

THE REVERBERATIONS, AFTER-EFFECTS, AND REPERCUSSIONS OF COVID-19: UNMASKING THE LEARNING GAPS PLUNDERING, RAVAGING AND RUINING LEARNERS IN SELECTED ZIMBABWEAN SCHOOLS

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Abstract

The cumulative impact of pandemic-induced school disruptions and shutdowns has been unprecedented. Numerous reverberations, after-effects, and repercussions of COVID-19 devoured many learners. This led to countless learning gaps that plagued, ravaged, and ruined the students. This prompted this convergent parallel design-informed, mixed methods research that used a systems framework to unearth and present layered, multi-faceted results. These results divulged and revealed the complexities of the impacts of COVID-19 in plundering, ravaging, and ruining the lives of learners through learning gaps. Seven schools whose students' performance in public examinations took a nosedive after COVID-19 were purposively sampled. Five teachers whose classes experienced a comparatively large decline in pupil performance, from each of the seven schools, participated in the research. Key findings unearthed are that students were being ravaged and ruined by learning gaps that include Test or knowledge competence gaps, stimulation or inspiration or enthusiasm gaps, social systems or environmental gaps, and others. These schools were caught by COVID-19 unprepared, flatfooted, and not ready for this kind of eventuality. The research concludes that there are long-term consequences of the reverberations, after-effects, and repercussions of COVID-19 that are too frightening if they are not addressed. The research recommends that schools should be capacitated so that they are ready to face exceptional circumstances that include pandemics, natural disasters, and other turbulent situations.

Keywords: Immigrants/refugees, inclusion, Greek Secondary education, Educators

1. Introduction

Zimbabwe gained independence in 1980. On attaining independence, education was made a human right. The country is well known for its highly acclaimed education system. For this reason, Zimbabwe is respected for its comparatively high literacy rate. However, all this was under threat in 2020 after the country was not spared by the dreaded COVID-19. This is after the World Health Organization in a bid to save lives globally declared the outbreak of COVID-19 a global pandemic that needed collective action (UNESCO, 2021). During that time, Zimbabwean learners experienced unprecedented school closures. This was accompanied by complete or partial school closures. Unfortunately for Zimbabwe, school closures took place amid an economic meltdown that the country was exposed to before the advent of the pandemic. However, the effects of the Covid-19-induced lockdown were unprecedented (Sintema, 2020). Dhawan, (2020) points out that the COVID-19 pandemic has caused havoc in the world, adding that this pandemic has radically changed how education is being offered. It has also affected learners' lives thereby raising new and old questions regarding the social order (Kaffenberger, 2021). In Zimbabwe, the effects became the long-run learning impact of the COVID-19 learning shock as expounded by Kaffenberger, (2021). Even though education remained a priority, many challenges were plundering, ravaging, and ruining the student population in Zimbabwe. The once revered education system was now under threat of collapsing.

To make the situation of learners bleak, in Zimbabwe, there was an element of social stratification in the challenges faced by learners who were threatened by COVID-19 (Sintema, 2020). For example, in some instances, the length of school closures varied. This was because the development levels also varied. This was confirmed by Palad (2022), who, in exploring stakeholders' experiences and challenges, stumbled through stratified learner challenges. This means that those learners from poorer communities missed substantially more classroom instruction as compared to their counterparts from high-income localities (UN, 2020). To lessen the burden, some communities engaged their teachers through eLearning platforms to lessen the learning losses. According to Engzell, et. al. (2021), this learning loss remains an albatross to many learners three years after the pandemic was first detected. The persistence of the reverberations, after-effects, and repercussions of COVID-19 has prompted this study. According to Ardington, Wills & Kotze (2021), one of the after-effects of COVID-19 is the "opportunity

cost” of lost learning which is the learning students would have gained over a typical year of schooling if schools were not disrupted. They also pointed to the “deterioration” of knowledge because learners forget what they have learned over time (Widdowson and Dickson, 2014).

According to the World Bank (2020) parents who live in a remote village such as those found in Zimbabwe have found out that educating children during the COVID-19 pandemic was a monumental challenge. The World Bank (2020) citing the example of Indonesia, pointed at the lack of electricity and the lack of access to the internet as some of the challenges that affected the children living in remote villages. This means that this learning loss should have been addressed immediately after the pandemic because the learners in remote areas found it difficult to access education through the Internet (Engzell, et. al. (2021). These were also some of the challenges that enabled learning gaps to plunder, devastate, and ruin the educational future of the learners in this study. The challenges were exacerbated by the problems faced by teachers who were also learners regarding the use of technology (Tuncel & Cobanoglu (2018).

Rowley, (2014) was also of the view that many learners were greatly affected by the sudden switch to virtual learning. In such circumstances, this was a process that gave learning gaps a chance to plunder, ravage, and ruin the educational future of those learners who had no ready access to the internet. The World Bank (2020) agrees and points out that uneven access to education has the potential to leave huge learning gaps for students. Bonal & Gonzalez (2020), agree and add that it is the structure and size of families' social, economic, and cultural capital produced, that limits opportunities for many of these children. This leads to what they call significant differences in the learning opportunities for children from different backgrounds (Bonal & Gonzalez, 2020). These learning gaps that emanate from the unprecedented learning losses can have an unsurmountable negative impact on learners' futures. This can dent the educational prospects of these learners for the rest of their lives (Widdowson & Dickson, 2014). More important, because learners differ, the challenges they face also differ. This means the learning gaps that they are experiencing should be unmasked.

