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Studentka se ve své bakalářské práci zaměří na možnosti zprostředkování výuky anglického jazyka pomocí počítače. V teoretické části definuje tzv. CALL a vymezí roli a funkci moderního didaktického prostředku (PC) ve výuce anglického jazyka, přičemž se zaměří na možnosti využití tohoto média pro rozvoj jednoho z jazykových prostředků, a to slovní zásoby. V praktické části nejprve studentka vytvoří soubor aktivit vhodných pro rozvoj slovní zásoby u žáků prvního stupně. Dále na základě pozorování vyučování s pomocí výše uvedených materiálů toto vyučování kriticky zhodnotí a navrhne případné modifikace.

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Annotation:

The thesis deals with the theme learning vocabulary through computers. I begin with the term learning viewed from the perspectives of behaviourist, cognitivist and constructivist learning theories. Then computer is presented as a modern learning tool able to provide learners with rich learning environment, when used with respect to the knowledge of the learning process. Positive and negative features of implementing computer technology into second language learning are discussed. At last the role of vocabulary in the second language learning is defined together with the category of young learners. With respect to the findings stated, the role of computer assisted vocabulary instruction is reflected.

For the purpose of the practical part an interactive audiovisual programme was developed. The programme aims to offer a rich learning environment and to provide concrete learners with a multimedia support linked directly with the vocabulary items introduced in their course books. The programme was complemented with pre- and post- activities and the project was tested in a real school environment. Observation of the learners' interaction with the programme was taken as a feedback and the project was redesigned in order to support the learners in a more suitable way.

Keywords:

computer assisted learning, English language learning, acquiring vocabulary

Anotace:

Bakalářská práce se zabývá tématem osvojování slovní zásoby pomocí počítače. Záměrem této práce je definovat přínos počítače pro učitele i jeho žáky. V teoretické části se zabývám procesem učení z hlediska behavioristické, kognitivní a konstruktivistické teorie učení. Využití počítače jako didaktického prostředku je reflektováno ze strany učitele i žáka. Kategorie žáků mladšího školního věku je reflektována z hlediska důležitosti slovní zásoby pro komunikaci v anglickém jazyce.

Pozitiva i negativa využití počítače při učení se cizímu jazyku jsou brána v potaz při sestavováni konkrétní učební jednotky s využitím interaktivního programu pro rozvoj slovní zásoby u žáků mladšího školního věku. Audio-vizuální program je doplněn o úvodní a závěrečnou aktivitu podporující komunikaci v anglickém jazyce. Program byl vyzkoušen v reálném prostředí základní školy. Na základě pozorování žáků a jejich interakce s audio-vizuální podporou výuky byla navržena vylepšení programu pro snadnější práci žáků.

Klíčová slova:

výuka s podporou počítače, výuka anglického jazyka, osvojování slovní zásoby

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INTRODUCTION

We live in a society driven by technologies. Everybody owns a mobile phone; almost every household is equipped with computers, netbooks or tablets. These technologies are multimedia we use daily as tools to get the piece of information we need, to solve various problems, to connect with other people or to entertain ourselves. Our everyday life depends on technologies therefore it is almost inevitable to use them in schools.

Children are generally used to work with technologies. As Zounek (2012, p. 16) says the generation of today's children are often being labelled 'digital natives'. They are growing up with technologies; they are driven by the desire to discover how it works and how it can be used. It is popular among the children and teenagers to use modern technologies. However teachers are in a different position towards the modern technologies than the young generation. Most of the teachers were not themselves exposed to ICT-related instruction when they attended primary and secondary school.

According to Grimus (2003, p. 198) that fact presents a considerable obstacle in the integration of the new learning culture in addition to the hierarchical structure of the educational scene. Bartos (Grimus 2003, p. 198) recommends changing the professional image of teachers. According to him teachers have to change from "a channel for dissemination of knowledge" to guides, coaches, organizers and troubleshooters. The change will help to reach the organizational and intellectual requirements of the 21st century demands.

Grimus (2003, p. 199) states:

The new learning culture is a concomitant of the integration of multimedia learning sequences in learning processes. This requires didactic and organizational changes which are based on opportunities to make use of the digital media for learning. Theoretical concepts of learning and general trends which are founded on network-based technologies must be included in the considerations.

Richard Kern (2006) in TESOL Quarterly concludes:

We still need to know how to make the best uses of computer to accomplish specific goals. Moreover it is important to ask what it means to use computers for learning and using a language, that is, to reflect critically on the social, cognitive, cultural, as well as educational implications.

Considering the implications for meeting the needs of the 21st century learners mentioned above, the overall aim of this thesis is to make a short study taking the positive and negative

features of the modern culture into account. The inevitability of implementing computer technology support based upon the theoretical insights of language learning will be discussed and evaluated. Then a concrete computer support of a second language English instruction will be planned and designed according to the findings.

I start the theoretical part with the term learning as I assume that the process of learning is the basic feature of our lives. Attitudes to the process of learning changed through the centuries. The process of learning has been evaluated through different learning theories. For the purpose of this thesis I choose three theories, I believe have significance for my short study. I present basic facts about behaviourism which offers drill techniques often used in computer driven instruction. Apart from behaviourism, cognitivism and constructivism benefits towards language learning are discussed.

Computer used as a tool promoting learning is contrasted with more traditional didactic tools used for second learning instruction. Positive and negative features of conducting second language learning through computers are considered and different types of direction are offered. The category of young learners and the importance of lexical items for developing communicative competence are discussed.

Aspects of vocabulary knowledge and its construction are presented together with the necessity of deep processing, recycling and storage. The importance of incidental and intentional types of learning is taken into account when discussing vocabulary acquisition.

The authorial interactive programme aims to promote English vocabulary acquisition, deep processing and further recycling of concrete vocabulary items presented to the group of young learners in advance. The computer driven instruction will be completed by teacher led pre- and post- activities designed for facilitating learners' motivation to participate on the computer programme. Kinaesthetic needs which cannot be fulfilled during the time spent on conducting learning through computer technology will be hopefully nourished with the help of activities held before and after the computer assisted vocabulary instruction.

The vocabulary instructional programme will be tested in a real school environment. The group of the young learners will at first undergo a teacher lead pre-activity designed for recycling already known vocabulary items as well as fulfilling children' communication and kinaesthetic needs. While participating on the pre-activity young learners will practice asking simple

questions and short answers. Their effort will result in finding their partners for conducting the vocabulary instruction led by computer.

The tasks performed on computer present the collection of vocabulary items learners were dealing with in the pre-activity. My concern towards designing the computer led instruction was to prepare an attractive learning environment promoting facilitating needs of young learners. I believe that a rich appealing audiovisual environment fosters developing receptive skill and motivation for further study needed for adequate storage and retrieval of the items learnt.

I hope that, varied options for deep processing, recycling and storage of the items are offered. I assume that working on the task with a partner helps to fulfil the importance of cooperation of the children. I also suppose that conducting the tasks in a pair will help to accomplish the goals of single exercises.

Whereas the computer led instruction is based on working on the tasks mainly on learners' own while sitting and co-working with their peers without moving much, the purpose of the post-activity is to change the mode of language 'work'. The final activity presents a closure task with speaking opportunities for all of the children. The vocabulary items will be discussed and children will have an opportunity to state their opinions, the most favourite activity and express which tasks they liked or disliked. I hope this will help to personalize the students' learning.

After conducting the whole project I will evaluate the positive and negative aspects of the lesson and with the help of these findings I will present an idea how to redesign the project.

1. LEARNING

1.1. Learning according to Learning Theories

Generally recognized theories, like behaviourism, cognitivism and constructivism, view learning differently.

According to behaviourism learning is influencing - conditioning a learner's response (Grimus 2003, p. 147).

