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EXPERIENCE IN CREATING EDUCATIONAL CONTENT FOR DISTANCE LEARNING

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Abstract

In the current conditions of the coronaviral infection pandemic, in connection with the introduction of quarantine restrictive measures and regime of self-isolation, high educational institutions of the Republic of Kazakhstan switched to a distance learning format. This article describes the experience of creating educational content for distance learning at the "Semey Medical University" of the Republic of Kazakhstan.

Key words: distance learning, educational content, IT-competencies.

Резюме

ОПЫТ СОЗДАНИЯ ОБРАЗОВАТЕЛЬНОГО КОНТЕНТА ДЛЯ ДИСТАНЦИОННОГО ОБУЧЕНИЯ

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В современных условиях пандемии коронавирусной инфекции в связи с введением карантинных ограничительных мер и режима самоизоляции высшие учебные заведения Республики Казахстан перешли на дистанционный формат обучения. В данной работе описан опыт создания образовательного контента для дистанционного обучения в «Медицинском университете Семей» Республики Казахстан.

Ключевые слова: дистанционное обучение, образовательный контент, IT-компетенции.

Түйіндеме

ҚАШЫҚТАН ОҚЫТУ ҮШІН БІЛІМ БЕРУ КОНТЕНТІН ҚҰРУ ТӘЖІРИБЕСІ

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Коронавирустық инфекция пандемиясының қазіргі заманғы жағдайында карантиндік шектеу шаралары мен өзін-өзі оқшаулау режимін енгізуге байланысты Қазақстан Республикасының жоғары оқу орындары қашықтан оқыту форматына көшті. Аталмыш жұмыста Қазақстан Республикасының "Семей медицина университетінде" қашықтан оқыту үшін білім беру контентін құру тәжірибесі сипатталған.

Түйінді сөздер: қашықтан оқыту, білім беру контенті, IT-құзыреттілігі.

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Токешева А.М., Назарова А.Р., Кайралинов Д.М., Шынгаев Т.С., Кривяков И.В. Қашықтан оқыту үшін білім беру контентін құру тәжірибесі // *Ғылым және Денсаулық сақтау*. 2020. 6 (Т.22). Б. 80-85. doi 10.34689/SH.2020.22.6.011

Many domestic and foreign high education institutions use distance technologies in the provision of educational services [1,3]. This form of education is convenient for obtaining a second high education, advanced training. Many students choose a distance learning form for their first high education. It should be noted that the content of education is preserved, as in full-time form, only the way of forming the knowledge and competencies of the student changes. In modern conditions, "COVID 19," in connection with the introduction of quarantine restrictive measures and the self-isolation regime, high educational institutions of the Republic of Kazakhstan have switched to a distance learning format.

On March 13, 2020, our university approved the "Instruction on the implementation of distance learning in the NJSC "MUS", which sets out the procedure for implementing the educational process within the framework of distance learning [2]. From March 16, 2020, students of 1-5 courses and interns of 6-7 courses quickly switched to remote online training through the automatic educational process management system KEYPS in accordance with

the current schedule of classes. For the remaining categories of students (residents, undergraduates, doctoral students), a full-time training format was retained. From the beginning of the 2020-2021 school year, interns of 6-7 courses also switched to full-time training. Currently, the rules for organizing and implementing the educational process in the context of the use of distance educational technologies are regulated by the Academic Policy of Distance Learning approved in September 2020 at the "Semey Medical University".

Distance learning is an independent student's education, for which the student himself is responsible, and it is focused on self-education. At the same time, educational content is important as a key link of distance learning technology [4], the quality of which depends on the effectiveness of the educational process. The faculty of the university carried out a huge work to create and replenish the existing electronic database of educational, methodological, reference, illustrative materials available to students in the automatic educational process management system KEYPS (Figure 1).