According to Godber & Atkins (2021), in the context of New Zealand, the students there were grappling with new technologies because they were caught unawares. They were also grappling with the changes in lifestyle and livelihoods. One of the impacts of these changes was that of learning gaps that increased phenomenally. The learning gaps were also nourished by the impact that social isolation had on learners who shifted to emergency “remote” teaching and learning (Godber and Atkins, 2021). Thus, they add that COVID-19 brought extraordinary disruptions (Sintema, 2020) on a scale not previously witnessed since World War I and II (Godber & Atkins, 2021; Mohammadpourkachalami, 2025).

In the context of South Africa, Le Grange (2021); Mahlangu (2025) and Mataboge, (2025), make the situation clearer by pointing out that the pandemic laid bare racial inequalities in the South African education system. To them, the black population was bearing the brunt of the COVID-19 pandemic. They pointed at poor nutrition, impoverished living conditions, lack of access to technologies, and others as the main source of the challenges. To them, the disproportionately negative effect of the COVID-19 pandemic on blacks fuelled, plundered, ravaged, and ruined the black student population disproportionately. They argue that this is the consequence of sustained discrimination at systemic levels—economic, political, and social. Thus, the country’s gross inequalities compounded the challenges that learners were facing. This then became a breeding ground for learning gaps. Learning gaps were being fuelled and worsened by the economic impact of the pandemic.

While many believe that virtual learning experiences are the best for students, some dispute this kind of thinking. For example, Pokhrel & Chhetri (2021) and Nangolo, & Mbatl (2025) cite current literature indicating psychological, social, and economic reverberations on the lives of learners as they are immersed in technology while away from their normal schedule of study. This means that the increased and chaotic time that they spend on online learning platforms brought to light and exposed the learners to potentially harmful and violent content. They even faced greater risks of cyberbullying (Espineli, 2021). Because of this, the school closures were an albatross for many learners. This was worsened by the strict containment measures. Meanwhile learning gaps flourished unabated and the aftermath of Covid 19 became chaotic. Ravichandran and Shah (2020) appear to support this argument when they point out that the significant increases in time spent on virtual platforms are not healthy for young and delicate minds. They saw this time as a breeding area for domestic violence and child abuse since the perpetrators would also be confined to the neighbourhood. They saw this as a threat and a mental distraction to the learners.

Some strategies were employed elsewhere to engage disengaged students as part of compensation learning after COVID-19 lockdowns were eased (Omar, 2014; Jayani, 2021; Fusco, et. al. 2021; and Link & La Prad (2023). Link & La Prad (2023) suggested the use of what they called the ECHO model of experiential education.

This ECHO model has four critical components that should work synergistically together. These components are:

- Exploring as an initial inquiry-based approach. This is a process of finding out what a student knows. It also tries to find out what the student wants to learn.
- Creating is the process of creating. This is where the learners are provided with an opportunity to have common experiences.
- Harvesting is a process in which the idea is to harvest the reflections. Under this process, the learners are provided with an opportunity to reflect on their common experiences.
- Owning is a process in which the experiences that have been harvested are now domesticated. This is a process where the learners transform, change, and transfer the shared experiences for use in their contexts.

Espineli (2021), and Mink & La Prad, (2023) also added the concept of an Experiential Learning Compass. This compass is seen as a set of guiding principles for authentic learning in the classroom. Apart from being used in the classroom, the compass is an element of community activities that can be incorporated into a variety of courses. Such community activities, among others, include activities beyond the physical, outdoor adventures that are most often associated with experiential education (Mink & La Prad, 2023). If these processes were done for learners in this study, the after-effects of COVID-19 could have been reduced.

Chiome (2023), pointed out that learners in Zimbabwe were experiencing various forms of learning gaps, adding that these very gaps affected their learning in many ways. However, what did not come out of this study and other studies in Zimbabwe was the types of learning gaps that the learners were experiencing, and the consequences of these learning gaps as expounded by Stanistreet, et. al. (2020). In the study by Chiome (2023), the teachers in that study provided transformative solutions that could benefit both teachers and learners. Among other strategies, they suggested a focus on targeting an instructional framework that will transform learning toward closing those gaps. Such a move has been supported by Karalis (2020), who thinks that to transform learning, there is a need to learn from the lessons learned during COVID-19. However, there is a gap as to the embodiment, type, classification, category, or pattern of the learning gaps that are plundering, ravaging, and ruining the learners in the selected schools. Hence, this study.

Research objectives

Two research questions were explored in this study. These are:

- To examine the main factors contributing to learning gaps in the students after the COVID-19 pandemic.
- To assess and expose the learning gaps that are plundering, ravaging, and ruining the students in selected Zimbabwean Schools.

