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NEW PROSPECTS OF E-LEARNING IN KAZAKHSTAN DURING PANDEMY-2020

***Abstract.** The article considers the prospects and problems of the transition of the Kazakhstani education system from traditional to distance format in the context of global quarantine 2019-2020. The article is divided into questions related to school education and university studies in Kazakhstan. The international experience in introducing distance education is also taken into account.*

***Key words:** Distance learning, pandemy, quarantine, school online format, university online format*

Introduction

The situation with coronavirus in 2020 turned out to be one of the global problems of all mankind. On 31 March, 2020, President Tokayev on-air spoke about additional opportunities to support the public and businesses in connection with the state of emergency, including an indication of pensions and general benefits, including targeted social assistance, providing coverage with additional social benefits by 10% in annual terms, extend the list of categories of citizens who were supposed to be provided with free grocery and household sets from 1 April to 1 July, supporting farmers to timely carry out spring field work, and provide work around large quarantined cities for small and medium business for 6 months [1]. Of course, the pandemic also affected the education sector both around the world and in Kazakhstan.

Today, Kazakhstani schools and higher educational institutions are quite successful in the educational services market, preparing future leaders and specialists for all sectors of the Kazakhstani economy, politics, culture, and social life. By participating in various educational projects, schools and universities in Kazakhstan are developing and implementing strategies to increase the competitiveness of their graduates in the globalizing world. But the 2020 pandemic has truly become a serious problem for education around the world. The traditional educational ‘face-to-face’ format was placed under a threat and, at the same time, was only seen as a special case of education in the frames of the global pandemic. Although humanity has experienced pandemics more than once, it is the first time that humanity has faced such a massive transition of traditional education to online learning. According to UNESCO, today officially schools were closed in 191 countries, and in some countries (USA, Australia, Denmark, etc.) schools were closed at the local level depending on the intensity of the pandemic. “As of mid-July 2020, over one billion learners are still affected, representing 61 per cent of the world’s total enrolment. Some countries have opened schools and colleges, only to close them again after a resurgence of the virus” [2]. The situation with coronavirus forced all of humanity to rethink the forms of learning and look for new ways to solve this problem. Of course, most countries have switched to online learning, as this allowed the learning process to continue and at the same time test the effectiveness of the Internet platform for global needs.

Main body**1.1. The Situation in Schools**

In many countries today, various training formats are used, such as the direct conduct of classes through Internet channels, placing of video lessons on special virtual platforms, through radio, e-mail, etc. Depending on the quality of the Internet, communication infrastructure, and technical achievements, each country has tried its own approach to providing educational services to schoolchildren and students. “Many learners in developing countries, especially the youngest and

minority groups, are not fluent in the language of instruction” [3]. Of course, at first there were difficulties, but everyone knew that one could not stop only to state the fact of a pandemic, but it is necessary to solve problems with global education during the pandemic.

Like the whole world, Kazakhstan also faced the problem of the transition of education to online format because of the global quarantine. Naturally, many did not expect this pandemic and were not immediately ready for a new training format. However, all steps were taken to ensure that the educational system of Kazakhstan as smoothly as possible switched to online learning. “School closures have necessitated changes in – and in some cases caused serious disruptions to – how students are evaluated” [4]. Those, who first faced the transition to the new training regime, were Kazakhstani schools. First of all, it took time to prepare for the new format, so the spring break was extended by one week more. This made it possible to technically prepare for the continuation of the educational process, but already in online study mode.

The coronavirus quarantine has literally put all families in the world, including Kazakhstan, in home isolation. Suddenly, millions of families found themselves in a situation where regular education in schools was stopped and distance education came to replace it. How soon the pandemic will end, and when we can get back on track, is unknown. “Domestic chores, especially for girls, and the work required to run households or farms, can also prevent children from getting sufficient learning time. Children with disabilities who were already marginalized before the outbreak are not always included in strategies of distance learning” [5]. But education will no longer be the same as it was before. Here are some observations about what has gone wrong in our system, how other education systems around the world are responding to quarantine, and what we can do to improve the situation. “The total closure of schools in some countries is impacting over 60% of the student population. Even in those countries that have implemented only localised closures, it still impacted millions of students” [6].

