FORMATION OF MEDICAL STUDENT PROFESSIONAL COMPETENCE BY MEANS OF COOPERATIVE LEARNING OF THE ENGLISH LANGUAGE

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Abstract. The article focuses on the topicality of cooperative language learning for medical student professional knowledge and expertise. These techniques meet main aims in the process of learning: team-player professional education and his mastering a great amount of information. The points describe up-to-date techniques of cooperative learning and teaching.

Keywords: professional competence, cooperative learning, cooperative structures, positive interdependence, individual accountability.

Introduction

Dynamic reorganization processes in modern Ukrainian society cause the need reform the education in general and medical education in particular. The need to achieve global standards encourages us to reorient education from the simple accumulation of diverse knowledge to the attainment of relevant professional competences that will enable professionals to navigate the endless vast flow of information for solving specific practical problems that arise in the course of professional activities.

Foreign language as a means of communication is one of the most important tools to achieve the priority objectives for the education of medical students, namely to prepare a highly competent expert with the necessary knowledge and practical skills ready for professional growth, self-education and self-improvement. In the modern world one of the conditions of professional competence is the mobility of a specialist. After all, the reorientation of the concept of education "for life" on the concept of life-long education is happening today, that involves the formation of such competences that will ensure the acquisition of abilities necessary in the information society. It requires implementation of innovative techniques in the learning process of medical students.

Quite obvious is the fact that professional mobility is provided by the ability to solve everyday and professional problems, the ability to speak foreign languages and master new information technologies. Such demands are made by the employer to the hired specialist, and the level of compliance of individual characteristics and expectations of the employer and society is a key indicator of competence.

Implementation resources of the cooperative learning for the achievement of professional competence by the medical students

Both foreign and domestic researchers have started not only to study competence, allocating between 3 and 39 of its species, but also to build education, viewing its formation as the final results of this process. The Council of Europe have identified an indicative list of key competencies for different types of activities with detailed explanation of each: to examine, to search, to think, to cooperate, to work, to adapt (osvita.ua). A. Markova considers competence as "the set of individual characteristics and ability to perform certain labour functions" (Markova, 1996). In the research the scientist identifies the following types of professional competence: technical competence, social competence, personal competence, individual competence (Markova, 1996). S. Levkivska defines the components of professional competence of graduate of secondary school, which are invariant for nurses. They are social competence, cultural competence, functional (activity) competence, motivational competence (Levkivska, 2014).

In the content of formation of medical student competence, we believe it is necessary to provide for the acquisition of communicative, information and communication, healthcare, socio-labour, socio−cultural, educational and basic, special (professional) competence. In the English classes, the actualization of all these competencies is realized through practicing the four basic types of language skills: listening, speaking, reading and writing.

Communicative competence is practiced in all the English classes from the study of the comprehensive education themes to in-class and out-of-class work on professionally oriented themes. Examples include dialogues "expert - patient" pronounced by the students who are offered the most important professional vocabulary from the topics, grammatical structures, speech patterns. Tasks for testing writing skills, for example writing e-mails to a friend about the duties of a nurse (paramedic, midwife, technician), actualizes information and communication competence. You can also invite the students to simulate a professional situation about an emergency at the hospital, sending a message to the imaginary colleague using SMS language. In this case, the students work through a socio-cultural competence. Healthcare competence can be realised in the form of dialogues, tests, texts with fill-in-the-blanks, debating points. The topics are ranged from healthy living to more specialized relevant topics on tuberculosis, HIV / AIDS, etc. Tasks for testing different language skills: listening, reading, writing and oral speech will help to form the social and labour competence. Listening on the topic of employment in the hospital with different levels of comprehension tasks will allow students to imagine the situation with personal participation, understand peculiarities of the behavior during the interview. The form of the presentation on the topic can help them see and understand the structure of the hospital. Well-chosen lexical and grammatical exercises implement the communicative competence. Professional competence is realized by using tables, figures, films in English, working on specially selected texts and lexical exercises with specific terminology. Reports and presentations prepared by the students ensure the implementation of the base (training) competence.