The environment surrounding us is the most important variable. People react to their environment. The behaviour that receives positive feedback is reinforced, while the behaviour that results in negative feedback from the environment is discontinued. Behaviourism sees perception and reproduction as the most important phases of learning. Learning is receptive and reproductive (Zounek 2012, p. 41). Learning is not a contextual process; the best way how to teach students is to focus them on the content itself, which is taught individually. The wanted result is student's performance.

While behaviourism is based upon the stimulus from the outside, theories formed of cognitivism view learning as the interaction of the external information input with an already existing internal structure of knowledge. As a result, the information is processed into the learner's knowledge and various solving skills are strived for (Grimus 2003, p. 149).

Constructivism interprets learning as an active construction of knowledge in connection with the previously existing knowledge (Zounek 2012, pp. 44-50). Mental cognitive maps are refined, internal processes of understanding are emphasized. According to the constructivist paradigm, learning is: perceiving, assimilating, taking action (deciding and solving problems), experiencing and communicating in social interaction with one's environment and other learners in the most real problem situations. The wanted result is learner's competence.

The theories mentioned above agree in this: learning is a process that has some stages. The outcome of the process is a change. While behaviourism emphasises the environment surrounding the learner and simplifies the learning process into the stimulus-response model when the outcome is the correct behaviour and correct answers, cognitivism and constructivism advocate looking on the teaching/learning process from the learner's point of view. These theories take the internal individual processes into account.

Learning theories also differ in dealing with knowledge. Behaviourism says that knowledge is imparted, the teacher is the one who owns the knowledge and learners are passive consumers. Cognitivism and Constructivism view knowledge differently. Learners are not passive; learners should be in the centre of the learning. Knowledge is processed and according to constructivist theories knowledge is constructed.

1.2. Learning according to Authorities

Čáp and Mareš (2007, p. 80) state: learning is a process of achieving experience, formation of an individual and changing the individual during his or her life. According to Čáp and Mareš (2007, p. 80) the learned (the knowledge) is the opposite of the congenital. Learning is a lifelong process; its function is achieving preconditions for the active coping with the natural and social environment.

Baumgartner says (Grimus 2003, p. 145):

Learning is an active, individual constructional process based on subjective decision-making structures and as such it is not controllable". Also he states that: learning is a process which leads to relatively stable changes in behaviour or in potential behaviour and is based on experience, controlled by external stimuli and drives.

According to Zounek (2012, p. 2), the core of learning is the process of transformation. During learning there is a quantitative and qualitative change of the former knowledge, abilities, habits and attitudes into a new form. Zounek states that this aspect of learning stresses the role of an individual in the learning process and the individual approach to organize the learning process itself and the knowledge learnt. He also mentions two parts of learning - learning new information and learning new ways how to learn. Learning takes place in a context - learning is linked to the student's life, his or her own prejudices and doubts. Zounek sees learning as a social activity. Learning transforms the individuals, it has social characteristics. He agrees with Čáp that learning is a key process in the life of an individual and its form changes through the centuries.

1.3. Conclusion

From the statements above we can elicit that learning is a process taking place in specific circumstances. The result of the learning process is a change. Some researchers examine the change in an individual's behaviour; the other ones investigate thought processes that occur

during the process of learning. In both cases it has got some phases. Learning has impact on learner's knowledge, his or her abilities, attitudes and behaviour.

2. TEACHING AIDS

2.1. Terminology

During teaching/learning process various supports are used. All materials and technology used for teaching/learning purposes are defined as teaching aids. When speaking about aids which help to accomplish the goals in education, terminology slightly vary. Besides the term teaching aids the terms didactic aids or didactic tools are used. Most of the authors divide teaching aids into material teaching aids and non-material teaching aids.

Maňák (2003, pp. 21-25) states that teaching aids can be perceived in the broad sense and in the narrow sense. Aids from the broad perspective include all objects and phenomena used for achieving the didactic and teaching aim. From the narrow - analytical perspective the term teaching aids is restricted only to tools and phenomena of material character. The non - material tools include knowledge, methodology or organisational forms. The material tools include the tools of material character.

Janiš (2006, p. 78) states that material aids include all real objects and visual aids used in the classroom. The non-material tools are described by Janiš as non-material phenomena which contribute to effective learning. These phenomena include teaching methods and organisational forms of teaching.

Apart from the terms didactic or teaching aids, the term didactic technology is also presented. Průcha characterizes didactic technology as a technical device which makes learning more effective. As a didactic technology not only the machine is recognized but its programme as well. Průcha (1995) divides didactic technology into traditional one - for example the overhead-projector and modern technology - computer with didactic programmes or language laboratory.

As we can see teaching aids and tools are considered by individual pedagogues differently. But either the teachers see materials used for learning/teaching purposes as aids, tools or they set an own category for didactic technology, they distinguish material aids and non-material aids.

2.2. Teaching Aids from the Temporal View

Another concept for the division of the teaching aids is taken from the temporal perspective. Teaching aids can be divided into traditionally used tools, being used in the education for many decades, and into modern tools, which have not been used for that long time.

Traditional aids used in the language classroom are: the course book, dictionaries, teachermade materials, real objects, videos, audio cassettes. According to Penny Ur (1999, pp. 183-196) the main material is traditionally the course book, she advises to complement the course book by teacher-made materials such as worksheets and cards with tasks. She recommends using dictionaries and reference books.

Harmer (2007, pp. 181-182) finds positives in good course books. He states that a carefully prepared course book besides a coherent syllabus offers satisfactory language control and motivating texts. Course books have to have an attractive content, a detailed guide for teachers. Besides these positive features a good course book is well accompanied by various resources.

When a course book is a reliable material teachers are provided by a powerful stimulus for their methodological development. Harmer also points out that not only a course book might be the media used in the teaching/learning process. He also proposes to develop materials tailored up to the needs of the children.

Modern teaching aids include personal computers, tablets, interactive-whiteboards or mobile phone applications. These technologies are able to deliver web applications and provide access to various learning resources. Modern course books are accompanied by course supplementary learning resources like interactive CDs, dictionaries, audio and video support and various other opportunities for further work and practice.

3. MODERN TECHNOLOGIES AND LEARNING

3.1. Demands of the 21st century

Our era is the era of a great impact of technologies. According to Zounek (2012, p. 29) and Grimus (2003, p. 127) modern era has new demands. Teaching is increasingly viewed from the perspective of learning. The teacher role shifted, he or she is no longer the centre of all the knowledge. There are new methods of gathering and processing information, therefore new strategies to manage the wealth of information have to be considered.

Zounek (2012, p. 51) suggests implementing a strategy called connectivism. Connectivism refers to learning as a process during which "specialized parts of the broad net are connected, information resources are shared. Process of understanding is based on connecting numbers of different experience, meeting different cultures, usage of variable and different technologies". Zounek also proposes making steps towards linking teaching and learning with modern technologies. According to Zounek, modern learning theory should deal with the changes and benefit from the modern technologies using the paradigms of learning theories as behaviourism and constructivism.

Grimus (2003, pp. 149-150) also talks about using computer from the constructivist view, advantage of using computers in the learning process, she especially sees in areas such as stimulation and motivation. According to her, computers should not be seen as means to control learning processes but she states that learners use computers have the potential for learners especially for representing their learning progress. Computers are used as a source of information and as a tool for the organization of learning processes. Also they are able to supply learning experiences not possible by other means, provide personalised learning or elaborate other teaching materials.

3.2. Positive Features of Technology

Technologies can be engaged in class work as well as in out-of-class assignments. Grimus (2003, p. 143) states: "Computer and global networking effect lasting changes in previous forms of acquisition of knowledge." Personal computer, internet and rich mobile applications offer interactivity, student's own pace and an immediate feedback. All these media enable presenting the same piece of information in various ways. According to Grimus, the application of digital media is capable of fostering mental agility and abstract thought. She

concludes, that the learner involved in multimedia content is active in selecting and combining different modes of information to construct meaning and learner's own activity results in more effective learning.

