



basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

Research Repository Collation on the effects and impact of COVID-19 on children, adolescents and education

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The following forms the third compilation of informational resources about the novel COVID-19 disease and its impact on children, schooling and educational outcomes as it is currently understood. This compilation is a continuation of a collation of peer reviewed empirical studies, editorial viewpoints, research policy briefs and insights from leading South African and international sources in an attempt to provide some useful resources to researchers, policy analysts and any other stakeholder with an interest in understanding the state of evidence and scientific research into critical questions around the COVID-19 pandemic and schooling.

Included in this third compilation are resources on the various findings and implications of the reopening of schools after the hard lockdown. The insights from various sources highlight implications for learners, teaching and schooling in general. The recently added section on Early Childhood Development Centres has broadened the scope of this collation since the ECD sector has also been hit hard by the pandemic and many responsibilities within this sector are in the process of being migrated to the DBE.

Although a set of criteria (described below) was followed to identify the sources to be included in this repository, the field of research on COVID-19 is so new and time-sensitive that a few limitations of this repository should be noted: 1) it was necessary to include a range of sources other than peer-reviewed publications; 2) this repository should not be viewed as a conclusive list of the main or most reliable sources – some important sources may well have been inadvertently omitted; 3) new sources are emerging every day and although the plan is to update this repository from time to time, important studies may well have emerged since the last update; 4) by providing the links to the studies in this repository the DBE is not endorsing the findings or recommendations of these sources.

Initially compiled in a two-week period from 10 – 21 August 2020 and most recently in October 2021, a desktop review was done of available empirical literature either describing, measuring or modelling the effects of the disease (or national responses to the disease) as they impact (or concern) children of school-going age, teaching and learning. The literature search began with a keyword search in journal search engines using the terms “COVID/19” AND “Children” OR “Schools” OR “South Africa” and later adapted to also include AND “Learning Outcomes” OR “Education,” OR “School Closures.” In 2021 the journal search engine added the terms “SECOND WAVE” “SCHOOLS REOPENING” “TRANSMISSION” AND “ECD”. In aiming to have the collation be topical, only sources citing publication in 2020 and 2021 were included.

Articles, commissioned reports or working papers that did not focus on ECD, schooling or children of school-going age, or did not show evidence of robust methodologies such as extensive referencing or were only available via unsecure web portals were excluded. When a dearth of literature on South Africa emerged, the search expanded to include international case studies and research that applied more generally to children and schooling around the world. Given the interest in understanding the disease and children, meta-studies and journal editorials reviewing available literature were prevalent in medical/ health journals and thus were included. Some of these rapid literature reviews were nestled in journal editorial commentary from health professionals providing their considered opinions on various matters as they pertained to the health of children. As these commentaries usefully referenced prior or forthcoming research, these too were sometimes included.

As a mechanism of verifying the trustworthiness of the research contained herein, commonly cited peer-reviewed sources available on journal search engines, eLibrary portals, or well-regarded research knowledge repositories were privileged. Given the pace at which information about the disease and its impact on children and schools is emerging, some gaps will no doubt exist. Should you be aware of studies that meet our focus or are yourself engaged in forthcoming research on this topic kindly contact research@dbe.gov.za.

Figure 1: Number of sources identified within each thematic area

| | The COVID-19 Disease in children. | COVID-19 transmission through schools. | Impacts of school closures on children: learning, mental health, and nutrition. | COVID-19 & Early Childhood Development (ECD) |
|------------------------------------|--|---|--|---|
| South Africa | <u>2</u> | <u>1</u> | <u>12</u> | <u>2</u> |
| International Applicability | <u>6</u> | <u>6</u> | <u>26</u> | <u>2</u> |
| International Country Cases | <u>1</u> | <u>12</u> | <u>15</u> | |

The COVID-19 DISEASE IN CHILDREN

South Africa

- **Epidemiology and clinical characteristics of laboratory confirmed COVID-19 among individuals aged ≤ 19 years, South Africa, 1 March 2020 - 2 January 2021.**

Source: Kufa-Chakezha T., Jassat W., Walaza S, Erasmus L., von Gottberg A., Cohen C., National Institute for Communicable Diseases (NICD). (22 January 2021) Available at <https://www.nicd.ac.za/wp-content/uploads/2021/01/COVID-19-SPECIAL-PUBLIC-HEALTH-SURVEILLANCE-BULLETIN-Volume-7.pdf>

Type: *Special Public Health Bulletin.*

Summary: increases in case numbers is a new lineage of SARS-CoV-2 that was detected and found to be predominant in the Eastern Cape, Western Cape and KwaZulu-Natal provinces.

- **What are we doing to the children of South Africa under the guise of COVID-19 lockdown?**

Source: van Bruwaene, L., Mustafa, F., Cloete, J., Goga, A., & Green, R. J. (July 2020). *South African Medical Journal*, 110(7), 1-2. Available at http://www.scielo.org.za/scielo.php?script=sci_arttext&pid=S0256-95742020000700007

Type: *Journal Editorial*

Summary: Health professionals' commentary on the South African government's COVID-19 response.

International Applicability

- **Children and young people remain at low risk of COVID-19 mortality**

Source: Bhopal, S, Bagaria, J, Olabi, B and Bhopal, R. 10 March 2021
[https://www.thelancet.com/journals/lanchi/article/PIIS2352-4642\(21\)00066-3/fulltext](https://www.thelancet.com/journals/lanchi/article/PIIS2352-4642(21)00066-3/fulltext)

Type: *Medical Article*

Summary: Since early reports from China stated that severe COVID-19 disease was rare in children,¹

- **How have COVID-19 pandemic school closures impacted the health of children globally?**

Source: Thomas, L (PhD) 18 February 2021 <https://www.news-medical.net/news/20210218/How-have-COVID-19-pandemic-school-closures-impacted-the-health-of-children-globally.aspx>

Type: *News Article*

Summary: A medical news article detailing the impact of school closures on learners physical and mental health.