All four types of language skills can be practiced by using cooperative method, which is build upon the idea that learning language should be based on interaction and cooperation. It is best to introduce in the groups of students who work on tasks together to achieve a common unifying purpose. It should also be noted that in our time of high technology "specialist-loner" who has universal knowledge in a wide field (Philology, Mathematics, Physics, Natural Sciences, etc.), defeats to another specialist, who can be considered a "team

player." He usually has narrower knowledge, but the ability to collaborate allows "team players" work together to achieve significant progress. An example of such work can serve co-working centers, which strive to unite like-minded people around the world, creating a new product or service.

The reform in education, which is now being hold by the Ministry of education of Ukraine, confirms the abovementioned. Lilia Hrynevych in his interview to the public television claims the need for a new meaning and aims of education, when the competence-based approach has a leading role. The list of competencies includes not only Foreign Languages, Mathematics, Natural Sciences. "They are entrepreneurship, financial literacy, ability to work in a team"**"** (Hrynevych, 2016).

Psychological reason for the promotion of co-operative methods is the fact that the reading and understanding large amount of information becomes a problem for the young generation. It forces them to choose the short story between a novel and a short story, the comics between a narrative and a comics, the TV program between a comics a TV program, and the blog between a TV program and a blog. The problem with the perception of information emerged with the advent of social networking, aimed just sharing information, not opinions. The article "The Internet and the degradation of the brain" (nk.org.ua, 2016) said that even the blog-posts sized more than three or four paragraphs seem too difficult and uninteresting to read to an average user of the Internet. The phrase: "too many letters – I can't manage with it" has become familiar for lots of people (nk.org.ua, 2016). This issue deserves a separate and detailed study. The teachers should take this issue into account.

We think that cooperative learning allows to solve the problem of assimilation large amount of information, dividing it into parts. The tasks "teaching through learning" " allow to develop communication skills, the aptitudes to understand and explain the subject. It is extremely important for the oral speech training in combination with the other activities in professional foreign language classes for medical students.

The concept of cooperative learning differs from individualized and competitive approaches. The students in the team work together and are individually responsible for the result. The success of one student is associated with the success of the other and vice versa. The cooperative approach requires from the teacher to provide students with materials that exclude the possibility to work independently and ensure simultaneous active participation of most students in the learning process. Essential elements of cooperative learning have been already named: positive interdependence, individual accountability, group processing, social interaction skills, face-to-face interaction (Kagan, 1997).

The prerequisite for the organization of classes is to organize learning environment. The standard arrangement of desks in rows does not allow students to cooperate effectively; therefore round tables are better for cooperative learning. You can also use regular desks arranging them so that the students could sit close enough to each other to cooperate. Desks can be combined for two, three or four teams of students. Depending on the requirements of the teacher it can be fixed or replaceable arrangement. The teacher can make students change the location of their desks for more standard at the appropriate time ("desk switch") (Johnson, 1998).

The next step for the organization of cooperative training process is the teaming-up of the students. According to cooperative learning there are two main types of teams: formal (permanent) cooperative groups, informal (situational, interest, work) cooperative group. Formal groups are organized for the long period of time: several classes, weeks or even a term. Informal cooperative groups are united with students who have common interests for

specific work, for example, project. The teacher can use different types of grouping (flexible grouping) in one class period to achieve the strategic goals (Marzano, 1997).

There are different methods of cooperative group forming: random and purposive. For the reason that the students of the medical colleges have different levels of foreign language knowledge, we consider it necessary to use the purposive forming of cooperative groups in the Professional English classrooms, as the correct formation of the team is crucial for the management of the educational process. Teams should be evenly composed of students of different English language levels. It is therefore necessary to differentiate students with high, medium and low level of knowledge into three groups, uniting them in such a way: there should be one student with high and low levels of English and two students with intermediate level in each cooperative team. Of course, this is perfect condition, but the teacher's task is to implement the cooperative method in practice, based on the true-life conditions.

