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Blahun S., Naumenko O., Stuchynska N., Lytvynenko N.**THE USE OF MODERN TECHNOLOGIES AND WEB TOOLS
FOR ORGANIZING DISTANCE LEARNING AT MEDICAL UNIVERSITIES**

The article aims at evaluating the effectiveness of distance learning supported with the use of modern technologies and web tools for practical classes in learning the discipline “The Latin language and medical terminology” at medical universities, working with foreign students.

Modern technologies and web tools for organizing distance learning have been analyzed at every stage of the practical class: the preparatory stage, the main stage and the final stage of practical class. Their didactic purpose has been determined: at the preparatory stage: – to transfer and present theoretical material; – to give useful educational tips; – to check the initial level of knowledge; – to motivate students for taking the active role in studying; at the main stage: – to present educational information in the interactive way; – to do practical training in a real-time interaction, asking and answering questions; and at the final stage: – to sum up the topic of the lesson; – to control and evaluate students’ knowledge.

The comparison of distribution of students’ achievements of the discipline “The Latin language and medical terminology” during traditional (in 2018-2019 studying year) and distance learning (in 2020-2021) has been conducted. Research has shown that the use of modern technologies and web-tools for organizing distance learning provides the same academic performance of the foreign students as they are obtained during traditional learning.

The disadvantages of distance learning can be seen in the bad quality of internet connection, the technical features of computers and mobile devices can be insufficient, gadgets can be broken or not functioning properly.

However, the advantages of the use of modern technologies and web tools for practical classes outweigh the disadvantages, furthermore the distance learning helps foreign students get knowledge at the qualified level during the Covid-2019 pandemic.

Keywords: *distance learning, web tool, LIKAR_NMU platform, practical class, web-conferencing, foreign students.*

(статтю подано мовою оригіналу)

The Covid-2019 pandemic has changed the way of traditional learning greatly. Modern technologies and web tools for organizing distance learning are being investigated by different researches, for example the works of Weidlich, J. and Bastiaens [7] dwelt on the impact of transactional distance on satisfaction in online distance learning; T. J. Puspitasari, K. A. and Oetoyo, B. [3] highlighted the role of open and distance learning system on the academic success of the students; Tkachuk V., Yechkalo Y., Semerikov S., Kislova M. and Hladyr Y [6] investigated ICT in educational process and scientific research. Sergienko V. P., Franchuk V. M., Kuhar L. O., Galitskiy O. V., and Mikitenko P. V. [4] comprehensively studied the establishment of control tests for the assessment of students’ achievements in distance learning. Blahun S. S. and Stuchynska N. V. [1], Lytvynenko N. P. and Misnyk N. V. [2] carried out the necessity of the use of

modern information technologies and learning tools in educational process for the formation of professional terminological competence. Stuchynska N. V., Belous I. V. and Mykytenko P. V. [5] dwelt on the use of modern cloud services at medical universities.

However, the effectiveness of modern technologies for distance learning at medical universities, which train foreign students in the discipline "The Latin language and medical terminology" has not been studied yet.

The aim of our research is to study the effectiveness of distance learning during practical class with foreign (English-speaking) students at medical university. With regard to the aim of our research, the following tasks were formulated:

– to analyze the modern technologies and web tools for distance learning and describe their use at practical class in "The Latin language and medical terminology";

– to assess the effectiveness of distance learning estimating changes in the distribution of students' achievements of the discipline "The Latin language and medical terminology" during traditional (2018-2019) and distance learning (2020-2021).

There is the difference between the structure of a lecture and practical class in the process of learning Latin and medical terminology. That fact must be considered in the organization of distance learning. The practical class consists of the preparatory stage, the main stage and the final stage. We analyze the modern technologies and web tools for each stage according to their didactic purpose:

1) *The preparatory stage*: the combination of e-learning and mobile learning, LIKAR_NMU platform, groups created in WhatsApp or Telegram, different mobile applications (Kahoot! etc.). Didactic purpose: – to transfer and present theoretical material; – to give useful educational tips; – to check the initial level of knowledge; – to motivate students for taking the active role in studying.

At LIKAR_NMU platform students have the access to the theoretical materials in .pptx or .doc formats and can use them at any time or download the folder easily (Picture1).

2) *The main stage*: web-conferencing using Zoom application, Viber and Google Meet, learning services: Bookwidgets, Prezi, EdPuzzle, VideoNotes and Blendspace. Didactic purpose: – to present educational information in the interactive way (using interactive whiteboard, screen, presentations and comments during the web-conferencing); – to do practical training in a real-time interaction, asking and answering questions (using option "raise hand", "chat" etc).