Statement of the problem

The table below shows the results of five selected schools in public examinations before and after the pandemic. The names are pseudo-names.

Table 1. The pass rate before and after the COVID-19 pandemic

Name of school	Pass rate before	Pass rate after	% changes
Mandini school	87%	69%	18
Muni School	63%	52%	11
Guvukuvu School	92%	83%	9
Gondongwe school	44%	23%	21
Shechere school	71%	60%	11
Chishave school	39%	28%	11
Romorehoto school	68%	57%	11
Average	66%	53%	13%

Table one shows that the average pass rate in the schools under study before the pandemic was 66%. The average pass rate for the same schools after the pandemic dropped to 53%. This was a 13% drop in the pass rate. It is clear from the table that there are learners whose performance after the pandemic took a nosedive. What is not clear from the table is the types of learning gaps that are inflicting educational pain on the learners. To worsen the challenge, in the literature, there is limited empirical data that can provide important contextual background

for understanding the impact of the pandemic on student learning. This is the problem that this research sought to address.

Research questions

Two research questions were explored in this study. These are:

- What are the main factors contributing to learning gaps in the students after the COVID-19 pandemic?
- How do you expose the learning gaps that are plundering, ravaging, and ruining the students in your school?

2. Method

This research was influenced by John Dewey's pragmatism where practicality and multiple viewpoints were valued. Pragmatism also promotes the view that the subjects should interact with their environment and learn (Cresswell, 2022). The learners should interact with ICT tools that they can use to support and facilitate learning (Cheung, et. al., 2021). They pointed to the use of immersive virtual reality in learning complex subjects as one of the ideas that can motivate learners and slow down learning gaps. To them, technology helps in bringing more engaging, motivating, and effective learning experiences for all learners. Thus, according to Cheung et. Al. (2021), a smart learning environment attracts learners and then stimulates their learning motivation by promoting active learning. Technology can also improve academic performance and stimulate higher-order thinking skills (Jena cited in Cheung, et. al., 2021). There is a need for all stakeholders to collaborate to ensure participation in school improvement (Guzman, 2020).

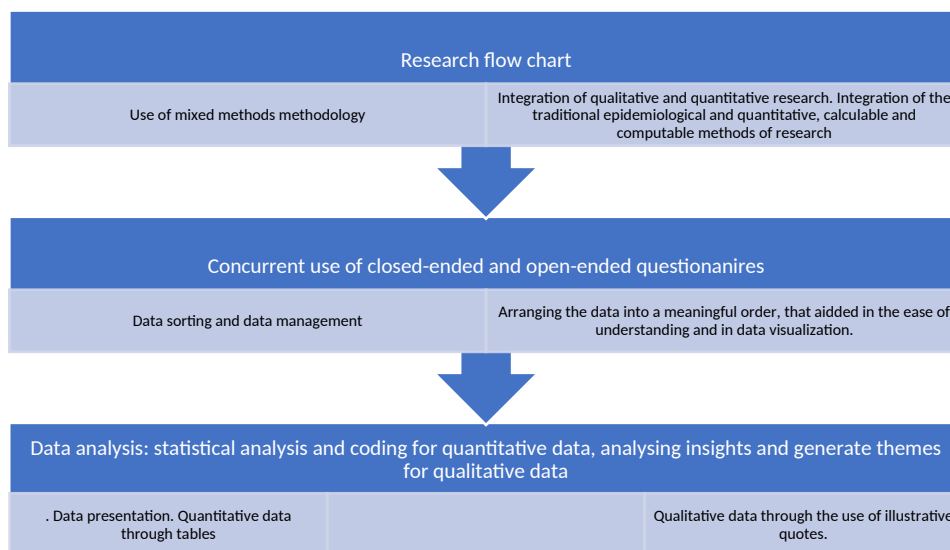
In line with the paradigm, this research used the mixed-methods methodology. Cresswell & Cresswell (2018) say that mixed methods research is the research method that combines and integrates qualitative and quantitative research methods in a single research study. Cresswell & Cresswell (2018), adds that mixed methods research is a research procedure that collects, analyzes, and mixes both qualitative and quantitative methods in a single study. The research design for this study was the convergent parallel design. In this research, although the areas of convergence or divergence between the qualitative and quantitative results were considered, the greatest interest was in the convergence of the qualitative and quantitative findings. These formed the backbone of this research. The quantitative used in conjunction with the qualitative data provided the researcher with a better understanding of the research problem and obtained more detailed data regarding the problem under research (Cresswell, & Cresswell, 2018). Mixed methods methodology was preferred in this research because it makes the most of the strengths of each data type (Cresswell, & Cresswell, 2018). Mixed methods methodology was also used because of the methodology's capacity to neutralize the weaknesses of either qualitative or quantitative (Cresswell, & Cresswell, 2018). In this research, combining qualitative and quantitative methods helped in expanding the evidence thereby improving the credibility of the findings.

