ІННОВАЦІЇ
У МИСТЕЦЬКІЙ І ПЕДАГОГІЧНІЙ ОСВІТІ

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THE IMPLEMENTATION OF THE MIND MAPPING TECHNIC INTO THE PROCESS OF TEACHING CADETS ENGLISH FOR PROFESSIONAL PURPOSES

The article is devoted to the problem of the mind mapping technic implementation into the process of teaching English for specific purposes at the higher educational establishments of the Ministry of Internal Affairs of Ukraine.

The definition of the main notion «a mind map» is accurately analysed. The main concept and its modifications are worked out. The peculiarities of the terms «a mind (a mental) map» and «a concept map» are defined. The benefits of including such a form of cognitive process which is characterized by another level of mental literacy and two-dimensional thought are worked out.

The preferences of the mind mapping usage in the organization of the educational process including the peculiarities of the cadets' daily routine and the specific characteristics of performing the service duties are shown. The advantages of this technic's implementation including the successful combinations of individual and group work are encountered. The possibility of the interdisciplinary usage of the formed skills and abilities is used.

The positive features of the method's and its modifications usage while teaching the educational discipline «English for specific purposes» are underlined by the possibilities of their introducing practically in all kinds of the cadets' activity (reading, speaking writing and listening). The motivational aspect of the auditory is also studied.

The pattern of the mind map's building in the process of the English language study is presented. It includes three main steps: brainstorm, an organization of information and completing the mind map. Detailed elements of the work on every level and links between all the items are introduced.

The personal results of the authors' implementation of the mind mapping technic on the initial level of the English language study by the cadets of the National Academy of Internal Affairs are introduced and worked out.

The benefits of the mind mapping gradual implementation into the educational process at the higher educational establishment of the Ministry of Internal Affairs of Ukraine are grounded. The ways of conducting further research in this field and the most perspective directions of this study are proposed.

Keywords: *a mind map, a concept map, technic, English for specific purposes, communicative, creative, mental literacy, two-dimensional.*

Formulation of the problem. Transformations in the national system, as well as the changes in the international approaches to the concept of the higher education, are setting new goals and requirements to the process of the formation of highly qualified professionals. Contemporary changes of the economy and technology provide new challenges to the professional demands. The growing tendencies of flexibility, a complicated contextual component of education, internationalized content lead to the necessity of creating completely new approaches to the process of study. The ways of mastering the educational material must include such forms and methods of education which would develop the enlarged, non-linear comprehension of information. The usage of the modern methods and technics, based on technology, communication, and mental literacy is stressed by the adoption of the number of native documents, which define the mainstream of the higher education development in the fields of higher education and specialized higher education. The significant number of international treaties and agreements in the sphere of policing underlines the demand for active participation of Ukrainian professionals in the area of the global law enforcement network. The changes in the sphere of the law enforcement education also need a search for new, more effective methods of teaching. Personnel and organizational specifics of the study organization in the higher educational establishments of the Ministry of Internal Affairs of Ukraine dictates the peculiarities of the methodical choice. The place of the Foreign languages in the curriculum of cadets is significantly enlarged, the criteria of the estimation and evaluation of the cadets' knowledge are strengthening during the recent years. These facts, nevertheless, are combined with relatively law language and motivational levels of cadets. So, in order to achieve positive results, which will help to overcome this contradiction, the teaching staff is to be able to use such methods and forms of the foreign languages teaching, which will greatly benefit the process of mastering English for specific purposes on the level, appropriate for the further professional communication.

Among the peculiarities, which influence the educational process in the specified establishments the following can be mentioned as the main ones:

1) high enough graduation examination demands comparing to the freshers' level of knowledge;

2) comparatively low level of motivation of the cadets;

3) specific daily routine, which left not so many time for mastering subjects of the humanitarian cycle.

The actuality of this work is grounded by the necessity to overcome these contradictions is the usage, among other means, of contemporary methods of the cadets' work activation and motivation.

The main purpose of this article is the implementation into the process of the foreign languages study the method of the mind maps building, which would benefit the cadets mastering the skills and abilities of the professional communication in English. According to the given purpose, the following aims can be differentiated:

• to study the theory of the mind map's usage;

• to find out the modifications and theories of the mind methods' application in the educational process;

• to propose the mechanism of its implementation into the educational process of the higher educational establishments of the MIA of Ukraine on the result of the analysis of the foreign and native experience of the mind maps and its modifications' building;

• to prove the effectiveness of the mind map's building usage;

• to propose the ways of further research in the sphere of the mind map's building in the process of the foreign languages' study.

