

## **EXPERIENCE OF E-LEARNING DURING LOCKDOWN IN THE COURSE OF BIOCHEMISTRY FOR MEDICAL STUDENTS**

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The pandemic of Covid 2019 persuade challengers all over the world. Academia is also involved in this process however teachers and students successfully collaborate with using modern technologies, such as e-learning classes. Google class rooms are one of the most convenient and easy for using e-learning environment for both teachers and students. The evidence of using Google classes can be found in the articles published in India, Great Britain and other countries. The main goal of our investigation was studying the attitude of students to the learning process through GC in conditions of the lockdown.

At Dnipro Medical Academy classes of English students were investigated from the middle of the march till the end of the June 2020. The total number of students that taken part in the survey is equaled 200. In Google classrooms students have accessed to the materials for self-dependent preparation and lectures in the view of the Power point presentations, videos from Youtube. Tasks were organized in the form of the questions and case study questions in the printed protocols, as well in the end of the topic students answered to the MCQs in the Moodle platform. The questionnaires were created in line with the scale of S. Dash [1] with using to one question replies proposed by J.A. Krosnick with collaborators [2]: totally agree, somewhat agree, rather disagree, totally disagree, I do not know. Students answers to the 10 questions. The full version of the survey can be found in our previous publication [3].

All results were verified by Anova at 95 % and multiple regression in Statistica 13.0.

According to our investigation the acceptance to the presentations for the materials and links to YouTube videos in GC was convenient for 70% of surveyed students. That means that students can easily read presentations and watch videos. However, only 50 % of students were totally agree with the convenience of replying to the each question as well to the answering for the tasks in the protocol. However 80 % of students were totally and somewhat agree with the statements that “Use of GoogleClassroom helped in learning outside of class environment” and “Use of Google Classroom

overall enhanced my learning experience for the topics covered”. In such a way studying in the GCs makes a valuable contribution in the biochemical education of the medical students.

The most challenging question was the issue if the use of GC on the laptop was easier than on phone. Opinions were divided between totally agree, somewhat agree and I do not know in the next way 40 %, 30 % and 44 %. It can be seemed that the problem with Internet connection and other technical issues are crucial during distance education.

As a result, our preliminary research approves that Google classrooms provide students with learning and teaching information as well they increase their access to the materials. The main problems occur with accessibility to the investigating learning managing system and with presentation of the studying materials. The currently obtained results with a bigger selection of students show the same results as for the less students, which was hold by us for one group of English students.

### **References**

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2. Krosnick, J. A., Holbrook, A. L., Berent, M. K., Carson, R. T., Hanemann, W. M. et al. The impact of “no opinion” response options on data quality: non-attitude reduction or an invitation to satisfice? / Public Opinion Quarterly. – 2002. 66, 371-403.
3. Maslak G.S., Volodarets S.O., Chernousova N.M., Savchenko A.V. Google classroom using experience in the studying process at biochemistry and medical chemistry department of Dnipro state medical academy in COVID-2019 lockdown. Proceedings of the Second International Scientific Conference Social Sciences and Humanities Research and Innovative Educational Activities (Dnipro, June 26-27 2020). 278-280.