- **An evidence summary of Paediatric COVID-19 literature**

Source: Boast A, Munro A, Goldstein H. (2020). Don't Forget the Bubbles. Available at: <http://doi.org/10.31440/DFTB.24063>

Type: *Think Tank Article*

Summary: A rapid literature review of pertinent paediatric literature regarding COVID-19 disease

- **The missing link? Children and transmission of SARS-CoV-2**

Source: Munro, A., & Roland, M. (2020). Don't Forget the Bubbles. Available at: <http://doi.org/10.31440/DFTB.25585>

Type: *Think Tank Article*

Summary: Health professional post that aims to outline all the evidence available so far on the potential role of children in transmission of COVID-19.

- **Susceptibility to SARS-CoV-2 Infection Among Children and Adolescents Compared with Adults: A Systematic Review and Meta-analysis**

Source: Russell, M. Viner. Oliver, T. Mytton. & Chris Bonell 25 September 2020.

[Susceptibility to SARS-CoV-2 Infection Among Children and Adolescents Compared With Adults: A Systematic Review and Meta-analysis | Adolescent Medicine | JAMA Pediatrics | JAMA Network](#)

Type: *Journal article*

Summary: A systematic review the susceptibility to and transmission of SARS-CoV-2 among children and adolescents compared with adults.

- **Multisystem inflammatory syndrome in children (MIS-C) and the coronavirus pandemic: Current knowledge and implications for public health**

Source: Raffety, M. Burrows, H. Joseph, J.P, Leveille, J. Nihtianova, S. Susan Amirian, E.

Type: *Journal Article*

Summary: Though children have been largely spared from severe COVID-19 illness, a new and rare complication known as Multisystem inflammatory syndrome (MIS-C) has emerged, which most commonly affects young children. In this article, current knowledge on MIS-C is reviewed and the potential implications of this syndrome are discussed from a public health perspective.

International Country Cases

- **Simulating the effect of school closure during COVID-19 outbreaks in Ontario, Canada.**

Source: Abdollahi, E., Haworth-Brockman, M., Keynan, Y. et al. (24 July 2020). *BMC Med* 18, 230. <https://doi.org/10.1186/s12916-020-01705-8>

Type: *Journal Article*

Summary: Article evaluating the effect of School Closures on reducing attack rate and the need for critical care during COVID-19 outbreaks, while considering scenarios with concurrent implementation of self-isolation (SI) of symptomatic cases in Ontario, Canada.

COVID-19 TRANSMISSION THROUGH SCHOOLS

South Africa

- **Patterns in the COVID-19 cases among learners and staff in Gauteng schools: Analysis of school-level data to 8 July 2020**

Source: Gustafsson, M., & Chanee, A. (July 2020). Working Paper, Department of Basic Education. Available at <https://www.education.gov.za/Portals/0/Documents/Reports/Gauteng%20%20July%20infections%20patterns%202020%2007%2021.pdf?ver=2020-07-28-165203-553>

Type: Working Paper

Summary: Working paper analyses school-level data submitted by Gauteng schools on staff and learners found to have tested positive for COVID-19 in the period 25 May to 8 July.

International Applicability

- **COVID-19 in schools: Mitigating classroom clusters in the context of variable transmission**

Source: Tupper, P & Colijn, C. (8 July 2021) <https://doi.org/10.1371/journal.pcbi.1009120>

Type: Research article

Abstract: Widespread school closures occurred during the COVID-19 pandemic. Because closures are costly and damaging, many jurisdictions have since reopened schools with control measures in place. Early evidence indicated that schools were low risk and children were unlikely to be very infectious, but it is becoming clear that children and youth can acquire and transmit COVID-19 in school settings and that transmission clusters and outbreaks can be large.

- **Model-driven mitigation measures for reopening schools during the COVID-19 pandemic**

Source: McGee, R.S., Homburger, J.R., Williams, H.E., Bergstrom, C.T & Zhou, A.Y (15 May 2021) <https://www.pnas.org/lookup/suppl/>

Type: Research article

Summary: Reopening schools is an urgent priority as the COVID-19 pandemic drags on. To explore the risks associated with returning to in-person learning and the value of mitigation measures, a stochastic, network-based model of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) transmission in primary and secondary schools was developed.

- **Age-dependent effects in the transmission and control of COVID-19 epidemics**

Source: Davies, N.G., Klepac, P., Liu, Y. et al. (16 June 2020). Nat Med 26, 1205–1211 <https://doi.org/10.1038/s41591-020-0962-9>

Type: Journal Article

Summary: Evaluating age disparities in COVID infections by fitting an age-structured mathematical model to epidemic data from China, Italy, Japan, Singapore, Canada and South Korea.

- **Children are not COVID-19 super spreaders: time to go back to school**

Source: Munro, A. P., & Faust, S. N. (19 June 2020). Archives of *Disease in Childhood*, 105(7). Available at <http://dx.doi.org/10.1136/archdischild-2020-319474>

Type: *Journal Editorial*

Summary: Editorial viewpoint exploring key questions in children's susceptibility and immune responses to COVID.

- **COVID-19 in children and the role of school settings in COVID-19 transmission**

Source: European Centre for Disease Prevention and Control (ECDC). (6 August 2020). Stockholm: ECDC. Available at <https://www.ecdc.europa.eu/sites/default/files/documents/COVID-19-schools-transmission-August%202020.pdf>

Type: *Technical Report*

Summary: Report on the overview of the epidemiology and disease characteristics of COVID-19 in children (0-18 years) in EU/EEA countries and the United Kingdom (UK), and an assessment of the role of childcare (preschools; ages 0-<5 years) and educational (primary and secondary schools; ages 5-18 years) settings in COVID-19 transmission.

- **On the Effect of Age on the Transmission of SARS-CoV-2 in Households, Schools, and the Community.**

Source: Edward Goldstein, Marc Lipsitch, Muge Cevik

<https://doi.org/10.1093/infdis/jiaa691> *The Journal of Infectious Diseases*, Volume 223, Issue 3, 1 February 2021, Pages 362–369

Type: journal article

Summary: There is limited information on the effect of age on the transmission of SARS-CoV-2 infection in different settings.

