ҚАЗАҚСТАН РЕСПУБЛИКАСЫ БІЛІМ ЖӘНЕ ҒЫЛЫМ МИНИСТРЛІГІ
Л.Н. ГУМИЛЕВ АТЫНДАҒЫ ЕУРАЗИЯ ҰЛТТЫҚ УНИВЕРСИТЕТІ

ҚАШЫҚТЫҚТАН БІЛІМ БЕРУ:
ЖАҺАНДЫҚ АУҚЫМДАҒЫ ЖАҢА СЫН-ҚАТЕРЛЕР
III Бөлім

ДИСТАНЦИОННОЕ ОБРАЗОВАНИЕ:
НОВЫЕ ВЫЗОВЫ ГЛОБАЛЬНОГО МАСШТАБА
Часть III

DISTANCE LEARNING:
NEW CHALLENGES ON A GLOBAL SCALE
Part III

Нұр-Сұлтан, 2020

Главный редактор: **Сыдыков Е.Б.**

Заместитель главного редактора: **Онгарбаев Е.А.**

Члены редакционной коллегии: **Ильясова А.С. (ответственный редактор), Сеилов Ш.Ж., Козыбаев Д.Х., Нурмолдин Е.Е., Бейсенбай А.Б., Бекманова Г.Т., Мукажанова Л.Г., Дюсекеев К.А., Кушенова Г.И., Адамов А.А., Омарбекова А.С., Рахметулина Ж.Б., Алдонгаров А.А., Байхожаева Б.У., Бейсенова Р.Р.**

В данном сборнике, подготовленном Евразийским национальным университетом имени Л.Н. Гумилёва, представлены материалы международной конференции на казахском, русском и английском языках по вопросам дистанционного образования.

Выступления участников конференции посвящены актуальным проблемам и перспективам актуальных задач в области применения дистанционных технологий и распространение эффективного инновационного опыта на международном уровне.

Сборник рекомендован всем участникам образовательного процесса для обмена педагогическим опытом и дальнейшего повышения квалификации.

ANALYSIS OF THE MAIN TRENDS AND PROBLEMS OF DISTANCE LEARNING IN GERMANY AND KAZAKHSTAN AT THE PANDEMIC TIME

[1]Zharmakhanova Zh. I., [2]Nurdavletova S.M.
zhansaule94@bk.ru , saniyanm83@mail.ru
[1]Researcher, Faculty of International Relations,
[2]Candidate of historical sciences, Associate Professor
L.N.Gumilyov ENU, Nur-Sultan, Kazakhstan

Abstract: The article examines the main trends and problems occurring in education field due to the Covid-19. To be precise, the article focuses on features and problems of distance learning in Germany and Kazakhstan in 2020 due to the pandemic situation worldwide. As the World Health Organization has declared Covid-19 as a pandemic, global shutdown of several activities, including educational activities happened and this has resulted in huge crisis-response migration of schools, universities and other educational institutions with online learning serving as the educational platform. To our minds, the pandemic has shown that there is a problem with e-learning processes not only in developing countries such as Kazakhstan, but also in highly developed leader-countries, such as Germany. The article discusses the peculiarities of distance learning in both countries and gives a clear analysis of challenges faced by teachers and students while migrating to online educational platform.

Key words: distance learning, e-learning, pandemic, Germany, Kazakhstan.

Introduction: The coronavirus pandemic and quarantine measures have had a sharp and large-scale shock effect on the world economy, plunging it into a deep recession. According to the World Bank's forecasts, the world's economy is expected to shrink by 5.2% this year[1]. This decline

will be the deepest since World war II, and the decline in per capita output will affect the largest share of countries since 1870. This is stated in the June 2020 issue of the World Bank's "Global Economic Prospects" report.

The pandemic has also forced global physical shutdown of institutions to migrate to online platforms. 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, representing 1.58 billion children and youth, from pre-primary to higher education, in 200 countries [2].

Schools and higher educational institutions wereclosed by ministerial decisions to prevent the spread of the virus, while teaching and learning processes had to be organized online. Germany and Kazakhstan were not exceptions. Countries' different levels of digital readiness meant that many teachers and trainers had to become digitally literate overnight. Ministries, local authorities and other stakeholders, including private businesses and volunteers, provided access to resources, advice and support to teachers, trainers, learners and their parents.

Worldwide, the use of technology in all fields of education is at a historical high. In Germany, though, we face a special situation. Germany is a world-leading developer and producer of high-tech products in many domains. And while the medical sector seems relatively well equipped to face the epidemic, educational system seems to be lagging in the use of digital technology for teaching and learning.

Ninety percent of German schools and universities are public institutions and Germany's educational system depends largely on the autonomy of its 16 States. There is no accurate data on the spread of digital infrastructure in education, but schools have struggled for years with planning and implementing basic digital services. Only recently have schools started providing teachers with email accounts, web servers, and other learning technologies [3]. In early 2019, the Federal government decided to invest 5 billion euros in the dissemination of digital technologies in secondary schools [4]. But most school districts have so far been unable to spend money because of the complex bureaucratic procedures that precede spending and the need to first develop sound and consistent pedagogical concepts for using technology.