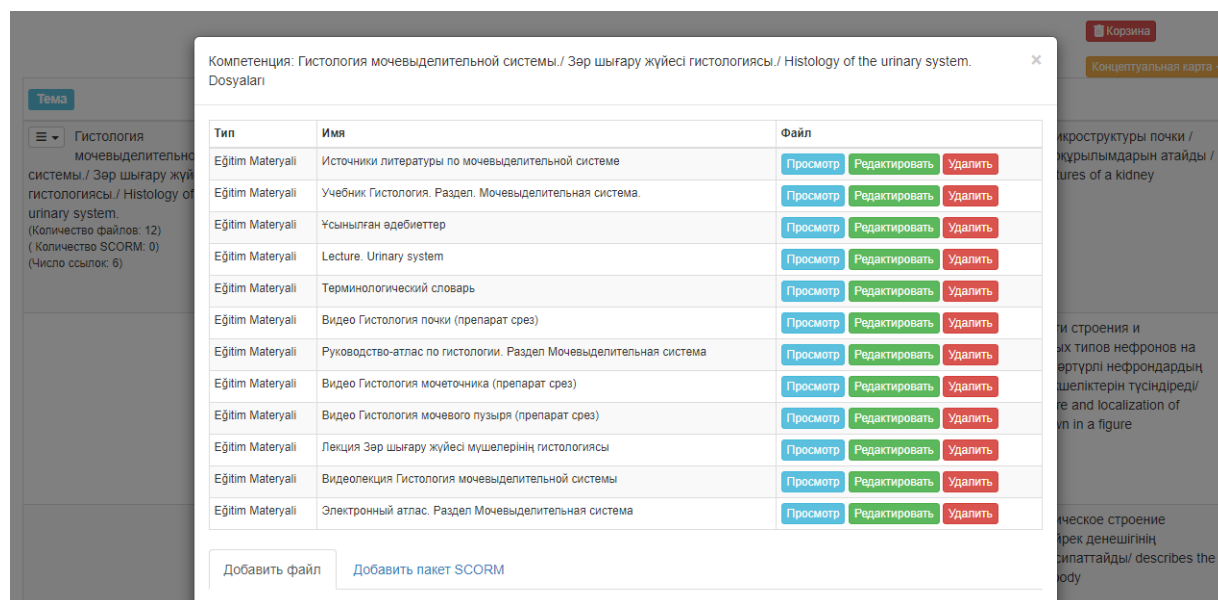


Figure 1. Electronic educational resources in the KEYPS.

It should be noted that the departments created a bank of video lectures and videos on practical skills

posted on the university's youtube channel (Figure 2, 3).

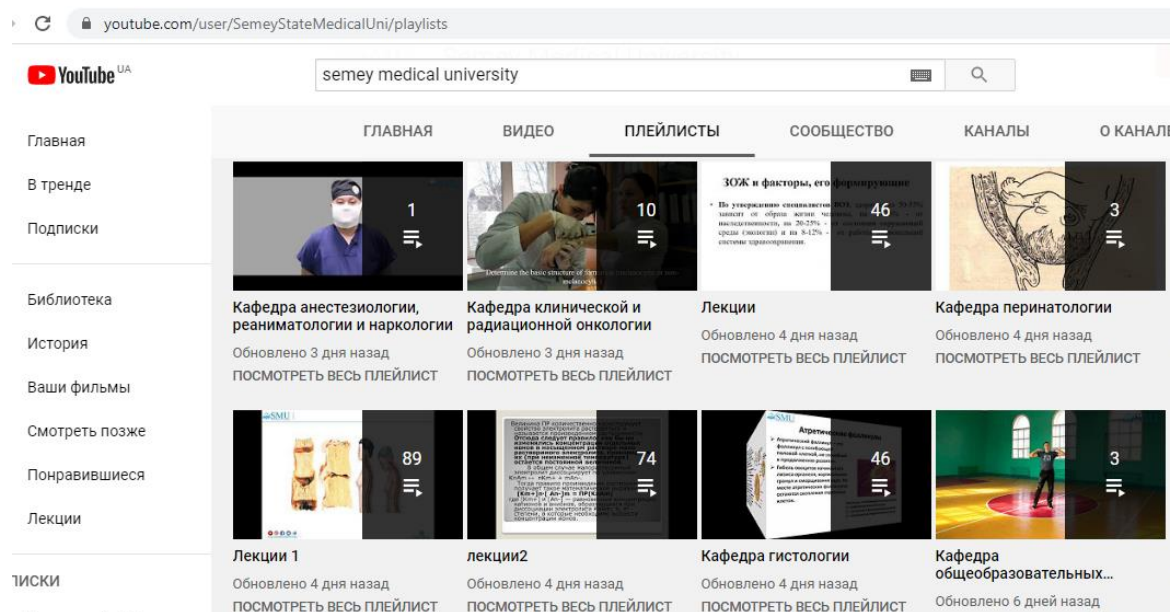


Figure 2. University YouTube Lecture Playlists.