International Country Cases

- **SARS-CoV-2 infection, risk perception, behaviour, and preventive measures at schools in Berlin, Germany, during the early post-lockdown phase: A cross-sectional study.**

Source: Hommes F, Welmoedvan LMT, Abramovich I, et al (19 December 2020).

<https://www.medrxiv.org/content/10.1101/2020.12.18.20248398v1>

Type: *Journal Article*

Summary: Briefly before the first peak of the COVID-19 pandemic in Berlin, Germany, schools closed in mid-March 2020 for six weeks. Following re-opening, schools gradually resumed operation at a reduced level for nine weeks preceding the summer holidays.

- **Surveillance of acute SARS-CoV-2 infections in school children and point-prevalence during a time of high community transmission in Switzerland.**

Source: Kriemler S, Ulyte A, Ammann P, Peralta GP, Berger C, Puhan MA, Radtke T (26 December 2020). <https://www.medrxiv.org/content/10.1101/2020.12.24.20248558v1>

Type: *Journal Article*

Abstract: Switzerland had one of the highest incidence of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infections in Europe during the second wave. Schools were open as in most of Europe with specific preventive measures in place.

- **SARS-CoV-2 infections in Italian schools: preliminary findings after one month of school opening during the second wave of the pandemic.**

Source: Buonsenso D, De Rose C, Moroni R, Valentini P (11 October 2020). Available at <https://www.medrxiv.org/content/10.1101/2020.10.10.20210328v1>

Type: *Journal Article*

Summary: The impact of school opening on the SARS-CoV-2 pandemic is still unknown. This study aims to provide preliminary information about the number of SARS-CoV-2 cases among students attending Italian schools.

- **SARS-CoV-2 infection and transmission in educational settings: cross-sectional analysis of clusters and outbreaks in England.**

Source: Ismail SA., Saliba V., Bernal JL, Ramsay ME., Ladhani SN. (12 August 2020). Available at <https://www.medrxiv.org/content/10.1101/2020.08.21.20178574v1>

Type: *Journal Article*

Abstract: There are limited data on SARS-CoV-2 infection and transmission in educational settings. This information is critical for policy makers and practitioners to ensure the safety of staff, students and the wider community during the COVID-19 pandemic.

- **TV-Based Learning in Bangladesh: Is it Reaching Students?**

Source: Biswas, K., Asaduzzaman, T. M., Evans, D. K., Fehrler, S., Ramachandran, D., & Sabarwal, S. (16 July 2020). World Bank, Washington, DC. © World Bank. <https://openknowledge.worldbank.org/handle/10986/34138>

Type: Working Paper

Summary: A World Bank remote learning survey evaluating the Bangladeshi government's TV-based learning programs for Grade 9 pupils.

- **Reopening K-12 Schools During the COVID-19 Pandemic: A Report From the National Academies of Sciences, Engineering, and Medicine**

Source: Dibner KA, Schweingruber HA, Christakis DA. JAMA. Published online (29 July 2020). [doi:10.1001/jama.2020.14745](https://doi.org/10.1001/jama.2020.14745)

Type: Journal Editorial

Summary: The National Academies of Sciences, Engineering, and Medicine commissioned report to provide guidance on the reopening and safe operation of elementary and secondary schools for the 2020-2021 school year in the USA

- **COVID-19 Trends Among School-Aged Children — United States, March 1–September 19, 2020**

Source: Leeb, RT., Price, S., Silwa, S., Kimball, A., Szucs, L., Caruso, E. Godfred-Cato, S. Lozier, M. (28 September 2020) Available At <https://www.cdc.gov/mmwr/volumes/69/wr/mm6939e2.htm>

Type: Journal Article

Summary: An article about cases of COVID-19 in school-aged children and COVID-19 transmission in school settings.

- **Transmission of SARS-CoV-2 in Australian educational settings: a prospective cohort study**

Source: Macartney, K., Quinn, H. E., Pillsbury, A. J., Koirala, A., Deng, L., Winkler, N., et al & Brogan, D. (01 November 2020). *The Lancet Child & Adolescent Health*. Available At [https://doi.org/10.1016/S2352-4642\(20\)30251-0](https://doi.org/10.1016/S2352-4642(20)30251-0)

Type: Journal Article

Summary: Article examining SARS-CoV-2 transmission among children and staff in schools and early childhood education and care (ECEC) settings in the Australian state of New South Wales.

- **A large COVID-19 outbreak in a high school 10 days after schools' reopening, Israel, May 2020.**

Source: Stein-Zamir, C., Abramson, N., Shoob, H., Libal, E., Bitan, M., Cardash, T., et al & Miskin, I. (May 2020). *Eurosurveillance*, 25(29), 2001352. Available at <https://www.eurosurveillance.org/content/10.2807/1560-7917.ES.2020.25.29.2001352?crawler=true>

Type: Open Access Journal Article

Summary: Article tracing the COVID transmission rates among learners and teachers of an Israeli high school days after school re-openings.

- **Determining the optimal strategy for reopening schools, the impact of test and trace interventions, and the risk of occurrence of a second COVID-19 epidemic wave in the UK: a modelling study**

Source: Panovska-Griffiths, Jasmina; Kerr, Cliff C.; Stuart, Robyn M.; Mistry, Dina; Klein, Daniel J.; Viner, Russell M.; Bonell, Chris. (01 June 2020). *The Lancet Child & Adolescent Health*. <https://doi.org/10.1101/2020.06.01.20100461>

Type: *Journal Article*

Summary: Research paper using an individual-based model to predict the impact of two possible strategies for reopening schools to all students in the UK from September, 2020, in combination with different assumptions about relaxation of physical distancing measures and the scale-up of testing methods.

- **Infection and transmission of COVID-19 among students and teachers in schools in Japan after the reopening in June 2020.**

Source: Nobuhiko WK., Shobugawa NOY (20 September 2020). *BMJ Paediatrics Open* 4(1). Available at <https://bmjpaedsopen.bmj.com/content/4/1/e000854>

Type: *Journal Article*

Abstract: We aimed to investigate the confirmed COVID-19 cases among students and teachers in elementary schools (ages 6–12 years) and junior high schools (ages 13–15 years) in Japan between 1 June and 31 July 2020.

