



EDUCATIONAL IMPLICATIONS IN THE COVID-19 ERA

Edited By
Assoc. Prof. Dr. Şahin DANIŞMAN
Dr. Mustafa GÜLER

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Environmental Consciousness during the COVID-19 Pandemic

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PREFACE

The humanity is fighting a global war against the coronavirus. The ongoing COVID-19 pandemic has changed the lifestyle of almost everyone. Education is one of the many areas affected by this pandemic. It has already been the subject of many researches addressing its impact on society. The need for continued access to the teaching and learning for teachers and students has never been more important, as its impact poses many challenges for them. This book is written to provide the effects of this pandemic on the education and its stakeholders.

The book is divided into ten chapters, each of which approaching the pandemic from different perspectives. The readers may also benefit from the references of each section, which has a potential to enlighten them to read and study further, as well as the content.

The book starts with an introductory chapter on the pandemic. It questions “back to normal” after the pandemic for school education. It argues values in terms of the wellbeing of the students, especially in mathematics. The second chapter covers the experiences of preservice teachers and mentors during the remote teaching. It puts forward the challenges and pedagogical skills needed for remote teaching, and expectations, problems encountered, possibilities and limitations of school experience course. The third chapter informs the readers about the environmental consciousness of students in this pandemic. It includes information about students’ views on conscious consumption, waste and recycling, energy saving. The chapter informs various stakeholders about the environmental consciousness. The fourth chapter focuses on the video-assisted out-of-school learning activities as an alternative learning drawing attention to the access for knowledge anywhere and anytime. It presents and analyzes the potentials of out-of-school activities designed by pre-service mathematics teachers with the support of visuals from the activities. The fifth chapter covers online education stress among students in terms of lock-down, online classes, online learning and online examination. It presents findings about the stress levels of students using different variables such as gender, locale and course level in addition to the availability of digital devices.

The sixth chapter deals with the family-focused psycho train-ing sessions for preschool education during the pandemic. It draws attention to the affective effects of the pandemic as well as behavioral and habitual disorders. The seventh chapter includes reflections of EFL students about the use of computerized corpus technology in academic writing. It further mentions the potentials of corpus tools and difficulties met during the implementation process. The eighth chapter informs us about the challenges science teachers face in distance education. The

author also puts forth the subjects the teachers had difficulties most and discuss the reasons behind these challenges. The ninth chapter draws attention towards the undergraduate teacher education program from the perspective of Philippine. The authors discuss the curriculum on COVID-19 crisis' doorstep. The chapter is supposed to guide the authorities to improve the undergraduate program for teacher education. The tenth chapter focuses on the psychological effects of pandemic examining the relationships among psychological resilience, social support, cognitive emotion regulation and obsessive beliefs. The authors assert that the pandemic has imposed several constraints on daily life of the individuals and the effects of the pandemic will likely to last for a long time.

We hope this book will be able to help the readers to have a picture of the effects of the pandemic on education. Sharing the research results may provide the readers to evaluate the risks and potentials of this unwelcomed process. With this in mind, we will be glad to see the comments and constructive criticism from the readers. Since the pandemic is still ongoing, there are still opportunities for researchers to contribute to the education in general.

We express our heartfelt thanks to the contributors of this book and the publisher for their efforts.

Assoc. Prof. Dr. Şahin DANIŞMAN

Dr. Mustafa GÜLER

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CHAPTER 1

No Return to Normal: Reducing the Impact of COVID-19 Remote Education on Student Wellbeing

Prof. Dr. Wee Tiong SEAH

1. Introduction

The COVID-19 pandemic which began in January 2020 had led to school closures around the world at a scale not seen since the 1918 Spanish flu epidemic. According to UNICEF data (UNICEF, 2021a), schools around the world were closed for an average of about half the intended operational time (i.e. 95 instruction days) between March 2020 and February 2021. As of 15 April 2021, more than 132.6 million children were affected by school closures around the world (UNICEF, 2021b).

