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EMERGENCY DISTANCE TEACHING: CHALLENGES AND OPPORTUNITIES

Abstract

On March 2020, the World Health organization declared COVID-19 a global pandemic. Following the speed with which COVID spread to all parts of the world most governments around the world, including Kazakhstan, authorized unprecedented social containment measures to stem the tide. These measures among others required the temporary closure of educational institutions. The Caspian Public University had to switch for distance-learning to enable students to complete the 2019–2020 academic year. The unplanned, rapid, and uncertain duration of the approach presented challenges at all academic levels. This article discusses results of a survey to collect immediate data on how the rapid transition to distance learning impacted teachers and identify challenges and opportunities for further teaching.

Keywords: distance learning, distance learning technologies, online learning, teacher's key competencies

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**ЭКСТРЕННОЕ ДИСТАНЦИОННОЕ ОБУЧЕНИЕ: ПРОБЛЕМЫ И
ВОЗМОЖНОСТИ**

Аннотация

В марте 2020 года Всемирная организация здравоохранения объявила COVID-19 глобальной пандемией. Учитывая скорость, с которой COVID распространился по всем частям света, большинство правительств по всему миру, включая Казахстан, санкционировали беспрецедентные меры социального сдерживания, чтобы остановить

волну. Эти меры, среди прочего, требовали временного закрытия учебных заведений. Каспийскому государственному университету пришлось перейти на дистанционное обучение, чтобы студенты могли завершить 2019-2020 учебный год. Незапланированный, быстрый и неопределенный по продолжительности подход создавал проблемы на всех академических уровнях. В этой статье обсуждаются результаты опроса, направленного на сбор непосредственных данных о том, как быстрый переход к дистанционному обучению повлиял на учителей, и выявление проблем и возможностей для дальнейшего преподавания.

Ключевые слова: дистанционное обучение, технологии дистанционного обучения, онлайн-обучение, ключевые компетенции преподавателя

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ШҰҒЫЛ ҚАШЫҚТЫҚТАН ОҚЫТУ: ҚИЫНДЫҚТАР МЕН МҮМКІНДІКТЕР

Аңдатпа

2020 жылдың наурызында Дүниежүзілік денсаулық сақтау ұйымы COVID-19-ны жаһандық пандемия деп жариялады. COVID әлемнің барлық бөліктеріне таралу жылдамдығын ескере отырып, бүкіл әлемдегі үкіметтердің көпшілігі, соның ішінде Қазақстан да толқынды тоқтату үшін бұрын-соңды болмаған әлеуметтік тежеу шараларына рұқсат берді. Бұл шаралар, басқалармен қатар, оқу орындарын уақытша жабуды талап етті. Каспий мемлекеттік университеті Студенттер 2019-2020 оқу жылын аяқтауы үшін Қашықтықтан оқытуға көшуге мәжбүр болды. Жоспарланбаған, жылдам және белгісіз тәсіл барлық академиялық деңгейлерде қиындықтар туғызды. Бұл мақалада Қашықтықтан оқытуға жылдам көшу мұғалімдерге қалай әсер еткені және одан әрі оқытудың қиындықтары мен мүмкіндіктерін анықтау туралы тікелей деректерді жинауға бағытталған сауалнама нәтижелері талқыланады.

Түйін сөздер: қашықтықтан оқыту, қашықтықтан оқыту технологиялары, онлайн оқыту, оқытушының негізгі құзыреттері.

Introduction. The COVID-19 pandemic has created the largest disruption of education systems in history, affecting nearly 1.6 billion learners in more than 190 countries and all continents. Closures of schools and other learning spaces have impacted 94 percent of the world's student population [1], and the rapid transition to distance teaching as a part of the pandemic response has become a great challenge for the pedagogical community of all educational institutions, including higher educational institutions. The need to adapt to new, extraordinary conditions forced the accelerated use of innovative learning technologies in the mode of a continuous educational cycle.

It should be noted that theoretical and applied aspects for organizing distance learning have become subject of studies long before the start of pandemic.

The interpretation of terms "distance learning" and "distance education" was proposed by D. Keegan [2], D.R. Garrison and D. Shale [3]. In works of M.J. Rosenberg [4], M. Driscoll [5], W.K.

