



2020

Coronavirus Epidemic: Impact on Education

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Cooperation

Table of contents

1. Global Trends and Challenges	2
1.1 Disrupted Educational Process.....	2
1.2 Introduction of Remote Learning in Educational Institutions.....	3
<i>Common Problems associated with the Transition to a Distance Education System.....</i>	<i>4</i>
<i>Recommendations and Solutions to the Problems of Introducing Remote Education.....</i>	<i>6</i>
2. International Efforts	8
2.1 Joint Solutions to Overcome the Crisis	8
2.2 UNESCO Support	9
3. Long-Term Opportunities.....	10
4. Conclusions and Recommendations.....	10

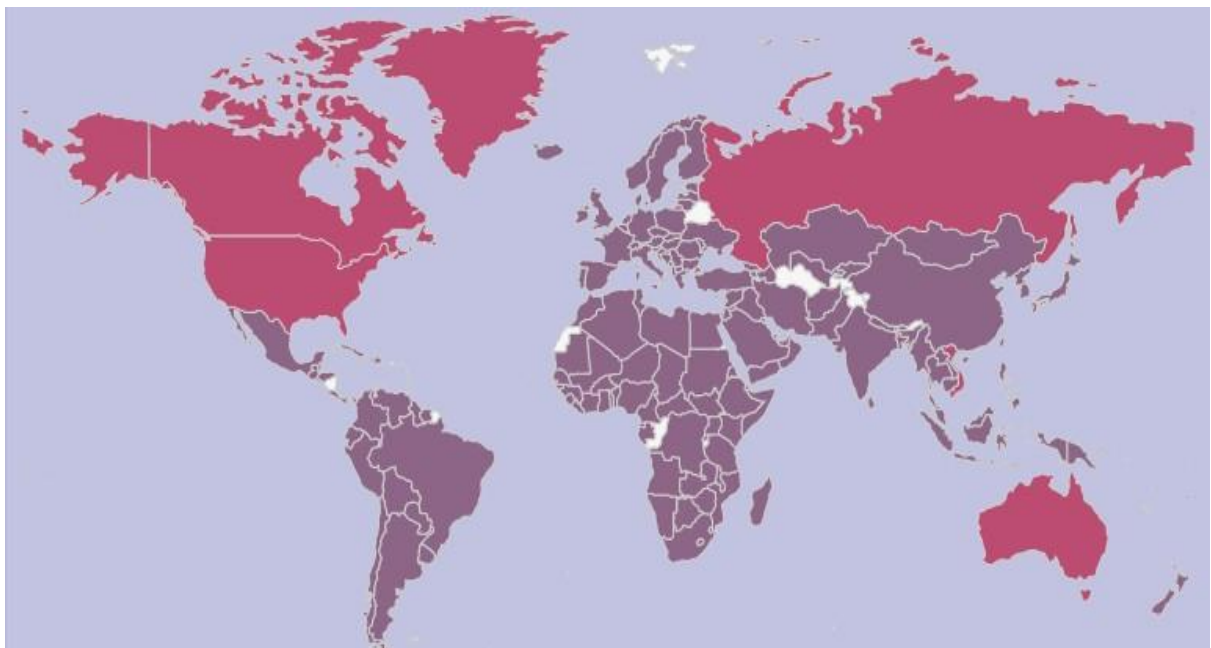
The United Nations Educational, Scientific and Cultural Organization (UNESCO), the Organization for Economic Co-operation and Development (OECD) and the World Bank are leaders in monitoring the impact of the spread of COVID-19 on education.

The materials from these international organizations provide an analysis of problems that are common for most countries and that educational systems face during the transition to a digital educational format. The reports address the main challenges for all groups affected by the transition to the online environment—students, teachers, parents as well as decision makers. International organizations formulate practical recommendations based on best practices from around the world.