One of the main principles of cooperative learning is positive interdependence of the students in teams, which means that they need to work together to complete the job successfully. The impossibility or difficulty of performing the task independently means that the principle of interdependence fulfills. A variety of techniques can help to implement this principle: "resource interdependence", "role interdependence" "awards interdependence", "task interdependence" (Kagan,1997). First, you should limit the number of educational materials in the team to cause the need for cooperation. Each team needs to be provided by only one copy of the types of tasks: text for reading, exercises to perform lexical and grammatical material, vocabulary, project works. Role interdependence works on the concept of "division of labour". Each team member must perform a separate task: to find the meaning of the words in the text; form word combinations, explain grammar rules and so on. The fulfillment of these roles and tasks must be important for all team members to achieve a common goal. Sometimes the teacher can "reward" students for successfully completed task to enhance motivation. It is essential that practice to reward students must be infrequent and the team must be awarded, not the individual student. Each team should have the opportunity to compete for the award, and it is necessary to develop equitable criteria: speed, quantity and quality of the performance. Task interdependence is achieved by the submission of a common final product which must be presented for the assessment, for example, single project from one team.

The second principle of cooperative learning is individual accountability. There should not be an individual leader who carries the group. The cooperative group differs from simple group work in such a way. Each member of the cooperative team must demonstrate his own skills and have the confirmation of his contribution. "Equal participation" is an important basis for individual responsibility (Marzano, 1997). The teacher should cultivate the social qualities of a responsible "citizen" in each member of a cooperative team. These qualities include equal participation, turning, full accomplishment of the tasks, responsibility, generating ideas. The teacher must create a private key to verify the individual contribution of each student in the team. There can be a technique of "coding". The easiest way to do this is to provide each student in the team with a pencil, pen or marker of different colour. Working on a single sheet of paper with their own pencils, students automatically demonstrate personal contribution in a common goal. There are also traditional techniques to estimate the knowledge of each student: tests and control works that can be checked by the teacher or students of one or the other team.

The third principle of cooperative learning is class processing (students' reflection) as one of the main stages of the lesson, which demonstrates the higher level of development of

medical students – to think about the level of their own thinking, the ability to learn" (Kagan,1997). To implement class processing the teacher must make a lesson plan, or otherwise it will just be forgotten in a dynamic process during the class work. Questions prepared in advance are a prerequisite for the implementation of students' reflection. Each team member should be given the opportunity to speak. It is easy to take care about it with a few techniques that are variants of "open mike". A student who begins to speak gets a "microphone" (students can do it themselves), or puts on the table a "chip" of a chosen colour. According to the situation, each student may have one or two coloured chips of the same colour. So the teacher is sure that all students had the opportunity to express their own opinions.

Another principle of cooperative learning is having the skills of social interaction. The help of "partner" (team member), classmates in the regular class will be called "cheating", a dishonest fulfillment of the task. In the cooperative class the support of a team member is a necessary element of learning. Social skills include: basic interaction skills (self-control, movement without unnecessary noise, having own place, sitting with the group, staying in the group, talking quietly), individual attitude and skills (to accept different opinions calmly, to understand the value of each person, to control anger, etc.), skills of team interaction (active listening, asking for different opinions, criticize ideas, not people...), skills of team productivity (brainstorming, the accuracy of the statements, common planning...) (Marzano, 1997). A complete list of social skills is presented in "Measurement of learning" (Marzano, 1997).

The fifth important principle of cooperative learning is the interaction "face-to-face", which means working close enough to each other to use one instance of the task, to understand each other talking quietly so as not to disturb the other teams. This principle is achieved by the organizing the workplace in a way to avoid a large space between team members. In the process of creating the theory and practice of cooperative learning scientists have developed a special cooperative structures which are used in the methodology of cooperative learning in general and language learning in particular. The most common are "Think – Pair – Share" and variations of this structure; "Round Table" with variations; "Corners"; "Jigsaw, Expert Jigsaw", "Numbered-Heads-Together", "Mix and Match", etc. (Johnson, 1998).

The first structure "Think –Pair – Share" is the most suitable for medical student training writing and speaking. The rule of this structure is on the following: the teacher asks questions and gives students "think time". Then, using the technique of "random call", the teacher asks the students to exchange opinions in pairs, then share their thoughts with the entire audience. Students can also share their thoughts with the team first ("Think - Square - Share"), or to write their thoughts on a separate sheet ("Write – Pair - Share"). So, mastering the topic "The Impact of weather on a person's health and mood" the students of specialty "Laboratory Diagnostics" can be offered the question "What disease is called "seasonal?", "What are the causes and symptoms of Seasonal Affective Disorders?", "List the methods of treatment of Seasonal Affective Disorders" etc. The specified structure can be diversified by other teaching techniques, such as "associative flower." Working on the vocabulary of the topic, you can offer the students a key concept ("SAD"), asking to create the petals of a flower (pointing the minimum quantity), then act according to the specified structure. The team, having the largest number of petals receives the highest points. This task should be limited in time.