Horton [6], the term “e-learning” is associated with the term “web-based learning”. R.C. Schank [7] correlates e-learning with educational activities, including the use of computer networks, but separates the concepts of e-learning and distance learning. The concept of online learning precedes the emerge of the world web, however, the publications of L. Malopinsky, J. Kirkley, R. Stein, T. Duffy [8] and the American non-commercial public broadcasting service on the topic of online learning refer to materials delivered via the Internet and Intranet.

The problem of distance learning, namely its subject-matter and organization of learning based on provision of distance learning technologies, DLT, online learning, have been discussed in researches of both domestic scientists - K.A Madykhanova [9], A.I Kusainov and A.A Sharipbai [10], also expert community, analyzing the positive and negative aspects of its use [11], as well as Russian scientists - I.A. Dyakonova, O.L. Rubtsova, revealing the conditions and factors for the development of relevant competencies among teachers. [12, 13]. And, of course, a significant number of publications appeared after the end of the period of self-isolation. In these works, the experience of transition to distance learning is analyzed, and difficulties are identified as technical and technological [14, 15, 16, 17].

Distance education is a progressive type of education that allows to bring together in the learning process a geographically remote teacher, educational material and a student. It should be noted that the term "distance education" is much less common than the term "distance learning". This is largely due to the fact that the spread of distance learning technologies is much faster than the development of a legally and organizationally conditioned form of distance education. “Distance learning is learning carried out with the interaction of a teacher and students at a distance, including using information and communication technologies and telecommunications [18] which include the organization of educational process based on an online course representing a methodically sound sequence of educational materials in various forms of presentation, practical and control tasks that ensure achievement by students of the planned learning outcomes. Key to online learning is the instructional design. When designing a course, a teacher thinks through the pace of material imbibing, determines types of content, forms of information presentation, takes into account the number of future students, develops control and measuring materials, forms of interaction, types of tasks, and everything is planned - up to passing the exam and feedback.

It must be taken into account that online courses designed for the real distance learning are filmed in professional studios with a team of experts. The material in the program has been worked out in advance and verified to the word; the author of the course is supplemented by graphs, models, pictures, animation, examples, formulas, etc. Creating an online course is an art and includes a lot of work. So even if the most advanced teacher in terms of digital competencies does everything possible to transfer classes to the online environment: record several online lectures, post text materials and upload tests to the platform, a full-fledged online course may not work. Therefore, it is more correct to propose the term "forced transition to distance learning" implemented in a short time with minimal investments and resources. The uniqueness of the current situation was that most teachers did not have experience in using distance learning technologies, as well as sufficient digital competencies. But it must be borne in mind that they simply were not prepared for this. Therefore, the resourcefulness with which teachers adapted to the distance format is commendable.

It should not be denied that the rapid transition to distance learning under force majeure circumstances affected the attitude to online learning of all participants in the educational process. However, we believe, it is not entirely correct to call an unplanned transfer of the educational process to a distance format in the middle of the academic year as online learning. As noted above, the complexity is due to the fact that terms such as "e-learning", "web-based learning", "online learning" and "distance learning" are often used interchangeably.

Method

This article highlights the results of an express-survey conducted to analyze the pedagogical experience of teachers of the Department of Language Disciplines of the Caspian Public University during an emergency transfer to distance learning in spring of 2020, as well as to identify a pool of key competencies necessary for a teacher of the 21st century. It's worth noting that teachers of language disciplines (Kazakh, Russian, English, French, Chinese), as well as the department of translators, have always used technical means in the study of languages. With the advent of modern digital tools and services, the opportunities for teachers have expanded. Therefore, the transition to the distant format was much easier, because teachers of Language Disciplines always use colorful and visual educational materials, tests, audio and video recording, animation clips, and musical inclusions.

The object of the express survey was the teacher staff of the Department of Language Disciplines of the Caspian Public University, which trains bachelor students in 28 educational programs and in 11 master's programs of six accredited higher schools of the university.

The profile of respondents include as follows: total number 23 teachers, of which 87% are teachers with over than 20 years of teaching experience, 9% - from 5-10 years and 4% from 1-5 years; most of the teachers are women (96%). The study was conducted by the method of online questionnaires. The majority of questions in the survey were closed questions; respondents had to choose between certain options. However, there were also two optional open questions, which gave respondents the opportunity to report on the most important challenges encountered in light of the current crisis; these questions allowed them to identify potential opportunities or changes that they believe may impact higher education beyond the immediate emergency situation.