The new training format has exposed several significant problems in the domestic educational system. Firstly, unlike traditional education, Kazakhstan has no legislative standards for distance learning. This means that we still have to develop appropriate educational programs that should be focused on distance learning. Secondly, the transition to distance learning under quarantine showed that the ICT training of teachers is not on a high level, especially in rural schools. Thirdly, with all the development of the technological sector in Kazakhstan, the level of technical support for the educational system was insufficient. This includes the level and speed of Internet connection, availability of equipment and computers in educational institutions, etc. Fourthly, there is the lack of domestic platforms for large-scale educational activities and the lack of digital content for online classes. Naturally, in order to solve this whole complex of problems that had arisen, it was urgent (and at the same time qualitatively) to create materials, to form programs, to develop assessment criteria for evaluating students, to introduce new instructions for conducting lessons, to conduct special courses for teachers, and to take into account the psychology of the students themselves, who have been under quarantine at home all this time.

After a thorough analysis of world experience and recommendations from UNESCO and the World Bank, Kazakhstan switched to distance learning via the Internet, television and radio, as well as by sending educational materials to settlements where there are no schools.

Today, time has shown that, taking into account all the outstanding problems, school education in Kazakhstan was able to successfully switch to distance education. About 2.5 million students get their education in the schools in our country, and almost all of them are connected to the Internet. Also, during the widespread quarantine, such Internet platforms as ‘Daryn.Online’, ‘Kundelik’ and ‘BilimLand’ were developed. On these platforms, school students can find instructional video lessons that fit the state curriculum. Having gained important knowledge, they complete the necessary tasks at the end of each lesson. If questions arise about lessons, students can

ask teachers directly. In addition to these platforms, teachers use foreign streaming systems such as Microsoft Teams, Meet by Google Hangouts, etc.

One more achievement of distance education during quarantine was the development of educational lessons through the television channels ‘Balapan’ and ‘El Arna’. These television lessons were also relayed through the ‘Qazaqstan’ channel, which allowed those school students who did not have time to watch TV lessons on time to watch them at a later time.

Of course, the final exam was another problem for schoolchildren. And here again we turned to world experience. Today, there are three solutions to this issue:

- 1) to cancel all exams for graduation classes, as was done, for example, in Norway;
- 2) to reschedule the exams;
- 3) to conduct exams in a different format, for example, online.

Kazakhstan decided to cancel final exams for grades 9 and 11, and annual grades were based on current grades of four quarters.

In 2020, the academic year in Kazakhstan began in an unusual way. For the first time in the country's history, there were no festive lines, flowers and traditional meetings with school friends and teachers on Knowledge Day. All events took place online and were carried out remotely, except for the ‘experimental classes’ of elementary school.

Kazakhstan’s Ministry of Education and Science has introduced duty classes for primary schools, trying to find a balance between the threat of a pandemic and the quality of education for primary school children. Primary schools continue to work for students whose parents chose offline learning. The main conditions for the work of schools are compliance with strict sanitary standards and the organization of teaching children in several shifts a day.

One more problem faced by teachers and parents living in rural areas is limited access to broadband internet (or lack thereof). Even though many have mobile Internet and at least some kind of computer, this access is not enough to ensure high-quality viewing of video lessons and presence in online classes. And in rural areas we have 48% of children from the total contingent [7].

We should know that more than 2,800 remote rural schools in all 17 regions of Kazakhstan continue to work in strict accordance with the new sanitary and hygienic standards. Any teacher explains that children get used to the new norms, understand the seriousness of the COVID-19 situation and comply with sanitary requirements. Parents help teachers raise safety awareness among children.