3) *The final stage*: educational learning platforms (LIKAR_NMU platform etc). Didactic purpose: – to sum up the topic of the lesson; – to control and evaluate students' knowledge.

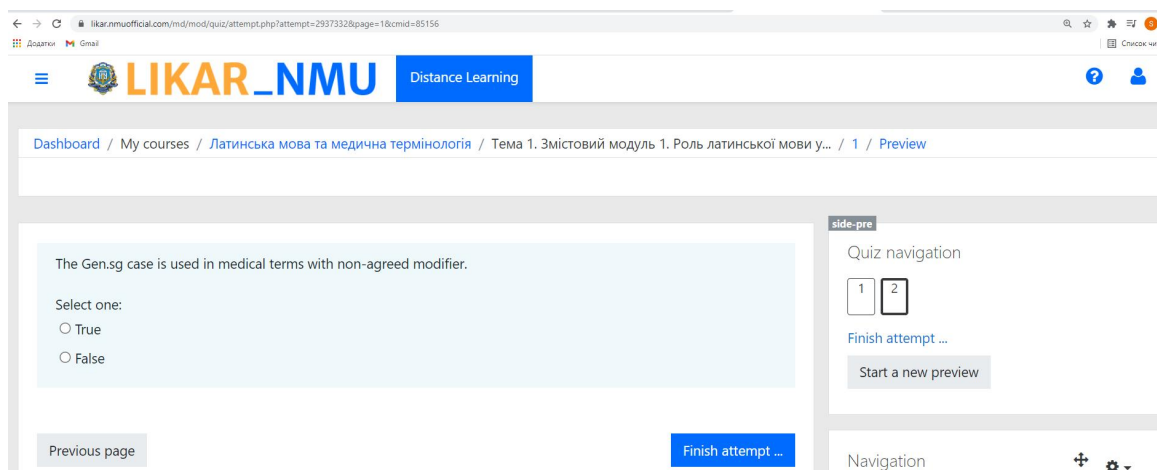
for checking and evaluating students' knowledge in medical terminology and Latin: "Essay", "True/False", "Multiple choice", "Drag and drop into text", "Matching", "Drag and drop onto image", "Drag and drop markers", "Random short-answer matching", "Numerical", and others.



Picture 1. Documents in different formats can be added to distance course at LIKAR_NMU platform and can be downloaded easily

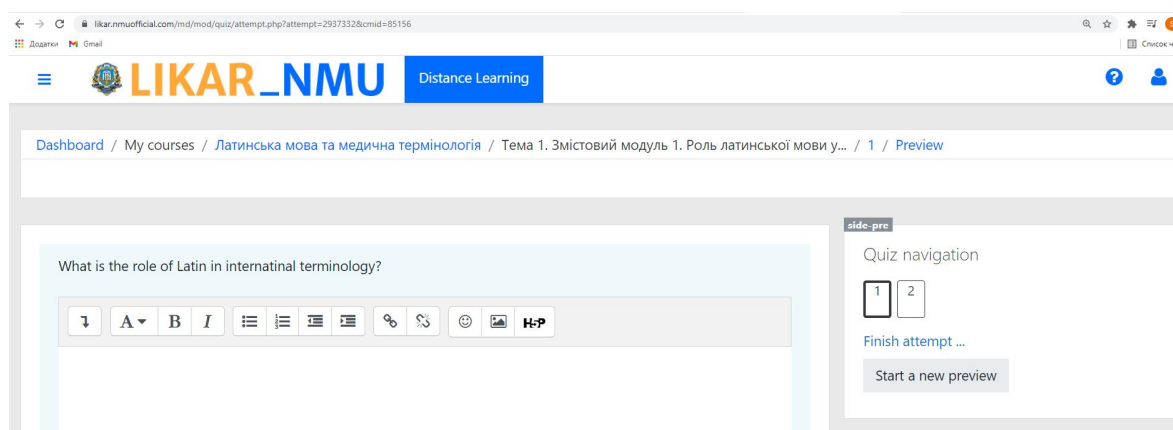
At LIKAR_NMU platform different types of tasks can be prepared and used

We have analyzed some of the question types, which are used during the distance learning of the discipline “The Latin language and medical terminology” at Medical faculty, working with foreign students. **“True/False”**: gives two choices (“True” or “False”) for an answer. E.g.: students are given the statement: “The Gen.sg. case is used in medical terms with non-agreed modifier” (Picture 2).