Results & discussion

The first question was aimed to identify whether teachers of the Language Disciplines had experience in distant leaning technologies. Since the University started providing distance learning services before the pandemic, four of 23 or 17% had experience in such work. As such, the majority of the staff was not ready for the rapid shift. They started learning technical aspects of using the platform Moodle simultaneously with students, considering that teachers should have upload all educational materials into the university database.

The purpose of the next question was to find out what tools and services teachers used at time of transition for distance learning. It should be noted that the vast majority of respondents have mastered almost all the tools and services available and acceptable for the purposes of teaching languages, which allowed teachers to continue the educational process in a distance learning environment.

- Electronic course in the university system MOODLE - 100%
- Video conferencing service Zoom and others - 100%
- Email - 100%
- Messengers Viber, WhatsApp, Telegram, etc. - 100%
- Online courses on other platforms - 56%
- Cloud storage - 47%
- Test builders – 33%
- Recording of audio lectures / video lectures - 8%

Thus, all teachers of the department managed to successfully develop and place educational materials in the university system based on the Moodle platform, 100% used video conferencing service Zoom, as well as BlueButton on the Moodle platform; they actively used (100%) messengers Viber, WhatsApp , Telegram for interaction with study groups; 56% of teachers used online courses hosted on other platforms, such as (TED; Coursera., Openlearning, TILQURAL.KZ, TILMEDIA.KZ, ABAI.INSTITUTE), 47% used cloud storage, 33% used electronic kits for tests' development; 8% - recorded audio and video lectures

In response to a question about the most convenient and useful tools and services for work, teachers named the following: email and video conferencing services Zoom (39%) and WhatsApp

messenger (37%) were ranked as first in popularity; the second place was given to e-courses in the university system Moodle (18%); and the third - to electronic tests and cloud storage (3% each, respectively). We believe that the popularity and usefulness of the Zoom service, as well as the Bluebutton service on the Moodle platform, as well as WhatsApp messenger were named as the most popular as they allowed teachers and students to communicate in a “live” manner, which is very important for all language learners.

When asked whether the experience of using distance learning and digital technologies in the educational process has been enriched, the answers of the respondents were distributed as follows: 17% of the teacher staff rated their progress in the application of DLT and digital technologies as excellent, 65% as good; and 18% - satisfactory. Thus, many of the respondents see the experience of working and teaching from distance as an important opportunity to learn from this exceptional situation.

The next question was targeted to reveal whether teachers intend using tools and services and which ones in their future work after the self-isolation period. Based on the goals and objectives of language teaching, teachers will continue using electronic tests (36%), which, in addition to their main control function, serve as a means to diagnosing difficulties of language materials and measure of effectiveness; cloud storage that allows students to record self-made videos, speeches, project work for later analysis and discussion (34%); and online courses hosted on external platforms that allow students to expand their theoretical knowledge and master language skills by listening to audio/video materials from native speakers (30%). This unplanned and unprepared experiment in distance teaching and learning has led to capacity building of staff who have learned and tested new tools and systems to enable distance teaching and learning. It is therefore possible that a shift in mindset is happening or that this experience has opened a new horizon of opportunities for teaching and learning.

One of the most important questions related to the satisfaction of teachers with the achievements of students or simply whether distance learning offers the same value as leaning in a classroom. It was necessary to range answers from “very satisfied”, i.e. students mastered the material much better, “generally satisfied” - students mastered the material at the predicted level, “not very satisfied” - students mastered the material worse; and “dissatisfied” - students found it difficult to master the material.

Despite the fact that more than half of the teachers - 58% (4, 17% and 41%, respectively) are generally satisfied with the degree of imbibing educational material by their students, but the fact that almost half of the respondents, 42%, believes that students found it difficult or worse can be considered as a signal for in-depth analysis and finding out reasons for the effectiveness of the distance learning system. In addition, one of the main reasons that affected the quality of services provided, according to the respondents, was the limited and unstable access to broadband Internet connection preventing the use of digital educational platforms and/or quality of materials.