As increasingly more countries emerge from lockdowns and as schools reopen around the world, it is as important to plan for school education post-lockdown as it is to support teachers in their deliveries of remote education.

Indeed, what will school education look like in a world which is slowly accepting COVID-19 as an endemic? Parts of this new reality might already be visible in schooling today as students return to class, or you might be able to reflect on your professional experiences with school education changes that took place after previous outbreaks such as SARS and MERS. Or you might have lived through other school disruptions as a result of wars such as in the Middle East, civil unrest such as in Myanmar or Hong Kong, or natural disasters such as forest fires and floods.

One thing for sure, just like societies in which it is situated, school education as we know it is not likely returning to what it looked like before the COVID19 pandemic struck. The notion of returning to normal, or being back to normal, is an illusional one. Many aspects of school education would have undergone irreversible changes by the time the pandemic ends, or when it becomes an endemic. For

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CHAPTER 2

School Experience during Emergency Remote Teaching: Evaluations of Teacher Candidates and Mentors

Dr. Esin DÜNDAR, Assoc. Prof. Dr. Ali MERÇ

1. Introduction

Within the two past decades, the world has experienced several pandemic outbreaks which have had not only financial but also educational consequences (Owusu-Fordjour et al., 2020). What differs COVID-19 from the other crises the world has ever experienced is the extent of its impact on the education and its simultaneous emergence around the world (Karalis, 2020). Unlike previous outbreaks during which there was still access to education to some extent (Karalis, 2020), outbreak of COVID-19 has resulted in educational upheaval for almost 376.9 million learners (Huang et al., 2020). According to the data of UNESCO, the number of the countries announcing school closure was 46 as of 12 March 2020 (Huang et al., 2020). Other than pharmaceutical solutions, countries adopted the following precautions:

“social distancing (such as banning large gatherings and advising individuals not to socialize outside their households), border closures, school closures, measures to isolate symptomatic individuals and their contacts, and large scale lockdowns of populations with all but essential internal travel banned” (Reimers & Schleicher, 2020, p. 3).

These limitations have disrupted educational activities for all levels as they make it impossible for teachers and learners to share the same environment physically (Reimers & Schleicher, 2020). As a result, enforced closure of the educational institutions has affected between 94% and 99% of student population in the world (Paudel, 2021). At the worst state of the crisis, 1.6 billion students from more than 190 countries and more than 100 million educators and school staff

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CHAPTER 3

Environmental Consciousness during the COVID-19 Pandemic

Dr. John Mark R. Asio

1. Introduction

The COVID-19 pandemic has led to a dramatic loss of many lives. The pandemic caused significant effects that put everyone's life in danger. Moreover, the impact of the pandemic that we are currently experiencing tantamount to both human and environmental conditions. Of course, one considers the advantages that the COVID-19 brought upon us like practicing proper hand hygiene, avoiding exposure to possible infected individual (social distancing), keeping the immune system strong and many more. On the other hand, the disadvantages include being quarantined at home, limited outside activities, hampered economic activities, unemployment, temporary closure of establishments like market, churches, and even schools are only a few to mention. The world became a mess and people panicked. The world governments and other responsible agencies scampered to relieve and alleviate the sudden impact of the pandemic. Regardless of the status, COVID-19 affected education (Karademir et al., 2021; Schleicher, 2020), stock markets (Topcu & Gulal, 2020), psychosocial (Dubey et al., 2020; Klapproth et al., 2020), environmental (Bashir et al., 2020; Lokhandwala & Gautam, 2020; Wang & Su, 2020), travel and tourism (Skare et al. 2021), and socio-economic (Bashir et al., 2020). These impacts were just a few among the many effects of the COVID-19 pandemic, individually and globally. It made a significant dent to the lives of many and caused misery and suffering one way or another. Since this COVID-19 is a new strain of viral infection, antiviral treatment is yet available. Scientists race against time to find the cure for it and even the advancement of technology and medicine, it is still difficult to concoct a solution to battle the infection. It is a great nightmare for everyone specially those who are in the frontline. Other impacts basically dwell