In the classrooms on duty, a social distance between desks of 1 meter is observed. Only one student can sit at one desk. Everyone is staggered. They put crosses on empty places, which do not allow children to take these places. No more than 10 students can attend the duty class. But middle school students are deprived of such an opportunity to meet with their classmates. Homeroom teachers hope that everyone will soon be able to return to traditional offline learning, and the restrictive measures are temporary. “By midApril 2020, 94 per cent of learners worldwide were affected by the pandemic, representing 1.58 billion children and youth, from pre-primary to higher education, in 200 countries” [8]. Due to the new conditions in which the whole world finds itself today, we need to follow the following methods.

Firstly, we should expand the range of educational solutions for the ‘client’, to adapt solutions to the conditions and needs that a particular class, school, district has, as well as the age of the child. For example, the higher the age, the less supervision and daily checks are needed. Or the lower, the less connection requirements for each lesson or the amount of homework you need to present. It is important to consider what resources parents have (whether there is an individual computer or internet at home) and teachers (for example, whether they have technical skills and at what level).

Secondly, we should not try to fit the entire volume of the educational program, which was planned for the regular mode of study, into the new distance format. We need to lower expectations

and requirements for principals, teachers, parents, and students. While many families are trying to figure out how to function in new conditions, how to work from home themselves, when social mood and ‘weather’ in the house can be tense anyway, schoolchildren and their parents do not need extra stress. “The closures have also affected the ability of many parents to work. A significant share of working parents rely on childcare and schools. In countries such as France, Germany, Italy, the UK, and USA, 60 per cent of parents have been unable to find alternative solutions for schools and day-care centres. A recent study highlights that women are bearing the greater share of additional time spent on childcare and household tasks” [9].

Thirdly, we should test various solutions and conduct exploratory assessments of what works. In all countries, any political and managerial decisions are made on the basis of an evidence base, and not on someone’s opinion. In order to understand which solutions at the national level are effective and which are not, and where to invest, it is necessary to introduce experimental research methods in government bodies, such as impact assessment, which is actively used around the world, especially in the field of education and social protection.

Fourthly, we should transform the bureaucratic system into a more flexible one. Clearly, those countries that normally operate according to the principle of accountability and transparency of processes in making political and managerial decisions were able to quickly and effectively respond and accordingly build the education system during the crown crisis. In order to respond quickly to constant changes and feedback from stakeholders coming from the regions, our system must become less bureaucratic and tied to decisions from the ‘center’. Here you need to build a full-fledged system, and not try to respond to individual cases in a manual mode.

1.2. The Situation in Universities

Like many businesses, universities are racking their brains over how to reopen, choosing different strategies for action. For example, the Cambridge University announced that lectures will be delivered exclusively online until at least the summer of 2021. Other universities, including Stanford, offer a mix of online and in-person classes, while the academic year has been extended to keep as few students on campus as possible at any given time. “The learning loss, in the short and long term, is expected to be great. Researchers in Canada estimate that the socio-economic skills gap could increase by more than 30 per cent due to the pandemic” [10].

We see Covid-19 as a powerful economic blow to higher education. Dorm rooms are vacant, sports stadiums are still empty, students are unhappy with the requirement to pay full tuition fees. For many colleges and universities, the drop in income from international students (especially Chinese) is likely to be very painful; many smaller and less affluent universities may close. “Teachers across the globe were largely unprepared to support continuity of learning and adapt to new teaching methodologies. In sub-Saharan Africa, only 64 per cent of primary and 50 per cent of secondary teachers have received even minimum training, which often does not include basic digital skills” [11]. But won’t the shock of Covid-19 lead to the fact that eventually better education will become available to more people, and at a lower cost? The answer will depend, in part, on what universities do when the pandemic subsides: they can either put technology aside or start looking for the best ways to use it. This is not an easy question to answer, given the importance of communication between faculty, graduate students and students both in and outside classrooms.