Data collection and analysis

The researcher purposefully selected both sites and individuals who were deemed to have the information that could answer the research questions. Data was gathered through an open-ended and closed-ended questionnaire. Random sampling was employed for choosing the closed questionnaire respondents while for open-ended questionnaires, the research participants were purposively sampled. Concurrent forms of data collection were employed. Both quantitative and qualitative data were collected concurrently using both open-ended and closed-ended questionnaires. The instruments used had scores that were both valid and reliable. Information was collected from the source through systematic gathering, recording, and preserving. The researcher consistently questioned methods and findings to check for alternative interpretations that could emerge during data collection. In analysing the data, since this was a mixed methods research, qualitative data was analysed using qualitative methods. On the other hand, quantitative data was analysed using quantitative methods.

Efforts were made to explore the data to understand what was available. The next step was to sort, manage, and reduce the data to manageable levels. Then the data was coded to identify relevant concepts, variables, and themes that were used to make comparative analyses with the view to answer research questions and discern deeper meaning in the collected data.

Research flow chart



Theoretical framework

The theoretical framework that guided this study was that of the Socio-Ecological Systems Model (Godber & Atkins, 2021). In education, the model encompasses the lifestyle, experience, and livelihood of the learners. The model encompasses the significance of networks of people and structures that surround learners. They also look at the networks of structures and people that safeguard the learner's well-being and support the learner's optimal development. Godber & Atkins (2021) pointed out that this is like a systems approach. To them, that system acts and interacts together. The socio-ecological system can construct the well-being of those who live in any system. They pointed at processes like social reproduction and economic productivity that they said rely on the efficacious functioning of all areas of the system. The most important area for this research is what Godber & Atkins (2021) called multiple factors that have the potential to influence, interact, act, and create outputs, opportunities, and outcomes. To them, the socio-ecological system can even create obstacles or even go on to create a new system equilibrium.

The socio-ecological systems theory takes into consideration the individual learner, and his/her affiliations to people, organisations, and the community at large. This means that the reverberations, after-effects, and repercussions of COVID-19, started to build potential during the COVID-19 lockdowns starting with the individual and going on to manifest in the associates of that individual learner. By way of an illustration, Godber and Atkins (2021) pointed out the challenges that were faced by teachers. They pointed at the relocation of the workplace into the teacher's home. They also pointed out the increased demand on the teachers' time due to a spillover between one microsystem and another. They also mentioned issues like sudden changes to personal spaces. Thus, according to Godber & Atkins (2021), the impact on teachers was unprecedented because of the underlying effects of demands and resources on each microsystem. This means that the whole ecosystem had multiple influences that impacted the teachers and eventually the learners thereby nurturing learning gaps. The learning gaps then plundered, ravaged, and ruined the educational future of the students that they were teaching.

According to Godber & Atkins (2021), the socio-ecological system heavily affected the students. In this regard, they pointed out some factors that they called the microsystem. Some of these are livelihoods, education experience, and lifestyle domains. They also pointed out the power dynamics of school heads, teachers, and students. Even time to them was important to the ecosystem. For example, the timeframes within which information was being disseminated. Another area of the socio-ecological system that they saw as influencing the behaviour of learners was that of space. In this regard, the home was the new learning space. The internet was another learning space. Students were working from home while teachers were also working from home. Both were experiencing distractions in their homes.

3. Findings

This section examines findings regarding the issue of identifying the types of learning gaps. The participants were of the view that if a student is experiencing learning gaps it is important to identify the type of the learning gaps that is handicapping that learner. The scaffolding issue of knowledge means that they will not keep building and learning more complex concepts if this gap is not bridged.

Learning gaps are not a new phenomenon because they have always been common in education. However, according to Donnelly & Patrinos (2022), the new normal brought about by Covid 19 has been especially difficult

for students because of the transition to online learning. This has been a lot tougher for many students particularly those from disadvantaged backgrounds. This has led to an increase in learning gaps as exposed by the findings of this study.

This research examined two research questions. These are:

- What are the main factors contributing to learning gaps in the students after the COVID-19 pandemic?
- How do you expose the learning gaps that are plundering, ravaging, and ruining the students in your school?

One of the participants (7C) warned that to undergo a successful transformation from disengagement to engagement it is important to note that:

Successful transformation should be hinged on a strong base. That strong base is an accurate diagnosis of the situation. You need to be facing the real cause before enacting meaningful change. The truth of the matter is that performance gaps and disengagement of learners are mere symptoms of a malfunctioning system. Total transformation and change require careful planning, assessment, analysis, and evaluation whose main focus is on solving the disengagement paradox and getting learners to be firing enthusiastically once again.

The other research participant (4B) shared the snowball effects of learning gaps by pointing out that:

Learning gaps are dangerous mainly because of their snowball effect. If left unattended, learning gaps can easily become a bigger challenge the longer the learning gap goes without a remedy. If a child misses an important concept in a subject like Mathematics, this gap would later surface leading to bigger learning gaps in all the concepts that depend on this missed foundation concept.

The research question of this research examined the reverberations, after-effects, and repercussions of COVID-19 to unmask the learning gaps plundering, ravaging, and ruining the students in selected Zimbabwean schools. The results on the main learning gaps contributing to disengaging students leading to the plundering, ravaging, and ruining of the students in selected Zimbabwean schools are presented below. The results are shown in Table 2 below.