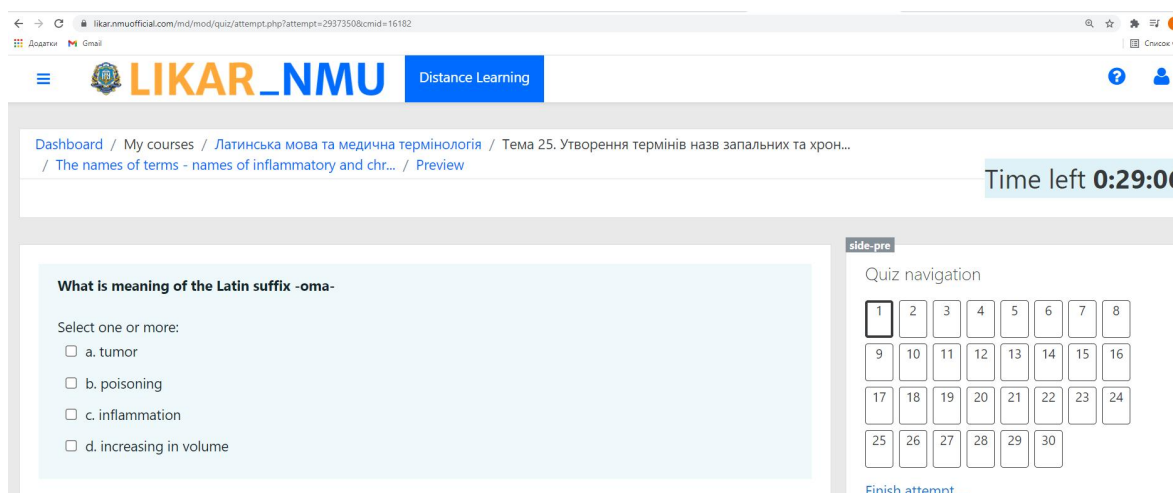
Picture 2. The example of “True/False” question type at LIKAR_NMU platform

“Essay”: answer can be given by entering the text online or uploading a file. E.g.: students should answer the question, without being given any option to choose: “What is the notion of “scientific term” and what is the role of Latin in international terminology?” (Picture 4).



Picture 3. The example of “Essay” question type at LIKAR_NMU platform

“Multiple choice”: students are given the question and options of answers, there can be more than 1 correct answer, which makes the process of evaluating students’ knowledge flexible. E.g.: students should choose the correct answer to the question but the number of correct answers is not mentioned: “Choose the correct meaning of “oma” suffix in clinical terminology?” (Picture 4).



Picture 4. The example of “Multiple choice” question type at LIKAR_NMU platform

The research has been carried out to assess the effectiveness of the distance learning for practical classes in the discipline “The Latin language and medical terminology”. The study enrolled 401 foreign students of Bogomolets National Medical University and included 2 stages that lasted from 2018-2019 studying year and 2020-2021.

In 2018-2019 studying year students had the traditional learning. Practical classes were held at classrooms. Students had to prepare theoretical material and practical work for every class. The evaluation of students’ academic performance was conducted with the help of current control test, semantic module control test and final control test. The final control test showed the following distribution of students’ achievements of the discipline “The Latin language and medical

terminology”: 5% of students demonstrated “A” ECTS grade (Excellent), 20% of students – “B” ECTS grade (Very good), 15% of students – “C” ECTS grade (Good), 41% of students – “D” ECTS grade (Satisfactory) and 19% of students – “E” ECTS grade (Sufficient). (Table 1.)

Table 1

*The distribution of students’ achievements of the discipline
“The Latin language and medical terminology” during traditional learning in 2018-2019*

ECTS GRADE	Number of students	%
A	12	5%
B	47	20%
C	36	15%
D	98	41%
E	44	19%
Total	237	100%

During 2020-2021 studying year students had the distance learning. Practical classes were supported with the help of platforms for distance learning and different web tools. Web-conferencing at Zoom was used every practical class at the preparatory and main stages of the class.

The final stage of the practical class was performed at NEURON and LIKAR_NMU distance learning platforms. The evaluation of students’ academic performance was conducted at LIKAR_NMU distance learning platform with the help of current control test, semantic module control test and final control test, which consisted of different question types.

