 (2), pp. 68-750
- Murat, H. (2012). Integrating Second Life Into An EFL Classroom: A New Dimension in Foreign Language Learning and Teaching. Paper presented at *The 3rd International Conference on New Trends in Education and Their Implications*. Antalya- Turkey, 26-28 April.
- Nan Yue. (2017). Computer Multimedia Assisted English Vocabulary Teaching Courseware. *China iJET*, 12 (12).
- Nation, I.S.P. (2001). *Learning vocabulary in other language*. New York: Cambridge University Press.
- Nattress, J. (2006). *Learning Through Reflection: Student Self-Assessment in Language Education*. Matsuyama University. n. d, n. p.
- Nádori, G. and Prievara, T.(2002). IKT módszertan: *Kézikönyv az info-kommunikációs eszközök tanórai használatához*.
- Oxford, R.L. (2003). *Language learning styles and strategies: An overview. Learning Styles and Strategies*– Oxford, GALA.

- Palmeira, E. G. Q., Martin, V. B. S., Gonçalves V. B., ' Moraes, I. A., Lamounier Jr., E. A. and Cardoso, A. (2020). The Use of Immersive Virtual Reality for Vocabulary Acquisition: a Systematic Literature Review. Paper presented at *The 9th Brazilian Congress of Informatics in Education (CBIE 2020)*. Uberlandia- Brazil, 2020.
- Patesan, M., Zechia D., and Balaghiu A. (2019). Vocabulary Acquisition. 25 (2).
- Pathan M., M. (2012). Computer Assisted Language Testing [CALT]: Advantages, Implications and Limitations. *Journal of Sebha University*, 1(4).
- Schmitt, N. (2000). *Vocabulary in Language Teaching*. Cambridge, UK: The Press Syndicate of the University of Cambridge.
- Shofner, K. (2018) Virtual Reality Is The Next Step In Language Learning. [Online] <https://www.unitedlanguagegroup.com/blog/virtual-reality-next-step-language-learning> [2020, March 12]
- Syafiqah, H., M. Khalid M. Nasir, Maslawati, M. (2021) The Effects of WordWall Online Games (WOW) on English Language Vocabulary Learning Among Year 5 Pupils. *Theory and Practice in Language Studies*, Vol. 11, No. 9, pp. 1059-1066, September 2021. Available at: <http://dx.doi.org/10.17507/tpls.1109.11> [2022, March 20]
- Takač, V. P., and Singleton, D. (2008). Vocabulary learning strategies and foreign language acquisition. *Multilingual Matters Ltd*, 93(1). – pp. 123-144.
- Team. Learning a New Word – How Does It Actually Happen? | Dive into Language [online]. Available at: <https://www.worddive.com/blog/learning-a-new-word-how-does-it-actually-happen/>. [2019, November 15].
- Teoh, B. Soo-Phing and Dr. Neo, Tse- Kian. (2007). Interactive Multimedia Learning: Students' Attitudes And Learning Impact In An Animation Course. *The Turkish Online Journal of Educational Technology – TOJET*. [Online] 6 (4) Article 3. Available at: <https://files.eric.ed.gov/fulltext/ED499660.pdf> [2020, March 22]
- Von Sidow, A. (2015). *Vocabulary acquisition. Possibilities within the task-based framework*, p. 4-5
- Wahyu, K. (2019/2020) Developing Macromedia Flash Learning Media On Vocabulary For The Seventh Grade Of Smpn 1 Ngambur., n.p.
- Waring, R. A. (1997). Comparison of the Receptive and Productive Vocabulary Sizes of Some Second Language Learners. *Immaculata*, 1(1), 53–68.
- Webb, S. (2005). Receptive and Productive Vocabulary Learning: The Effects of Reading and Writing on Word Knowledge. *Studies in Second Language Acquisition*, 27 (1), 33-52.
- Wenhui Dai, Ling Fan (2012). Discussion about the Pros and Cons and Recommendations for Multimedia Teaching in Local Vocational Schools. Paper presented at *International*

Conference on Medical Physics and Biomedical Engineering. China, 2012.

- Wilkins, D. (1972) *Linguistics in language teaching*. Publisher: Edward Arnold, London, n.p.
- Yoshii, M., and Flaitz, J. (2002). Second language incidental vocabulary retention: The effect of picture and annotation types. *CALICO Journal*, 20(1), 33-58.
- Zhang, Q., and Zhang, J. (2013). The Limitations and Application Errors in Multimedia Teaching of College.– *International Conference on Education Technology and Management Science*. ICETMS. p. 1-4., n.d, n.p.
- Zhaohui, Ch. (2006). *The effects of multimedia annotations on L2 vocabulary immediate recall and reading comprehension: A comparative study of text, picture and audio-picture annotations under incidental and intentional learning conditions*, n.d, n.p.



РЕЗЮМЕ

Лексика - важлива частина мови. Для оцінки рівня англійської мови учнів, важливим стандартом є розмір словникового запасу. Без грамотного та достатньо великого словникового запасу, розмовне володіння іноземною мовою, та розуміння і читання зіткнуться з труднощами.

Лексика - це основа мови. Розмір його може показати величезну зміну в успішності вираження себе. Тому важливо спробувати застосувати різні методи у навчанні, і також викладанні, знайти найбільш підходящу його форму, яка може сприяти процесу засвоєння.

Результати робіт дослідників говорять про те, що студенти, які використовували мультимедію, щоб покращити якість навчання, як правило, були набагато успішніші, ніж ті, хто використовував традиційні методи.

