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## **INTEGRATED COGNITIVE COMPETENCIES OF MEDICAL STUDENTS THROUGH A TECHNOLOGY OF ASYNCHRONOUS LEARNING A FOREIGN LANGUAGE**

A modern university is supposed to use up-to-date pedagogies in teaching all subjects, including foreign languages, as happens in advanced institutions of higher education. Kharkiv National Medical University (KhNMU) is widely involved in innovative development, in which the department of foreign languages is skillfully functioning, constantly participating in international events and projects on implementation of modern methods, educational, methodological, or digital as well.

Being aware of the recent instructional and methodological achievements in the world strategy of teaching foreign languages, having analyzed the experience of the recent technologies implementation (D. Nuna, M. Bannert, P. Reimann, C. Brunstein, J.C. Glaser, K. Saks, A. Leijen, et al.) [1 – 4], gaining integrated cognitive competencies through innovative foreign language learning technologies, we can state that their use develops the competent cognitive skills of future specialists, in particular, medical students. As it is mentioned in a recent methodological research, "the combination of cognitive and metacognitive scaffolding accompanied with prompts is a vehicle for promoting learners' self-regulation and better learning gains" [2,155].

One of the instruction options is distance learning, the technologies of which have been mastered and implemented in KhNMU education. One of the available options is asynchronous learning, which we offered under certain

circumstances, considering asynchronous learning as an opportunity that is given to students at their discretion to complete the tasks provided on the Moodle distance education platform within a specified time.

Integrated technology-enhanced student self-regulated tasks into university foreign language course allowed us to make some remarks. Digital online opportunities somewhat have changed the instruction: student autonomy, student-centered learning, teacher-student communication. A higher level of mastery of the cognitive activity skills is provided by the opportunity to go through a personally defined educational trajectory, using interactive options on the path of mental development, completing tasks up to better performance. Considering the students' learning needs is a mainstream of teaching languages for specific purpose, therefore the procedure of needs analysis is a general practice at foreign languages department.

With the purpose to assess the students' attitude to asynchronous learning and their understanding of the role of this teaching modality in learning a foreign language, we conducted an anonymous online survey of 280 1<sup>st</sup> and 2<sup>nd</sup> year students of the Faculties of Medicine and Faculty of Dentistry who were involved in asynchronous learning, of them 97.5% with the use of KhNMU Moodle distance learning platform.

The received data about pre- and in-university asynchronous mode experience were compared. More than half (56.8%) students had an experience of studying a foreign language in an asynchronous mode before entering university, of them 27.9% were completely satisfied with the previous experience, 40% - in part; 32.1% were not satisfied with their previous experience. Of the surveyed students, 65.7% were satisfied with the organization of asynchronous learning at Foreign languages department, 25% could not define their attitude, while 9.3% were dissatisfied. Notable, that answering the question 'Has anything changed for you since the start of asynchronous classes in a foreign language?', the students perceive the offered asynchronous learning as one of the options for their education, that is 62.9% reported that 'there is a certain specificity, but not much at

all which changed', 11.1 % believe that 'nothing has changed', and 26.1% said that 'everything has changed in their approach to education'.

For 42.1% of the students asynchronous learning was rather time consuming, they admitted that they had to spend more time working in this regimen, while only 15.7% replied that they had to spend less time learning a foreign language in this format.

When answering the question 'What difficulties have you encountered due to the independent performance of tasks in a foreign language during asynchronous learning?', 13.9% students denied any difficulties, which is related to the number of students who spent less time working in an asynchronous mode. The majority of the students reported technical problems. The issues concerning other than technical problems were the following: 'difficulties with the work planning and time management' (46.4%), necessity 'to consult a teacher' (15%), 'difficulties in completion the tasks' (25%), 'difficulties with assessment of the works' (18.2%), though the platforms checks the students works and shows them their mistakes. As this value is close to the number of the students feeling the need 'to consult a teacher', it can be assumed that language learners practicing asynchronous mode required feedback not only in the form of statement of the mistake but also in the form of explanation the correct choice and, perhaps reference to the additional work. However, despite the described difficulties and shortcomings, only 26.1% of the students considered this mode of learning inexpedient in the future. 60.9% noted the necessity to choose the form of learning (synchronous or asynchronous), 40.8% were for combination of both forms, 35.6% thought that asynchronous learning can be used for certain types of tasks, in particular, revision of previously studied material, vocabulary and grammar work, reading.

The students' opinions or wishes regarding the organization of asynchronous foreign language learning were as follows: 'creation of mind maps, infographics, interactive schemes to improve understanding of certain material', 'additional interactive platforms are needed to develop conversational skills'; 'asynchronous learning is an ideal solution for practice. The teacher will spend less

time checking the assignment, and the student will be able to complete the lesson when it is convenient for him', 'enhancing feedback provision through multimodal video technology', etc.

In conclusion, in the contemporary world the career of a medical practitioner implies life-long learning. The necessity to be constantly aware of the achievements of the medical science will stimulate improvement of a foreign language competency. Given the busy work schedule, a medical specialist can be forced to use different learning modalities throughout the entire work life. With this in mind, cognitive competencies of the students should be developed through self-management and self-motivation while acquiring the innovative technologies offered at a modern higher school, including in a foreign language class. "The development of autonomous or independent learners through IT-mediated support" [3, 1] at the same time developing their cognitive competencies through self-management and self-motivation in acquiring the innovative technologies offered by various modes of learning a foreign language is one of the requirements to modern higher school.

Thus, the results obtained in this survey allowed us to make changes to the instructional materials improving the quality of education and the foreign language training of future specialists.

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