Why is Germany lagging behind, taking into account its economic power? In Germany, digital technologies in education are a very discussed topic. For decades, emotional discussions have focused on the usefulness of computers in education. A German book written by a doctor has received much attention in the public debate and explains - with references to brain science-that computers in schools impair academic performance, causing addiction and obesity [5]. Some parents have long protested, for example, against the installation of a wireless LAN in schools, arguing for the negative impact of radio waves on the health of their children. German Federal regulations restrict the introduction of software that is successfully used in education in other parts of the world. Teachers are strictly prohibited from using cloud services, social platforms, microblogs, or document sharing tools hosted outside the EU due to non-compliance with (full) EU privacy and data protection standards, as well as telemetry practices. Germany has arguably the world's strictest privacy and data protection laws. Modern school solutions are usually based on open source products managed by States or regional school boards, on servers located within national borders (or the EU). To avoid using software applications that could make data open to the intelligence services of the United States or other countries, some States provide EU-compliant Alternatives for

document exchange and repositories. German universities have created a cooperative company, HIS Hochschul information System eG, Hannover, to develop administrative software solutions that work in accordance with EU data protection and privacy regulations [6].

Kazakhstan was also facing some difficulties while transferring to distance learning. In Kazakhstan, 3 million school students and almost half a million University students were forced to study remotely during a difficult period. According to the RustemBigari, Vice-Minister of Education and Science of the Republic of Kazakhstan, in mid-March of this year the Ministry, IT companies, and educational institutions carried out a huge amount of work. Within the Ministry, an operational headquarters and project office were created, where the world experience was studied daily, as well as the transition to distance education all over the world. Training sessions and webinars were promptly held to switch to the new format of training. The state provided support to domestic educational resources [7].

Furthermore, a pre-requisite for any type of online learning activity is that students have access to a computer. One of the problems that students in Kazakhstan faced when switching to distance learning, is lack of computers and accordingly lack of internet. When switching to distance education out of 3 million students, about 700 thousand (23%) needed computers, although since the beginning of the epidemic, more than 250 thousand computers have been transferred to students for temporary use. Children from low-income families, with special educational needs, and primary school students needed equipment [8].

Whereas in Germany, according to PISA 2018 data collected 92% of students reported having a computer they could use for school work, which is higher than the OECD average (89%) [9].

Meanwhile, the head of UNICEF in Kazakhstan, Arthur van Diesen, noted that the pandemic has changed the rules of the game in the field of education and has forced us to completely reformat the education sector. According to the expert, Kazakhstan is prepared for digital education at a high level. Arthur van Diesen noted that 78% of the population has access to the Internet and moreover, Kazakhstan has very cheap rates for mobile data transmission [10].

However, internet penetration is uneven across regions, and the quality of data transmission also raises questions, as does the quality of distance education. Both teachers and students were not ready for the urgent transition to distance learning. According to UNICEF, switching to distance learning is a big challenge for teachers, even in the best of circumstances, adding stress and confusion to their activities. In Europe, 16% of teachers report a high need for professional development in the use of ICT in distance learning. While in Kazakhstan, teachers are also facing difficulties acquiring and further working on online platforms. A.Aimagambetov, the Minister of Education of the Republic of Kazakhstan highlighted the lack of domestic IT platforms for organizing simultaneous streaming connections of a large number of students, the lack of digital educational content and full-fledged software for conducting classes via the Internet among the problems faced by the domestic education system [11].

During the World Bank's online briefing on "Education in Central Asia: learning during the pandemic", which was held on August 5 it was discussed that the pandemic has a long-term negative impact on education, the quality of human capital and socio-economic development in Central Asian countries, where children and young people make up almost half of the total population. Experts believe that the crisis threatens the future incomes of the younger generation.Thus, they predict an increase in the level of functional illiteracy among adolescents. This means that a growing number of

students are unable to use their reading, writing, and math skills to participate effectively in society [12].

In Kazakhstan, in the 2020-2021 academic year, due to the current epidemiological conditions, education is being given in a distant format for all schools and higher educational institutions in the country, with the exception of remote rural small – scale schools and "on-duty" primary school classes in strict compliance with all sanitary standards. This year, more than 3.3 million people will study in 7391 schools in Kazakhstan, including more than 396 thousand children in grade 1 [13].

In Germany, on August 7, 152,700 students at 563 schools returned to school for the first time since the COVID-19 pandemic caused a nationwide lockdown in March. Although reopening schools has not been easy, Germany plans on prioritizing keeping them open, even if it means closing other public venues. "Children should not become the losers of the pandemic," German Chancellor A. Merkel said on August 28 [14].

Conclusion: Today, most educational institutions in the world are closed to slow the spread of the coronavirus. These changes affected more than 1.5 billion people – both preschool children and those who were preparing to defend their doctorate. Students are forced to stay at home and entrust the role of teachers to their parents or relatives. In just a few days, teachers from all over the world have digitized learning processes. Millions of students began to receive education remotely, and teachers abandoned the lecture form of education. At the same time, digital solutions in the field of education were not used as actively as it might seem. The pandemic served as a kind of stress test and once again raised the issue of "digital inequality", recalling that 40% of the world's population still does not have access to the Internet.