1. Global Trends and Challenges

1.1 Disrupted Educational Process

Governments around the world have decided to close educational institutions in an attempt to contain the global COVID-19 pandemic. According to UNESCO, 188 countries have closed schools nationwide, affecting 91.3% of students worldwide (1.58 billion people).



Global monitoring of school closure due to COVID-19 (as of April 4, 2020) at

- the regional or local level
- nationwide

In some other countries, schools are closed at the local or regional level. If these countries also order the closure of schools and universities across the country, this will [disrupt the educational process](#) for millions of other students.

Even temporary closure of schools has great social and [economic consequences](#), especially for the poor.

1. Interrupted education: children and young people are deprived of opportunities for growth and development; this mainly affects students from low-income families who do not have the opportunity to receive education outside of school.
2. Nutrition: many children receive free or reduced-price meals provided in schools.
3. Childcare: in the absence of alternative options, working parents are forced to leave their children alone, which can be dangerous for their life and health.
4. High economic costs: working parents are forced to skip work to take care of children, which in many cases leads to loss of wages and negatively affects productivity.
5. An additional burden on the healthcare system: women make up the majority of healthcare professionals and often cannot attend work because they need to care for their children. This means that many healthcare professionals are not there where they are most needed during a healthcare crisis.
6. An increasing burden on schools that remain open: when some schools in the locality are closed, parents and government officials send children to those that are still open.
7. Student dropout rates tend to increase: ensuring that children and young people return to school after they are opened is a difficult task.
8. Social exclusion: schools are centers of social activity and human interaction. Many children and young people are deprived of the social contacts that are necessary for education and development.

1.2 Introduction of Remote Learning in Educational Institutions

To minimize the negative consequences of the closure of educational institutions and to create conditions for continuous learning, especially for the most vulnerable, many countries are introducing remote learning systems in schools and universities.

[According to UNESCO](#), 53 states have already deployed national educational platforms for remote learning.

Common Problems associated with the Transition to a Distance Education System

The World Bank draws attention to the problems faced by countries during the transition to the system of distance education. It also outlines the challenges for [all affected groups](#): students, teachers, parents and decision makers.

1. At the moment, there are very few education systems (even among the most high-end ones) with good technical facilities to make a quick transition to remote learning. Success is more likely in countries where remote education was commonly used before the pandemic.

A regional example.

For example, the Chinese government provides support to digitalize educational materials.

The South Korean government has announced measures to support digital education. The new school year in the country will begin as online classes on April 9. The first semester of a school year in Korean schools usually begins on March 1 and lasts until mid-July.

2. Switching to remote learning requires significant funding. Of course, it is important to ensure infrastructure capacities. But a far greater challenge is to support teachers, provide relevant high-quality digital educational materials, improve students' digital skills in order to help them use technologies effectively for educational purposes, and to introduce auxiliary data and information management systems.

A regional example.

A unified university platform iUniversity has been launched in Armenia, which allows remote learning during quarantine.

The UAE Ministry of Communications announced that five new applications for study and business began to work smoothly in all UAE networks: Google Hangouts

Meet, Cisco Webex, Avaya Spaces, BlueJeans and Slack. Earlier, uninterrupted access was provided to Microsoft Teams, Skype for Business, Zoom and Blackboard.

3. The transition to remote learning is a cause for concern due to social inequality. In practice, online learning is disproportionately beneficial for students with an initially more advantageous position (for example, in case of a gap between the rich and the poor, those living in urban and rural areas, those with good performance and with poor performance).

4. Most students will have difficulty going online. This means that for most pupils and students, education will be less beneficial. This aspect is especially relevant for children in poor areas with limited or no access to the Internet. Students with existing remote learning experience will also benefit.

A regional example.

British broadband access providers offer UK citizens free and unlimited Internet access.

5. When switching to remote learning, one needs to keep in mind that at first, students will show weaker results. This is due to a lack of user experience with tools and learning processes and a lack of favorable conditions for online learning at home. Both students and teachers will soon face a lack of motivation to learn.