- **Association between State-wide School Closure and COVID-19 Incidence and Mortality in the US**

Source: Auger, K. A., Shah, S. S., Richardson, T., Hartley, D., Hall, M., Warniment, A., et al & Schondelmeyer, A. C. (29 July 2020). *JAMA*. [doi:10.1001/jama.2020.14348](https://doi.org/10.1001/jama.2020.14348)

Type: *Journal Article*

Summary: Paper exploring the extent that school closures and their timing were associated with decreased COVID-19 incidence and mortality in the United States of America.

IMPACTS OF SCHOOL CLOSURES ON CHILDREN: LEARNING, MENTAL HEALTH, NUTRITION

South Africa

- **The impact of COVID-19 in education – more than year of disruption**

Source: Mohohlwane N., Shepherd D (8 July 2021)

<https://cramsurvey.org/wp-content/uploads/2021/07/11.-Shepherd-D- -Mohohlwane-N.-2021.-Changes-in-education-A-reflection-on-COVID-19-effects-over-a-year.pdf>

Type: Policy Paper

Summary: Since the onset of the COVID-19 pandemic, children have been put at greater risk of dropping out of school, lagging behind and losing learning, as well as food insecurity and emotional health deterioration. All these issues, as they arise in the South African context, are considered in this policy paper.

- **Systemic shock: How Covid-19 exposes our learning challenges in education**

Source: Soudien, C. (2020). *Southern African Review of Education*, 26(1): p. 6–19

Type: *Journal Article*

Summary: Scholarly reflection on the shock of Covid-19 and what that might mean for the task of learning in deeper and more inclusive ways.

- **Position statement: Return of South African Children to School during the ‘Second Wave’**

Source: South African paediatric association 01 February 2021

<https://wcedonline.westerncape.gov.za/documents/BackToSchool/SAPA%20School>

Type: Position statement

Summary: The South African Paediatric Association (SAPA) strongly recommends children return to school as soon as is safely possible. COVID-19 will continue for the foreseeable future, with infection rates increasing and decreasing in waves.

- **Reimagining parents’ educational involvement during the Covid-19 lockdown**

Source: Daniels, D. (2020). *Southern African Review of Education*, 26(1): p.134–147

Type: *Journal Article*

Summary: Journal reflection on the educational role of parental involvement in schooling during the COVID crisis.

- **School lessons from the Covid-19 lockdown**

Source: Taylor, N. (2020). *Southern African Review of Education* 26(1): p.148–166.

Type: *Journal Article*

Summary: A qualitative study 16 South African families undertaken in April 2020 at the start of the national lockdown

- **Data or bread? A policy analysis of student experiences of learning under lockdown**

Source: Jansen, J. (2020). Southern African Review of Education, 26(1): p. 167–181.

Type: Journal Article

Summary: A policy analysis of student experiences of online learning by focusing on emergent themes from more than 600 (primary and high school) student stories including the educational and emotional costs of lockdown learning and what this means for immediate and long-term policy interventions.

- **Schooling during the COVID-19 pandemic: An update from Wave 3 of the NIDS-CRAM data.**

Source: Mohohlwane, N., Shepherd, D & Taylor, S (17 February 2021). National Income Dynamics Study (NIDS) – Coronavirus Rapid Mobile Survey (CRAM). Available at <https://cramsurvey.org/reports/#wave-3>

Type: Research & Evaluation

Summary: Using data from the second and third waves of the National Income Dynamics Study – Coronavirus Rapid Mobile Survey (NIDS-CRAM), this paper examines changes in learner attendance, the worry levels of parents and the provision of meals to learners since March 2020 until December 2020.

- **Coronavirus, Lockdown and Children: Some impacts of the current crisis in child welfare using data from NIDS-CRAM Wave 1.**

Source: Van der Berg, S., Zuze, L., & Bridgman, G. (15 July 2020). National Income Dynamics Study (NIDS) – Coronavirus Rapid Mobile Survey (CRAM). Policy Brief. Available at https://cramsurvey.org/wp-content/uploads/2020/07/Van-der-Berg_policy-brief.pdf

Type: Policy Brief

Summary: A high level summary of child hunger incidence since lockdown regulations took effect in South Africa.

- **How is the COVID-19 pandemic affecting educational quality in South Africa? Evidence to date and future risks.**

Source: Gustafsson, M., & Nuga, C. (15 July 2020). National Income Dynamics Study (NIDS) – Coronavirus Rapid Mobile Survey (CRAM). Insight Brief. Available at https://cramsurvey.org/wp-content/uploads/2020/07/Gustafsson.-Nuga.-How-is-the-COVID-19-pandemic-affecting-educational-quality-in-South-Africa_-1.pdf

Type: Insight Policy Brief

Summary: Paper models impact of the pandemic on educational quality in South Africa.

- **Counting the Cost: COVID-19 school closures in South Africa & its impacts on children**

Source: Van der Berg, S & Spaull, N. (15 June 2020). Research on Socioeconomic Policy (RESEP). Stellenbosch: Stellenbosch University. Available at <http://resep.sun.ac.za/wp-content/uploads/2020/06/Van-der-Berg-Spaull-2020-Counting-the-Cost-COVID-19-Children-and-Schooling-15-June-2020-1.pdf>

Type: Think Tank Report

Summary: Paper sets out to offer evidence drawn from nationally representative household surveys, school surveys and administrative datasets on the impact of COVID-19 on children, teachers and schooling.

- **COVID-19 Learning losses: early grade reading in South Africa**

Source: Ardington C., Wills G., Kotze J. (May 2021) Available at <https://fundawande.org/img/cms/news/Ardington%202021%20->

[%20Funda%20Wande%20EC%20learning%20losses%20report%20\(24%20May%202021\)_1.pdf](#)

Type: Research Paper

Summary: Using three different studies on early grade reading from no-fee schools across in South Africa, this paper establishes short-term learning losses in reading for grade 2 and 4 students from under-resourced school contexts.