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CHAPTER 4

An Alternative Learning during Pandemic: Video-Assisted Out-of-School Learning Activities

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1. Introduction

It is vital to raise our children as individuals who know how to access knowledge from the initial years of their student years in order for our society to have the skills necessary by the age and the skills to adapt to the age it is in, as the term “the tree bends when it is young” implies. Furthermore, we should be able to design learning settings in which students may develop abilities such as verifying, classifying, and applying the information they have gathered to solve the problems they encounter. In this context, it is well known that mathematics education plays a significant role in achieving the aims of developing persons who are capable of creative and analytical thinking (English & Watters, 2004; Şahin & Eraslan, 2019). The basic premise of the Turkish mathematics curriculum is to raise global citizens who can apply mathematics in their daily lives, have problem-solving, analytical, creative, and critical thinking skills, think solution-oriented, and share their ideas with their classmates (Ministry of National Education [MoNE], 2018). Mathematics teachers, as well as students, play a critical role in fulfilling the mathematics curriculum’s acquisitions. In other words, teachers and the instructional processes they develop play a major role in achieving the desired level of success in the classroom (Danişman et al., 2019; Gökbulut et al., 2008; Hill et al., 2005; Kilpatrick et al., 2001). Student profiles (learning styles, attention spans, interests, etc.) that differ each year make it difficult to confine teaching to the four walls of a classroom (Clark, 2016). In this instance, teachers should construct their instructional materials in such a way that they will attract students’ attention and make them feel that the information they will learn is a part of their daily lives. Teachers’ ability to construct their instructional procedures in this manner

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CHAPTER 5

Online Education Stress among Students during the COVID-19 Pandemic: Evidence from Indian Universities

Assist. Prof. Dr. Razia B

1. Introduction

The outbreak of COVID-19 pandemic has resulted in dramatic changes worldwide in the education system. Traditional classroom education has been replaced by online education for time being whereby teaching learning process is being carried through online modes using various digital platforms. In order to control the pandemic caused by COVID-19, educational institutions all over India were closed by March 16, 2020 as per the instructions of Ministry of Health and Family Welfare, Government of India (Times of India Report, 2020). Students were advised to stay at home and carry on with online education in order to maintain social distancing and abide with COVID-19 protocols. At present, digital technology has become the foremost medium for conducting classes and examinations. This is a clear indication that during this period of crisis, there is no option left other than online mode for providing education to students at various levels of education system. Even though internet-based teaching is the most appropriate stop-gap arrangement now, it has highlighted the inequalities in education system (Reddy & Ramesh, 2020). Due to this major change, the normal life of students and teachers in India have been greatly disrupted as in any other country and there are number of challenges being faced which may lead to psychological problems including anxiety and stress. Remote learning situation during the period of crisis can bring tremendous stress among students (Rotas & Cahapay, 2021). One of the major challenges on the part of the students studying in Indian universities is that most of them belong to middle and lower socio-economic status and hence cannot afford expensive online devices like laptops or tablets. Non-availability of technological gadgets and Internet connectivity issues

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CHAPTER 6

Family-Focused Psycho Training Sessions during COVID-19 Pandemic

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1. Introduction

Many fatal epidemic diseases such as typhoid, cholera, plague, swine flu and bird flu influenced the world in history and humanity carried out a battle of life against the epidemic. The new type of corona virus disease (COVID-19), with a high level of infectiousness and death risk that appeared in Wuhan, China, soon spread to the whole world with destructive effects due to its structure and transportation facilities and the global world. The epidemic affected and still affects negatively not only people but also the political, economic, social, psychological and physical structure of communities. Epidemic conditions brought by COVID-19 caused many changes with its unexpected effects on both adults and children (Çakır Kardeş, 2020).