Table 2. The main learning gaps that are plundering, ravaging, and ruining the students in selected Zimbabwean schools N=35 F stands for Frequency.

The main learning gap factor	F	%
Test-score/ or knowledge gaps	33	94
Stimulation/inspiration/enthusiasm gaps	31	89
Social systems or environmental gaps	27	77
Dissemination/Transmission/Communication gaps	32	91
Digital divide/technology gaps	35	100
Language gaps	26	74
Cultural gaps	21	60
Community gaps	20	57
Phonetic learning gaps	32	91

4. Discussion

The results in Table 2 are discussed below.

Test-score or knowledge gaps

Some 33 (94%) of the respondents in this study attributed learning deficiencies that are plundering, ravaging, and ruining the students in selected Zimbabwean schools to the shortcomings in *knowledge gaps*. According to Cheung, Kwok, & Phusavat, (2021), knowledge gaps are situations in which a learner does not know the correct information. In some instances, this may be a result of a lack of exposure to correct information. This was also confirmed by the respondents in interviews. For example, one (B3) shared the views that:

In my class, I could observe through assessments that there are widening knowledge gaps in the children that I taught. I observed that the knowledge gaps are glaring in academic achievement between children from lower and higher socioeconomic backgrounds.

This clearly shows that one of the core types of learning gaps that students can experience including the knowledge gap where learners' lack of knowledge is exposed. Devi (2022) agrees and points out that these knowledge gaps are achievement gaps or test-score gaps where learners were not exposed to the correct opportunities for information. Yet, according to von Hippel, et al. (2018), schools must be great equalisers. One of the respondents (D7) appears to have summed up the issue of test-score gaps by pointing out that:

Many of the learners in my class were, in subjects like Mathematics, clueless about the concepts in their syllabus. I discovered that even general knowledge of Mathematics and Science was lacking. I think I will be excused to mention that the test-score gap is higher in low-income students who even fail to do homework. There was some connection between home life and classroom learning.

This research, apart from exposing the test or knowledge gaps also confirmed Le Grange's (2021) findings in the context of South African education that the aftermath of COVID-19 was inflicting disproportionate pain on students in terms of their background. Le Grange (2021) pointed out that the pandemic laid bare racial inequalities in the South African education system where the black population was bearing the brunt of the COVID-19 pandemic. They pointed at poor nutrition, impoverished living conditions, lack of access to technologies, and others as the main source of the challenges. In this study, the same challenges fuelled test-score gaps that then plundered, ravaged and ruined the working-class background student population disproportionately.

Stimulation/inspiration/enthusiasm gaps

Inspiration or stimulation gaps were mentioned by 31 (89%) of the respondents in this study. Devi (2022) thinks that learners in schools who lack motivation, are weak in their efforts to advance their knowledge or skills. On the other hand, Mink & La Prad (2023) pointed out that motivation gaps are experienced by learners who know what they are supposed to accomplish. They know how to do it but decide to switch off for reasons better known to them. Devi (2022) agrees and points out that motivation gaps are those learning gaps that have the potential to prevent learners from meeting their learning goals.

Mataboge (2025); Andra & Alvero (2023); Cabantog, & Ortega-Dela Cruz, (2025); Drew (2023); Mink & La Prad, (2023); and Reimers, & Schleicher (2020), agree that motivation gaps affect many children. They point out that motivation gaps occur when a learner has the information or when a learner has the required skill but does not employ the knowledge, skill, or information to solve problems. Some of the reasons that they give for this lack of motivation are the view that the learner is not in agreement with the objective that the teacher is trying to attain, the learner is failing to understand the objective, the learner is challenging the teacher's objective, there is a communication breakdown regarding the objective under consideration, the lack of communication is causing confusion and resentment. The respondents in this study appear to agree with the information from the literature especially one (C3) who pointed out that:

In the class that I taught; I noticed inspiration gaps resulting from resistance to change. Maybe some members of my class were afraid of change. My mentor was equally perplexed and hinted that Grace (not her real name) was very active before. She was highly knowledgeable about the topics in Mathematics. She knew what was required, but she suddenly lost focus and with it, motivation to accomplish given tasks.

According to the OECD (2020), enthusiasm gaps should be addressed. They point out that if the gap that is at stake is motivational, teachers need to ensure that they include content that deals with whatever inspirational issue they are facing. Lawson & Lawson (2020) appear to agree with these ideas. They added that the need to deal with the motivational issues is critical. They even gave some examples like the need to explain why the objective under consideration is important to the learner if the motivational issue is a contestation regarding the objective. They hinted at the need to clearly explain the objective of the course to ensure buy-in from the learners. Another example given was the need to make the course as interactive as feasible, pointing at making the lesson interesting, easy to use, relevant, and engaging (Lawson & Lawson, (2020) and Vuma & Mutongoza (2025). Delivering an interesting and interactive lesson will also help to overcome motivational and enthusiasm issues. Teachers may need to have a long-term vision for this (Zhu & Liu, 2020).