- **COVID-19 and basic education: Evaluating the initial impact of the return to schooling.**

Source: Mohohlwane, N., Shepherd, D & Taylor, S (30 September 2020). National Income Dynamics Study (NIDS) – Coronavirus Rapid Mobile Survey (CRAM). Available at <https://cramsurvey.org/reports/#wave-2>

Type: Research & Evaluation

Summary: This paper describes the partial return to school that occurred during June and July, drawing mainly on the second wave of the NIDS-CRAM survey.

International Applicability

- **Effects of COVID-19-Related School Closures on Student Achievement-A Systematic Review**

Source: Hammerstein, S., König, C., Dreisörner, T., & Frey, A (16 September 2021) doi: 10.3389/fpsyg.2021.746289

Type: Journal Article

Summary: A systematic overview of evidence-based studies on general and differential effects of COVID-19-related school closures in spring 2020 on student achievement in primary and secondary education. Results indicate a negative effect of school closures on student achievement, specifically in younger students and students from families with low socioeconomic status.

- **Schools Closures during the COVID-19 Pandemic: A Catastrophic Global Situation**

Source: Buonsenso, D., Roland, D., De Rose, C., Vásquez-Hoyos, P., Ramly, B., Nandipa Chakakala-Chaziya, J., Munro, A., González-Dambrauskas, S. (8 December 2020) Available at <https://www.preprints.org/manuscript/202012.0199/v1>

Type: Research article

Abstract: School closures (SC) were adopted globally as a COVID-19 disease pandemic containment strategy. This extreme measure provoked a disruption of the educational system involving hundreds of million children worldwide. The return of children to school has been variable and is still an unresolved and contentious issue.

- **Simulating the Potential Impacts of COVID-19 School Closures on Schooling and Learning Outcomes: A Set of Global Estimates**

Source: Azevedo, Joao Pedro; Hasan, Amer; Goldemberg, Diana; Iqbal, Syedah Aroob; Geven, Koen. (June 2020). Policy Research Working Paper; No. 9284. World Bank, Washington, DC. World Bank. <https://openknowledge.worldbank.org/handle/10986/33945>

Type: Working Paper

Summary: Paper presents the results of simulations considering three, five and seven months of school closures and different levels of mitigation effectiveness resulting in optimistic, intermediate and pessimistic global scenarios.

- **The COVID-19 Cost of School Closures in Earnings and Income across the World.**

Source: Psacharopoulos, G., Collis, V. Anthony Patrinos, H. & Vegas, E.
<https://www.journals.uchicago.edu/doi/10.1086/713540#:~:text=Estimated%20lifetime%20losses%20orange%20from,impact%20is%20US%2415.3%20trillion.>

Type: Journal article

Abstract: Social distancing requirements associated with COVID-19 have led to mass school and university closures worldwide. The article provides estimates of the economic loss associated with these closures by mapping lost learning to the lifetime reduction of the earnings of graduates from 205 high-, middle-, and low-income countries.

- **The Impact of COVID-19 School Closure on Child and Adolescent Health: A Rapid Systematic Review**

Source: Chaabane, S. Doraiswamy, S. Chaabna, K. Mamtani, K. and Cheema, S.
<https://doi.org/10.3390/children8050415>

Type: Review Article

Summary: A rapid systemic review of school closures during the pandemic and the impact that these have had on children's access to school-based activities and resources especially for differently-abled children and those living in poorer families.

- **Impact of school closures on the attainment gap: Rapid Evidence Assessment**

Source: Education Endowment Foundation. (June 2020). Report. London: Education Endowment Foundation. Available at https://dera.ioe.ac.uk/35707/1/EEF_%282020%29_-_Impact_of_School_Closures_on_the_Attainment_Gap.pdf

Type: Foundation Report

Summary: Rapid evidence assessment aimed to examine the potential impact of school closures on the attainment gap, based on a systematic search of existing literature.

- **Modeling the Long-Run Learning Impact of the Covid-19 Learning Shock: Actions to (More Than) Mitigate Loss**

Source: Kaffenberger, M. (2020). Research on Improving Systems of Education (RISE) Insight Series. Available at

https://riseprogramme.org/sites/default/files/publications/RISE%20Insight%202020_17_Modeling_Impact.pdf

Type: Policy Insight

Summary: Insight exploring learning loss and its accumulated effects as a result of school closures around the world.

- **Covid-19 school shutdowns: what will they do to our children's education? CEP Covid-19 Analysis**

Source: Eyles, A., Gibbons, S., & Montebruno Bondi, P. (02 June 2020). Centre for Economic Performance Geography & Environment: London School of Economics, Working Paper. Available at <http://eprints.lse.ac.uk/id/eprint/104675>

Type: Working Paper

Summary: Paper exploring effects of school closures on education achievement, both in the short and long term.

- **We Have to Protect the Kids.**

Source: Das, J., Daniels, B. and Andrabi, J. (25 May 2020). Research on Improving Systems of Education (RISE) Insight Series. 2020/016. https://doi.org/10.35489/BSG-RISE-RI_2020/016.

Type: Insight Brief

Summary: Policy brief exploring interruptions to the accumulation of human capital due to disasters and subsequent disruptions to economies and schooling.

- **School closure and management practices during coronavirus outbreaks including COVID-19: a rapid systematic review.**

Source: Viner, R. M., Russell, S. J., Croker, H., Packer, J., Ward, J., Stansfield, C., et al & Booy, R. (6 April 2020). *The Lancet Child & Adolescent Health*, 4(5), p397-404. [https://doi.org/10.1016/S2352-4642\(20\)30095-X](https://doi.org/10.1016/S2352-4642(20)30095-X)

Type: Journal Article

Summary: A systematic review of what is known about the effectiveness of school closures and other school social distancing practices during coronavirus outbreaks.

- **Are children who are home from school at an increased risk of child maltreatment?**

Source: Syed, S., & Gilbert, R. (30 July 2020). *Journal of Public Health*.

<https://doi.org/10.1093/pubmed/fdaa115>

Type: Journal Article

Summary: Unavailable

- **Returning to school in the midst of the COVID-19 pandemic for children with cystic fibrosis.**

Source: Hamilton, J., Ameel, K., & Asfour, F. (30 July 2020). *Pediatric Pulmonology*. <https://doi.org/10.1002/ppul.24973>

Type: Journal Editorial

Summary: Health professional's letter to the editor on the absence of specific guidelines related to children with Cystic Fibrosis or other chronic pulmonary diseases returning to school in the midst of the COVID-19 pandemic.

