Shmidt V.V., Strelchuk Y.V.
Developing English potential vocabulary of students of non-philological specialties with the help of modern technologies

Shmidt Vitaliia, teacher-instructor of ESP
Strelchuk Yana, associate professor of ESP
Petro Mohyla Black Sea State University Mykolaiv, Ukraine

Abstract. The article reveals the importance of expansion of potential vocabulary of students of non-philological specialties in the study of vocabulary in English. The basic strategies of modern technologies application in learning vocabulary are considered.

Keywords: potential vocabulary, lexical skills, information technologies, eVoc strategy, mapping online tools, multimedia computer programs.

Defining the problem. Strengthening international relations in the modern era, the expansion of contacts between countries led to appearance of different literature from many disciplines. For the reading of popular scientific, fiction, journalistic and other types of foreign literature it is essential not only the actual vocabulary of students, which includes active and passive vocabulary, but the potential vocabulary.

Knowledge of foreign languages is associated with knowledge of words, while the command of language - with lexical skills, that provide the operation of lexical units in communication. Thus, lexical skills should be considered as an important and integral component of the content of learning foreign languages, and their formation is precisely the purpose of learning vocabulary. Nowadays new information technologies, such as internet usage and learning computer programs, are intensively introduced into university studying process.

Analysis of research and publications. The problem of expanding the potential vocabulary is paid some attention in the methodological research of scientists and educators, in the writings of teachers and practitioners. The concept of potential vocabulary and all of its components are considered in all major works on teaching foreign languages. This problem was researched by A.N. Shapkin and V.D. Semyryak, M.V. Lyahovtskyy and others. They highlighted the main components of the potential vocabulary, levels of difficulties in understanding unstudied words by students that are related to the potential vocabulary. E.I. Pasov, R.V. Rogov considered ways to expand the potential vocabulary in his writings. However, the question of methodical work in universities to expand the potential vocabulary has not been studied sufficiently, so this issue remains important for further investigation.

Development and application of new information technologies in the process of learning is investigated by scholars Y. Dmitrieva, S. Novikov, Y. Polat, T. Polipova, L. Tsvetkova. Theoretical and methodological basis of technologies introduction in the process of teaching and learning English was the object of works of the following modern scholars: V. Andruschenko, N. Balyk, Y. Baturin, N. Viner, M. Zhadak, N. Morze, A. David, R. Williams, C. Maclean, P. Ross.

The purpose of the article is to find peculiarities of using modern online and offline tools while learning English potential vocabulary components by students of non-philological specialties.

The main material. Lexical aspect of communication has certain features that facilitate its assimilation and those that impede it. The first includes the connection of vocabulary with the content of communication. This contributes to the concentration of learners’ attention and ultimately assimilation. The second includes almost inexhaustible supply of any Western language, and great difficulties in mastering foreign language vocabulary, which is associated with a form of word (sound, graphic, grammatical), its meaning (compatibility with other words, the use of words as well as differences with words in the native language). It leads to laborious work on mastering foreign language vocabulary, which provides a continuous accumulation and expansion of vocabulary and mainly handling it in different kinds of language activities - listening, speaking, reading and writing. Conditions of studying in higher educational establishments, primarily limited amount of training time, and limited topics predetermine the necessity of selecting lexical units, which is relevant to the purpose and content of foreign language.

The most relevant for the teaching reading in non-language universities is the problem of selection and differential accumulation of vocabulary. The main focus should be the development of students’ skills identification of new words in the process of reading texts without a dictionary.

While studying at the university student should learn quite a significant amount of vocabulary (at least 2500 units) to its competence to be sufficient for mature readers. Considering the real conditions of training and insufficient number of teaching hours, which are given for foreign language teaching in higher establishments we agree to the idea of S.K. Folomkina that it is appropriate to separate the real passive vocabulary of student with a potential vocabulary [6, p. 135].

All unfamiliar words in the text can be divided into two groups: 1) words that a reader can not understand by themselves, so they ignore them when reading or refer to the dictionary, and 2) words that a reader can understand independently on the basis of context or through internal features of unknown words. These are the words that belong to the second group, and they are sources of expanding vocabulary, or have a kind of "potential." Thus, the term "potential vocabulary" found its place in the long-term methods of teaching foreign languages. The potential vocabulary includes unexplored lexical items the content of which can be interpreted independently. By potential vocabulary we mean such affixal derivatives, complex and ambiguous words, convertible and international words that the students haven’t seen yet, but they can be understood by them, if you teach them to disclose the meaning of such words [2, p. 67].
Based on the psychological language analysis of vocabulary of English in terms of motivation, the following sources of potential dictionary were isolated: international words, derived words, ambiguous words, convertible words, compound words, language guess.