3.3. Negative Features of Technology

As in any other means of delivering the methods, there are disadvantages of using computer technology in learning. Technology implemented into learning may result in negative experience. Computer literacy, mentioned above, may still be a problem. Not every teacher is accustomed to working with technologies. Another problem Kopecký (2006, pp. 20-21) mentions, is that developing a concrete support is a very demanding task in terms of time and the effort of the designer. Other feature of every new technology is that it may be overused, as it seems to be a perfect strategy having only positive effects. Černá (2004) concludes that intentional and determined study is crucial for utilization of the opportunities offered, and without this effort, tendencies to use the technology in the same ways as the previous ones prevail. In the view of this author, modern technology is only an instrument or a didactic tool in hands of the teacher. The teacher is the variable; a reasonable and accurate application of this tool depends on him or her.

3.4. Modes of Learning

Q. Ma and P. Kelly (2006) mention the current trend to emphasize the importance of 'learner autonomy' and 'learner focus', "The trend is for the user to be given as much freedom as possible in the use of the program". These authors also have the premise, that the learner development is the process and improved ability in language learning is the objective. According to them, there exists a premise that: "learners initially do not necessarily possess good learning ability and efficient learning strategies for language learning; they need to learn how to become good learners."

Zounek and Sudický (2012, pp. 27-28) distinguish 3 levels of conducting the process of learning with the respect to the learner's stage of development. Learners who lack adequate skills to learn in the self-directed mode learn with the help of teachers substituting the ability to learn through the computer technology. They learn in the directive mode. Teachers conducting this strategy do not provide space for students' self-regulation, as they do not anticipate the possibility of its presence in the learners. Teachers have to use a programme designed for this

group of learners and they have to substitute the lack of the self-regulative processes, than the technology is able to promote effective learning.

The opposite of the directive strategy used for technology driven instruction is self-directed learning. Self-directed learning is suitable for students able to conduct their own learning predominantly without the help of the teacher. Programmes for self-directed learning offer motivating strategies which help the students to promote their self-control of the outcomes of the learning process and learning strategies used.

The third level of promoting learning through technology is directed learning. Learners using this strategy are able to regulate their learning only partly. This level of directed learning use activation techniques which help promoting better learning strategies.

Mareš states (Zounek 2012, p. 25) that all the levels of self-conducting learning strategies mentioned above differ in the external control and self-regulation relationship and this feature may result in a conflict.

3.5. Conclusion

A few conclusions can be driven from the statements presented above. Learning through computer is not the only one strategy enabling learners to learn effectively. There are many other approaches which if handled with the respect to the language learning principles may become powerful tools in teaching/learning process. Computers are not salvation nor for learners nor for teachers. As any other method computers used in language learning have limits. Speaking about learning and technologies, teachers may use different strategies according to the level of the learners' ability of controlling their own learning.

4. LEARNING LANGUAGES THROUGH TECHNOLOGY

Technology used in the learning/teaching process is not a new idea. Every type of language teaching has had its own technologies to support it. The blackboard has been used in the classroom for many decades. Another medium used mainly for one-way transmission of information is the overhead projector. According to Carla Meskill (Warschauer 1996) the blackboard and the overhead projector were perfect mediums in times when teachers used grammar-translation method. In contrast, the audio tape was the excellent medium for the audiolingual method and early computer programmes excelled in the times of drill-and-practice grammatical exercises.

4.1. Computer Assisted Language Learning

One of the approaches widely used is Computer Assisted Language Learning (CALL). Mike Levy (2009) states that CALL programmes originated from 1950s and early 1960s empiricist theory and strategies based on audiolingualism in pedagogy, behaviourism in psychology and structuralism in linguistics. In Levy's opinion, the very first CALL programme may be identified the PLATO¹ Project initiated at the University of Illinois in 1960. Computer Assisted Language Learning has undergone many changes (Levy 2009) from its early times. Studies on CALL have already tackled various language areas and skills. For example, well-structured hypertexts with organizational devices supporting cognitive processes are able to help less proficient readers to direct their attention to important and relevant subject matters.

Developing of a good CALL programme requires a deep theoretical insight. According to Ma and Kelly (2006):

"It has been demonstrated that the quality of a CALL programme is determined by the methodology behind it rather than the computer technology itself."

The authors highlight the necessity of knowledge of the language learning theories when designing a CALL programme. Developers of CALL programmes should take the nature of language, language learning and the process of learning into account. Developers should consider specific learning theories in order to choose the proper one for facilitating language knowledge aspects and skills the programme focus on. Although many programmes are focused only on one of the skills or sub skills, programme developers have to take the basic goal of the second language learning into consideration. The main aim of language teaching/learning

Programmed Logic for Automatic Teaching Operations by Don Bitzer (Levy 1997)

process has undergone many changes during the era of language learning at schools. The concept of communicative competence dominates the field of the second language teaching/learning process in the modern era. Therefore teachers and CALL designers should prepare and use programmes in order to motivate learners and facilitate communication in the second language. CALL programmes properly used and designed may promote all kinds of language skills.

Number of studies has been written about the effectiveness of CALL programmes focused on reading, listening, writing or speaking. There are language journals and conferences devoted to the various methods of using computer in language learning and teaching process.

4.2. Computer Assisted Vocabulary Learning

Computer Assisted Vocabulary Learning (CAVL) is a subfield of CALL paying attention to the importance of vocabulary in the second language learning. Even though students differ in their language needs and their levels of English vary, all of them need to come across a vast amount of vocabulary items to become independent users of English. One of the many vocabulary programmes is the Hot Potatoes software. In spite of the fact, that some teachers may consider properties of this programme as limitations, Mike Levy (2009) highlights that the users have the option to complement their Hot Potato programme with audio files to listen for a separate word and using the word in context.

Other technologies in CAVL include hyperlinks to online dictionaries with definitions, translation or an image in order to provide meaning of the vocabulary item or its concrete use.

5. VOCABULARY

5.1. Vocabulary and its Place in Language Learning

Teachers observe that students experience problems relating to a shortage of lexical knowledge while reading, speaking, listening and writing in the target language. Often students cannot understand an English text well or they are not able to speak to person who is talking to them in English because of insufficient vocabulary knowledge. Sometimes students cannot express themselves effectively simply because they do not possess the needed vocabulary for successful communication. Krashen (1989) emphasizes the role of vocabulary when he states that most of the meaning in a language is carried by words.

Vocabulary is also the foundation for reading comprehension. The relationship between reading and vocabulary size is a complex and dynamic one. This relationship can be viewed from two different points of view: the effect of vocabulary size on reading comprehension and the effect of reading on vocabulary size. Regarding the effects of English vocabulary size on reading comprehension, the most frequent 2000 words enable learners to have a degree of comprehension of a text (Nation 2001). When considering the effect of reading on vocabulary in order for learners to enlarge their vocabulary size, some authorities argue that learners need to read extensively in the second language (Krashen 1989, Nation 2001). By reading extensively learners encounter the most frequent words repeatedly in meaningful contexts.

A large vocabulary size can also have a positive impact on understanding the grammar of the target language. According to Ellis (1995) knowing the words in a text can have a facilitative effect on learning grammatical rules as learners understand the discourse functions better. Vocabulary knowledge may make the meaning of grammatical functions more transparent to learners.

5.2. Aspects of Vocabulary Knowledge

Words are not discrete units in a language; they have strong and difficult features (Tokaç 2005, p. 4). Nation (2005) states that knowledge of a word consists not only of knowing the spelling of the word and its pronunciation and meaning but also knowing grammatical properties, collocations and contextual factors affecting its appropriate use.