The World Health Organization announced the global epidemic on 11 March, 2020 (<https://www.bbc.com>, 2020). Governments called citizens to “Stay at Home!” to control the epidemic, curfews were imposed, and had to close educational institutions and businesses. Education at all levels was suspended, and people in government and private institutions began to work from home. As part of the fight against the epidemic, these new regulations influenced physical, psychological, social and economic fields in the lives of families and caused many changes (Kurt Demirtaş & Sevgili Koçak, 2020).

The first COVID-19 related death in Turkey was declared on 15 March 2020. This was followed by strict measures against epidemics in the whole country. A curfew was imposed on people over the age of 65 and children and adolescents below 18. In this context, individuals were restricted, excluding those working

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CHAPTER 7

Online Instruction at a Turkish University: Reflections towards Corpus Applications in Language Classroom

Assist. Prof. Dr. Ali Şükrü ÖZBAY

1. Introduction

Instructing online courses during the Covid-19 has presented several challenges as well as certain advantages to the instructors in many educational settings especially in terms of adapting themselves to the use of online technology in their courses. One of these challenges is that with the sudden emergence of Covid-19, the educational institutions had to quickly transform their courses into online classes, using the available technologies (Romero-Ivanova et al., 2020; Barry & Kanematsu, 2020). This quick transition from in-person to online instruction naturally brought about several challenges teachers need to overcome (Cuellar, 2020). For example, teachers needed to adopt new pedagogical methods to make their teaching more effective and reliable as well as less stressful for their students and for themselves (Platt et al., 2014). Online teaching, on the other hand, presents several opportunities for writing instruction to help students become more proficient writers who can use corpus tools and produce better and more reliable writing even without being able to meet face to face (Premont, 2020). The awareness on the parts of the teachers towards the insufficiency of their existing teaching practices in online setting was also a strong motivation for some teachers to spend extra effort for facilitating effective online class sessions (Hicks, 2020). The increased flexibility of online classrooms and the increase in learning and teaching opportunities for students and teachers were the primary advantages of online teaching and learning (Healy et al., 2014).

Conducting online writing classrooms has only a recent popular history and needed adapt to the limitations brought by COVID-19 pandemic. Once consid-

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CHAPTER 8

Challenges Science Teachers Face in Distance Science Education during the COVID-19 Emergency

Dr. Ahmet TAŞDERE

1. Introduction

Today, the development of individuals' scientific literacy levels has become as important as learning basic daily literacy. This situation has now become one of the most basic level competencies that every individual should have, in addition to being the major purpose of formal education institutions. Raising all individuals as scientific literate, regardless of their individual differences, has been adopted as a vision in the current Science Curriculum, which has been constructed in recent years and a strong emphasis on this competence has been placed (Ministry of National Education [MoNE], 2005, 2013, 2018). The global COVID-19 pandemic, which has been affecting people from all walks of life over the past 2 years, has made the acquisition of this vision a requirement for everyone. Drawing attention to the impact of the COVID-19 pandemic process on daily communications in the context of scientific literacy, Dillon and Avraamidou (2020), stated that various scientific concepts such as virus, corona, pandemic, epidemic, herd immunity, incubation, social distance, isolation, quarantine, and symptom are now frequently heard. According to Lin (2020), educational activities were also directly affected in this process, which caused serious changes in all activities that directly concern people such as health, economy and social life, as well as the emergence of various anxieties and concerns. Emphasizing the reports published on this effect on an international scale, Miks and McIlwaine (2020), stated that schools were temporarily closed in many countries due to the virus that spread all over the world, affecting more than 91 percent of the students in the world (1.6 billion children and youth). As part of emergency measures, countries,