If the situation in Kazakhstani schools required immediate actions, first of all, due to the fact that school students (especially schoolchildren of lower grades) are very sensitive to gaining knowledge and to any changes in the field of education, then students and teachers of colleges and universities reacted to large-scale quarantine with more psychological readiness. The easier transition of universities to distance learning was partly due to the fact that many universities have been practicing distance education for many years. However, there were also many problems with the transition of universities to online education. “A rise in contract cheating and academic file-

sharing, and exam cheating were identified as particularly problematic” [12]. Many universities also have academic mobility programs for foreign students or those students who cannot directly attend the university classes for any reason. Therefore, from a technical point of view, the colleges and universities in Kazakhstan were more prepared for quarantine.

Obviously, probably not a single university can sharply and in a short time raise the level of the teaching staff. The situation in Kazakhstan has been aggravated by the coronavirus pandemic. Since March, quarantine has been in effect in all educational institutions of the country. Universities have been closed, and severe restrictions on entry into the country will remain.

According to Professor Rustam Burnashev, who taught at several foreign universities, another of the problems that Kazakhstani universities constantly face is their compliance with the standards of relevant ministries. “Since we still issue state sample diplomas, the presence of certain standards determined by the ministries looks right. But the fact is that the current standards are based on some fantastic and logically opaque ideas, which change every time officials from education with the arrival of a new minister. For example, it is still not clear what percentage of university professors should have an academic degree,” Professor Burnashev explained in an interview with DW [13]. He also drew attention to the strange, in his words, licensing requirements for the use of scientific literature, which should be no older than 5 years.

For example, Professor Witold Bielski (the Rector of the Kozminski University, Poland) believes that when this crisis is over, we will live in a different world [14]. At the same time, now no one fully knows what it will be like, but one thing is clear: higher education needs to be reformed and transformed so that it is useful and effective. According to the famous Brazilian educator-innovator P. Freire, it is necessary to replace the traditional ‘cumulative education’ with ‘problem-oriented’, when students are engaged in real life problems. This moment is very important in the conditions of modern education in conditions of quarantine. Learning, he believes, will be much more successful if students formulate problems, including economic, social, and political ones, based on their own experience and then solve them, using all the opportunities that the school provides them. P. Freire is sure that a properly organized education can free students from the suppression of the personality, therefore his educational concept is called ‘liberation pedagogy’ [15]. As painful and stressful a time as this is, it may fashion a long overdue and welcome rebirth of our education systems. The pandemic has been a great leveller in a way, giving all stakeholders (educators, learners, policy-makers and society at large) in developed and developing countries a better understanding of our current education systems’ vulnerabilities and shortcomings. It has underscored how indispensable it is for our populations to be digitally literate to function and progress in a world in which social distancing, greater digitalization of services and more digitally-centered communications may increasingly become the norm. More fundamentally, COVID-19 is causing us to challenge deep-rooted notions of when, where, and how we deliver education, of the role of colleges and universities, the importance of lifelong learning, and the distinction we draw between traditional and non-traditional learners [16].

Covid-19 showed that we faced several educational challenges. In the system of education priorities, there are two series of incomparable concepts, goals, value orientations: on the one hand, a humanistic one, on the other, a technological orientation of education. Which of them is dominant is a question that does not receive a sufficiently clear and full-fledged answer in modern literature on the philosophy of education. Some authors believe that the most important goal of education is the acquisition of knowledge and skills by students, including the ability to think critically and creatively approach the knowledge gained. So, R. Nurtazina emphasizes: “The concept of ‘education’ includes not only knowledge, skills and abilities as a result of training, but also the ability to think critically and be an active participant in the modern information field” [17]. Here the emphasis is on knowledge, information, operational skills. Other researchers believe that the