As we proceeded on analyzing peculiarities of distance learning in Kazakhstan and Germany, we have found out that both countries faced several problems. Moreover, it is surprising that most of the problems are common in both countries: students and teachers were unprepared to a quick shift from traditional teaching and learning to distant learning, lack of technology and competencies etc.

However, many students and teachers have now quickly, even if non-systematically, developed their digital competencies. After the Covid-19 crisis is gone, will they immediately return to earlier strong preference for face-to-face teaching or will they start moving towards online education? Answers to this question will depend on teacher and student experiences during the crises. As Jandrić has pointed out, this historical moment challenges many common positions in research and education and calls for a lot of rethinking in and for the future [15].

References:

1. COVID-19 to Plunge Global Economy into Worst Recession since World War II. – 2020. - URL: https://www.worldbank.org/en/news/press-release/2020/06/08/covid-19-to-plunge-global-economy-into-worst-recession-since-world-war-ii) (date of acceptance: 21.09.2020)

2. United Nation's Policy Brief: Education during COVID-19 and beyond. – 2020. – URL: https://www.un.org/sites/un2.un.org/files/sg_policy_brief_covid-19_and_education_august_2020.pdf(date of acceptance: 21.09.2020)

3. NRW stelltSchulcloud „Logineo' vor – Lehrerverbandrät von Nutzung ab. News4Teachers. – 2019. –URL: https://www.news4teachers.de/2019/11/nach-pleiten-und-pannen-nrw-stellt-endlich-seine-schulcloud-logineo-vor/ (date of acceptance: 21.09.2020)

4. BundesministeriumfürBildung und Forschung. – 2020. – URL: https://www.bildung-forschung.digital/de/der-digitalpakt-schule-kommt-2330.html. (date of acceptance: 22.09.2020)

5. Spitzer M. DigitaleDemenz. Wiewiruns und unsere kinder um den Verstandbringen. - 2012. – URL: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7198090/#CR16(date of acceptance: 21.09.2020)

6. Tremmel, S. Datenleck an Hochschulen. - 2020. – URL: https://www.heise.de/news/c-t-deckt-auf-Datenleck-an-Hochschulen-4683940.html. (date of acceptance: 22.09.2020)

7. Kakpandemiyakoronavirusapovliyalanaobrazovanie – mneniyaekspertov. – 2020. - URL: https://www.inform.kz/ru/kak-pandemiya-koronavirusa-povliyala-na-obrazovanie-mneniya-ekspertov_a3667516(date of acceptance: 22.09.2020)

8. Okolo 700 tysyachshkolnikovnuzhdayutsya v kompyuterakh. – 2020. - URL: https://24.kz/ru/news/social/item/410101-okolo-700-tysyach-shkolnikov-nuzhdayutsya-v-kompyuterakh?fbclid=IwAR1H77ASudVQOtT8cfLNKg1fvwAH5jPluZ7aCPcn0N-7VSTL4UYDqn3p6Z8(date of acceptance: 22.09.2020)

9. School education during Covid-19, Were teachers and students ready? – 2020. – URL: http://www.oecd.org/education/Germany-coronavirus-education-country-note.pdf(date of acceptance: 22.09.2020)

10.Kakpandemiyakoronavirusapovliyalanaobrazovanie – mneniyaekspertov. – 2020. - URL: https://www.inform.kz/ru/kak-pandemiya-koronavirusa-povliyala-na-obrazovanie-mneniya-ekspertov_a3667516(date of acceptance: 22.09.2020)

11.Oni uchilispri covid-19: spaset li shkolnikov "distancionka"? – 2020. – URL: https://ekonomist.kz/zhussupova/oni-uchilis-pri-covid-19/(date of acceptance: 23.09.2020)

12.Problemyobrazovaniyaiz-zapandemiimogutstoitTsentralnoyazii $44 mlrd? – 2020. – URL: https://forbes.kz//process/education/problemyi_obrazovaniya_iz-za_pandemii_mogut_stoit_tsentralnoy_azii_44_mlrd/ (date of acceptance: 23.09.2020)

13.Distancionnoeobuchenieprodolzhitsya v Kazakhstane s 1 sentyabrya: dezhurnyeklassy, obespechenieuchebnikami I zakupkompyuterov. – 2020. – URL: https://primeminister.kz/ru/news/reviews/distancionnoe-obuchenie-prodolzhitsya-v-kazahstane-s-1-sentyabrya-dezhurnye-klassy-obespechenie-uchebnikami-i-zakup-kompyuterov-1775416(date of acceptance: 23.09.2020)

14.Melissa Godin. Children Across Europe Are Going Back to School. Here's How 3 Countries Are Managing It. – 2020. – URL: https://time.com/5885554/europe-schools-reopening-germany-scotland-norway/ (date of acceptance: 23.09.2020)

15.Jandrić P. Postdigital research in the time of Covid-19. Postdigital Science and Education. -2020. – p.233–238