- **Digital Screen Time During COVID-19 Pandemic: Risk for a Further Myopia Boom?**

Source: Wong, C. W., Andrew, T. S. A. I., Jonas, J. B., Ohno-Matsui, K., James, C. H. E. N., Marcus, A. N. G., & Ting, D. S. W. (29 July 2020). *American Journal of Ophthalmology*. <https://doi.org/10.1016/j.ajo.2020.07.034>

Type: Journal Article

Summary: A review of the impact of increased digital device usage arising from lockdown measures instituted during the COVID-19 pandemic on myopia.

- **Recess Should NOT Be Cut: Considerations for COVID-19 School Reopening Plans**

Source: Clevenger, K. A., & Pfeiffer, K. A. (2020). *Translational Journal of the American College of Sports Medicine*, 5(11), 1-5. [doi: 10.1249/TJX.000000000000147](https://doi.org/10.1249/TJX.000000000000147)

Type: Journal Editorial

Summary: Health professional's commentary on the health benefits of maintaining recess as policy officials consider all aspects of keeping children healthy when they return to schools.

- **Balancing the Risks of Pupils Returning to Schools.**

Source: Royal Society DELVE Initiative. (24 July 2020). Report No. 4. Available at <http://rs-delve.github.io/reports/2020/07/24/balancing-the-risk-of-pupils-returning-to-schools.html>.

Type: *Think Tank Report*

Summary: The report sets out to provide an evidence framework for understanding the risks involved in re-opening and re-closing schools based on evidence from around the world.

- **Impact of COVID-19 on the Mental Health of Children and Adolescents.**

Source: Shah, K., Mann, S., Singh, R., Banghar, R., Kulkarni, R. (26 August 2020). *Cureus* 12(8). Available at.

<https://www.cureus.com/articles/38703-impact-of-covid-19-on-the-mental-health-of-children-and-adolescents>

Type: *Journal Article*

Summary: This article identifies some of the mental health risk factors posed to children by the pandemic and considers some possible solutions.

- **Lost Wages: The COVID-19 Cost of School Closures.**

Source: Psacharopoulos, G., Collis, V., Patrinos, H. A., & Vegas, E. (19 May 2020). World Bank Policy Research Working Paper, (9246). Available at SSRN: <https://ssrn.com/abstract=3601422>

Type: *Working Paper*

Summary: Paper exploring the impact of school closures on loss of learning and earning outcomes.

- **Simulating the Potential Impacts of COVID-19 School Closures on Schooling and Learning Outcomes: A Set of Global Estimates.**

Source: Pedro Azevedo, J., Amer, H., Goldemberg, D. Geven, H., & Aroob Iqbal, S. 17 March 2021 <https://academic.oup.com/wbro/article/36/1/1/6174606?login=true>

Type: *Research Paper*

Summary: the paper presents simulations using data on 174 countries, the analysis finds that the global level of schooling and learning will fall substantially. School closures could result in a loss of between 0.3 and 1.1 years of schooling adjusted for quality, bringing down the effective years of basic schooling that students achieve during their lifetime from 7.8 years to between 6.7 and 7.5 years.

- **Tofu Is Not Cheese: Rethinking Education Amid the COVID-19 Pandemic.**

Source: Zhao, Y. (29 June 2020). *ECNU Review of Education*, 3 (2), p189-203. Available at <https://doi.org/10.1177/2096531120928082>

Type: *Journal Editorial*

Summary: An education professional's discussion on productive ways to take advantage of the opportunity brought about by the disastrous crisis through online teaching.

- **Teaching, Technology, and Teacher Education during the COVID-19 Pandemic: Stories from the Field.**

- Source:** Ferdig, R.E., Baumgartner, E., Hartshorne, R., Kaplan-Rakowski, R. & Mouza, C. (Eds). (2020). Association for the Advancement of Computing in Education (AACE). Retrieved June 15, 2020 from <https://www.learntechlib.org/p/216903/>
- Type:** *Open Access eBook*
- Summary:** This AACE and SITE-published, open access eBook contains 133 chapters with over 850 pages documenting best practices, strategies, and efforts by teacher educators, professional developers, researchers, and practitioners. It is divided into seven sections that address pedagogy, collaboration, field experiences, preservice education methods, professional development, digital tools, and equity issues.
- **How to Support Students When Schools Reopen?**

Source: Cilliers, J. (23 June 2020). Research on Improving Systems of Education (RISE). Insight Series. 2020/018. https://doi.org/10.35489/BSG-RISE-RI_2020/018

Type: *Insight Brief*

Summary: Policy brief exploring the main challenges teachers will face when schools re-open and how to support them.
 - **Learning in the time of COVID-19: capitalizing on the opportunity presented by the pandemic**

Source: Trombly, C. E. (29 June 2020). *Journal of Professional Capital and Community*. Forthcoming. Available at <https://doi.org/10.1108/JPCC-05-2020-0016>

Type: *Journal Article*

Summary: This paper addresses the current disruption in the educational status quo ante that has been caused by the worldwide outbreak of COVID-19. Its purpose is to suggest how practicing educators, their professional associations and the university-based researchers with whom they partner might capitalize on the unanticipated opportunity to impact education policy that the pandemic presents
 - **Will the pandemic change schools?**

Source: Sahlberg, P. (29 June 2020). *Journal of Professional Capital and Community*. Forthcoming. Available at <https://doi.org/10.1108/JPCC-05-2020-0026>

Type: *Journal Editorial*

Summary: This essay offers a perspective for practitioners and decision-makers to look beyond short-term recovery from the COVID-19 pandemic and consider longer-term consequences that it may have on schools.
 - **Emergency remote teaching environment: a conceptual framework for responsive online teaching in crises**

Source: Whittle, C., Tiwari, S., Yan, S., & Williams, J. (29 June 2020). *Information and Learning Sciences*, 121(5/6), p. 311-319. Available at <https://doi.org/10.1108/ILS-04-2020-0099>

Type: *Journal Article*

Summary: Study aims to provide an educational framework for not only the emerging COVID crisis but also future emergency remote teaching environments (ERTE).
 - **Literacy in the new norm: stay-home game plan for parents**

Source: Zainuddin, Z., Perera, C. J., Haruna, H., & Habiburrahim, H. (25 June 2020). *Information and Learning Sciences*, 121(7/8), p. 645-653. <https://doi.org/10.1108/ILS-04-2020-0069>

Type: *Journal Article*

Summary: Research paper aiming to help countries implement an equitable, innovative and context-appropriate stay-home game plan for the millions of disadvantaged and under-privileged students severely affected by current school closures.

