The negative and positive impact of the pandemic on education

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Abstract. Lately, a new outbreak of virus has influenced almost everything, partially or completely changing the normal stagnant life. It forced to introduce new approaches or to take actions to lessen the impact and to bring its to minimum. The influence did not pass by education, but dramatically changed it. Therefore, the following work outlines the influence of so-called COVID-19 on education. Both positive and negative influences will be discussed. And also, a comparison of COVID-19 with other similar spread of viruses that have occurred in the last two decades. Briefly will be outlined the positive influence of pandemic on education, for instance introduction or integration of new technologies into the system. Similarly, negative effect of pandemic will be presented covering mostly from perspective of learners. The influence of pandemic on academic performance of students was covered. To conclude, the escape of such dangerous virus is completely novel, if taking account its massive influence, thus the information that’s provided in this work might change and be outdated, as yet the problem is not fully covered.

1. Introduction

Early 2020 were known for one major issue, that led to the dramatic changes in every aspect of human lives. These changes partially or mostly permeated all fields of industry, educational institutions, social life and etc. The changes brought negative and positive influences. Therefore, it will be remembered as an incident that nearly killed millions of people and at the same time the pusher of new technologies into the ordinary stagnant life.

The outbreak of coronavirus, or mostly known as COVID-19/SARS-CoV-2, shivered the world. Every news and social media were filled with endless coverage of the COVID-19. Although, it is not the first time, when outbreak of such viruses happened. Coronaviruses makes up a large family of viruses. These viruses can infect humans, birds and mammals. The influence from these viruses can differ, from causing mild to moderate respiratory infection to severe consequences [1]. Between 2000 and 2020 there have been three outbreaks of coronaviruses: SARS-CoV in 2002, MERS-CoV IN 2012 and 2019-nCoV. It was found that the 2019n-CoV appears to be relatively mild if compared with other two [2, 3].
As it was mentioned before COVID-19 restructured every part of settled routine. Some parts were influenced more and others less. Similarly, educational institutions were influenced by COVID-19. Due to quarantine schools and higher educational institutions were moved to so called online learning (distant or remote learning). The new approaches required introduction of new technologies to fulfill the need of students and lectures. As a result of pandemic new technologies were imbedded to the learning as a part which will help with distant learning. Although, the usage of these technologies were considered before and in some institutions these methods were applied long before the pandemic [4,5].

This work will look into the influence on education by COVID-19. The obvious influence is distant learning, but there are a lot of other parts of education, which were effected by the pandemic (mostly starting from April). Therefore, this work will outline some of the common changes it brought: positive and negative.

2. Common changes on education by COVID-19
As mentioned above COVID-19 has both positive and negative consequences. This pandemic caused shutdowns of education systems and thus creating the largest impact on students, approximately 94 percent of total students around the world. Therefore, the following paragraph will be devoted on these consequences.

2.1. Positive influence
There can be a question asked about COVID-19. Can such influential event-pandemic provide us-humans with positive outcomes at the end? And the answer can be clearly stated, but yet the consequences of it will be fully uncovered in the future. However, by analyzing present days one can clearly outline that some of the touched parts by the COVID-19 can be somehow improved or redefined in right direction.

When discussing the positive impact of pandemic, one thing that comes into mind is integration of technologies into education system. Education and technologies always come together, but with the pandemic it took new level. Although this can be seen as forced transition, but at the time only fusible solution.

However, integration of new technology into education does not mean that it will improve interaction between teacher and student (meaning that teacher will deliver material better and student will receive it and fully understand. New technology provides more possibilities for both teacher and student, but only when it used correct.

Introduction distant learning by itself. Today term distant learning associated with the words such as pandemic, COVID-19, shutdown and so on. Distant learning was on horizon, but needed a one strong push to become a major part of education. Although its effectiveness will be available only after sometime.

2.2. Negative influence
Most negative influence from pandemic received these countries and students where poverty is a major issue. It is agreeable that in one place pandemic pushed technology usage into the next level, whereas in others the absence of such technology put to pause the whole educational system. The term of distant learning can be easily comprehended, but in reality, it is more complex. It requires appropriate software packages, stable internet (fast internet also preferable), computers (other compatible devices) and etc. For sure this time can be called an era of technology, but out of 7.5 billion people on the planet only 4.1 billion have internet connection, not mentioning the access to computers and software packages. Figure 1 illustrates the percentage of households with internet connection by region (data collected by IESALC).

The other issue with the distant learning is that some of the stuff and students needs to be trained to use the technologies that they are been given. This task requires some time to fully get use to the new approaches and, thus, further delay of teaching occurs. This cannot be the common problem, but added to wider issue this might have some impact.
Further delay can cause for students’ loss of opportunity to return to educational institutions. It was stated that due to the pandemic some of the learners are highly in danger of not moving to the next academic year. These learners will drop out from or have no access to attend schools. The number of these learners are around approximately predicted to be 23.8 million [6]. If so called second wave is on the horizon the numbers probably will increase.

There also are some health-related issues with the lock down or replacing offline sessions with online sessions. In door activities (classes or sessions) can negatively influence on health of learners. One can argue this statement by comparing remote learning with the same in door classes or lecturers in the schools or in the higher educational institutions. And, indeed, they can be fairly compared to each other and, thus, conclude the similarities of the both. Nonetheless the difference comes when normal classes are changed to fronting computers or any electronic devices (which are capable of handling the remote learnings) throughout the classes or lectures.

Not the much, but yet, the negative influence on health comes from social distancing and it makes worse by the combination of the two beforementioned statements. Pandemic can negatively effect these student with special educational needs. It might occur that the changes could negatively influence on their ability to scope the learning challenges. In addition, not directly related to the education, but can be counted as a result of closure, parents labor increase is an outcome of pandemic. Meaning that the need of new arrangements for children to stay at home, while closure is happening, and making it worse in situation where playground and children centers are closed.

Furthermore, the consequences of such events fraught with more severe outcomes, which are not instantly noticeable, but will surface in the medium and long term.

![Percentage of households with internet connection by region](image)

**Figure 1.** Percentage of households with internet connection by region [7].

### 3. Influence on the student’s marks

The following paragraph will look at the influence of pandemic on the marks of the students. The first thing that is effected by the pandemic when choosing between lectures and practical sessions, the last mentioned suffers the most. As remote learning is substantial element during pandemic and its influence on lectures sessions are comparably small if taking into account that practical sessions effected the most. In addition, it was noted that the students with the remote learning if compared to those who attended the classes are at risk of getting worse on their performance (figure2) [8].
4. Conclusion
In conclusion, this work was prepared to show some common influences of so called pandemic, which is responsible for the closure of educational institutions and thus having an impact on education as whole. It discussed some symptoms (outcomes) that already shown up in educational institutions and their role to the learners, teachers, working stuff etc.

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