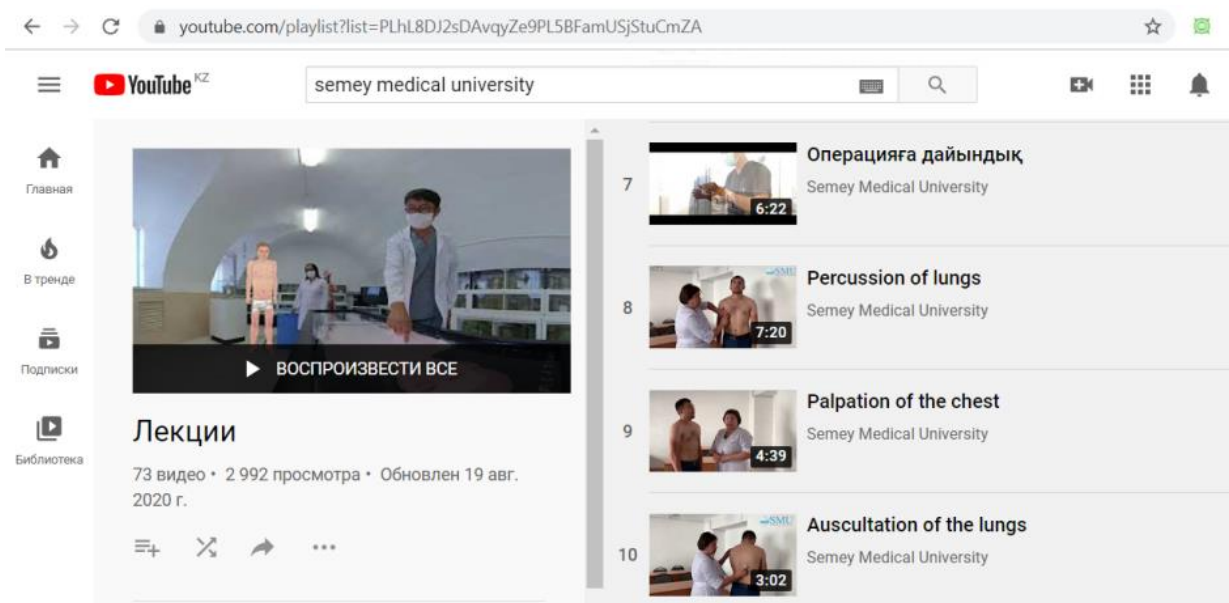


Figure 3. Practical Skills Videos on the university's YouTube channel.

Instrumentation has been created and constantly updated for formative and summative evaluation of students in the format of "multiple-choice questions (MCQ)," "multi-select questions (MSQ)," as well as "question on the formation of pairs" (Figure 4,5,6).

With the process of creating educational content for distance learning, the teaching staff was simultaneously trained to improve IT competencies. Employees of the

digital technology department recorded video instructions for registering and conducting video conferences on the "Zoom" educational platform, creating video lectures and videos on practical skills in the Captura-Portable, Bandicam program. In July 2020, the team of the Department of IT in Medicine conducted webinar "Virtual Reality and Haptic Simulation" on the "Zoom" platform (Figure 7).

Субкомпетенция: о
құрылысын микро

Вопрос :

RU: На микрофотографии надпочечника определите сетчатую зону

KZ: Бүйрек үсті безінің микросуретінен торлы аймағын анықтаңыз

EN: On the photomicrograph of the adrenal gland, determine the reticular zone



A) 5
 B) 4
 C) 3
 D) 2
 E) 1

Ақпараттың негізгі
Sorulap

Табалғандық	Дата загрузки
esheva ul	16.09.2020

Закреть

Figure 4. Test of "MSQ" format in "KEYPS"

Компетенция: объ
микроскопиялық құ

Вопрос:

RU: Определите признаки, характерные для гистологического строения органа (выберите 3 ответа)

KZ: Мүшенің гистологиялық құрылысына тән белгілерді анықтаңыз (3 жауапты таңдаңыз)

EN: Define signs specific for the histological structure of the organ (select 3 answers)



Однослойный столбчатый каемчатый эпителий в слизистой оболочке / Шырышты қабықтағы бірқабатты бағаналы жиекшелі эпителий / Simple bordered columnar epithelium in the mucous layer
 2 слоя гладкой мышечной ткани в мышечной оболочке / Бұлшық етті қабықтағы теріс салалы бұлшық етті тіннің 2 қабаты / 2 layers of smooth muscle tissue in the muscle layer
 Рыхлая волокнистая соединительная ткань, мезотелий в наружной оболочке / Сыртқы қабықтағы болбыр талшықты дәнекер тін, мезотелий / Loose fibrous connective tissue and mesothelium in the external cover
 Многослойный плоский неороговевающий эпителий в слизистой оболочке

Ақпараттың негізгі
Sorulap

Табалғандық	Дата загрузки
esheva ul	05.05.2020

Закреть

... a zone of transition of
... copic level
... ство вопросов: 0)
... ство файлов: 0)
... ство SCORM: 0)

Figure 5. Test of "MSQ" format in "KEYPS".

КЗ: У
EN: D

Операции ▾

Включить
RU: C

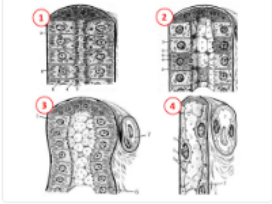
КЗ: E
EN: I

Операции ▾

Включить
RU: C

КЗ: У
EN: D

Вопрос:
RU: Определите вид почечного канальца на ультрамикроскопическом уровне
KZ: Ультрамикроскопиялық деңгейде бүйрек өзекшесінің түрін анықтаңыз
EN: Determine type of renal tubule at the ultramicroscopic level



Проксимальный каналец / Проксималды өзекше / Proximal tubule

Тонкий каналец / Жіңішке өзекше / Thin tubule

sheva	05.05.2020
sheva	04.06.2020

Figure 6. Question to Pair formation in KEYPS.