The structure "Round Table" also meets the needs of training of writing skills. The teacher asks questions, calls the student (name or number), which writes the response. And then the first student passes the sheet to the second and so on in turn. For example, take the topic "The duties of a laboratory assistant" for the third year students of the specialty "Laboratory Diagnostics". After reading the text, you can give the students a task to list the duties of a lab assistant in the laboratory. Everyone should write down one duty in turn. The sheet of paper goes around once or several times in accordance with the number of responsibilities of the lab technician or students in the team. Students can also work in pairs ("Rally Table"), or orally ("Round Robin"). Using this structure you can also master lexical and grammatical topics. While studying the lexical topic "Duties of the Technician" students are encouraged to repeat grammar material "Future Continuous Tense". You can offer the students a word or phrase on the topic and ask them to form sentences in Future Continuous Tense in turns, when each student must add only one word. Take care that the sheet goes around the table twice. Students can work on this task in pairs for a specified period of time. Offering the task you should remember that students must work with coloured pencils for the assessment of personal contribution. Both the first and second structures can be diversified by the technique "Art Gallery" when students are offered photos, images, graphics for titles and explanations of certain material (lexical or grammatical); or "Knowledge of "Taystr", when each team must fill the "taystr" (Hutsul bag): names, concepts, terms of the topic that are being studied. The winner is the team with the largest quantity of words...

The cooperative structure "Corners" should be used for training of dialogue speech skills, when students choose one of four topics, or answers to the questions and create dialogues on the topics in pairs. So you can offer students to make up dialogues "Patient – Lab assistant" when they learn the theme "Types of lab tests". Then pairs of students are transformed in groups of four people and should reproduce the direct speech in the form of the indirect speech sentences. Thus listening skills, grammar and communicative skills are comprehensively practiced.

The structure "Jigsaw" is universal, in our opinion. It can be used for all kinds of language activity. Dividing the text into parts (according to the number of students) the teacher can give the task to read and understand the text and then answer the questions of the members of the team (question can be prepared by the students or the teacher in advance). The task for all team members is to know the contents of the whole text. The teacher chooses the speaker of the team and controls the fulfillment of the task. Students can work in pairs when they need to fill in the gaps which are different for each student of the pair. The students should formulate the questions (preferably in writing) to the partner. At the same time grammar skills and dialogic speech are being trained. The students can train listening comprehension skills when each team member needs to understand specific information in the recording, and then all the students have to reproduce all the content of the information performed.

"Numbered Heads Together" is best suited for the performance of "case" tasks. Students must know the vocabulary on the topic and have intermediate grammar skills. This structure is good for the revision of the material before the test or independent work. The specified structure can be verified by the teaching technique "find the error", offering the students a program text that contains lexical or grammatical errors. Any student from the team must not only point the error but explain the rule that is violated. Optionally the teacher requires forming new examples.

The structure "Mix and Match" is offered to practice vocabulary and grammar points. The material is divided into 2-4 parts, written on separate cards and placed in the container. Each student chooses a card without reading the information. After all students have chosen a card, the teacher gives a command to exchange the cards. Students stop sharing after the signal "stop". After the signal "match" the students have to find part of the statement which are lexically and grammatically matching. Then students get ready to pronounce the sentences to the entire audience. This structure is the variant of the technique "antivirus". It can be applied to the whole text when the paragraphs are in a random order and students have to restore the correct semantic order of the text, "killing the virus".

Conclusions and suggestions

Cooperative learning is extremely important for the development of professional competences in the process of learning a foreign language by medical students. The knowledge of a foreign language guarantees professional mobility of a future medical worker and develops his communication skills. The usage of cooperative structures during learning a foreign language helps to overcome the psychological barrier of a medical student towards the infinite flow of information in the modern world, forms social skills, skills of team work and motivates for further learning of a foreign language. This methodology provides the teachers with unlimited opportunities to realize their creative, methodical and scientific potential.

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