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Submission Date:

04/10/2023

**THESIS STATEMENT:**

The transition to online learning due to the COVID-19 pandemic led to a noticeable learning disparity for K-12 students of varying socioeconomic status. Globally, this transition forced educators and stakeholders to implement various technical and pedagogical strategies that were not effective for learners. This discrepancy ~~would have~~ worsened previous educational gaps that ~~would have~~ existed. It is imperative that private or government agencies responsible for various educational jurisdictions adequately address these issues in the post-pandemic era.

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**Introduction**

One of the sustainable development goals that the United Nations hopes to achieve by 2030 is to ensure inclusive, equitable quality education and promote lifelong learning opportunities for all [(*The Sustainable Development Goals Report 2022*, 2022)](https://www.zotero.org/google-docs/?fWyBzH). The attainment of this goal was severely challenged during the COVID-19 pandemic as educational districts worldwide were thrown into unfamiliar territory during the early half of 2020 when teachers were required to teach in a virtual setting to accommodate their students’ learning processes. In the digital age, education equality encompasses access to information and communication technology (ICT) ~~in education~~ [(Parey, 2023)](https://www.zotero.org/google-docs/?gzUfYx). However, this situation proved difficult for many students as there was not equal access to online resources for all students.

While the digital divide regarding ICT access among students in their homes previously existed, its ~~ramifications~~ became more apparent with the emergence of the pandemic, school closure and the adoption of remote education worldwide [(Parey, 2023)](https://www.zotero.org/google-docs/?O0dH3J). However, students in households with more involved and financially stable parents were better able to thrive during the pandemic [(Haelermans et al., 2022)](https://www.zotero.org/google-docs/?trGyKb). Student absenteeism and dropout rates also increased during the pandemic [(Santibañez & Guarino, 2021)](https://www.zotero.org/google-docs/?HvXeFE). The UN reports that school closures have had problematic consequences for children’s learning and well-being, especially for girls and those disadvantaged: (children with disabilities, rural dwellers and ethnic minorities). It is estimated that 147 million children worldwide missed more than half of their in-person instruction from 2020-2022 [(*The Sustainable Development Goals Report 2022*, 2022)](https://www.zotero.org/google-docs/?IK1FIb).

Pre-pandemic, 17 percent of children and youth globally were out of primary and secondary school, compared to 26 percent in 2000. From March 2020 through February 2022, schools worldwide were fully or partially closed for 41 weeks. Latin America and the Caribbean experienced the most prolonged school closures, with more than 60 weeks closed in those two years [(*The Sustainable Development Goals Report 2022*, 2022)](https://www.zotero.org/google-docs/?RfGVy7). In Trinidad and Tobago, the education system is overseen by the Ministry of Education and the Division of Education, Research and Technology (MoETT). During the pandemic, the MoETT and school administrators attempted to close the existing technology access gap by providing to students most in need. Families in need were required to submit a Means Test form to determine eligibility for ICT devices; however, approximately 63,369 primary and secondary school students in Trinidad and Tobago had limited or no access to ICT or connectivity during school closure [(*Ministry of Education*, 2020)](https://www.zotero.org/google-docs/?qMNPca). To account for pandemic learning losses, educational districts must implement aggressive and ambitious programmes to ensure that all children returning to school recover and meet their academic and psychosocial needs.

**Low attendance in online classes during the pandemic affected student performance**

One of the effects experienced during the pandemic that became exacerbated was the increased absenteeism; the rates were lower than in regular in-person school. Virtual learning could not obtain the standard student attendance rates during in-person learning. From March to June 2020, students would have consistently missed ten weeks of school, which amounted to 50 days, placing them at the far end of the typical absenteeism spectrum (Santibañez & Guarino, 2021). School attendance problems (SAP) include school refusal, truancy, school withdrawal and school exclusion; Nathwani et al. (2021) hypothesized that COVID-19-related SAPs will increase compared to pre-pandemic levels as mental health issues rise and virtual classes hinder academic performance.

In the United States, absenteeism was highest among students of colour and disadvantaged groups (Santibañez & Guarino, 2021). Absenteeism negatively affected student performance during the pandemic, especially for Mathematics compared to English Language Arts subjects’ test scores. Data predicted worldwide that students would achieve 50% of the learning gains in mathematics and only 70% in reading, up to a full year behind in some grades compared to a typical school year [(UNESCO, 2020)](https://www.zotero.org/google-docs/?iQ5KnM). Absenteeism affected middle school students’ achievements more than elementary students. Research suggests that school disruptions brought on by the pandemic will negatively impact students’ academic and social–emotional development, particularly for students in specific grades and vulnerable subgroups (Santibañez & Guarino, 2021).