SMU SEMEY STATE MEDICAL UNIVERSITY

Очки виртуальной реальности



VR-очки – это устройство, которое создает качественную 3D картинку, отдельную для каждого глаза. При этом конструкция очков исключает попадание изображения извне и дополнительно разделяет подачу картинки перегородкой.

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Жандос Касенов
Париза Косалиева
Шунар Тагапова
Рахат Серіков Әнелі
Жанна Музауб...
НАО МУС

Figure 7. "Virtual Reality and Haptic Simulation" Webinar.

At the end of August 2020, in order to develop the professional skills and IT-competencies of teachers for the qualitative organization of the educational process as part of the implementation of the DET (distance educational technologies) by the Department of Academic Work, together with the Department of IT in Medicine and the Department of Digital Technologies, webinars were held for the faculty of the university "Organization of the educational process in the format of distance learning" (Figure 8). Based on the results of the webinar, it is planned to develop

SCORM packs in the iSpringSuite application. Also, as an initiative, university teachers create Google forms (tests, tasks with expanded answers) for students' self-monitoring. In the 2020-2021 academic year, a cycle of advanced training is planned for the faculty of the university on the module of mandatory component "Information and communication technologies" of the State Standard for Additional Education of the Republic of Kazakhstan "Teacher of Medical Organizations of Education and Science."

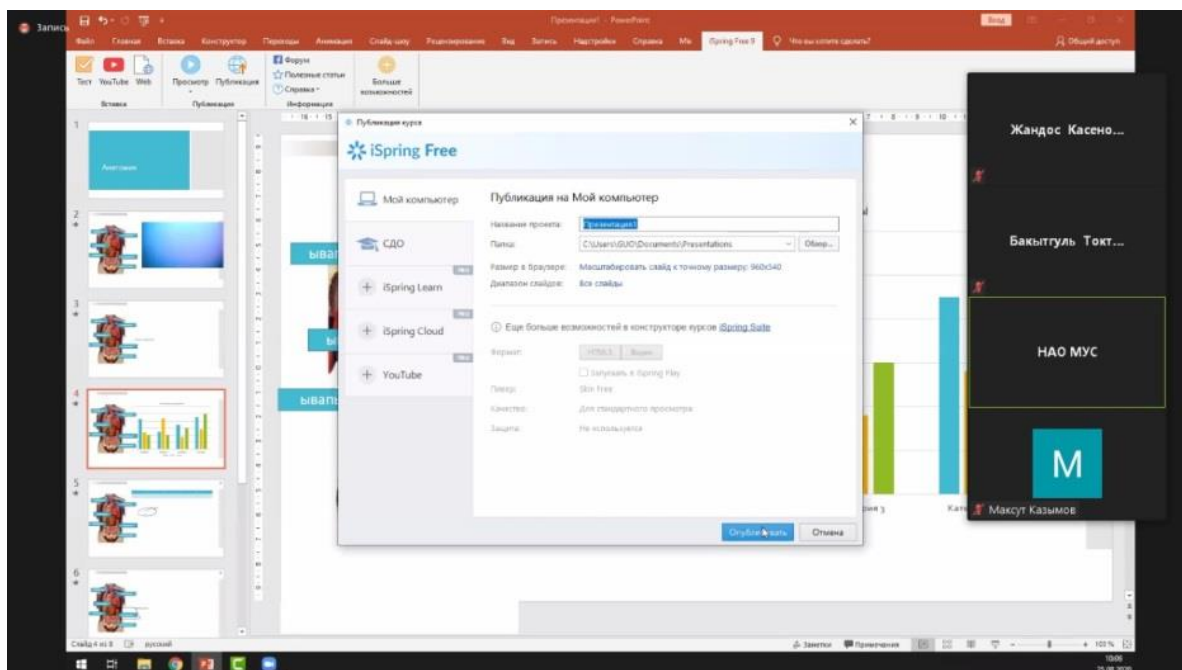


Figure 8. Webinar "Organization of the educational process in the format of distance learning".

Thus, the university departments have done a lot of work in creating educational content for distance learning. In the current world dynamics in the information space, the need for systematic updating of educational content is increasing, taking into account modern trends. In this aspect, the university continues sustained activities to update the electronic information educational environment, focused on improving the quality of the educational process in distance learning conditions and improving the IT competencies of university employees.

Contributors:

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No conflict of interest has been declared.

The authors state that this material was not previously submitted for publication in other publications.

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