Social systems or environmental gaps

Some 27 (77%) of the respondents in this study claimed that the learners that they were teaching lacked an environment that was conducive to learning. According to Rowley (2014), environmental and social system gaps that affect learners are those factors that are related to the external system. Some of the factors in the environment of learners that team up to affect their learning thereby causing learning gaps are the family, the school, the church, the peers, the community, and the media among others (Palad, 2022). These were also seen in this study as major causes of the learning gaps. According to Stanistreet, et. al., (2020), these are the social systems whose damage like that of COVID-19 can cause lifetime damage to the students since other people influence learners in their education journey and their daily lives. The participants in this study appeared to confirm this particularly one (D1) who opined that:

The challenges that are teaming up to inflict educational damage to the class that I teach appear to be numerous. They range from peer influence, religious influence, parental influence, and the distance that the learners travel to school among others.

Andras & Alvero, (2023); Hamid & Zinnah (2025) and Cheung, et. al., (2021) agree that a learning environment refers to the spaces and context in which students are nurtured as they grow and learn. They point out that this environment can affect a child's learning experience. Bartolome et al (2017) and Kaffenberger (2021) mention parents, teachers, caregivers, peers, other children, and others as some of the social beings that have a bearing on how a child learns. This can affect any learner's learning and receptiveness, especially parental involvement (Bartolome, et al, 2017). Cheung, et al., (2021) agree and add that a learner's learning environment is extremely important. This environment nurtures the child's development, especially in his or her early years. Thus, they argue that the learning environment **should be welcoming, stimulating, conducive, familiar, and interesting (Engzell et. al., 2021)**. It means for young learners, unfamiliar environments have the potential to cause young learners to feel stressed, which can affect his or her learning.

Cheung, et. al, (2021) and Vuma & Mutongoza (2025), talk about shaping future learning environments. They point to a conducive learning setting that allows for a free exchange of ideas. They also pointed to the free exchange of thoughts and skills among the teachers and learners in a collective attempt to attain the expected educational goals. They also see the importance of shaping the learning environment by considering the physical, psychological, social, and cultural needs of all the learners (Cheung, et. al., (2021).

Dissemination/Transmission/Communication gaps

Some 32 (91%) of the respondents in this study mentioned the issue of dissemination or transmission or communication gaps that are disengaging learners. These communication gaps are manifesting as deficits in the effectiveness of communication especially between the teacher and the learner. One of the respondents (B6), in elaborating on the issue, explained that:

In my class, I grappled with the dissemination barriers when the learners were unable to express their ideas and knowledge to me and others. These transmission barriers greatly affected the students that I taught since proper learning could not take place because there was poor communication between me and the disengaged students. I saw this through some of my instructions that were not understood. While these barriers were present before, they increased in the post-COVID-19 period.

Cheung, et al., (2021) and Mahlangu (2025), concur that communication gaps can disengage learners. To them, the main causes of these communication gaps are the lapse in concentration, use of very complicated terms, the lack of clarity in the instructions that are provided, inaccurate instructions that are given to students, noisy environment, the different communication styles that are employed in the classroom, the language barriers especially in classes that are taught through a second or a foreign language. According to Karalis, (2020), learners in some instances experience breakdowns in communication that can grossly affect their learning leaving them with learning gaps. Some of these include failure to communicate well, outright miscommunication, not being on the same wavelength, and others. Devi (2022) believes that communication tools can help. He points out the importance of the communication channels or mediums used by the teacher or the students. These tools can be used as weapons that can help in overcoming communication gaps in the classroom. According to Devi (2022) even reading materials that are just like bundles of words put off children. Yet, young children are excited about using graphics like diagrams, charts, images, and other interesting graphics.

According to UNICEF (2021), it is common knowledge that the most important element to overcome communication gaps in learning is the message. Messaging is a crucial element in communication which should reach its destination well. This means, that to minimise learning gaps that come because of challenges in communication, schools as learning organizations should keep in mind that their learners need to get basic communication skills. UNICEF (2021); Mataboke, 2025 and Nangolo, & Mbatl (2025) are of the view that schools as learning organizations should provide both teachers and pupils with the online training tools of the trade that will promote seamless communication.

Digital divide/Technology gaps

All 35 (100%) of the respondents in this study pointed out the digital divide. One of the research participants (D5) had this to say:

The digital divide is not only there in our school, but it is increasingly widening, especially during and after COVID-19. This disparity in the access and use of technology is having a significant impact on the learners that I teach. My colleagues also agree that the disparity is real and is growing. The challenges appear to have been exasperated by the COVID-19 pandemic. Some students were completely left out of the education train when schools were closed, and lockdowns were imposed. Now the consequences of the digital divide are ravaging our students.

The other one (E1) also pointed out that:

I experienced two types of technology challenges in my school. I realized that the digital divide is twofold. On one hand, we have those students and even teachers who have insufficient access to technology. On the other hand, we had students and teachers who lacked the knowledge of how to use information and communication technologies that were provided by either the government or the donor community.

