

Міжкультурна комунікація

Samofalova O.V.

Teacher, Department of English for Engineering # 1

National Technical University of Ukraine

“Igor Sikorsky Kyiv Polytechnic Institute”

Kyiv, Ukraine

**USAGE OF NEURODIDACTICS PRINCIPLES AS MODERN APPROACHES
IN ENGLISH-SPEAKING COMMUNICATIVE COMPETENCE
FORMATION AMONG STUDENTS OF TECHNICAL PROFESSIONS**

We live in the days of when technology and computers have become an integral part of our lives. The rapid development of modern science and technology has led to the fact that today technical professions occupy a leading position among the others that are chosen by the students from all over the world. The educative university process requires changes under the conditions that are dictated by the modern employment market. The employers want today's technical university graduate not to be just a highly qualified specialist, but also a person who has a set of additional professional qualities such as to be a critical thinker and self-organized, to have the ability to analyze, and to be able for self-education. The modern engineering employment market assumes the maintaining communication with representatives of the international scientific and technical community around the world. Therefore, today the foreign language teaching is becoming one of the main directions in training students of technical professions.

The appearance of the modern science “neuropedagogy”, which is based on the principles of neurobiology, pedagogy, psychology and didactics, encouraged for the development of new methods and techniques of teaching based on new knowledge about the processes occurring in the students' brain. One of the components of neuropedagogy is neurodidactics. The principles of neurodidactics were formulated by German scientists R. Caine and G. Caine back in 1990. The principles not only haven't

lost their topicality so far, but also served as the methodological basis for the creation of foreign languages textbooks for adults.

So what do these principles declare, and how does their usage promote the foreign language competence for the students of technical professions? From the perspective of teaching foreign languages at non-linguistic universities, the problem of the learning process organization to the profession-oriented approach is clearly visible. The profession-oriented approach in its turn should be aimed at the qualitative changes in the system of a professional and foreign-language communicative competence formation, taking into account the individual capabilities and students abilities [2, c. 234].

Learning environments and experiences must be designed so that they both treat everyone equally and at the same time, help individuals to capitalize on their own strengths and overcome their own weaknesses [3]. This statement empowers to consider that without the realization of one of the main principles of neurodidactics, which states that “Each brain is uniquely organized”, the successful organization of the educational process is impossible.

Not least important neurodidactics principle is one that declares: “The brain/mind is social”. People are born with a “contact urge”. Recent research on mirror neurons confirms that the social nature of human beings is grounded in biology. So the brain/mind is designed to learn by imitation and from the modeling [3].

Therefore, the learning process must take into account the students' social needs, their interests, formed from their future profession peculiarities, providing students with a high level of foreign language proficiency within a narrow profile [1, c. 66]. It is very important to put in place the forms of training focused on the professional students' activities: the creation of electronic textbooks, audio files, the usage of distance learning sources and language tests.

It is a known fact that a positive classroom atmosphere, showing respect and friendly attitude towards students, providing positive motivation for studying a foreign language – is essential for students to learn and develop. However, not everyone knows that these statements are neurodidactics principles, and not all teachers give them due

consideration. Usage of different methods, choosing the modern materials relevant to the students' future profession, can help a teacher to implement these principles and turn a classroom into a positive learning environment.

We cannot but mention about the principle that says “the search for meaning occurs through patterning”. The brain/mind organized all experience into pattern, and even tends to invent patterns or fill in information to make experience meaningful. So meaning is grounded in how things are connected with each other [3]. Our brain works by neural networks so that the acquired information, experiences, pictures are perceived and processed, and afterwards either create new structures or the incoming impulses connect to the existing structures. With frequent repeating of certain structures or patterns, brain classifies this sample as important. Thus, the usage of these processes by repeating lexical and grammatical patterns is the main task in the educative process.

Based on the above mentioned statements it is considered that the implementation of modern approaches and techniques, in particular the usage of research results in the field of neurodidactics, the application of its principles, has a positive effect on realizing the educational process in the conditions of modern scientific and technological progress. This forms students' professional communication skills, which significantly expands the possibilities of building international scientific and business contacts as well as promotes the career growth.

References:

1. Качалов Н.А., Сидоренко Т.В. Профессионально ориентированное обучение иностранному языку как основа формирования профессиональных умений студентов неязыкового ВУЗа / Николай Александрович Качалов, Татьяна Валерьевна Сидоренко // Вестник Вятского государственного гуманитарного университета. – [Электронный ресурс] – 2010. – Вып. 3(3). – С. 64-69. – Режим доступа: <http://cyberleninka.ru/article/n/professionalno-orientirovannoe-obuchenie-inostrannomu-yazyku-kak-osnova-formirovaniya-professionalnyh-umeniy-studentov-neyazykovogo>
2. Чорна О.О. Особливості та практика формування іншомовної комунікативної компетентності студентів технічних спеціальностей / Олена Чорна // Викладання мов у вищих навчальних закладах освіти на сучасному етапі. Міжпредметні зв'язки. Наукові дослідження. Досвід. Пошуки. –

[Электронный ресурс] – 2013. – Вып. 22. – С. 230-237. – Режим доступа:
http://nbuv.gov.ua/UJRN/vmvn_2013_22_32

3. Caine G., Caine R. Overview of the Systems Principles of Natural Learning. [Electronic resource] / Geoffrey Caine, Renate Caine // Cainelearning.com. – Electronic data. – Mode of access: World Wide Web: www.cainelearning.com. (viewed on March 17, 2017). – Title from the screen.