Knowing words' pronunciation helps the learner to recognize the words when he or she listens to a spoken text. It also enables him or her to produce the words correctly. Knowledge of the written forms of words helps learners to locate them in a written text.

Knowing the meaning of a word is also crucial. The meaning of a word constitutes the relationship between the word and a concept. The spoken and the written form of a word correspond to a concept in the real world. Learners need to connect the written and spoken forms of words to the concepts successfully in order to communicate the intended message.

Newly made connections have to be strengthened in order to be properly stored and retrieved when the learner encounters the words later.

Nation also mentions that English vocabulary items often have more than one meaning, thus learners need to know various meanings of the word. Another aspect of English is the importance of English collocations. Collocation knowledge affects accuracy and fluency therefore learners should to know what vocabulary items co-occur.

Word parts knowledge involves knowing how to form different words by using a root word with the help of derivational suffixes and prefixes. Knowing how to form new words by using derivational suffixes and prefixes in English becomes particularly important because of widespread and frequent use of derivational prefixes and affixes (Carstairs-McCarthy 2002, p. 20). Word parts knowledge also plays an important role in using words in phrases and sentences as learners sometimes need to consult their word parts knowledge when they are placing the words in sentence and phrase patterns. Words are also closely related to grammatical patterns. It is necessary for learners to know what part of speech a word is in order to place it in grammatical pattern accurately.

The last aspect of vocabulary knowledge deals with having information about contexts in which a given word can be used appropriately (Nation 2001). The context refers to a particular situation in which the communication is taking place. Particular words and phrases can be more appropriate for a given communication context. Learners need to have knowledge about the appropriateness of a word in particular contexts in order to communicate successfully (Nation 2001).

5.3. Nature of Vocabulary Acquisition

An advanced language learner knows approximately ten thousand words (Tokaç 2005, p. 16). Although there is not a consensus on how learners learn such a large amount of vocabulary,

there is a general picture of vocabulary acquisition in the literature (Tokaç 2005, p. 16). Some important features of vocabulary acquisition have been revealed through research on vocabulary acquisition. Tokaç (2005, p. 16) stresses that learners gradually learn different knowledge types that belong to a single word. He also states that these different types of knowledge cannot be learned entirely at one time. Moreover, some knowledge types are mastered before others. For example in a study by conducted by this author, learners first learned a word's spelling then the meaning of the words. He also found that within a single type of word knowledge there was also a continuum. In this continuum the learners first learned a word's basic meaning and then they learned other meanings of the word. In this authors opinion complete mastery of a word takes time. Another aspect of vocabulary acquisition is the distinction between receptive and productive vocabulary. The term receptive vocabulary refers to the type of vocabulary knowledge that lets learners recognize and understand a word when encountered in a written or audio piece of language whereas productive vocabulary refers to the type of vocabulary knowledge that enables learners to produce a word (Tokaç 2005, p. 17). Although there are certain levels of knowledge about a particular word, such knowledge should not be considered as two separate systems. They should be considered as differing degrees of familiarity dependent on each other. In other words "knowing a word is not an all-or-nothing proposition" some aspects may have become productive while others remain at the receptive level.

Another feature of vocabulary acquisition is its retention fragility. When there is learning there is also forgetting what has been learnt. Forgetting is a natural part of learning. When it comes to second language vocabulary according to several research studies lexical knowledge is more likely to be forgotten than grammatical knowledge (Tokaç 2005, p. 17). According to Schmitt (Tokaç 2005, p. 17) the fragility of vocabulary knowledge is due to the fact that vocabulary consists of individual units rather than a series of rules. Forgetting the learnt vocabulary can mean losing all the effort put into learning them. Therefore once the vocabulary items are partly or completely learnt, they should be recycled systematically to foster successful retention. Knowing a word means mastery of its pronunciation spelling relation to other words and the other meanings it has. Once these knowledge types are learnt further effort should be put into activation of this knowledge. In addition due to the existence of different types of knowledge about a word the mastery of all these features cannot be developed at once (Tokaç 2005, p. 18). Furthermore vocabulary knowledge is subject to forgetting. Words should be systematically

revised in order not to be forgotten (Tokaç 2005, p. 18). Considering all these insights learners need to allocate a considerably long time to extend, consolidate and retain their vocabulary knowledge (Tokaç 2005, p. 18).

5.4. Vocabulary Retention

Newly learnt vocabulary items are prone to be forgotten partially or completely. Connection of the concepts of the words and their real word concepts have to be strengthened in order to be later retrieved. Space repetition is believed to be effective for a longer period of time (Tokaç 2005, p. 19). Spaced-repetition is a learning technique in which subsequent repetitions of learning material are separated by increasing intervals of time. According to studies on memory, dividing learning practice time equally over a period leads to better learning and remembering. The studies suggest extending the space between successive repetitions gradually since practicing items massively at one time does not result in better learning and retention. Ellis (1995) states when spaced repetition is implemented, it may be able to optimize the vocabulary acquisition process for the second language learners, because they may remember words better, when the words are repeated in a spaced manner rather than in a condensed or unsystematic manner.

5.5. Intentional and Incidental Vocabulary Learning

Lexical skills are one of the most fundamental components of second language reading listening speaking and writing. Lexical skills extend over a broad area with many dimensions as Nation (2005) and Tokaç (2005, p. 20) point out. As a result vocabulary learning is a demanding task for language learners.

One goal of research on vocabulary acquisition is to find the most effective ways for language learners to learn and use the target vocabulary. Two central positions exist in the field on second language vocabulary learning - incidental vocabulary learning and intentional vocabulary learning. Incidental vocabulary learning refers to reading-based vocabulary enlargement, while intentional vocabulary learning refers to provision of support to learners by teacher's dictionaries and some exercise types that allow students to manipulate vocabulary items. Besides these two central positions on vocabulary learning Coady argues that intentional and incidental vocabulary learning should be used at the same time as they both have an important place in learner's vocabulary development. Krashen (1989) recommends extensive reading for meaning in the target language. Krashen holds the opinion that vocabulary items

should not be presented explicitly because "*linguistic competence developed this way is highly limited*" in terms of quantity usability and quality of learnt vocabulary. (Krashen 1989).

Intentional vocabulary instruction suggests that learner's acquisition of new vocabulary can be facilitated with the help of the teacher or dictionaries and undergoing exercises that promote consolidation and retention of the vocabulary items (Nation 2005). In an intentional vocabulary instruction environment learners are encouraged to notice the words that are unfamiliar; they consult dictionaries or their teachers and classmates in order to learn the unknown words in a text. Learners involve in these intentional vocabulary teaching activities in addition to inferring meaning of unknown words from context. Furthermore learners consolidate the newly learned words by repetition and vocabulary learning exercises. According to this view learners are active processors of vocabulary knowledge since the process of vocabulary learning is a complex task and requires varied mental processing (Wesche 2000). To provide that kind of processing Wesche and Paribackht argue that besides inferring meaning from context learners should be engaged in vocabulary exercises such as definition matching, multiple choice cloze, open cloze or semantic mapping and negotiating meaning with peers. These exercises help learners to process vocabulary knowledge in depth and can lead to successful retention (Wesche 2000).