Intensification of international relations in the modern era leads to expansion of borrowings and international words in each national language. Students easily understand English words, which sound similarly to the words of their native language. However, there may be some difficulties associated with the so-called "interpreter false friends" – international lexical units that have entirely different meaning in the target language comparing with the native language.

One of the most productive means of word formation is affixation - formation of new words by attaching grammatical affixes (suffixes and prefixes) to the basic word. Derived words can be formed by attaching affixes to basic derivative, which coincides with the basic word: e.g.: kind – kindness, use – useful. Components of derived words in English are well allocated, which is a prerequisite for self identification of unexplored derived words of potential vocabulary.

Ambiguity is the presence of several interconnected meanings of the same word, which arise from the modification and development of the original meaning of the word [3, p. 132]. Ambiguous word has different lexical-semantic variations that form the semantic structure of the ambiguous word. In the semantic structure we distinguish main and secondary meaning.

Conversion is one of the fundamental principal means of forming words in modern English by translating words from one part of speech to another. This tool is very efficient in enhancing English vocabulary with new words, e.g.: a screen - to screen, work - to work; a mirror - to mirror.

Compounding is the formation of new words by combining into one or two or more bases. The lexical meanings of compound words can be derived from the lexical meanings of their components, e.g. blackbird; baby-sitter.

In the case of applying knowledge of affixation and conversion understanding is reached on the basis of knowledge about the meanings of the elements that make up the unfamiliar. For example, when reading English text one can understand unfamiliar words derived from the root of familiar noun “head”: headless, header, heady, headway, headset, headstrong [5, p. 75].

Based on the potential vocabulary linguistic guess is developed that is not caused by a natural conclusion of meaning, and it is the result of heuristic search in reliance on the context and the structural and semantic features of lexical items. If a reader meets unfamiliar words in simple context, this word does not interfere with understanding and can even be learned in the sense of what the reader guesses. The development of abilities of students to guess the meaning of unknown words using formal support in the text or the overall context is very important: this ability will help to expand vocabulary of students during reading. This ability helps to develop the ability to predict, which is necessary for the formation of mature reading. [1, p. 112].

Language psychological analysis of unstudied lexical items of each source of potential vocabulary showed that the probability of their understanding is different and it depends on the nature and type of motivation. Motivation is understood as the presence of semantic and structural correspondences. [4, p. 100]. Unfamiliar lexical items may have structural and semantic similarity with the corresponding units in the native language, that is, they are motivated by their own language: for example, tank, lift. This motivation is called interlingual. Unexplored lexical items may have structural and semantic correspondences with the known basic words: useful, useless – from the word use. In such cases we can talk about internal language motivation. Some lexical items have both internal and interlingual motivations, others - only one kind of motivation.

Modern technologies give various opportunities for the formation of foreign language communicative competence. There exist Internet-sources which offer foreign language vocabulary acquisition with the help of translation. The other are completely constructed in a foreign language and are formed on a more advanced language level.

The point is that there should be clear electronic or technology-based strategies that teachers can use to develop students' vocabulary learning and interest in words. This term is formulated as eVoc strategy. This formulation shows that such strategies are based on digital tools and resources and at the same time are aimed at evoking of learning potential, improved by technologies and media application.

Wide usage of modern computing technologies adds new sides to a learning process. For example, an advantage of Internet-sources in teaching vocabulary is simultaneous application of visual and audio basis with the possibility of lexical units’ semanticization with the help of translation or context understanding.

Visual line which reflects natural situation shows surrounding, and conditions of an action, is naturally connected with a topic, can form students’ additional associations, and helps to understand interdependence of language, speech, and situation due to direct sensual perception. The most popular visual I-net means are mapping online tools: Wordle and Wordsift. Wordle is a free Web application that helps to create a word cloud based on the frequency of words in a certain text [11]. It can for the tasks of determining the meaning, and relations of words in the process of analyzing and creating Wordles. Wordles can be published, printed, and there is also an opportunity to screen capture Wordles as images, creating a bank of images on the institution server. They can then be inserted into a document, PowerPoint presentation, a blog, or other text. WordSift is another free word cloud tool available on the Internet. Like Wordle, a word cloud is created based on text that is cut and pasted into the application. WordSift is less creative from the point of design but for the tasks of determining the meaning, and relations of words it is very effective. It is also possible that a word cloud that can be used will be created based on text that is cut and pasted into the application. The other are completely constructed in a foreign language and are formed on a more advanced language level.
representations of words in PowerPoint slides, which are hyperlinked together, can also be useful in vocabulary instruction. (Pritchard & O’Hara, 2009) [11]. Students’ glossary items can be sorted into slides by subtopics or multiple meaning. This learning opportunity can also be transformed into an individual task of independent learning when students create their own hyperlinked presentations of lexical material.