Analysis of recent research and publications. Recently a lot of authors use this technology. We can define scientific researches: T. Buzan, the inventor and successful practitioner of this method, his famous followers J. Novak and D. Gowin (1984) and some of the most famous developers L. David, J. Nesbit, O. Adesope (2006) and others. The contemporary development of the method tends to be more practical and slides to the online representation of the technology's modification due to the peculiarities of the learning process on the sites of such a famous organization as the British Council, Oxford and Cambridge Universities and a number of other ones (Baylis, Smith, Owens).

Presentation of the material. So, the first item to deal with is the definition of the notion «a mind map». The inventor and the practitioner of the mind map theory Tony Buzan defines a mind map

as: «A Mind Map is a powerful graphic technique which provides a universal key to unlock the potential of the brain. It harnesses the full range of cortical skills» (Buzan).

This technique is further developed by Joseph Novak, who is famous by the developing theory of the concept maps, which represent meaningful relationships between entities (concepts) in the form of propositions. A concept map, according to Novak is a technique for externalizing concept labels and propositions created by concept labels and relationships (Novak, & Gowin, 1984). There are some variations of the term «concept map». Some authors correlate it with education map (Nesbit, & Adesope, 2006, p. 415) defining «a concept map» as a type of graphic organizer that is distinguished by the use of labelled nodes denoting concepts and links denoting relationships among concepts. The links in a concept map may be labelled or unlabelled, directional or nondirectional.

In the process of the learning theories usage, L. David gives the following notion: «A concept map (or mind map) is a visual tool to help a learner organize and represent what he or she knows. It includes concepts, usually enclosed in circles or boxes of some type, and relationships between these concepts indicated by a connecting line linking two concepts. Words on or between the line, referred to as the linking words/phrases, explain the relationship between the two concepts» (David, 2016).

So, we can state that there are some different approaches to the mapping of the learning material. The most famous of them are:

1) the mind map (the mental map);

2) the concept map (educational map, topic map).

The main difference between them lies in the fact that the concept map and its variations are concentrated on the central concept and the further development is concentrated on the links with it. In the process of building the mind map and the structures close to it, one usually uses tree structures.

The famous internet link underlines the following differences «.... Another contrast between concept mapping and mind mapping is the speed and spontaneity when a mind map is created. A mind map reflects what you think about a single topic, which can focus on the group brainstorming. A concept map can be a map, a system view, of

a real (abstract) system or set of concepts. Concept maps are much more free in the form, as multiple hubs and clusters can be created, unlike mind maps, which typically emerge from a single centre» (Baylis, Smith and Owens). Though there are some organizational differences in the usage of these techniques, the effectiveness of their usage in different spheres of life draws our attention to the possibility of their implementation into the process of teaching the foreign languages. The growing international interest in this topic is underlined by the native and foreign free of charge and paid electronic constructors and graphical organizers for mapping. One can easily find a lot of other examples. It also must be stated that a sufficient number of the universities across the World (the USA, the UK, Australia, and New Zealand, Europe, China uses this technic and represents it in their sites.

Such a wide usage of the technic makes us define the main preferences of the mind and concept mapping usage.

Coming closer to the main idea of this paper it is useful to study the definition of the subject given by the British Council: «A mind map is a visual record of new vocabulary or other content. Vocabulary mind maps are also known as word maps or spidergrams and are organized in a way that shows groupings or relationships between the words» (Mind map).

Taking into account all the above given definitions and their peculiarities the concept of the mind map in teaching English at the higher educational establishments with specific purposes may be shaped as: «a graphic visual record of a definite concept, where the organization of the main and subordinate concepts and the links between them help in studying and remembering concepts and vocabulary». From this point of research, there are many preferences of the method's usage. The main of them can be worked out from the point of view of the cognition organization and language content's study benefits.

From the cognition organization points of view, the method of mind mapping looks attractive as it creates a complex structured approach to the study of the educational information. Due to the processes of selective visualization of the main concepts and the links between them the students became aware of the learning material's

main points personally. The mental processes included into the process of mind mapping helps the students to create more complex and effective cognitional schemes which in their own turn benefit the processes of the memorization and recalling the studied material in their further activities.

Based on the scientific researches (Buzan; Nesbit & Adesope, 2006; Kacafírková, 2013; David, 2016) we can define the following benefits of organization the auditory work according to this method:

1) development of two dimensional, nonlinear way of cognition;

2) creative visualization of the knowledge;

3) usage of complex knowledge;

4) development of the group, collaborative learning;

5) team building;

6) development of the students' individual and group organized interaction;

7) formation of the self-regulation processes;

8) the development of problem-solving abilities;

9) creating an ability to the complex analysis of the material;

10) creation of meta comprehension of the material;

11) creating a schematic way of thought;

12) possibility to transfer the created skills and abilities to the other subjects learning.