Table 2

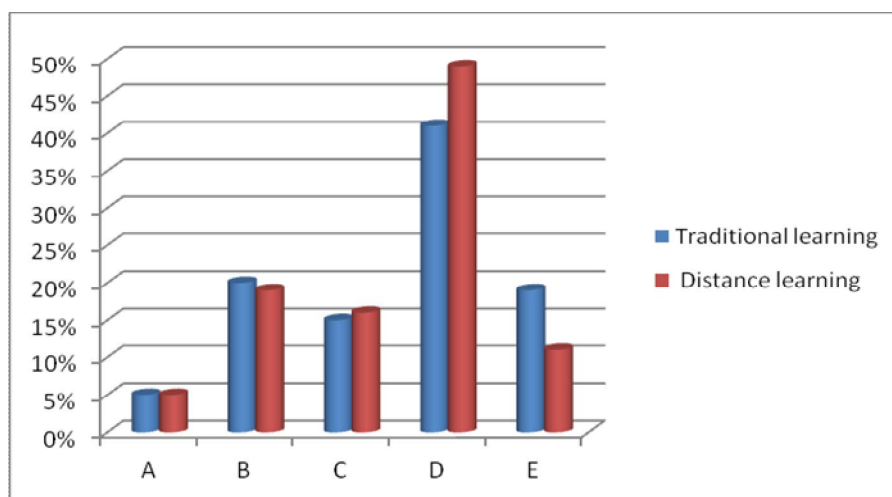
*The distribution of students’ achievements of the discipline
“The Latin language and medical terminology” during distance learning in 2020-2021*

ECTS GRADE	Number of students	%
A	9	5%
B	31	19%
C	26	16%
D	80	49%
E	18	11%
Total	164	100%

The final control test showed the following distribution of students’ achievements of the discipline “The Latin language and medical terminology”: 5% of students demonstrated “A” ECTS grade (Excellent), 19% of students – “B” ECTS grade (Very good), 16% of students – “C” ECTS grade (Good), 49% of students – “D” ECTS grade (Satisfactory) and 11% of students – “E” ECTS grade (Sufficient). (Table 2)

Comparing students’ achievements of the discipline “The Latin language and medical terminology” during traditional and distance learning the following results can be emphasized: the percentage of students with “A” ECTS grade of academic

performance stayed at the same level. The number of students with “B” ECTS grade was slightly higher during traditional learning than during distance learning (20% and 19% of students respectively). Distance learning decreased the number of students with “E” ECTS grade and increased the percentage of students with “D” and “C” ECTS grades. (Graph 1.)



YEAR	2018/2019		2020/2021	
LEARNING TYPE	Traditional		Distance	
ECTS GRADE	Number of students	%	Number of students	%
EXCELLENT	12	5%	9	5%
VERY GOOD	47	20%	31	19%
GOOD	36	15%	26	16%
SATISFACTORY	98	41%	80	49%
SUFFICIENT	44	19%	18	11%
Total	237	100%	164	100%

Graph 1. The comparison of distribution of students' achievements of the discipline "The Latin language and medical terminology" during traditional and distance learning

According to our research we can conclude that the use of modern technologies for distance learning of the discipline “The Latin language and medical terminology” at Bogomolets National Medical University, working with English-speaking groups, has shown nearly the same effectiveness as the traditional learning. Students demonstrated the high level of motivation to study the discipline during web-conferencing at Zoom, the homework was done and submitted according to all regulations; the practical class had all important stages: the preparatory stage, the main stage and the final stage. Different modern technologies and web tools have been successfully used. However, we can highlight some problems: – the bad quality of the internet connection can lead to poor speed during test performance, the video or audio connection can be disturbed etc; – computers and other devices, which are used during distance learning, can be broken or not functioning properly; – self-organization to catch the

deadline for submitting homework or tests is highly needed. The use of modern technologies during distance learning has a lot of advantages, as they help lecturer to evaluate students' achievements faster; the theoretical materials are available at distance learning platforms whenever they are needed; students can do practice performing tasks, which are available for a certain period of time. In addition to this, Covid-19 pandemic situation forced foreign students to stay at their countries, but distance learning helped them to continue their education at the qualified level.

It is necessary to conduct further research on the effectiveness of using modern technologies for distance learning at Dentistry and Pharmacy Faculties, working with English-speaking students.

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Благун С. С., Науменко О. М., Стучинська Н. В., Литвиненко Н. П. Використання сучасних технологій та веб-інструментів для організації дистанційного навчання у медичних університетах

У статті досліджується ефективність використання сучасних технологій та веб-інструментів для організації дистанційного навчання під час практичних занять із дисципліни “Латинська мова та медична термінологія” у медичних університетах, працюючи з іноземними студентами.

Сучасні технології та веб-інструменти, які можуть бути використані для організації дистанційного навчання, проаналізовано на кожному етапі практичного заняття: підготовчому, основному та заключному. Визначено їх дидактичну мету: на підготовчому етапі: – подача та виклад теоретичного матеріалу; – рекомендації для успішного навчання; – перевірка початкового рівня знань; – мотивація студентів до активної участі у навчальному процесі; на основному етапі: – виклад навчальної інформації в інтерактивній формі;

– забезпечення інтерактивності під час проведення практичних занять в режимі реального часу; і на заключному етапі: – підсумування ключових та важливих теоретичних та практичних аспектів із теми заняття; – контроль та оцінка знань студентів.