- **Web-based Learning in Periods of Crisis: Reflections on the Impact of COVID-19**

Source: Chiemekwe, S., and Imafidor, O. Mike. (23 July 2020). *International Journal of Computer Science & Information Technology (IJCSIT)*, 12(3). Available at SSRN: <https://ssrn.com/abstract=3650893>.

Type: *Journal Article*

Summary: Study aimed at extrapolating and theorizing from the existing knowledgebase about the use of Web-Based Learning for policy makers and education system actors.

International Country Cases

- **The Impacts of Remote Learning in Secondary Education: Evidence from Brazil during the Pandemic**

Source: Lichand, G., Doria, C.A., Leal Neto, O., Cossi, J. (11 June 2021) Available at <https://publications.iadb.org/en/impacts-remote-learning-secondary-education-evidence-brazil-during-pandemic>

Type: Institutional paper

Abstract: The transition to remote learning in the context of Covid-19 could lead to dramatic setbacks for school enrollment and learning outcomes, especially in developing countries – where a multiplicity of challenges, from limited connectivity to little support from parents, are bound to limit its effectiveness.

- **School closures and children’s emotional and behavioural difficulties**

Source: Dr. Blanden, J., Dr. Crawford, C., Dr. Fumagalli, L., & Dr. Rabe, B. https://www.iser.essex.ac.uk/files/projects/school-closures/SDQnote2021_final.pdf March 2021

Type: *Briefing note*

Summary: The briefing note specifically examines the role of school closures in England on the emotional and behavioural wellbeing of children aged 5-11

- **Remote-learning, Time-Use, and Mental Health of Ecuadorian High-School Students during the COVID-19 Quarantine (English)**

Source: Asanov, I., Flores, F., Mckenzie, D.J., Mensmann, M., & Schulte, M. (19 May 2020). Policy Research Working Paper: WPS 9252; COVID-19 (Coronavirus) .Washington, D.C.: World Bank Group.

<http://documents.worldbank.org/curated/en/328261589899308503/Remote-learning-Time-Use-and-Mental-Health-of-Ecuadorian-High-School-Studentsduring-the-COVID-19-Quarantine>

Type: *Working Paper*

Summary: Paper reporting on a rapid response phone survey of over 1,500 high school students aged 14 to 18 in Ecuador to learn how students spend their time during the period of quarantine, examine their access to remote learning, and measure their mental health status.

- **Suffering in Silence: How COVID-19 School Closures Inhibit the Reporting of Child Maltreatment**

Source: Baron, E. J., Goldstein, E. G., & Wallace, C. T. (17 May 2020). *Journal of Public Economics*, Forthcoming. Available at <http://dx.doi.org/10.2139/ssrn.3601399>

Type: *Journal Article*

Summary: Study examines an unexplored consequence of COVID-19 school closures: the broken link between child maltreatment victims and the number one source of reported maltreatment allegations---school personnel, using current, county-level data from Florida, USA.

- **Coronavirus disease 2019 (COVID-19) and mental health for children and adolescents.**

Source: Golberstein, E., Wen, H., & Miller, B. F. (14 April 2020). *JAMA pediatrics*. Available at <https://jamanetwork.com/journals/jamapediatrics/fullarticle/2764730>

Type: *Journal Editorial*

Summary: Health professional considers the potential associations school closures have with children’s well-being and what can be done to mitigate them in the USA.

- **Mitigate the effects of home confinement on children during the COVID-19 outbreak.**

Source: Wang, G., Zhang, Y., Zhao, J., Zhang, J., & Jiang, F. (4 March 2020). *The Lancet*, 395(10228), p.945-947. Available at [https://doi.org/10.1016/S0140-6736\(20\)30547-X](https://doi.org/10.1016/S0140-6736(20)30547-X)

Type: *Journal Editorial*

Summary: Editorial examining how prolonged school closure and home confinement during a disease outbreak might have negative effects on children's physical and mental health in China.

- **COVID-19, school closures, and child poverty: a social crisis in the making.**

Source: Van Lancker, W., & Parolin, Z. (7 April 2020). *The Lancet Public Health*, 5(5), e243-e244. Available at [https://doi.org/10.1016/S2468-2667\(20\)30084-0](https://doi.org/10.1016/S2468-2667(20)30084-0)

Type: *Journal Editorial*

Summary: Editorial discussion on the detrimental social and health consequences of prolonged school closures on poor children in the USA and Europe.

- **Reopening Primary Schools during the Pandemic.**

Source: Levinson, M., Cevik, M., & Lipsitch, M. (3 September 2020). *New England Journal of Medicine*. Available at <https://www.nejm.org/doi/full/10.1056/NEJMms2024920>

Type: *Journal Editorial*

Summary: Health professionals’ call to re-open schools safely.

- **The impact of ‘learning at home’ on the educational outcomes of vulnerable children in Australia during the COVID-19 pandemic.**

Source: Drane, C., Vernon, L., & O’Shea, S. (2020). Literature Review prepared by the National Centre for Student Equity in Higher Education, Curtin University, Australia. Available at

https://www.dese.gov.au/system/files/doc/other/final_literaturereview-learningathome-covid19-final_28042020.pdf

Type: *Think Tank Report*

Summary: Literature review on current approaches to managing school closures as well as recent literature related to young people learning "outside of school" in Australia.