priority in education should be its humanization, rather than rationalization and technologization. In our opinion, the latter should develop only following the development of humanistic principles in the educational process. The pandemic has affected many universities around the world. Educators and scientists from all over the world have united in a common struggle and reforms in this area. Many are already touting the benefits: Dr Amjad, a Professor at The University of Jordan who has been using Lark to teach his students says, “It has changed the way of teaching. It enables me to reach out to my students more efficiently and effectively through chat groups, video meetings, voting and also document sharing, especially during this pandemic. My students also find it is easier to communicate on Lark. I will stick to Lark even after coronavirus, I believe traditional offline learning and e-learning can go hand by hand” [18]. Of course, each situation has its own advantages and disadvantages. For example, the following is an advantage. Faculty opined that online learning helped ensure remote learning, it was manageable, and students could conveniently access teachers and teaching materials. It also reduced use of traveling resources and other expenses. It eased administrative tasks such as recording of lectures and marking attendance. Both the students and teachers had an opinion that online learning modalities had encouraged student-centeredness during this lockdown situation. The student had become self-directed learners and they learnt asynchronously at any time in a day [19]. However, a significant drawback of online learning is, first of all, the lack of emotional contact between teacher and student.

Conclusion

The process of reforming the education system of the Republic of Kazakhstan has now identified fundamentally new requirements for the quality of education, which affect all participants in the educational process at all levels. The current serious contradiction between the need for informational assistance to teachers and the lack of access to information for participants in the educational process predetermined the need to create a satellite channel for distance learning as one of the elements of the program for informatization of the education system as a whole. “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 per cent of the world’s student population, up to 99 per cent in low and lower-middle income countries” [20]. Thus, the global pandemic has already left its indelible mark on the history of all mankind. This pandemic will remain in the memory of more than one generation.

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**Тулеубеков А.С., Доскожанова А.Б.
Пандемия–2020 кезеңіндегі Қазақстанда электронды
оқытудың жаңа перспективалары**

Аңдатпа. Мақалада 2019-2020 жылдардағы жаһандық карантин кезіндегі қазақстандық білім беру жүйесінің дәстүрліден қашықтық форматқа өтуінің келешегі мен қазіргі жағдайы туралы қарастырылған. Еңбекте Қазақстандағы мектептегі білім мен жоғары оқу орнында оқуға байланысты туындайтын мәселелерге ерекше көңіл бөлінген. Сонымен қатар қашықтықтан білім беруді енгізудің халықаралық тәжірибесі де ескерілген.

Түйінді сөздер: қашықтықтан оқыту, пандемия, карантин, мектептің онлайн форматы, университеттің онлайн форматы

Тулеубеков А.С., Доскожанова А.Б.

Новые перспективы электронного обучения в Казахстане в период пандемии–2020

Аннотация. В статье рассматриваются перспективы и проблемы перехода казахстанской системы образования с традиционного на дистанционный формат в условиях глобального карантина 2019-2020 гг. Статья разделена на вопросы, касающиеся школьного образования и обучения в вузе Казахстана. Также учитывается международный опыт внедрения дистанционного образования.

Ключевые слова: дистанционное обучение, пандемия, карантин, школьный онлайн-формат, университетский онлайн-формат.

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**ПРОФОРИЕНТАЦИЯ В ЦИФРОВОМ ПРОСТРАНСТВЕ:
ПОДХОДЫ И СТРАТЕГИИ**

***Аннотация.** В статье раскрыта идея о том, что профориентация должна ориентировать современного человека на рынок и выступить необходимым условием его успешного развития в цифровом пространстве. На этой основе автор предлагает создать профориентационную онлайн-платформу. Рассматриваются подходы и стратегии функционирования платформы, направленные на осуществление выбора профессии старшеклассниками.*

***Ключевые слова:** выбор профессии, профориентация, профориентационная онлайн-платформа, старшеклассники и выпускники колледжей, подходы к выбору профессии.*

Введение

Изменения, происходящие в современном мире находят прямое отражение в жизнедеятельности каждого казахстанца. На фоне политических, экономических, социальных потрясений цифровые технологии масштабно проникают во все сферы нашей жизни, диктуют пересмотр существующих подходов к ней, а также задают необходимость обновлений. В условиях бурной цифровизации происходит кардинальное изменение рынка труда. Появляются новые профессии, а многие среди существующих, теряют свою актуальность. Для достижения успешности и конкурентоспособности современному