The simplest offline visual tool for vocabulary instruction is using learning videos. Most of the DVD discs contain large volume of information, are audial and visual, give the idea about the authentic context and situation in which a lexical unit should be used, and at the same time it provides regular repetition of words and word-combinations. When students watch a DVD, they remember new lexis naturally through perception of a new word, understanding, and using it. Moreover, most of the DVDs enable to choose a demonstration mode (sound, music, images, episodes, subtitles). When choosing fragments of authentic videos for teaching lexis, a teacher pays attention to defining rational correlation of visual and audio information in a fragment. Authentic fragments show language units functioning in real situations, so it leads to “contextualization” [10]. Moreover, authentic visuals are versatile and can combine genre and expressive opportunities of scientific movies, chronicles, and cartoons. Speech in a fragment of video which is used for teaching lexis is a source of foreign language linguistic and extra-linguistic information, which gives basic characteristics to a video and specifies its details. A word adds to images, and contains information, which cannot be expressed by images. These advantages make multimedia DVDs so convenient for usage in the process of learning new vocabulary. So synthesis of visual and audio information provides linguistic and extra-linguistic basis. Interdependence of these components, which is an important condition for obtaining foreign language skills, should be determined according to subject and tasks.

Many online word reference tools are also useful teaching resources. For example, the Visual Thesaurus website contains free information in its Behind the Dictionary and Teachers at Work columns and teacher-created themed word lists. Multiple distribution platforms are widely used in distant learning, because they have various opportunities for getting information through social networking and mobile applications. For example, the Back in School webpage of Dictionary.com, links to Facebook, has an iPhone application, a free toolbar application, a word of the day, communicated on Twitter or as a text message on the phone, and a free weekly word explorer audio podcast on iTunes.

There are powerful tools for learning new lexis while reading digital online or offline texts: online dictionaries and thesauri. Some word reference tools can be inserted to the browser toolbar, allowing a student to right click on any word to have a brief definition display. Other dictionaries can be bookmarked for easier access while reading on the computer. The increasingly popular e-book readers usually provide a dictionary which has a function of audio pronunciation of the word and brief definitions to it. Two widely-used free online dictionaries/thesauri are Reference.com and Merriam-Webster. Another resource is a language translator. The value of a translator is that it supports learning words simultaneously as they occur naturally in an authentic text and allows students to use their first-language knowledge to develop their English vocabulary. One can use Babelfish, Google translator, and Bing Translator for that purpose. One more powerful strategy is to allow students to listen to a text with a text-to-speech (TTS) tool or to listen to an audio narration. There are free TTS tools that can be mounted on the browser toolbar, such as Click, Speak for Firefox (click speak.clcworld.net), or downloaded to your desktop, such as the NaturalReader free TTS utility. Balabolka is a PC-based TTS application. Some e-book readers such as Microsoft Reader are free to download and can be used with public domain content that is a part of their e-book library. Training computer programs provide task and control of the process at the same time. While learning with the help of computers, students get both teaching and checking issues, which change each other regularly, so a teacher can get a step-by-step feedback of the success of learning lexical units.

**Conclusions.** The ability of students to overcome difficulties associated with understanding unexplored lexical items can be viewed as the ability to solve the problem tasks. This is consistent with the desire of students of conscious creative search activity and meets the demands of pedagogic in teaching language as a stable system of solving cognitive tasks. Ability to solve cognitive tasks is considered, on the one hand, as an important criterion of accomplished independence, on the other – as an essential prerequisite for the formation of independence.

Teaching methods in understanding unexplored vocabulary are provided by training techniques developed for each source of potential vocabulary and the target set of exercises. Knowledge of foreign languages is associated with knowledge of words, while command of language – with the lexical skills that provide the operation of lexical units in communication. Thus, lexical skills should be considered as an important and integral component of the content of foreign languages, and their formation is precisely the purpose of learning vocabulary.

So application of computing technologies creates conditions for intensified learning process. They allow a teacher to use psychological and pedagogical studies which provide a transition from mechanical memorizing of issues to acquisition of skills to get new knowledge. Technologies contribute to the development of students’ individual skills. The conclusion of experience of using computer and multimedia at classes of ESP/ ESL is that multimedia boosts learning process, leads to increasing learning interest, and makes mastering quality better. Online and offline learning tools individualize learning and teaching, and disable teacher’s subjectivity. Many word reference online means, multimedia computer programs, dictionaries have a high potential of usefulness in improving students lexical skills. More traditional but not less productive methods of teaching vocabulary are videos and PowerPoint presentations.