Проаналізовано академічні результати студентів із дисципліни “Латинська мова та медична термінологія” під час традиційного (у 2018-2019 рр.) та дистанційного навчання (у 2020-2021 рр.). Результати дослідження стверджують, що використання сучасних технологій та веб-інструментів для організації дистанційного навчання забезпечують такий же рівень академічної успішності іноземних студентів, як і під час традиційного навчання.

Недоліками дистанційного навчання визначено: погану якість інтернет-з'єднання, недостатні технічні характеристики комп'ютерів і мобільних пристроїв, поломка або несправність гаджетів та ін.

Обґрунтовано, що дистанційне навчання допомагає іноземним студентам отримувати знання на високому рівні під час дистанційного навчання, що було зумовлене пандемією Covid-2019.

Ключові слова: дистанційне навчання, веб-інструменти, платформа LIKAR_NMU, практичне заняття, веб-конференція, іноземні студенти.

Благун С. С., Науменко О. М., Стучинская Н. В., Литвиненко Н. П. Использование современных технологий и веб-инструментов для организации дистанционного обучения в медицинских университетах

В статье исследуется эффективность использования современных технологий и веб-инструментов для организации дистанционного обучения на практических занятиях по дисциплине “Латинский язык и медицинская терминология” в медицинских университетах, работая с иностранными студентами.

Современные технологии и веб-инструменты, которые могут использоваться для организации дистанционного обучения, проанализированы на каждом этапе практического занятия: подготовительном, основном и заключительном. Определена их дидактическая цель: на подготовительном этапе: – подача и изложение теоретического материала; – рекомендации для успешного обучения; – проверка начального уровня знаний; – мотивация студентов к активному участию в учебном процессе; на основном этапе: – изложение обучающей информации в интерактивной форме; – обеспечение интерактивности при

проведении практических занятий в режиме реального времени; и на заключительном этапе: – подведение итогов ключевых и важных теоретических и практических аспектов по теме занятия; – контроль и оценка знаний студентов.

Проанализированы академические результаты студентов по дисциплине “Латинский язык и медицинская терминология” во время традиционного (в 2018-2019 гг.) и дистанционного обучения (в 2020-2021 гг.). Результаты исследования утверждают, что использование современных технологий и веб-инструментов для организации дистанционного обучения обеспечивают такой же уровень академической успеваемости иностранных студентов, как и во время традиционного обучения.

Недостатками дистанционного обучения определены плохое качество интернет-соединения, недостаточные технические характеристики компьютеров и мобильных устройств, поломка или неисправность гаджетов и т.д.

Обосновано, что дистанционное обучение помогает иностранным студентам получать знания на высоком уровне во время дистанционного обучения, что было обусловлено пандемией Covid-2019.

Ключевые слова: дистанционное обучение, веб-инструменты, платформа LIKAR_NMU, практическое занятие, веб-конференция, иностранные студенты.

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Shcherbyna O., Semeniako I., Leontieva O.

PSYCHOLOGICAL COMFORT IN ADULT FOREIGN LANGUAGE CLASSROOM

Foreign language classes for adults are becoming more and more popular in Ukraine due to globalization, open borders and international cooperation. Nowadays people have more opportunities for efficient learning and self-fulfillment, improving and renewal of their knowledge, keeping on the top of their professional life. But some difficulties may occur in organization of adult learners' studying, such as psychological climate in the classroom, professional deformation of adult learners, stress at work, students' social and personal problems etc. Teaching at foreign language training courses, the teacher encounters groups of completely different composition. Age difference, psychological characteristics of students, occupation and work – all these factors greatly affect the attitude to learning, to cognitive activity as such, to the teacher as a carrier of certain educational stereotypes, to learner's status as a student. The important task of the teacher is to ensure a link between motivation, emotions and intellect of students working in a group. This requires considerable psychological training, since the teacher should take into account not only the presence or absence of student's motivation, but also its qualitative structure and intensity, namely, if it is external or internal motivation, or a combination of these both types, if it is expressed or not. A teacher can ensure a link between motivation, emotions and intellect of students working in the group. The division of students into four groups according to the most significant motivation types enables to set the tasks effectively, take into account driving forces of the individual, ensure maximum intellectual and emotional inclusion in the learning process. While teaching foreign languages to adults, the teacher should also take into account students' occupation, since it influences the atmosphere in the classroom in a significant way.