- **Learning "Loss" and Learning "Gain" in Primary School Years: What Do We Know from India That Can Help Us Think Forward in the COVID-19 Crisis?**

Source: Banerji, R. (6 July 2020). Research on Improving Systems of Education (RISE) Insight Series. https://doi.org/10.35489/BSG-RISE-RI_2020/019

Type: *Policy Insight*

Summary: Policy brief exploring primary school learning loss in India in an effort to understand the long term impact of school closures.

- **Using educational transitions to estimate learning loss due to Covid-19 school closures: the case of Complementary Basic Education in Ghana.**

Source: Sabates. R., Carter., E., Stern. J (June 2020). REAL Centre, University of Cambridge. Available at

<https://www.educ.cam.ac.uk/centres/real/publications/Using%20educational%20transitions%20to%20estimate%20learning%20loss%20due%20to%20Covid-19%20school%20closures.pdf>

Type: *Think Tank Report*

Summary: Report estimating learning loss and impact on educational inequality as a result of COVID-19 school closures in Ghana.

- **Are Our Children Learning? The Status of Remote-learning among School-going Children in Kenya during the Covid-19 Crisis.**

Source: Uwezo. (May 2020). Nairobi: Usawa Agenda. Available at <https://palnetwork.org/wp-content/uploads/2020/05/Usawa-Agenda-2020-Report.pdf>

Type: *Think Tank Report*

Summary: A remote Learning Survey Report in collaboration with the Kenyan Ministry of Education exploring issues in remote learning since school closures in March 2020.

- **Stemming Learning Loss during the Pandemic: A Rapid Randomized Trial of a Low-Tech Intervention in Botswana**

Source: Angrist, N., Bergman, P., Brewster, C., & Matsheng, M. (5 August 2020). Available at <http://dx.doi.org/10.2139/ssrn.3663098>

Type: *Open Access Research Article*

Summary: This paper provides experimental evidence on strategies to minimize the fallout of the pandemic on education outcomes. It evaluates two low-technology interventions to substitute schooling during this period: SMS text messages and direct phone calls in Botswana.

- **The Response of Ukrainian Teachers to Covid-19: Challenges and Needs in the Use of Digital Tools for Distance Learning**

Source: Ivaniuk, I. V., & Ovcharuk, O. V. (2020). Information Technologies and Learning Tools, 77(3), 282-291.

Type: Open Access Research Article

Summary: Unavailable

- **'School's Out, But Class's On'. The Largest Online Education in the World Today: Taking China's Practical Exploration during the COVID-19 Epidemic Prevention and Control as an Example.**

Source: Zhou, L., Wu, S., Zhou, M., & Li, F. (17 March 2020). Best Evid Chin Edu 2020; 4(2), p. 501-519. Available at <http://dx.doi.org/10.2139/ssrn.3555520>

Type: Journal Article

Summary: Paper analysing the background and impact of The "School's Out, But Class's On," campaign launched by the Chinese government during the COVID-19 epidemic where a large-scale normal online education application was created.

- **Transition to online education in schools during a SARS-CoV-2 coronavirus (COVID-19) pandemic in Georgia.**

Source: Basilaia, G., & Kavadze, D. (10 April 2020). *Pedagogical Research*, 5(4), 1-9. <https://doi.org/10.29333/pr/7937>

Type: Journal Article

Summary: Paper examines the capacities of the Republic of Georgia and its population to continue the education process at schools through distance learning.

COVID-19 AND EARLY CHILDHOOD DEVELOPMENT

South Africa

- **Early Childhood Development in South Africa during the COVID-19 Pandemic: Evidence from NIDS-CRAM Waves 2-5**

Source: Wills G., Kika-Mistry J., (8 July 2021). Available at <https://cramsurvey.org/wp-content/uploads/2021/07/14.-Wills-G--Kika-Mistry-J.-2021-Early-Childhood-Development-in-South-Africa-during-the-n-COVID-19-pandemic-Evidence-from-NIDS-CRAM-Waves-2-5.pdf>

Type: Research Paper

Abstract: Globally, large international organisations have been tracking school closures and learning losses due to COVID-19 induced lockdowns. Yet few studies have been conducted to assess how childcare markets or access to early childhood development (ECD) opportunities have been impacted by COVID-19, especially in low-to-middle-income countries.

- **A sector hanging in the balance: ECD and Lockdown in South Africa**
Source: Kotze J., Kika-Mistry J., Will G. (30 September 2020). Available at <https://cramsurvey.org/wp-content/uploads/2020/09/15.-Wills-G.-Kotze-J.-Kika-Mistry-J.-2020-A-Sector-Hanging-in-the-Balance-ECD-and-Lockdown-in>
Type: *Research Paper*
Abstract: New evidence suggests that over four months after the closure of early childhood development (ECD) programmes on 18 March 2020, the ECD sector is likely to be operating at less than a quarter of its pre-lockdown levels.

International Applicability

- **Global estimates of the implications of COVID-19-related preprimary school closures for children’s instructional access, development, learning, and economic wellbeing**
Source: McCoy D.C., Cuartas, J., Behrman, J., Cappa, C., Heymann, J., Lopez Boo, F., Lu, C., Raikes, A., Richter, L., Stein, A. Fink, G. Available at DOI: 10.1111/cdev.13658
Type: *Journal Article*
Abstract: Observational data collected prior to the pandemic (between 2004 and 2019) were used to simulate the potential consequences of early childhood care and education (ECCE) service closures on the estimated 167 million preprimary-age Children in 196 countries who lost ECCE access between March 2020 and February 2021. Projected developmental and learning losses were concentrated in low-and Lower middle-income countries, likely exacerbating long-standing global inequities.
- **The Effects of COVID- 19 on Early Childhood Education and Care: Research and Resources for Children, Families, Teachers, and Teacher Educators**
Source: Jalongo M., (30 April 2021), Available at <https://doi.org/10.1007/s10643-021-01208-y>
Type: *Journal Article*
Abstract: The COVID-19 world health crisis has profound implications for the care and education of young children in homes and schools, the lives of preservice and inservice teachers, and the work of college/university faculty. This article begins by discussing the implications of a world health pandemic for education and the challenges of conducting a literature review on such a rapidly evolving topic.