**Limited access to devices and technology contributed to low participation in online education and academic success**

A naive assumption about virtual learning is that it would be more likely for all students to be present as they would already be in their homes; however, not all students or families had easy access to ICT devices. Worldwide, the education field was not equal during the pandemic, primarily due to the lack of access to technology, which was unequal for educational districts. The lack of technology was not only a developing country problem but also was felt by racial minorities and those with lower education and income levels in the United States as they were less likely to have broadband services at their home [(Huck & Zhang, 2021)](https://www.zotero.org/google-docs/?GL5vzU). In the United States, the digital divide in technology and internet access is apparent by race, ethnicity and a family’s socioeconomic status; according to educational polls done in 2020, nearly 50% of low-income families and 42% of families of colour lack sufficient devices at home to access virtual learning [(Kuhfeld et al., 2020)](https://www.zotero.org/google-docs/?TOvW5Z). Varied problems were experienced in regions such as Africa, where low and middle-income countries experienced challenges conducting online classes due to inadequate power supply and poor internet connectivity (Lawrence et al., 2021) [(Uweso, 2020)](https://www.zotero.org/google-docs/?JLLG9s).

Further issues faced were insufficient internet network connectivity and a shortage of trained or technologically skilled teachers who were prepared to provide effective virtual instruction before the pandemic; these would have also contributed to low attendance or poor participation in online learning [(Lawrence et al., 2021)](https://www.zotero.org/google-docs/?mRVSs6) [(Kuhfeld et al., 2020)](https://www.zotero.org/google-docs/?Mkz5oc). A decrease in students’ engagement, which lead to less favourable academic success than traditional face-to-face instruction, was also observed as few online teaching and learning activities could follow a rigid schedule and design [(Zhonggen, 2021)](https://www.zotero.org/google-docs/?CHTM4W). Generally, a digital divide occurred due to the lack of ICT devices, infrastructure, and connectivity, which impeded learning opportunities and experience as meaningful ICT interaction and engagement were hindered, which affected learning experience and outcomes [(Kuhfeld et al., 2020)](https://www.zotero.org/google-docs/?Fuy8mA). Despite the global revolutionizing of digital and online education during the pandemic, primary and secondary school learners in rural and under-served communities remained behind due to a lack of skills and resources to transition to the new learning avenues [(Eze et al., 2021)](https://www.zotero.org/google-docs/?3KTPzE)**.**

**Family’s socioeconomic status and educational backgrounds affected their challenges with remote learning**

 Stressors may have more dramatically impacted marginalized groups from the pandemic and school closures, but students from all socioeconomic backgrounds experienced difficulties [(Haelermans et al., 2022)](https://www.zotero.org/google-docs/?xsmOqV). Lower-educated parents felt less capable of helping their children with schoolwork; children of low-educated parents learned less between the midterm and end-of-year tests than their peers with high-educated parents; this difference was mainly observed in grades 1 to 3 for spelling and math [(Haelermans et al., 2022)](https://www.zotero.org/google-docs/?TIHP11).

 Research has shown that parental education and home guidance critically determine ICT availability and support in learning-relevant ICT use at home. Parents with higher educational levels are likelier to guide, support, and supervise their child’s device and internet use. Children’s learning conditions at home mimic their family’s socioeconomic conditions, which account for observable portions of educational achievement gaps among children (Liu, 2021). Middle-class parents from developed countries spent more time on home-schooling than parents from working-class homes [(Haelermans et al., 2022)](https://www.zotero.org/google-docs/?5l4Kq2). Home-schooling as a practice is one way that middle-class families can account for having an easier transition to digital schooling as they previously would have more familiarity with schooling their children. On the other hand, online learning may be an illusion in developing low- and middle-income countries without adequate parental involvement during the unprecedented COVID-19 pandemic [(Lawrence et al., 2021)](https://www.zotero.org/google-docs/?PlgxnM).

Working-class parent’s work schedules did not allow for continued opportunities to assist their children during virtual school as they most likely had jobs that did not enable work-from-home schedules. In wealthier households, students are more likely to achieve educational gains from computer use because they engage in learning-enhancing and information-rich ICT activities at a much higher frequency (Liu, 2021). Wealthier families also would have had parents with more flexible work from home schedules who would have been better able to assist their children during virtual school. Previously existing educational gaps would have widened and disproportionately affected low socioeconomic families’ educational attainment.