Of course, there are many more elements which can be included in the list of benefits. A great number of items may also be included here due to concrete educational aims and peculiarities of studying separate subjects in the curriculum. To be closer to the main purpose of the paper, the implementation into the process of the teaching the foreign languages the method of the mind maps building, we can define the directions where the benefits will be the most substantial. We can't omit the fact, that this method usage is widely spread while teaching English abroad. To speak about English for specific purposes, it must be stated, that the concentration on the concepts and the links between them cannot be overestimated while working with the texts, which contain professional information. So, we can speak about the benefits in building logical structures of the texts, creating links between main concepts, including new, professional vocabulary into the content, visualizing the textual information as a unity, creating

links for further usage of the definite maps etc. Taking into account the communicative nature of the learning processes we can get extra benefits from organizing mind mapping work. The main positive results which can be achieved can be shaped as:

1) a better way to summarize textual information;
2) visualizing the key points and the main links between them;
3) creating communicative situations in micro- and macro-groups;
4) stimulating the mental processes of the professional vocabulary memorization;
5) creating easier constructions with more comprehensive context verbal structures;
6) formation of easier cognitive structures;
7) use of more comfortable language structures;
8) helping learners with a lower level of knowledge;
9) creating visual support for topical information;
10) creating patterns for personal and collective work on a specific topic;
11) creating a united view on the massive of professional information;
12) creating the structured mechanism of the further professional information's usage in the personal practical activity.

Based on the all above-mentioned preferences we can clearly see the benefits of the mind mapping usage in the process of teaching English in the higher educational establishments of the MIA of Ukraine. We must take into account that the English course here lasts for three years and the final exam contains the professional material from the whole course. From this point of view creating schematically map-shaped visual support looks like a beneficial idea for the process of memorization. The additional advantage is the proved effectiveness of the method for the cadets with the lower level of knowledge, as the substantive part of the cadets don't demonstrate the high enough one. The technology of mind mapping building, so, will support them in creating a unity of professional information massive.

In practice, there are two most widely shapes of the maps: spider and pyramid. Though there are a lot of possible technologies of working with mapping, there can be distinguished some consequent

steps or levels which form the common scheme of the method's usage. After the careful study of the scientific works and the universities' recommendations we can differentiate the following:

Step 1. Brainstorm (can be used individually or in the group).

• Use some paper which is enough to add something on the page.

• Write the central concept (topic, subject) in the centre of the page.

• Write all the factual information you know in the separate words or short word combinations (nouns).

• Write all the possible link and action words (verbs and prepositions) which can link the facts you've written before.

• Do not try to organize material on this level.

• Better to use the paper horizontally, as you can add the information easier.

Step 2. Organization of the information.

• Define the main subpoints (ideas, facts) connected with the topic.

• Connect the subpoints with the topic using link words and lines. It is better to draw lines of different shape, colour and to use every visual (sketch, icon etc.) which may be helpful.

• Make the map dipper. Think about the organization of each subpoint. Try to organize facts, link them to the definite subcategory and try to establish relations between them.

• Try to establish links of subpoints only to the main category, but also among the subpoints.

• Leave some additional place in order to fix some extra information which may come in the process of further work or discussions.

Step 3. Completing the mind map.

• Look through the sketch. Discuss it in the group.

• Rewrite it on the other sheet of paper taking into the mind the placement of the key concept, subpoints, their components and the links between them. Try to mark the elements logically.

• Present the map (in the manual or electronic form).

• Discuss and fix corrections, additions, and improvements.

• Try to link the mind map with the other, concerning the different topics.

• Find a place of the completed map in the system of the educational theme (key, subordinate, additional).

There are the key recommendations of the mind map usage. Of course, there are many more possibilities of the mind map modifications usage. The maps, used in the educational process may be mainly devoted to the concepts' formation, the creation of the logical links, semantic characteristics of the texts. It depends on the great number of factors: themes of the lessons, formation of definite skills and abilities, levels of knowledge, already formed skills and abilities of such kind of work, year of study etc.

Author's personal experience of using the mind maps during the first year of teaching English at the National Academy of Internal Affairs shows positive results. To compare the results of the cadets (50 in the groups, studying with the dominance of the mind mapping and 50 in the groups, studying traditionally) it may be stated that qualitatively groups, studying the material experimentally have the average ball for the control test 4.1 corresponding to the control groups – 3.7. The best results were shown while checking vocabulary, discussions and retelling the texts, containing professional information. Besides, cadets show higher motivational level to such a kind of the works' organization. The questionnaire, made at the end of the term shows, that 81 % of the cadets "strongly like" and "like" such works' organization. As to nearly the same results, the cadets show the same levels of grammar constructions usage. It states, that the method of the mind maps' creation should be used along with the traditional communicative ones.