According to Haleem, et al. (2022), the digital divide is a situation that affects learning. It can be used for disengagement because there exists a situation in which some learners, some teachers, some schools, some families, and some communities have access to information and communication technologies that support their learning and on the other hand, there are others who do not have any. Lawson & Lawson (2020) appear to agree that the digital divide is a challenge in schools. It is a source of learning gaps because some students lack physical access to technology. They also pointed out some of the students in their research where digital illiteracy is a contributing factor to the digital divide in the sample.

Hamid & Zinnah (2025); Downes (2023) and Reimers & Schleicher (2020) lament the effects of the digital divide on fuelling learning gaps and disengaging learners. They point out that reduced access to digital tools is a challenge for many disadvantaged students. These students are faced with hurdles that disengage them in their learning. On the other hand, Mink & La Prad (2023) in their research on bridging the learning gap between the engaged and the disengaged, was that the students disengaged by technology often are led down the dropout drain because they abandon their educational pathways. In some instances, learners who have reduced access to digital infrastructures are more likely to spend a greater amount of time seeking access to the technologies thereby inhibiting their long-term success.

The use of digital tools such as mobile technologies to minimize technology gaps was mentioned by UNICEF (2021) and Mataboke (2025). They are of the view that mobile-friendly microlearning competencies can galvanize learners and scale up their engagement with both technology and learning. They point to online training materials that they can view on any device, particularly mobile devices. The content is that by using mobile devices; schools can bridge both technology-based learning gaps and minimize the technological divide as well. According to UNICEF (2021), this world is mobile, and the current z-generation is always moving. Thus, mobile-based technologies and tools can make the learning process easier than what has been experienced hitherto (Mohammadpourkachalami, 2025).

Cultural gaps

Some 21 (60%) of the respondents in this study pointed at cultural gap challenges as some of the sources of learning gaps that disengaged the students that they taught. One of the research participants (E2) explained the cultural gap by pointing out:

My experiences regarding cultural differences that disengaged my students is that in the school that I am teaching, there are significant disparities in world views. There are also significant disparities in values and expectations. These disparities exist between the teachers and the ethnically diverse student population of the school.

What this means is that in almost 60% of the schools in this study, there are some form of learning gaps that emanate from cultural differences. Khadija (2023) agrees that cultural differences can disengage students. She points out the cultural gaps that are a systematic difference between two cultures. She thinks that such a gap hinders mutual understanding or relations. According to Khadija (2023), the cultural gaps that are prevalent in schools include differences in education, values, customs, behavior, and others that differ from one culture to the other. This was confirmed by Andra & Alvero (2023) who discovered the learning gaps among learners. These learning gaps just like cultural gaps had potential risks that they posed to the learning process.

Cheng (2021) argues that it is paramount that teachers and other educators understand that culture can influence the behaviour of the students that they teach. They need to realize that culture can influence the behaviours and actions that occur daily in the classroom setting (Cabantog, & Ortega-Dela Cruz, 2025). These behaviours and actions can affect teacher-student interactions and ultimately student engagement or lack of it. Even the extent to which teachers can manage behaviour can be impacted by cultural gaps in the classroom. This makes it important for teachers to recognise that their students' cultural practices and beliefs might well be different from their own. The differences in the form of cultural gaps may lead to disparities in the ways teachers respond to behaviour (Cheng, 2021).

Language gaps

Some 26 (74%) of the research participants in this research believed that there is a correlation between language and learning. One of the participants (D3) opined that:

You can undertake classroom research on language and learning so that you will understand that there is a strong link between the language of instruction and the interactivity and participation of the learners. I saw that

as we emerged from the COVID-19 lockdown, the language of instruction was now history. Many students had discarded English during the lockdown.

Another participant (A5) concurred and added that:

It is through the language that learners can connect with the teachers. It is language that gives the learners a sense of comfort that motivates them to participate in all class activities. Many of the disengaged students are doing so because of the language of instruction especially if they feel they are not being understood and heard.

According to Gibbons (2003), learners experience communication handicaps because of their incompetencies in the language. Such students will struggle to express themselves clearly. In many instances, they may even fail to understand instructions. This is also confirmed by Muhammad (2019) who thinks that through the language, students can understand what is being taught. They will also understand what they are expected to do by their teacher. This research has laid bare that the aftermath of the COVID-19 pandemic saw many students being ravaged by language learning gaps. Thus, there is a need to improve students' motivation to continue to attend classes. One way is to ensure that language is not a barrier to their understanding of the curriculum and ability to help them with their work.

Community gaps

Some of the respondents in this study 20 (56%) mentioned the disconnection with the community as one main driver of learning gaps in the schools studied. This is what OECD (2020) called a sense of connection that the learner can rely on to help prevent feelings of isolation. The sense of isolation was seen as a stumbling block that could help to accelerate learner disengagement. One of the respondents (E2) had this to say:

One of the major red flags that disengaged students in my class is the issue of isolation. I could see that there were some learners whose pre-existing educational inadequacies were widening because they felt isolated in class.

The other participant (B5) was of the view that:

Unequal opportunities were laid bare by the pandemic. This has resulted in a long-lasting effect on many of the learners in my class.