Практична цінність статті полягає в тому, що вона надає огляд різноманітних думок щодо викладання словникового запасу та їх теоретичного досвіду, намагається дати основу для розуміння його важливості за допомогою різних методів, виділених у частині 2. Крім того, дослідження, проведене в останній частині курсової роботи, спрямована на розширення його практичного значення шляхом надання розуміння думки учнів щодо сучасних методів навчання та використання мультимедійних засобів під час уроків англійської мови.

Мультимедійне засвоєння лексики надає новий метод навчання для подолання недоліків традиційного навчання в класі. Це важливий підхід для оптимізації навчальних ресурсів англійської мови та підтягнення таких навичків учнів як: аудіювання, мовлення, читання, та перекладу, розвиваючи їх креативність та критичне мислення в межах аудиторій.

Таким чином, систему мультимедійного навчання слід додатково і надалі вивчати та вдосконалювати через те, що вона не повністю розроблена. До досягнення стану фактичної досконалості потрібно пройти ще довгий шлях.

Загалом, відповіді на анкети доказали, що мультимедійне навчання справді дуже корисне для навчання лексики іноземних мов молодих. Особливо важливо, щоб на уроках доцільно використовували як традиційні (використання книг, традиційні дошки, вправи на папері тощо), так і сучасні методи (комп'ютери та мультимедіа). Вони повинні знати, як правильно впроваджувати сучасні технічні засоби у свої методи навчання, але в той же час вони повинні знати, як користуватися книгами, наприклад, для навчальних цілей. Після цього вони знатимуть обмеження та переваги кожного методу та вирішуватимуть, який із них краще підходить до їхніх навчальних стратегій.



APPENDIX Questionnaire

Dear Respondent!

I'm Csilla Királyi, a third-year student of English language and literature department at the Ferenc Rakoczi II Transcarpathian Hungarian College of Higher Education. In order to complete my course paper, I am doing a research with 8-9-10-11 grade Transcarpathian pupils. I assess the experiences of high school students regarding English classes.

Filling out the questionnaire is COMPLETELY ANONYMOUS, so neither I nor anyone else will be able to see your name attached to your answers.

Thank you in advance for completing (which takes a maximum of 6 minutes), which will greatly contribute to the effectiveness of my research! :)

1. Age

.....

2. Grade

.....

3. On a scale of 1-12, what mark did the teacher gave you from English at the end of the last semester?

.....

4. What tools does the teacher use to present audio materials in class?

- a) Radio
- b) Laptop
- c) Computer
- d) Mp3 Player
- e) Other

5. How would you rate your vocabulary in English?

- a) Weak, I understand little of the class;
- b) I know quite a few words, expressions;
- c) In class, I can easily deduce new words from the context and I can easily learn them

6. What programs does the teacher use to conduct the lessons?

- a) Power Point presentation
- b) Second Life simulation game
- c) Prezi
- d) Slide
- e) Java Script

- f) YouTube
Other.....

The following questions will be Likert-scale based ones. According to how much you disagree/ agree, circle the appropriate number.

Statements	Strongly disagree	Disagree	Not sure	Agree	Strongly agree
7. It's easier to learn from books than using a computer.	1	2	3	4	5
8. I like when the teacher uses electrical devices to run the lesson.	1	2	3	4	5
9. There is not enough good multimedia material to teach English.	1	2	3	4	5
10. I prefer to take an active part in the class if the teacher uses visual- and audio-material or a computer game to conduct the lesson.	1	2	3	4	5
11. Teaching using multimedia is more effective.	1	2	3	4	5
12. It is more interesting to learn new words / phrases using a computer.	1	2	3	4	5
13. I am more motivated to learn new terms using a computer.	1	2	3	4	5
14. The teacher then remains just as important in deriving the lesson, not becoming redundant.	1	2	3	4	5
15. I can memorize more words if the teacher uses pictures and audio material, a machine game, a tutorial to lead the lesson.	1	2	3	4	5
16. In the long run, words will remain in my memory if we use multimedia tools and programs in class.	1	2	3	4	5

17. How often does the teacher use each technology-enhanced multimedia in an average lesson? (tick what is true for you)

	Internet	Presentations (eg. Power Point, Prezi)	Videos (eg. YouTube, DVD)	Sound (Music, CD)	Communication tools (eg. Skype, Zoom, Messenger, Google Meet)
Never					
Rarely					
Always					

18. How do you evaluate the effectiveness of each multimedia in teaching foreign languages? (tick what is true for you)

	<i>CD recordings.</i>	<i>Computer programs</i>	<i>Video recordings</i>		<i>Websites,</i>	<i>Multimedia presentations</i>
Not useful						
A bit useful						
Useful						
Extremely useful						

19. If it were up to me, I would make the following changes: (choose one, or write your own answer)

- a) I would teach English with online / offline games
- b) I would use videos to teach English
- c) I would stick to books
- d) Other:

NYILATKOZAT

Alulírott, Királyi Csilla angol szakos hallgató, kijelentem, hogy a dolgozatomat a II. Rákóczi Ferenc Kárpátaljai Magyar Főiskolán, a Filológia tanszéken készítettem, angol nyelv és irodalom tanári diploma megszerzése végett.

Kijelentem, hogy a dolgozatot más szakon korábban nem védtem meg, saját munkám eredménye, és csak a hivatkozott forrásokat (szakirodalom, eszközök stb.) használtam fel.

Tudomásul veszem, hogy dolgozatomat a II. Rákóczi Ferenc Kárpátaljai Magyar Főiskola könyvtárának Kézirattárában helyezik el.

Beregszász, 2022. június 1.

Királyi Csilla