According to the intentional vocabulary instruction view an overemphasis on incidental vocabulary learning by teachers may prevent learners from checking the correctness of inferred meaning of words. Learners may not look up words in the dictionary to check if their inferred meaning is correct or not (Tokaç 2005, p. 23). As a result students may learn and remember some word meanings incorrectly. Moreover, unless 80 % of words in a reading text are known, it is difficult to infer the meaning of the unknown words from context (Nation 2001). Additionally an overemphasis on incidental vocabulary instruction may encourage students to ignore some unknown words in a text; thus students may not learn very many words from reading text. Based on this finding Tokaç (2005, p. 24) argues that incidental vocabulary learning alone does not answer the needs of the students in an EFL context where learners do not have the chance to meet the target vocabulary as frequently as needed to reach optimal vocabulary size and quality. Because of time limitations and the low rate of incidental vocabulary learning, there seems to be a consensus on providing learners both with incidental and intentional vocabulary learning opportunities.

5.6. Conclusion

Vocabulary knowledge is very important for conveying meaning. Children learning second language at the first stage of a basic school are still developing knowledge of the basic vocabulary items in English. They need to encounter words together with their audio and visual representations in order to infer meanings of the vocabulary items. Incidental and intentional vocabulary learning has to be promoted. Further practice and recycling the words in spaced repetition is recommended for proper storage and retrieval of the items.

6. YOUNG LEARNERS

The category of young learners differ in various cultures, the cause is mainly linked with the age of becoming a pupil at a basic school. Cameron (2001, p. xi) uses the label young learners for children from 5 till 12 years old.

According to Gabrielatos (1998):

- Children can justify choices and opinions.
- They need to be supported in their understanding of the content of a message by moving from the concrete to the abstract.
- Their attention span is limited. Tasks should be short, varied, motivating, interesting and should offer 'concrete perceptual support'.
- The role of words as language units begins with the early use of nouns for naming objects in first language acquisition and use of other words to express the child's wants and needs, followed by a period of rapid vocabulary development.

6.1. Young Learners and Second Language Vocabulary

According to Cameron (2001, p. xiii) vocabulary teaching has a central stage in teaching second language to young learners. Children are capable of learning foreign language words through participating in the discourse of classroom activities and vocabulary learning can be a step towards learning and using grammar.

Course books for young children often highlight nouns. This is because young learners often lack literacy skills. Nouns can be easily featured and illustrated. As Cameron (2001, p. 82) says it is also important to deal with verbs, adjectives, adverbs and also different lexical fields. As for number of new words presented in a single lesson James Flood and Diane Lapp (2006) recommend introducing five new unfamiliar vocabulary items for meaningful practice. Swinney (2001, p. 45) argue that only 3 or 4 new words should be introduced in order to not overload young learners in the third grade.

Tokaç (2005, p. 59) emphasizes establishing an initial form-meaning link as a first step in vocabulary acquisition. He suggests devoting a lot of time to the word forms, he argues that researches show that second-language learners often use incorrect word forms. Using vocabulary in context is one of the crucial points in the teaching/learning process.

Young learners at a basic school are still building their first language vocabulary, which is tied up with their contextual development; thus, in planning and teaching a foreign language, teachers need to take into account their first language background to know, what will work and what may be too difficult for children.

The gap between the vocabulary size in the first language and in the second language is very large and seldom closed even by adult learners after many years of study. Cameron states that a realistic target for children learning a second language might be around 500 words a year in good learning conditions.

Penny Ur and Nick C. Ellis (Ur 1999, p. 334) suggest using various visual materials to illustrate new vocabulary. Nick C. Ellis (1995) gives credence to the use of visual materials especially when visual materials and words are both used in teaching and learning. He points out that visual learning uniquely enhances students' cognitive understanding of abstract concepts. The right placement of visuals into context can be used for better understanding; children are able to categorize the new words into the system of words they already know.

Nation (2001) stresses the importance of vocabulary acquisition strategy called 'noticing' for all the categories of language learners. 'Noticing strategy' is based on: "seeing a word as something to be learnt". Knowing what to learn is for the author the necessary prerequisite to learning. The teacher's role according to Nation is to help learners to practise 'noticing strategy' by making clear, which items should be learnt, whether the item is a single word, a phrase, a collocation etc. and whether it is good to know the item for active or passive recognition. Nation also mentions the significance of materials for teachers. In the author's opinion materials help teachers to provide clearly marked vocabulary lessons making the target vocabulary set stand out. Nation suggests giving lists of vocabulary to be learnt for the lesson, include structured and focused practice and opportunities for regular review.

6.2. Conclusion

From the statements above a conclusion can be driven: the category of YL need: concrete basic level vocabulary, recycling the words again and again and learning words as collections. They need a lot of visual and audio support to match the concepts of the written and spoken word to their counterparts in the real world. Computer programmes are able to support dual coding - present new materials in an interesting and varied way to facilitate young learners' motivation. Although learning vocabulary through computers is a modern strategy suitable

for YL, teachers have to consider its relevance for the prepared activity and they have to have the main goal of language learning - the communicative competence - in mind. Teachers should make the target vocabulary to be clearly noticed and help the learners to learn the properties and usage of the newly learnt items. Focused practice and regular review is a necessity for further use of the vocabulary.

7. THE PRACTICAL PART

7.1. The Purpose of the Practical Part

In the theoretical part positive and negative features of current computer technology engaged in language learning and the category of YL were briefly discussed. My concern regarding these was to develop an authorial programme for YL in order to promote deep processing of newly acquired vocabulary items and an opportunity for further recycling. Computer technology may be used for class instruction, homework assignments or for facilitation of further study on learner's own. I decided to construct a simple programme to support class vocabulary instruction for YL learning English as a second language at a basic school.

Modern course books are often supported by multimedia programmes presenting collections of lexical items, promoting drill activities; they also foster assignments facilitating deep processing and recycling newly acquired vocabulary. An interactive design of assignments, the opportunity of learners' own pacing of its content and the immediate feedback of conducting single activities are believed to facilitate learners' acquisition and help to promote deep processing of the newly acquired vocabulary items in an interesting way. As stated above the use of computer assisted vocabulary instruction only is not the salvation for conducting language learning. The purpose of the programme has to be thoroughly considered together with its incorporation to the language curriculum and its usage in single lessons.

As the course book used for this group does not have a relevant technological support for vocabulary instruction and further deep processing and recycling of the newly learnt concepts I tried to develop a simple vocabulary instruction programme presenting newly acquired vocabulary items together with their picture realization, phonological properties and spelling. The programme deals with a single collection of vocabulary items presented in one unit of the course book and it's implementing to class instruction in a lesson devoted to a further practise of vocabulary items dealt with in three previous lessons.

7.2. Learners Participating on the Project

The group of learners consists of 16 pupils aged eight and nine. All of them attend third grade at the same basic school. There are 9 boys and 7 girls, all of them have been learning English at the basic school from the first grade. The students' level of English as a second

language is at the process of developing level A1 of the Common European Framework of Reference for Languages.

As for the level of computer literacy, the pupils are able to work on computer applications designed for their age and they are used to work on computers during the lessons of English. Once in a month they have a pre-planned lesson in the computer room.

In the view of the findings stated above, computer assisted vocabulary instruction focussed directly on the word forms presented in the course book is a suitable provider of further practise of the items.

7.2.1. The Course Book and its Technical Support

The school uses the course book Angličtina pro malé školáky written by a Czech author Marie Zahálková (2001). The book is written partly in Czech and partly in English. All instructions for children are in Czech and English is used for presentation of the most common words, collocations and simple sentences. Every unit contains a page dedicated to the parents of the pupils. The page is written in Czech and its aim is to advise the parents how to help the children to acquire the English language in a way motivating the young learners.

A CD accompanying the course book offers tasks devoted to listening and pronunciation. All the vocabulary items on the CD are presented in English and Czech. Because the concrete support for the course book does not include computer assisted vocabulary instruction, the teacher uses a few computer programmes in order to promote deeper practice and further recycling of the vocabulary items covered in the course book.