According to Gray Group International (2023) and Akwetey, (2025), inequality is the source of educational inequity. They pointed at issues such as poverty, overcrowded classrooms, poor infrastructures, distances travelled, and other inequalities that have always been there but now have been exasperated by COVID-19. In such dire circumstances, learners experience learning loss and those experiencing learning gaps need unwavering community support that may be not coming their way. This is because COVID-19 has exposed the unequal distribution of opportunities, resources, and privileges that are manifesting in learners as learning gaps. According to Gray Group International (2023), this disparity is being expressed and revealed as disparities in access to high-caliber teachers, extracurricular facilities, exposure to teaching and learning technologies, and modern infrastructures. This is glaringly visible as forms of academic achievement gaps that are glaringly evident between different student groups. Thus, differences in race, socioeconomic status, or disability become glaringly obvious.

Phonetic learning gaps

The issue of the phonetic learning gaps was mentioned by 32 (91%) of the research participants in this study. They pointed out that the repercussions and after-effects of COVID-19 are manifesting in students who have challenges in recognising words. This has greatly affected their reading proficiency. Thus, such learners have a phonetic learning gap. One of the research participants (D4) opined that:

I used to experience challenges with learners who were struggling readers. However, these challenges have now increased. Apart from COVID-19, the other drivers of poor reading ability include ADHD, dyslexia, difficult text, ADHD, working memory deficit, and limited vocabulary.

According to Allington, (2018), reading acquisition is like a tower of blocks. In such a tower, each skill is a foundation for the next block. In the case of a gap in these blocks, or one of these blocks, then there is a looming danger that the whole tower could fall. This means that for learners to grow from one level to the next, they must be competent especially in the foundational blocks through phonological awareness. Clay (2015) and Akwetey, (2025), lamented the ripple effects of phonetic learning gaps. She pointed out that some of the phonetic learning gaps have the potential to create big problems for learners. For example, they can create decoding challenges. These decoding challenges then slow down the reading competencies. On the other hand, slow reading may then lead to poorer comprehension (Clay, 2015). Furthermore, phonetic gaps can result in poor spelling abilities. These ripple effects of phonetic learning gaps that increased as part of the after-effects of COVID-19 are now plundering, ravaging, and ruining the future of the students in this study.

5. Conclusions

In this conclusion, the fundamental findings, implications, limitations, suggestions for future research, and recommendations are highlighted.

Fundamental findings

This research draws on the socio-ecological systems framework to conclude that the largest disruptions to education in history (COVID-19), contributed to a significant learning loss. This led to widening opportunity gaps that disproportionately affected learners from disadvantaged backgrounds. This was worsened by changes in delivery models, new technologies, teachers challenged by technology, challenges of blended/hybrid learning, the changing learning environment, student engagement strategies, less content coverage, and other factors that combined to compound the learning losses. These then nurtured, fed, and nourished the learning gaps. The learning gaps went on to plunder, ravage, and ruin the future of the students in the schools in this study. Some of these learning gaps were unveiled, exposed, and unmasked in this study as the test score or knowledge competence gaps, stimulation or inspiration or enthusiasm gaps, social systems or environmental gaps, dissemination or transmission or communication gaps, language gaps, cultural gaps, community gaps, phonetic gaps, and others.

Implications

These findings imply that the learning of the students in this study was greatly compromised during and after the pandemic. This was due to several factors such as social isolation, being disempowered, differential access to technology, lack of high-quality remote learning, lack of supportive learning environments, and others that teamed up to exacerbate the impacts of the pandemic for some populations. Learning losses that are expected to be greatest among low-income students, were exposed in this study. On the surface, these learning losses may appear to be short-term learning losses. However, in the long run, they will slowly become cumulative thereby resulting in larger and permanent learning losses.

Limitations

The major limitation of this study is that a great deal of expertise and effort is required to study the phenomenon being researched using two distinct methods. There is an added disadvantage in comparing two sets of data in addition to resolving discrepancies between the two sets of data if they arise. The process is more time-consuming and expensive, leading to increased cost and time.

Future research can be undertaken in areas that include potential regression towards attaining Sustainable Development Goal number 4, threats to the attainment of high-quality education for all, COVID-19 aftereffects on drop-out rate, impact on learners hailing from marginalised communities, the extent to which COVID-19 exacerbating existing educational inequalities and others.

Recommendations

This research was influenced by the socio-ecological system framework to recommend that:

- There is a need for systemic transformation, change, and adaptations in the face of the vast array of the learning gaps uncovered in this study because learning institutions are dynamic places that are required to continually evolve.
- The varied nature of the learning gaps unmasked by this study shows that it is imperative during times of crises to discard the “one-size-fits-all” mentality that is being applied in many educational institutions.
- There is a need for authentic and appropriate bridging of the learning gap after thorough assessment and confirmation of the learning gap that is ravaging and compromising the education of that identified learner.
- A socio-ecological system requires a culture of collaboration, problem-solving, communication, inquiry, and reflection for schools to succeed in reducing the effects of the reverberations, after-effects, and repercussions of COVID-19.

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