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Appendix 1

1. Considering the subjects in the science curriculum, which subjects were difficult to teach in the 5th, 6th, 7th and 8th grades in the distance education process?
For Grade 5:
For Grade 6:
For Grade 7:
For Grade 8:
2. Why do you think it is difficult to teach these subjects in distance education? What could be the possible reasons for this?
3. Which symbols, mathematical expressions, formulas, models, graphics, etc. are mostly used in science lessons during the distance education process was it difficult to teach? Can you explain with an example?
4. Have you done experiments in the distance science teaching process? What subjects have you experimented with? Which experiments and activities were the most challenging for you? Why is that?
5. What is the situation in which you have the most problems in distance science teaching (Lesson preparation, Teaching process, Assessment and Evaluation, Teacher-Student and Student-Student communication, Classroom Management, Student interest, motivation, etc.) Why?
6. Did you experience connection, internet, audio, visual etc. problems in distance science teaching? If so, how did this affect the distance science teaching process?



CHAPTER 9

Reimagining the Future of Philippine Undergraduate Teacher Education Program: The Curriculum Implications of COVID-19 Crisis

Erwin E. Rotas, Prof. Michael B. Cahapay

1. Introduction: Setting the Stage of Education in Crisis

People have been battling viruses even before the evolution of the human species into its modern shape now. One of these highly transmissible viruses that have emerged recently is the COVID-19, a new strain of severe acute respiratory syndrome caused by a novel coronavirus (Shereen et al., 2020). It was first reported in people exposed to a market in Wuhan, China, and transferred to humans through an unknown intermediary. Since then, it has quickly multiplied across six continents and in more than a hundred countries and territories (McLeod, 2020), transposing societies, homes, schools, and services into a new reality. Experts in epidemiology initially indicated that the COVID-19 virus is highly communicable (Thorneloe et al., 2020) and with the emergence of more contagious COVID-19 variants specifically originating from United Kingdom, South Africa, and Brazil, it is expected to lead to more cases of and put more strain on medical resources of each country in the world (Centers for Disease Control and Prevention, 2021). It was first declared a pandemic by the World Health Organization (2020) in March 2020 and just after a year, as of 17 March 2021, there have been 120,383,919 confirmed cases of COVID-19, including 2,664,386 deaths (World Health Organization, 2021).

The impact of COVID-19 is multidimensional and is evidently demonstrated in almost all sectors, including the education sector. The International Association of Universities (2020) reported that at the onset of the COVID-19 crisis, more than a billion students across the world were affected by the closures of schools,

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CHAPTER 10

The Role of Psychological Resilience, Perceived Social Support and Cognitive Emotion Regulation in Predicting Obsessive Beliefs during COVID-19 Pandemic

Özlem ÇOLAK, Assist. Prof. Dr. Ahmet SAPANCI

1. Introduction

COVID-19 is an infectious disease caused by the SARS-CoV-2 virus that first appeared in Wuhan, China, in 2019. It is disseminated through contact with the virus, which sick people transfer through droplets into the environment (Pedersen & Ho, 2020). The virus spread quickly and had an impact all over the world, prompting the declaration of a global pandemic (World Health Organization [WHO], 2020). While the virus causes a severe course of the disease in some people, it can also lead to death in others. Important consequences for people such as the inability to perform cultural and religious rites after the loss, as well as the inability to bid farewell to their loss, cause the bereavement process to be postponed and not completed (Wallace et al., 2020). The COVID-19 pandemic, which is a life-threatening disease, is regarded as a life-complicating condition since it affects daily life (Çelebi, 2020). Difficult life events are well established to be a key risk factor for people's mental health. Various studies examining the relationship between experienced experiences and psychological disorders exist. In a study, it was concluded that 35.8% of people with a psychiatric diagnosis had experienced at least one serious event before the illness (Farevelli et al., 2007). Although it is normal to follow the process and developments, it is thought that repetitive behaviors such as conducting extensive research on the pandemic, obsessively watching the news on social media and television, and frequently checking the body for signs of illness could be considered symptoms of anxiety disorder (Göka et al., 2020). Similarly, recent researches in Turkey have found that anxiety levels of the people have increased as a result of the COVID-19 era (Göksu & Kumcağız, 2020).

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