A question included in the express survey asked teachers to assess their moral condition at the end of the distance learning period. The answers were distributed as follows: “I feel more tired than usual at the end of the academic year” - 81%, “I feel about the same as usual at the end of the academic year” - 12% “I feel more energized than usually at the end of the academic year” - 7%. Thus, for the teaching staff of the department, the academic semester passed with more workload than usual. And only for the fourth part, it passed without undue stress.

When asked if teachers were willing to accept student digital help, if necessary, more than half answered “yes”, although about 30% said they were not ready for this, explaining that their teaching status would be at risk because they will find themselves in a situation where the students are more qualified and knowledgeable than they are. In our opinion, this problem should be subject of the in-depth research, because actively seeking advice from students can be useful in building relationships and breaking down barriers, as well as ensuring positive interaction and feedback.

The questionnaire also included an open-ended question, where teachers were asked to comment on what kind of assistance they need to organize distance learning in future. Teachers' recommendations included the following: creation by the university of a full-fledged system for recording and monitoring students' educational achievements without the need to duplicate them in printed and written form; material support in the development of online courses and other materials for distance learning; additional training in the use of digital technologies, as well as material support in the acquisition of modern technical devices; reducing workload and increasing free time to explore new opportunities.

To the open question "What competencies should teachers in the 21st century have", the respondents, taking into account the new roles and experience gained, included the following pool of competencies:

- digital literacy. This is not surprising, and we agree that the demand for teachers with a good knowledge of principles of online learning, as well as adaptation to the digital world, will grow. Today's students come to university with their own demands for the digital world, students never seen before in higher education: they are more technically savvy, better connected to each other and to the world, and more capable than ever before of expressing their opinions. This rapidly growing youth audience is learning new tools and applications at a pace that even the most dynamic university is hard to keep up with;

- analytical skills: practice-oriented, flexible and blended learning will require constant updating of content, methods, and technologies. Teachers will have to analyze information more independently, choosing the most relevant data, than relying on ready-made teaching aids and textbooks;

- flexible communication or soft skills, which will allow more flexible communication with students and contribute to the organization of effective work both in a group and individually;

- project thinking, as more and more emphasis is placed on interdisciplinary knowledge and research approach. Actually, teaching activity itself becomes a project activity, because it aims for a real result in the form knowledge acquisition that students can apply in practice, instead of abstract class hours worked or completed plans.

Conclusion

In general, the distance learning experience gained by the teachers of the Department of Language Disciplines of the Caspian Public University for the majority of respondents turned out to be quite successful and productive. As a result of the rapid transition to distance learning, teachers were forced to master modern DLT, which allowed them to continue the educational process and successfully complete the academic semester.

The new working conditions had a positive impact on the quality of teachers' digital competencies. In addition to the tools, they used earlier and have become familiar, such as e-mail, social networks, completely new tools were attracted in the arsenal of teachers.

Teachers consider it possible and necessary to use digital technologies even after the end of self-isolation to implement certain types of their teaching load. It seems that this particular path – blending the traditional teaching methods with modern online technologies - will become the best approach to the implementation of the educational process at present stage.

Despite the problems and challenges, the new experience is assessed by teachers rather as positive, and this allows us to conclude that teachers managed to understand how to restructure the traditional educational process into new forms, and find suitable opportunities for interaction with students.

Most of the teachers participated in the survey admit that teaching on the basis of DLT has fully justified itself in terms of effectiveness, and is generally satisfied with the achievements of students in imbibing knowledge of their disciplines. However, almost half of the respondents believe that there has been a decrease in the level of mastering educational material by students, and this is an alarming indicator that the educational system was not quite ready for the transition to a

full-fledged provision of distance learning. At the same time, ensuring the quality of education is the main goal of pedagogical process. Therefore, in the near future, it is necessary to focus on a deeper study of various aspects of distance learning.

We are witnessing changes in the higher education system - the very nature of educational activities, the ways of providing educational services and the role of universities in the economy and society are changing. And in the next decade, these changes will continue and will be very significant. Universities around the world compete for students, academic staff and funding, and only those who keep up with the times and learn how to make the best use of new digital opportunities and competencies will be able to succeed in the digital age.

Nowadays, in order to keep up with the times, it is necessary to have a strategic vision for the university as a whole, and the top management of universities with the support of other departments should promote this perspective development. This means that a key differentiating factor for institutions of higher education will be awareness of new trends in new technologies and the ability to quickly adopt and use their potential to enhance their performance.

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