To conclude, it must be stated that the topic has great potential for further researches. The deeper work may be performed in the spheres of mapping of the concrete topics. The further usage may be seen in creating semantic and grammar maps (which are not new for the communicative methodology but may be strongly personalized due to the group level and topical information). The number of online programs and universities recommendations of the mind mapping's usage clearly shows the necessity of this technic's implementation on all levels of study and creation of a systematic sketched picture of the educational material. The visual support and activation of the other level of memorization will be strongly recommended while preparation to the final and state exams in English for the professionals at the higher educational establishments of the Ministry of Internal Affairs of Ukraine and performing service duties further.

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УПРОВАДЖЕННЯ МЕТОДУ ПОБУДОВИ МЕНТАЛЬНИХ КАРТ У ПРОЦЕС НАВЧАННЯ КУРСАНТІВ АНГЛІЙСЬКОЇ МОВИ ЗА ПРОФЕСІЙНИМ СПРЯМУВАННЯМ

Стаття присвячена впровадженню методу побудови ментальних карт у процес вивчення іноземної мови професійного спрямування курсантами вищих навчальних закладів Міністерства внутрішніх справ України.

У роботі детально проаналізовано авторські підходи до поняття «ментальна карта». Ретельно вивчено основні концепції та їх модифікації. Визначено характерні риси понять «ментальна карта» та «концептуальна карта». Окреслено переваги використання такої форми пізнавального процесу, яка характеризується якісно іншим рівнем ментальної грамотності та двовимірності навчальної реальності.

Показано переваги використання техніки побудови ментальних карт у навчальному процесі у вищих навчальних закладах зі специфічними умовами навчання з урахуванням особливостей життєдіяльності курсантів. Ураховано можливості комбінацій індивідуальної та групової роботи в процесі використання цього методу в процесі вивчення іноземної мови. Проаналізовано мотиваційні аспекти курсантської аудиторії в процесі його застосування. Розглянута можливість актуалізації міждисциплінарних зв'язків у використанні курсантами вже сформованих навичок.

Запропоновано структурну схему роботи за методом «ментальних карт». Вона включає в себе три основні етапи: мозковий штурм, організацію інформації та логічне завершення побудови карти. Надано детальний опис роботи на кожному етапі та представлено основні структурні зв'язки між ними.

Проаналізовано результати особистої роботи автора за цією технікою на початковому етапі вивчення англійської мови курсантами Національної академії внутрішніх справ.

Теоретична та практичні складники даної роботи свідчать про доцільність застосування методу побудови «ментальних карт» у навчальному процесі вищих навчальних закладів системи МВС. У статті визначено шляхи та основні напрями подальших досліджень у цій сфері.

Ключові слова: *ментальна карта, концептуальна (понятійна) карта, техніка, англійська мова за професійним спрямуванням, комунікативний, креативний, ментальна грамотність, двовимірний.*

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МОЖЛИВОСТІ ВЕБ-СЕРВІСІВ ПРИ РЕАЛІЗАЦІЇ ОПЕРАЦІЙНО-ВИКОНАВЧОГО ЕТАПУ ТЕХНОЛОГІЇ ПЕДАГОГІЧНОГО СТИМУЛЮВАННЯ МАЙБУТНЬОГО ВЧИТЕЛЯ ДО САМООЦІНКИ НАВЧАЛЬНОЇ ДІЯЛЬНОСТІ

У статті розглядається процес використання інформаційно-комунікаційних технологій у рамках реалізації технології педагогічного стимулювання майбутнього вчителя до самооцінки навчальної діяльності. Здійснюється аналіз основних можливостей Веб-сервісів, що використовуються на операційно-виконавчому етапі зазначеної технології. Наведено приклади використання деяких Веб-сервісів при покроковій реалізації дій, спрямованих на формування самооцінних умінь у майбутніх учителів: ознайомлення студентів з еталонами і критеріями оцінювання, залучення їх до індивідуального і колективного оцінювання завдань, аргументація самооцінки навчальної діяльності, робота у складі групи з колективного вироблення критеріїв оцінки, обговорення результатів виконаного навчального завдання та розв'язування професійних ситуацій.

Ключові слова: *самооцінка; педагогічне стимулювання; технологія; інформаційно-комунікаційні технології; Веб-сервіси.*