6. Educational institutions will have to deal with choosing subjects to teach online and to leave for students to learn independently. Some subjects, school activities and approaches will be difficult to go online.

7. Only a few teachers will be able to make a quick and effective transition to an online learning model, since teaching remotely and in classrooms differs significantly. This is why teachers will need support and additional training.

A regional example.

The Ministry of Education and Science of Cyprus through the Pedagogical Institute provides accelerated teacher training on remote education. A large number of materials for pedagogical support are regularly posted on school sites and on the website of the Ministry.

8. In the context of remote learning, parents play a key role in supporting their children. Even under the most favorable circumstances, most parents are ill-prepared to provide effective support. Especially in those cases when they themselves do not have sufficient technical skills. Parents may have several children attending schools, so they will face the problem of distributing available devices between them. UNESCO also draws attention to the additional burden on parents with disabilities and parents working in sectors essential to the fight against the pandemic.

9. Decision makers are more dependent on two factors: the preparedness of the existing education system for the transition to online education and the amount of time before the closure of educational institutions. Today the global community does not have enough experience to determine the volume and mechanisms for financing the online learning system.

The [OECD identified](#) the main objectives in the implementation of digital learning:

1. There is a need to establish a balance between digital learning and off-screen activities. Transferring offline schedules to the digital environment can negatively impact students' health. Lessons can be shortened and combined with non-digital teaching methods.
2. Monitoring the emotional state of students is essential. School closure can cause anxiety in students.
3. Governments could provide students with laptop computers or other learning resources, as students have more access to smartphones than laptops. In addition, UNESCO points out the issue of unequal access to digital learning portals: lack of access to technology or of good Internet connection is an obstacle to continuing education, especially for students from disadvantaged families.
4. The problem of providing access to information infrastructure. In some countries, the simultaneous access of all students to the information infrastructure may be difficult.

Recommendations and Solutions to the Problems of Introducing Remote Education

In this situation, international organizations offer solutions to the problems of introducing remote education:

1. [The World Bank recommends](#) using a single portal to host all programs, applications, platforms and materials required for learning as well as guidelines for students, teachers and parents. In this area, providing access to materials using a wide range of devices, including mobile ones, becomes an important task.
2. It is very important for the government to include people with practical knowledge of using educational online technologies in decision-making processes. Such an obvious solution is not always implemented in practice.
3. In case of remote education, when students use various platforms, applications and equipment, schools have fewer opportunities to control their quality. In such cases, additional measures are required to ensure the safety of students, especially when it comes to the provision of programs by third parties or the absence of legal protection and regulation mechanisms in this area.

[OECD's recommendations](#) on the use of remote learning platforms during the closure of educational institutions:

1. To use existing distance education platforms. Distance education platforms may already contain the necessary course or materials for training in various digital formats. If such platforms do not exist in the country, then open educational resources can be used.

A regional example.

In Cyprus, licensed software required for remote education has been purchased at the state level. Tens of thousands of children and teachers joined the system using the provided codes.

2. To develop new educational platforms (virtual classes).

A regional example.

In China and Singapore, both public and private virtual classroom services have been successfully launched.

3. To establish cooperation with educational platforms. The main problem of existing educational platforms is that it is not always possible for a large number of users to operate them simultaneously. Some private companies have provided educational institutions with free resources and services as a support measure against the COVID-19 outbreak.

A regional example.

Cypriot banks and philanthropists provide children in need with electronic devices (6,000 tablets have already arrived), and telecommunication operators offer free Internet access to ensure remote learning. The Ministry of Education and Science has collected data for all schools in Cyprus to identify the needs of students.

In Hong Kong, Microsoft has offered Office 365 Education product for free for 50,000 teachers and 800,000 students.