**Technology allowed for families to support their children`s academic progress better**

 The increased use of ICT during the pandemic was purported to increase parental engagement and support as parents and teachers had a more readily available medium to communicate with each other, giving parents more opportunities to be involved in their children’s learning. Using technology to communicate with parents via mass texts, emails about school policy, Facebook posts announcing school events, and teacher emails regarding student progress positively supports the engagement of parents of children of all ages [(Huck & Zhang, 2021)](https://www.zotero.org/google-docs/?ylmMtB). Motivation is one of the factors that affects an individual’s academic achievement; therefore, parental relations by extension can affect an adolescent’s feelings of competence and autonomy. A child with a supportive parent during remote learning is likelier to excel with ICT [(Klootwijk et al., 2021)](https://www.zotero.org/google-docs/?g6n2xj).

 A concern was that families who could access the content provided by schools may not have the requisite language or technological skills to benefit significantly from the information produced by schools [(Huck & Zhang, 2021)](https://www.zotero.org/google-docs/?caIBCK). Students learning was also impacted by the quality of access related to the type of technology and availability of more features on some devices versus others, conditional access based on the use of shared devices or their attitude toward technology [(Parey, 2023)](https://www.zotero.org/google-docs/?18jkDP). Liu (2021) states that countries that were swift to transition to remote learning may exacerbate learning gaps if there were existing disparities in parental literacy and family endowment.

**Online learning aided innovation and creativity during the pandemic** The benefits observed through digital education were the opportunity for rapid learning and significant innovative and creative opportunities for teachers and students; this learning method encourages learning from varied locations, collaborative learning, and the achievement of tasks and enhances learning competence. Collaborative learning was strongly and positively correlated with peer discussions and engagement rates [(Lawrence et al., 2021)](https://www.zotero.org/google-docs/?6tU2rk). Studies also reported that online education could increase student participation and improve discussion quality while fostering online interactions [(Zhonggen, 2021)](https://www.zotero.org/google-docs/?UvmRVY). Although these benefits are noted due to the disparities in access to technology for economically disadvantaged students, they were, unfortunately, unable to capitalize equally on the online learning opportunities created by the pandemic. The Gen Alpha and Gen Z demographics are native to the digital world in comparison to the other generations; the switch to complete virtual learning would have been relatively easy for them, whereas the parents and teachers guiding them would have spent time that could have been used productively, managing and requesting cameras to be on and mics to be off rather than delivering curriculum.

**Conclusion**

The research concerning the pandemic and the worldwide education system challenges experienced during remote learning showed varied levels of effectiveness for students. The challenges noted were attributed to technological, pedagogical, and social. Technical challenges were related to access to appropriate internet sources and devices capable of remote learning virtual school. Pedagogical challenges included teachers’ and students’ digital competencies; teacher challenges included managing online resources and appropriately designing their digital learning environments [(Seabra et al., 2021)](https://www.zotero.org/google-docs/?wWBjiS). Teachers also had challenges encouraging their students to engage and motivating them physically and mentally in classes. The social difficulties experienced included the lack of engagement between students and between students and teachers. The physical conditions of the home where online school took place were also crucial as it was not always the most appropriate for learning to take place; parents’ or guardians’ availability and support were also challenges that contributed to a learning disparity during the Pandemic (Seabra et la., 2021).

One of the rights of a child declared by the United Nations is the right to education, a humanitarian right that every child has a right to; this should also include virtual education, online learning, which became more prevalent during the pandemic. Governments and the varying agencies responsible for children’s education must ensure that this humanitarian right is afforded to all children effectively. I believe it is the responsibility of governing bodies to collaborate with policymakers, educators and parents to ensure that educational gaps that were widened during the pandemic are decreased as we have predominantly moved back to face-to-face school post-pandemic. Training, grant funding, improved technological infrastructure, and supplemental and remedial classes are needed to mitigate any further educational deficits that may have developed due to the discrepancies in education during the pandemic.

The Bible strongly emphasizes training a child in the way that they should go; this can be related to both formal and informal education. Although it is ultimately the government of a country’s job to ensure that children attain academic achievement, the church should be concerned with issues that affect society at large. As we strive to be our brother’s keeper, churches and other social groups can put in place systems or programs that will help families get back on track with their childrens education.

