

Report on the Impact of the New Crown Pneumonia Epidemic on the Education Sector and the Crisis

Vinnytsia National Technical University

Abstract: *The aim of this report is to analyse the impact of the epidemic on the global education system, explore the main challenges facing the education sector by citing specific examples and data, and propose corresponding coping strategies*

Keywords: global education system, school closures, online education, educational inequality, mental health, coping strategies.

Since its outbreak at the end of 2019, the New Crown Pneumonia epidemic has had an unprecedented impact on the global education sector. According to UNESCO (United Nations Educational, Scientific and Cultural Organisation), in April 2020, more than 150 million students were affected by school closures globally, covering more than 160 countries. This sudden crisis has forced education systems and their participants to face multifaceted challenges, including disruptions to learning, the challenges of distance learning, rising inequalities in education, and an increase in mental health issues among students and teachers[1]. Widespread school closures, while helping to slow the spread of the virus, simultaneously led to significant delays in learning progress and a decline in the quality of education. Distance learning became key to educational continuity, but unequal technology and network access exacerbated inequities in educational opportunities[2]. In addition, prolonged home isolation and lack of face-to-face social interaction negatively impacted students' social and emotional development [3].

This report analyses the impact of the epidemic on the education sector, examines the main challenges faced and proposes a series of strategies to address them. These strategies include strengthening distance education resources and platforms, promoting equity in education, providing mental health support [4], and encouraging policies and investments to support the recovery and development of education systems. Through global cooperation and joint efforts, we can overcome the challenges posed by the crisis to the education sector and build a more equitable, inclusive, and resilient educational environment for all students.

Challenges facing the education sector:

Widespread Impact of School Closures

According to UNESCO (United Nations Educational, Scientific and Cultural Organisation), in April 2020, more than 150 million students were affected by school closures globally, covering more than 160 countries. While this measure has helped to slow the spread of the epidemic, it has also led to widespread learning disruption and delays in educational progress [5].

Challenges of Moving to Online Teaching and Learning

A school district in the United States quickly shifted to online instruction in response to school closures. However, surveys showed that about 10 per cent of students were unable to participate in online learning because they lacked appropriate equipment or a stable internet connection. Globally, inequality in access to distance learning resources is particularly acute for students from low-income families, fuelling educational inequality [6].

Impact on Mental Health and Social Development

In the UK, a survey of children and young people conducted during the epidemic found that around 31 per cent of respondents reported a deterioration in their mental health. Prolonged isolation and lack of face-to-face interaction not only affected students' academic performance, but also had a negative impact on their mental health and social skills development[7].

Rising Inequalities in Education

In India, the epidemic forced the closure of schools and distance learning became the primary mode of learning. However, according to a study, about 29 per cent of students are unable to access online education through any form of digital device. This digital divide is not limited to low-income countries; even in developed countries, poor and marginalised groups face similar challenges[8].

Response strategies

Strengthen Distance Education Resources and Platforms

Provide financial support and technical equipment to ensure that all students have access to online learning resources. Develop and optimise online teaching content and platforms to improve the quality of education and student participation. This strategy aligns with recommendations for enhancing multimedia programs to improve the quality and efficiency of distance education[9]and leveraging resources for educational equity to promote academic success among underrepresented students[10].

Enhancement of Educational Equity

Implement support programmes for disadvantaged groups, including the provision of equipment, network access, and customised learning materials. Increase investment in education in remote areas and low-income families to ensure that they too can enjoy high-quality educational resources. Efforts should focus on improving gender equity in education and fostering educational resilience and opportunities through equity-focused partnerships[11].

Strengthening Mental Health Support

Provide mental health education and counselling services for students and teachers to help them cope with psychological stress during the epidemic. Promote cooperation between communities and schools to establish support networks to support students' social development and emotional well-being. Initiatives like the WISE (Wellbeing in Secondary Education) study and support programmes for developing competences of teachers[12] are crucial in this regard.

Adopting Flexible Education Models

Explore and implement blended learning models, combining online and offline education to cater for different educational needs and the development of the epidemic. Encourage innovative teaching methods, including project-based learning and peer learning, to enhance students' motivation and engagement. Blended learning models have shown effectiveness in improving critical thinking and generic science skills[13] and should be considered for broader implementation.

Conclusion

The new Crown Pneumonia epidemic has had a profound impact on the global education sector, exposing many long-standing issues, while at the same time providing an opportunity for innovation and change in the field of education. Through a robust response, it is possible not only to mitigate the impact of the current crisis, but also to build a more equitable, inclusive and resilient education system for the future.

REFERENCES

1. Ikeda, M., & Echazarra, A. (2021). How socio-economics plays into students learning on their own. PISA in Focus.
2. Buelvas, D. (2023). An Action Research Study of Using Group-Based Remote Learning with ESL High School Students in English Language Arts. *The Canadian Journal of Action Research*.
3. Gong, Y., Liu, X., Zheng, Y., Mei, H.-l., Que, J., Yuan, K., Yan, W., Shi, L., Meng, S.-q., Bao, Y., & Lu, L. (2022). COVID-19 Induced Economic Slowdown and Mental Health Issues. *Frontiers in Psychology*, 13.
4. Arday, J. (2021). No one can see me cry: understanding mental health issues for Black and minority ethnic staff in higher education. *Higher Education*, 83, 79-102.
5. Carriera, L., Montà, C., & Bianchi, D. (2021). THE IMPACT OF COVID-19 ON RESIDENTIAL CARE SERVICES FOR CHILDREN: A CALL FOR FAMILY-BASED APPROACH IN ALTERNATIVE CARE. *Education and New Developments 2021*.
6. Krumsvik, R. (2020). Home schooling, remote teaching and digital Bildung in societal crisis. *Nordic Journal of Digital Literacy*, 15, 71-85.
7. Chen, T., & Lucock, M. (2022). The mental health of university students during the COVID-19 pandemic: An online survey in the UK. *PLoS ONE*, 17.
8. Francis, D. V., & Weller, C. (2021). Economic Inequality, the Digital Divide, and Remote Learning During COVID-19. *The Review of Black Political Economy*, 49, 41-60.
9. Mirzakarimova, M. M., & Fayziev, R. A. (2021). Enhancement of Multimedia Programs to Improve the Quality and Efficiency of Distance Education. 2021 1st International Conference on Technology Enhanced Learning in Higher Education (TELE), 265-267.
10. Kirui, C., & McGee, J. L. (2021). Leveraging Resources for Educational Equity to Promote Academic Success Among Underrepresented Nursing Students: An Integrative Review. *Nursing Education Perspectives*, 42, 212-215
11. Bryan, J. A., Williams, J. M., & Griffin, D. C. (2020). Fostering educational resilience and opportunities in urban schools through equity-focused school–family–community partnerships. *Professional School Counseling*, 23.
12. Hathazi, A. (2020). Support Programs for Developing Competences of Teachers as an Essential Factor for Successful Inclusive Education. *Educação e Cultura Contemporânea*.
13. Doyan, A., Susilawati, S., Hadisaputra, S., & Mulyadi, L. (2022). Effectiveness of Quantum Physics Learning Tools Using Blended Learning Models to Improve Critical Thinking and Generic Science Skills of Students. *Jurnal Penelitian Pendidikan IPA*.

Li Na, postgraduate student, Faculty of management and information security Vinnitsia National Technical University