4. To establish international cooperation for the exchange of educational online resources. The set of subjects taught in different countries is similar, so it is necessary to consider the possibility of translating foreign materials to use them for educational purposes.
5. To use all electronic means more efficiently. Some outdated methods of knowledge transfer (for example, broadcasting lessons on TV) are more suitable for very young students (as well as in cases when infrastructure development lags well behind).
6. To provide teachers with access to digital learning tools. Governments should provide teachers with online learning materials.

2. International Efforts

2.1 Joint Solutions to Overcome the Crisis

As countries prepare their response, international cooperation is vital to sharing the most effective approaches to supporting students, teachers and families. UNESCO is stepping up its efforts to ensure that this crisis fosters innovation and inclusion, rather than exacerbates educational inequalities.

On March 10, 2020, under the auspices of UNESCO, [a global videoconference was held](#) for senior education officials in order to enhance emergency response and exchange information on strategies to minimize possible disruption of the educational process worldwide. Representatives of 72 countries attended the conference, including 27 education ministers and 37 senior officials.

On March 30, [an online meeting](#) of representatives of the ministries of science was held. The meeting was attended by representatives of 122 countries, including 77 ministers and

secretaries of state, as well as representatives of the WHO, European Commission and African Union. The agenda of the meeting included the following issues:

1. Combining knowledge and research support efforts and narrowing the knowledge gap between countries.
2. Cooperation of decision makers, researchers, innovators, publishers and civil society representatives to ensure free access to scientific data, research results, educational resources and research facilities.
3. Strengthening the links between science and political decisions to meet social needs.
4. An open science for society despite the fact that borders between countries are closed.

2.2 UNESCO Support

[UNESCO works](#) with ministries of education in the affected countries to provide continuous education for all children and youth through alternative channels:

1. UNESCO provides technical assistance to quickly prepare and deploy inclusive remote learning solutions using high-tech, low-tech and non-tech approaches.
2. Webinars are being held for staff from ministries of education and other stakeholders to exchange information on countries' efforts to provide distance education.
3. It provides a selection of digital learning resources that governments, schools, teachers and parents can use to expand opportunities for students who cannot attend school. Educational platforms are designed to support continuous education through curricula.

The organization's website has [published lists](#) of digital learning management systems, massive open online courses, self-help training materials, tools for creating digital learning content that can be used by governments or individual educational institutions.

4. Partnership is being developed to expand national and local capacities to provide remote learning.
5. The Global Education Coalition is being formed under the auspices of UNESCO, which includes international organizations (UN, WHO, UNICEF, WFP, OECD, World Bank, etc.), private companies (Microsoft, Google, Facebook, Coursera, Zoom, Moodle, etc.), NGOs and the media. The Coalition is called upon to promote continuous education for children and young people around the world.

3. Long-Term Opportunities

The education crisis caused by the COVID-19 pandemic shows vulnerabilities in education systems and also encourages governments and societies to innovate and foster an inclusive environment.

In the long run, departments responsible for public policies on education will face additional tasks of:

1. Improving the security system to be able to take exams online. One of the difficulties will be the arrangement of exams of special importance (for example, entrance exams to universities), which usually do not imply access to additional resources and provide for a strict identification system for the tested person.
2. Experimenting with different time frames and teaching models. The analysis of how students learn in different circumstances (with respect to time and place) will help countries unlock the potential of remote learning.
3. Empowering teachers to get the most out of digital education. Teachers will have the opportunity to test different teaching models to develop methods that contribute to a more [effective learning process](#).

4. Conclusions and Recommendations

1. To reduce the childcare burden for citizens working in sectors that are essential during the pandemic (doctors, pharmacists, police, firefighters, transportation workers, etc.), schools and kindergartens for children of such essential workers need to remain open.
2. In order to ensure continuous and universal education, a national electronic educational platform needs to be deployed and students must be provided with access to it (through electronic devices, Internet).
3. To take measures to prevent the increase in the number of street children.
4. Remove administrative barriers for the international exchange of knowledge and experience, scientific research in the field of development of a vaccine and medicine against COVID-19 and tests for the accelerated detection of coronavirus.