**WORKS CITED**

[Eze, U. N., Sefotho, M. M., Onyishi, C. N., & Eseadi, C. (2021). Impact of COVID-19 pandemic on education in Nigeria: Implications for policy and practice of e-learning. *Library Philosophy and Practice*, 1–36.](https://www.zotero.org/google-docs/?broken=JrXSkM)

[Haelermans, C., Korthals, R., Jacobs, M., Leeuw, S. de, Vermeulen, S., Vugt, L. van, Aarts, B., Prokic-Breuer, T., Velden, R. van der, Wetten, S. van, & Wolf, I. de. (2022). Sharp increase in inequality in education in times of the COVID-19 pandemic. *PLOS ONE*, *17*(2), Article 2. https://doi.org/10.1371/journal.pone.0261114](https://www.zotero.org/google-docs/?broken=DH5fyv)

[Huck, C., & Zhang, J. (2021). Effects of the COVID-19 pandemic on k-12 education: A systematic literature review. *New Waves*, *24*(1), Article 1.](https://www.zotero.org/google-docs/?broken=09rXci)

[Klootwijk, C. L. T., Koele, I. J., van Hoorn, J., Güroğlu, B., & van Duijvenvoorde, A. C. K. (2021). Parental support and positive mood buffer adolescents’ academic motivation during the COVID-19 pandemic. *Journal of Research on Adolescence*, *31*(3), 780–795. https://doi.org/10.1111/jora.12660](https://www.zotero.org/google-docs/?broken=NVmPcp)

[Lawrence, K. C.~~,~~ & Fakuade, O. V. (2021). Parental involvement, learning participation and online learning commitment of adolescent learners during the COVID-19 lockdown. *Research in Learning Technology*, *29*. http://dx.doi.org/10.25304/rlt.v29.2544](https://www.zotero.org/google-docs/?broken=GkMzq6)

[Liu, J. (2021). Bridging digital divide amidst educational change for socially inclusive learning during the COVID-19 pandemic. *SAGE Open*, *11*(4), Article 4. https://doi.org/10.1177/21582440211060810](https://www.zotero.org/google-docs/?broken=MiWU1p)

[*Ministry of Education*. (2020). Adopt a School Programme. http://40.71.102.248/adopt-a-school-program-2/](https://www.zotero.org/google-docs/?broken=yTB2QM)

[Parey, B. (2023). Education experiences of primary school children with no or limited ICT during the COVID-19 pandemic in Trinidad and Tobago. *Education 3-13*, *0*(0), 1–12. https://doi.org/10.1080/03004279.2023.2206827](https://www.zotero.org/google-docs/?broken=Lqh0dv)

[Santibañez, L., & Guarino, C. M. (2021). The effects of absenteeism on academic and social-emotional outcomes: Lessons for COVID-19. *Educational Researcher*, *50*(6), Article 6. https://doi.org/10.3102/0013189X21994488](https://www.zotero.org/google-docs/?broken=fGrtiw)

[Seabra, F., Teixeira, A., Abelha, M., & Aires, L. (2021). Emergency remote teaching and learning in Portugal: Preschool to secondary school teachers’ perceptions. *Education Sciences*, *11*(7), Article 7. https://doi.org/10.3390/educsci11070349](https://www.zotero.org/google-docs/?broken=LTCg5a)

[United Nations: Department of Economic and Social Affairs. (2022)*. The Sustainable Development Goals Report 2022.*](https://www.zotero.org/google-docs/?broken=Lq5lNv) <https://unstats.un.org/sdgs/report/2022/>

[UNESCO. (2020). *COVID-19 response – Remediation: Helping students catch up on lost learning, with a focus on closing equity gaps*. UNESCO Digital Library. https://unesdoc.unesco.org/ark:/48223/pf0000373766](https://www.zotero.org/google-docs/?broken=ma53NP)

[Uweso. (2020). *Are our children learning? The status of remote-learning among school-going children in Kenya during the COVID-19 crisis.* Usawa Agenda. https://www.humanitarianresponse.info/es/operations/kenya/document/uwezo-2020-are-our-children-learning-status-remote-learning-among-school](https://www.zotero.org/google-docs/?broken=CH72s3)

[Zhonggen, Y. (2021). The effects of gender, educational level, and personality on online learning outcomes during the COVID-19 pandemic. *International Journal of Educational Technology in Higher Education*, *18*(1), Article 1. http://dx.doi.org/10.1186/s41239-021-00252-3](https://www.zotero.org/google-docs/?broken=py4RRb)