In my opinion, this lack of vocabulary practice linked directly with the content of the course book can lead into a few obstacles in conducting practise of the items. Firstly, the teacher has to devote time to find suitable support, secondly the collections of vocabulary items in the chosen collection can consist of items not covered in the course book. These features can represent obstacles for children in identifying with the aims of the practise, thus the teacher has either devote some time to presentation of the unknown vocabulary or help the learners individually in reaching the aims of the programme.

7.2.2. Presentation and Practise of the Vocabulary Items

In a lesson only a few new items are covered, the average amount ranges from four to six new single words, when phrases or word clusters are handled, lesser amount of new lexical items is presented (Flood 2006). The teacher often deals with new vocabulary at the final part of

the lessons. The teacher says the English word aloud and writes the spelling pattern of the word on the blackboard, together with its simplified pronunciation patterns and the Czech translation of the item. Children are instructed to write the items into their vocabulary notebooks.

For further presentation and practice the teacher uses the course book recordings in order to link the concepts of the written forms of the items with the concepts of their spoken forms. These two concepts are complemented by picture realizations of the concepts. The vocabulary items are dealt as a collection. When practising the items, children are instructed to look at the picture page introducing a new theme and to listen to single words played on the recording. They listen to each item in English (every single item is repeated in English twice before a Czech translation of the item occurs) then the children hear the same word again in Czech. While pupils listen to the recording, they point to the illustrations of single vocabulary items and repeat them chorally in English.

Paul Nation (2005) agrees that the most common vocabulary items should be presented. James Flood and Diane Lapp (2006) recommend to deal with five unfamiliar vocabulary items in a single lesson but Ruth Swinney and Patricia Velasco (2001, p. 45) argue that young learners of a third grade should encounter only 3 or 4 new items per lesson. Nation concludes that one of ways how to give a quick attention to the meaning is to use the L1 translation. Among the other strategies mentioned in his work, this author advises using L2 synonym or a simple definition in the L2 or showing a picture or a diagram. Presenting collections of words is highly recommended as stated in the theoretical part of this thesis. Collections of words enable children connect the items into already existing prior knowledge.

I believe that pictorial representations of words attached to written forms of the words are more suitable for children of a third grade than lists of translated words. In my assumption, when children draw pictorial dictionaries or find pictures to be enclosed to the written items, they are more likely to be motivated to realize the project. They create something new on their own and they have positive or negative feelings towards their work. I presume that the opportunity to make their own choices and to perform actions help to personalize their own learning. Personalization of one own learning process is considered to foster the learning itself.

As stated in the theoretical part, presenting written concept of the word with its visual representation together with the spoken form is highly recommended. The presumption is that, aspects of knowledge of the vocabulary item and its concepts are added to the already existing

real world concepts. When meeting new concepts the web of already constructed knowledge is reconstructed. Vocabulary items as well as other knowledge have to be deeply processed and recycled from time to time in order to keep the newly constructed knowledge available for the further usage.

As the list of words is recorded bilingually and right after the English vocabulary item is located, the Czech counterpart follows, it seems to me, that children are immediately told the outcome and they do not have to listen for the English word as they have the translation offered without making an effort. In my opinion they might rely on hearing the Czech vocabulary items and this feature does not facilitate learners' motivation to listen and locate the patterns of the English word.

If the instruction was only in English, children would have to listen for the English words only and process its pronunciation patterns without thinking about the Czech word. I assume that the concepts of the word would be linked with the real world concepts more easily and the link of these would be stronger. Another problem is that children are forced to listen for English words and Czech words in the same time, the nature of spoken English interferes with Czech language as the two languages greatly differ, children have to adapt from English to the mother tongue repeatedly. In the view of second language acquisition theories, the translation method is overpowered by more modern and learner friendly methods taking the difficulties connected with translating isolated items of a second language into account. Even there are some words borrowed from English which are commonly used in Czech, the most of the English words differ in many aspects. From my point of view presenting Czech counterparts right after dealing with the English word forms is counterproductive. I assume that some children might be detoured from conducting the task as they do not know what the purpose of the task is.

7.3. Theoretical Implications for Designing the Project

Young learners of this age group need to be supported in their understanding of the content of a message; moving from the concrete to the abstract is crucial. As attention span is limited, tasks developed for them have to be short and varied. The content has to be presented in an interesting and motivating way. Some pedagogues state that all-senses perception is vital for successful learning, others advocate dual coding strategy or concrete perceptual support, all of these strategies point out that a piece of information is better received when presented in more modes at the same time, i.e. written vocabulary item enriched with a picture realization of the

item and an audio support. With this perception support learners encounter different concepts of the single item at once, this helps to link all the concepts of the item into one structure consisting of the single concepts linked together. As stated in the theoretical part, computer technology enable delivering methods facilitating cognitive processes and strategies providing the multimedia content as pictures, text, audio or video (Ma 2006).

I personally agree with these theoretical insights, therefore I would like to design a rich learning environment facilitating learners' receptive and productive skills and demonstrate that a computer is a technology useful for young learners' vocabulary instruction when designed with respect to the knowledge of the learning process. Then I will document the positive and negative features of this strategy implemented into the class instruction.

7.4. Taking the Needs into Account when Planning the Project

My intention was to develop one lesson for the children mentioned above. I concentrated on developing computer driven vocabulary instruction used for further practice and opportunities for recycling and revisiting the content of one of the topics from the course book. As the course book, in my opinion, is the only valuable source to deal with, when conducting English vocabulary instruction, I did not use the bilingual recordings and based my support project only on the course book. Instead of the bilingual recordings accompanying the course book I exploited the option of integration the audio support done by a native speaker².

I believe that it is vice to use English more than the course book does. That is why there will are no Czech instructions and no Czech equivalents of the English vocabulary practised. I presume that picture descriptions complemented by comprehensible audio input are more adequate for children than strict words.

7.5. Developing of the Project

In the planning phase of the project I stated a few basic rules. The interface of the programme has to be visually attractive for the children. The menu has to be simple and easily handled. The content has to be motivating and challenging in order to keep children working on the tasks. The visuals used need to be adequate and comprehensible for the age of the children. The vocabulary items have to be linked with suitable audio support and pictures describing their abstract concepts in order to enhance cognition.

² Recordings are taken from Macmillan Online Dictionary and Thesaurus (Macmillan)...

7.5.1. The Interface

I started to think about the visual support needed to get the attention of the young learners. I draw a few sketches of the interface. It had to be simple to manipulate with and the content had to be attractive for the pupils. I decided to motivate the pupils by a lively picture on the background. I searched through the Corel Gallery Clipart which the university has license to use. The clipart set contains a great amount of pictures related to all sorts of human activities. Although I had many pictures to examine, the content is divided into separate categories and a user can select the adequate category quite easily. I chose a lively picture of children in Halloween costumes going trick and treating and added leaves in autumn colours. I wanted to trigger the image of the autumn nature and I added the exact date of Halloween in order to help the children to consolidate, shape the image of the culture, date, season into a complex idea.

7.5.2. Basic Features of the Programme

The menu contains five tasks. The easier tasks precede the more demanding ones. The menu is easily handled. Children start with the first task and follow as the tasks are put there. They will be asked not to switch to a different task until they finish the preceding one successfully. The practise done when working on a task prepares a child for the one following it. That is why the sequence of the tasks is predefined. Every vocabulary item is introduced in its written form complemented by the audio support taken from the Macmillan Dictionary and Thesaurus and an adequate visual representation of the word's meaning is incorporated from the Corel Gallery Clipart.

When the audiovisual computer programme was done, its incorporation into the class work was considered. Positive and negative features of working on the programme and working on computer generally was taken into account. I realized that the time children are supposed to spend working on computer was devoted to individual work and pair work. In order to support the cooperation of the whole group I decided to devote the pre-activity as well as the post-activity to group work. As the core of the project was quite static these two phases were incorporated to the work on computer in order to engage the pupils in more dynamic tasks.

The teacher was given a didactic manual with the tasks done with the support of the computer and the plan of the stages of the lesson. Teacher's instructions have to be simple. Children work in pairs in order to facilitate cooperation with a partner. The teacher is the organizer of the work during the whole lesson. My role is to observe the lesson and help if needed.

7.5.3. **Prerequisites of the Whole Project**

The testing phase of the project was planned for the day before the Halloween; I wanted to

keep the date of the Halloween lesson as closed to the exact date as possible.

The teacher introduced the vocabulary to children beforehand. Children wrote the vocabulary

items into their vocabulary notebooks. They were discussing the features of this holiday and

they were doing a few exercises from their course books.

7.6. The Project Itself

7.6.1. **Topic: Halloween**

The Vocabulary items collection presents not only the words but also cultural aspects

related to the English language the children are exposed to. The theme, I suppose, is attractive

for the children as it illustrates one concrete feature of lives of children from English Speaking

Countries. The topic is therefore comprehensible and motivating to use English in practise.

7.6.2. The Collection of the Vocabulary Items:

The collection contains 16 vocabulary items introduced to children beforehand. There are

13 nouns, 1 pronoun and 2 of the items play the role of a noun and the role of a verb when used

in a sentence. Children may know 1 of the nouns as an adjective.

Nouns: a witch, a dwarf, a ghost, a hat, a mask, a pumpkin, a lantern, chocolate, a lollipop,

a chew, a cake, an ice cream

Pronouns: they

Noun + adjective: a sweet / sweet

Noun + verbs: a trick / to trick; a treat / to treat

Many of these vocabulary items do not belong to the topic Halloween only. Items chocolate,

a lollipop, a chew, a sweet, a cake, an ice cream are related to the topic 'food' or 'sweets' as

well. The item a hat composes also category 'clothes'. The English item chocolate is easy to

learn because its Czech counterpart has similar properties as the English one.

7.6.3. Methods under the Project and Modes of Delivery

The audiovisual programme aims to support cognition and construction of mental maps, so

it is mainly based on cognitivist and constructivist learning strategies. The feedback of the work

done on the programme adopts behaviouristic learning strategy.

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The content of the audiovisual programme is delivered by computer-led instruction. The mode of self-directed learning is promoted by the programme and the instructions of the teacher. Also cooperation of pairs is supported.

The pre-activity is group work, children conduct the task on their own, and the procedure of the task is monitored by the teacher. The post-activity is directed by the teacher.

7.6.4. 1st Stage - Pre-activity

The pre-activity aims to motivate children to use simple English in a small conversation practice conducted among the peers. One half of the children get written vocabulary items and the other half obtains picture realizations of the written words. Students are supposed to find out who has the vocabulary item counterpart. The task consists of a simple question "Are you…?" completed by the spoken form of the pictorial/written representation of the item and eliciting one of the two possible short answers: "Yes, I am." / "No, I am not."

7.6.5. 2nd Stage - Computer-led instruction

The interactive audio-visual programme offers 5 tasks starting with the very easiest one called 'Match'. Children are exposed to 6 pictures and 6 English words. The goal of the activity is to link concrete written forms of the words to pictures and infer the true meaning of the items.

Feedback is given when the student clicks on the button 'Check', the incorrectly matched items vibrate and the student is given another option to succeed in the activity. When pictures and their written word forms are matched, children listen to the feedback in the form of applause.

The second activity 'Letters' aims to promote practice of the spelling patterns of the 16 items covered in the topic. A few of the letters composing the written form of item are missing.

The words are complemented by audio recordings of single items done by native speakers of English. Pictures illustrate the meaning of the items and clues promote successful retrieval of the spelling patterns of the vocabulary items. When the children spell correctly all the words, they listen to the applause.

The third activity provides an opportunity to recycle the items they have just practised in the previous task. Students fill word forms into a simple 'crossword 1'. The items are supplied with picture and audio clues. The fourth activity is also a crossword but a more complicated one. This task is a more demanding version of a crossword. This task is supposed to nourish the needs of talented learners who have already finished all the preceding tasks.

The final task 'Memory Game' revises all the items once again in a task children like to be engaged in. The aim of the game is to match a picture with its written word. When both concepts of a vocabulary items are retrieved, a feedback - the audio support of these two concepts is heard. When all of the items are revealed the feedback in the form of applause is played.

7.6.6. 3rd Stage - Post-activity

The post-activity is the final task of the whole lesson. Children together with their teacher sit on the floor and talk about the topic. The teacher says an item and the children who have the correct items both show the pictures to the others. When all of the items are mastered, children are motivated to speak about the lesson, their favourite tasks, which tasks were easy for them and which were difficult to success in.

7.7. Realization of the Project

The lesson was conducted as planned one day before the Halloween. Fifteen children were engaged in the teacher led activities as well as in the computer assisted vocabulary learning.

Children were motivated to discover the features of the lesson. They actively participated in the pre-activity task. One of the obstacles was eliciting the pairs for further computer work; two boys did not want to cooperate with the peers chosen. Another problem revealed was cooperation of two pairs. Overall, 11 children were working on all the tasks incorporated into the programme. Two pairs needed a lot of assistance of the teacher and the observer.

The interface proved as motivating and easily handled for children of the third grade. Most of them were enthusiastic when revealing the content of the tasks. The most favourite task as predicted was the 'Memory Game'. The most difficult task for the children were the 'Letters', some children did not notice the 'clue button' and struggled a lot when rearranging the letters. Many of the children had problems with the words: witch and ghost - they presumed that letter h has to follow after the first letter in both words. Also words were letters doubled i.e. treat, lollipop, were problematic together with longer words as: pumpkin, ice cream.

Matching activities were easily tackled, as the learners were supported in noticing the wrong items. I suppose that one of the problems of 'Letters' was the length of the task. All of the vocabulary items are shown in one large collection. Other tasks work with smaller groups of items. The 'Letters' should be tackled in small groups of items, then the task would be easier to handle and more pairs would succeed in it.

7.8. Conclusions of the Project

In my own perspective, the tasks are comprehensible and motivate pupils of this age to engage in computer-led instruction. The audio-visual support enhances cognition and helps to construct mental maps composed of varied concepts of the items. I presume that redesigning the problematical areas would promote more suitable learning environment for young children and nourish deep processing and recycling the vocabulary items in a more distinctive way.

Even though the programme has reached many of my expectations, I had to contribute too many hours in order to plan and design this simple programme that aims to promote learning of only 16 vocabulary items. With respect to the work teachers of English have to do during the whole school year, I do not suppose teachers would engage in developing a similar project, as they can adopt already existing appropriate vocabulary activities for computer-led instruction.

8. CONCLUSION

The Bachelor thesis reviews Computer Assisted Language Learning with its positive and negative features. The authorial audio-visual programme developed for a group of young Czech learners of English aims to promote cognitive strategies and construction of mental maps composed of various concepts linked to a single vocabulary item.

I start the theoretical part with the term learning discussed from the view of behaviourist, cognitivist and constructivist learning theories. Computer as a modern didactic tool has been contrasted to other tools, which have been used in language teaching for a longer period. Positive and negative features of language learning conducted through computers are discussed. A conclusion based on the findings is that, the method underlying the teaching strategy is the most important variable of learning, not the delivery of the method.

The importance of vocabulary knowledge to communicate meaning is considered in relation to the main aim of the language learning - developing learner's communicative competence. The category of young learners and their needs for appropriate second language acquisition is addressed together with the positive and negative features of computer technology involved in the class practice. On the basis of these theoretical findings the concrete support for vocabulary class practice conducted through computer technology was designed.

The audio-visual support presents varied vocabulary tasks for further practice opportunities designed according to the needs of the young learners of a third grade of a basic school. The computer-led tasks are complemented by an activity promoting simple conversation among peers and discussion about the vocabulary items covered by the programme. The learners are motivated to speak about their likes and dislikes concerning the tasks and the topic Halloween. This feature helps to personalize their learning together with learning about culture of the English speaking children. The programme was tested in the real school environment.

The author observed children interacting with the audio-visual programme. A few conclusions were driven from this observation. The programme is able to promote cognition and construction of mental maps of varied concepts of a single vocabulary item. The interactive design is motivating and easily handled for the children it has been developed for.

Although the programme and promoted activities mostly reached the author's aims - the programme was motivating the students to engage in further work and students discovered the

aspects of vocabulary item knowledge and got feedback from the programme, when succeeding in resolving the tasks, some features of the project implicated a few areas for later redesign.

Overall, the development of the programme was very demanding and time consuming, but helped the author to notice positive and negative features of conducting computer-led programme in the real school environment. Another positive outcome of testing the project is that a computer engaged in class work seems to be a good motivator for accomplishing effective study.

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10. APPENDIX A: REFLECTIVE DIARY

10.1. Testing Phase of the Project

A few days before the testing day, the computers and the internet connection were checked and the best tactics how to work with the computer equipment were chosen. I handed the plan of the lesson to the teacher and CDs containing the vocabulary instruction. When the project was ready to be tested in the real school environment I checked the technical equipment of the computer room in order to prevent malfunctions. I prepared a didactic manual with a simple description of the tasks and a plan how to work with the project effectively.

10.2. Realization of the Testing

10.2.1. A Few Problems

As the computer room is in a different floor the teacher and I had to collect the pupils a few minutes before the lesson was about to start. The children had to clean their spots because other pupils had a lesson in their classroom. But the transfer was quick, children were used to it and the teacher gave the orders clearly. A few problems emerged when the teacher and I started switching the computers on. Two of them were not working and we had to switch on other ones. Luckily the rest of the computers were working. Only five minutes of the lesson were lost by this inconvenience. Surely the best option was to come to the computer room beforehand to prevent loosing time for practise, but that was not possible, as lessons were held there.

Because of the computer policy (storage of the data, access to the software) I had to put CDs in all the computers and start the programme manually. I planned that during the time I prepare the computers the children will undergo a pre-activity with the teacher. But she forgot to do it and started to help me to switch the computers on.

10.2.2. The Pre-Activity

We handed pictures to half of the children and the other half got words. They were supposed to use a simple question "Are you a...?" to find out if the other one has the counterpart of the word or not. The other child was told to say Yes, I am or No, I am not.

The child found out who has the second part of the word and with that colleague he or she was supposed to work on the project.

Pre-activity Realization

Children were eagerly waiting which card was left for them. As there were fifteen children present, one was supposed to be without a partner. The teacher thought about this possibility and chose a boy who would work individually. The teacher considered the individualities of pupils beforehand. The boy chosen for the individual work had problems to cooperate with a colleague without bullying him or her. The teacher told the pupil before that he would work individually as she wanted to prevent problems when searching for the colleague for the pair work. The boy was not happy about the fact that he was not engaged in finding his buddy for the computer work. The teacher was chatting with him about his picture representation of the written word while the other pupils were talking to the peers in English in order to locate the counterpart for their card and found out who they were going to work with.

All of the children found their colleagues. Most of them were very happy about cooperating with their friends. Only of two boys were complaining that they got somebody they did not want to work with. The boy working on his own quickly found a computer with the programme already installed and started working on the first task right away. He was very motivated to learn something new. He had no problem to accomplish all the tasks on the computer.

10.2.3. The Tasks Done on Computer

Matching: 5 minutes



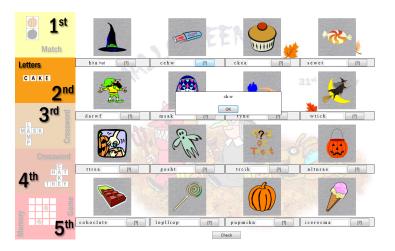
Img. 1 Screenshot of the Match activity

expected problems: children will have problems with words they, trick, treat and their picture descriptions

solution: teacher or my assistance to children struggling

Pupils do similar tasks when working on computers in English lessons; they knew what the goal of the activity is. As the menu is controlled differently than the one they use frequently, some of the pupils were confused, that it is not working in the way they presumed. When I showed them how to handle it, they adopted a new strategy. Picture descriptions caught the attraction of the children and they accepted the activity as a game.

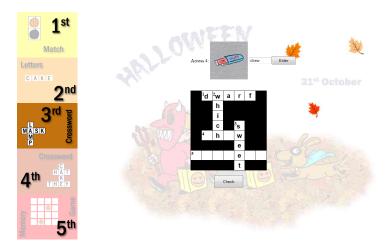
Letters: 10 - 15 minutes



Img. 2 Screenshot of the Letters activity

This activity was challenging for the pupils. At the beginning of the third grade the children still have many difficulties with the orthography patterns of English vocabulary. The spoken form and the written form of the English words differ and that fact confuses them. Reordering the letters demanded full attention and patience. Children had complications with the word witch as they were expecting the letter h to follow as in the words what, where, when as they are using these words a lot in the lessons. One pair did not spot the icon with the orthography clue but an immediate intervention of another pair was very helpful.

Crosswords:5 - 10 minutes



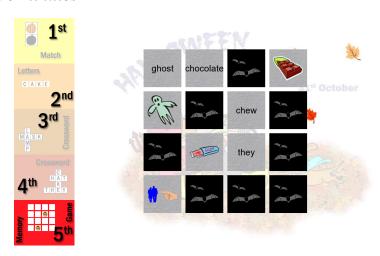
Img. 3 Screenshot of the Crosswords activity

Children were struggling to retrieve the words in their correct orthography pattern; maybe they could check it in their dictionary

expected problems: too difficult for children of this age

solution: only the simple crossword is obligatory for all the pairs. The difficult crossword is only for faster pupils who have accomplished all the previous tasks, supposing there is some time left.

Memory Game: 5 minutes



Img. 4 Screenshot of the Memory Game activity

expected problems: children will discover the memory game too early and will not want to accomplish the previous tasks

solution: do not tell them, that the final task is a memory game

how did it go: One pair was playing the memory game as they did not know how to work.

10.2.4. Pupils and the Pair Work

Some of the pairs cooperated well and all the tasks they worked out together. Some children divided the work to halves and one was responsible for half of the task and the other for the second half.

Only two pairs were not behaving well when doing the third task - the crossword. They were filling in nonsense words and having fun. One of the negatives the work done by couples was that only one pair of headphones was connected to one computer.

10.2.5. The Post-Activity: Not Accomplished

The teacher let the pupils to work on the computer too long. Five minutes to the end of the lesson, the children have accomplished the memory game couple times and she did not stop them. The post-activity was not undergone. The teacher thought that no closure activity is needed and when there were two minutes before the end she told them to switch the programme of and to leave the room. Some of them were very noisy and bored; some were quiet and did not want to stop working on computer.

10.3. Instructions of the Teacher

The teacher talked mostly in Czech, she started with English but then the amount of instructions in Czech rose and finally she was speaking in Czech only. The children talked to her in Czech. As the teacher was not an expert on technical support of the project, she had no answers to some of the questions the children asked. When she was saying something important she spoke clearly and used gestures to help the children to comprehend.

10.4. Cooperation of the whole group

Children are used to help the others. They are working as a team. The boy who was working individually had no problems with self-directed learning done with the help of the computer. This boy knew almost all orthography patterns of the words and was very motivated to have the tasks done without mistakes.