With the ravaging impact of the Covid-19 pandemic, schools have had no chance of proceeding conventionally as accustomed. The continuous interruptions have led to trials of different strategies which teachers could use to teach and enable their learners to keep learning, under the circumstances. In response to the pandemic, Namibia's MoEAC introduced multiple strategies of teaching from which schools could choose to ensure continuity of teaching and learning. The given strategies included the phased-in approach, platoon, time-based cohorts, distributed groups, or an amalgam of these strategies (MoEAC, 2020). While the mentioned strategies could be employed to some extent, the problem about all these suggested strategies is that they required physical presence of the learners in the classrooms for teachers to teach them.

These suggested strategies, despite the possible levels of control that could have been exercised, were still not safe enough to reduce, nor avoid the spread of the virus. As majority of the world embraced and continues to embrace e-learning, Namibia still maintained and continues to stick to conventional methods of teaching and learning. As a generation living in the digital world, the learners and the teachers were generally expected to quickly transition to ICT enabled teaching and learning strategies which can be done over a distance (König et al., 2020). This is because, we are supposed to be already accustomed to the use of computer technology, and this is exactly what happened in South Africa, as the country quickly switched to online learning during lockdown period of 2020 (Mhlanga & Moloi, 2020).

With all the technologies at our disposal, Namibia still failed to engage teachers in remote teaching, and one wonders if the strategies that the MoEAC gave were the best options in the face of the pandemic by the moment. It is on this background that this study is impelled to establish and explain how teachers can be empowered to teach their learners without the need to physically have them at school.

Context

The original study upon which this article is based was undertaken between 2013 to 2015. While this study was conducted without any idea that the need for off-school teaching and learning would come with such unexpected urgency, the findings of the study prove more justified today than they were back then. The main idea that motivated the study was to establish how computer technology was integrated and used for teaching and learning in schools, which meant ICT integration in classrooms (Simataa, 2015).

However, for the teachers to integrate computer technology in the classrooms they needed to have the necessary computer skills, computer technology resources, while the learners needed to have the same skills and resources as well (Simataa, 2015). This meant that, if teachers did not have these skills and equipment, there was a need for them to be trained and provided with all relevant resources. Therefore, the context of this article is to build on the findings of this previous study and provide measures which can be taken to enable teachers to use ICTs to teach and be able to teach beyond the physical classroom.

Literature Summary on Computer Technology in Education

Like it serves in many other areas of our lives, there are multiple ways through which computer technology can be used in education. Literature show that computer technology has the capacity to improve the academic performance of teachers in their teaching practices, as much as it can improve the academic performance of learners (Simataa, 2015; Rusten, 2010). Moreover, literature proved that, not only can computer technology improve academic performances of teachers and learners, but that it can also reform education, a phenomenon that we are observing across the world today.

Literature further showed that computer technology has the capacity to make teaching and learning more engaging, an aspect which promotes active learning for the learners (Simataa, 2015). This proved that digitized learning could be more potent in

education than the conventional teaching methods that the world is accustomed to. Furthermore, literature shows that computer technology can be used in many ways in education, and these include (1) using computers as a substitute teacher, (2) using computer technology for research purposes or as an information resource centre, (3) using computer technology for communication purposes, (4) using computer technology as a tool for school administration and management, and (5) using computer technology as an assessment tool (Simataa, 2015).

From all these identified uses of computer technology, it is evident that it is not limited in terms of utility in education. All mentioned uses clearly prove that computer technology can be used within the school premises, but even more so, beyond the school premises. However, to ensure that these uses are realized at any level in education, there need to be considerable investment in terms of planning and implementation (Newby et al., 2011). Without careful planning and implementation strategy, realization of the benefits and uses of computer technology remains an idea of what can be possible.

ICT in Education Today

With the pandemic of Covid-19, everything in education has changed from the way we knew it to an era where ICT and innovation have quickly become the way of doing things. Since teachers could not really have learners in the classrooms in fear of spreading the disease, the world resorted to using ICT functionalities such as e-learning, blended learning, or online learning (Williamson et al., 2020). This has now become the norm from the lowest level of education to the highest, that is, from elementary to tertiary education. Through the broad scope of ICT functions, the process of teaching and learning has become remote, digital, and online, and for prepared countries, the transition was smooth, while for other countries it was, and remains a struggle.

While the popularity of the use of ICTs for remote teaching and learning became more prominent during the Covid-19 time, the phenomenon of online education was already becoming popular across the world (Palvia et al., 2018). Many aspects such as the "industry (business); governments at local, state, and federal levels; country laws; ICT capacity; Internet/mobile technology diffusion; and income and digital divide" were all identified as factors which influence the quantity and quality of online education in a country (Palvia et al., 2018, p. 233). A combination of the mentioned elements plays a vital role in enabling the full realization of ICT in education.

The recent developments in the integration of ICT in the education sector has led to a revolution, where, instead of simple integration, computer technology has become the only feasible measure available to ensure continuity of education. This has led to e-learning or online education becoming a prominent tool through which teaching, and learning can continue regardless of the circumstances (Dhawan, 2020: OECD, 2020). With e-learning, and situations where schools are closed, parents and teachers have the facility to provide learners with academic support at their convenience (OECD, 2020). This shows the flexibility and convenience elements of using computer technology for teaching and learning. Considering the benefits of ICT, which include being a resource for information, learners do not have to depend on the teachers to keep learning, as they can do it on their own, while teachers and parents facilitate and guide the learning process.

Materials and Methods

The study employed a qualitative approach, in which a multiple case study design was adopted. The use of the case study design was justified by the ability of the design to enable a researcher to gather data using instruments such as interviews, document analysis, observations, and many others. For this study, semi-structured interviews, focus groups, field notes, and non-participant observations were all used to

help the researcher establish how ICTs were integrated in schools (Simataa, 2015). The study was conducted in three secondary schools, where a sample size of forty participants was identified, of which three were school managers (principals and heads of department), six were teachers, and thirty-one were learners (Simataa, 2015).

The study involved one-to-one semi-structure interviews with the school managers and the teachers, whereas focus group discussions were done with learners. The researcher observed lesson presentations to see how teachers integrated computer technologies in their lessons (Simataa, 2015). The collected data was analysed qualitatively using Creswell's data analysis spiral and presented through themes and coding. Measures such as triangulation and member checking were employed to ensure the credibility and trustworthiness of the findings of the study (Simataa, 2015).

For the immediate purpose of this article, the methods of document analysis and literature review were used. Therefore, the culmination of the previous study of '*The integration of computer technology in the Namibian education system*' and the current existing literature on the use of ICT in education, enabled this article.

Results

Results regarding the extent that ICT is integrated in the teaching and learning processes culminated into three mains findings. These findings are drawn from the research objective which sought "to explore the use of computer technology in teaching and learning" (Simataa, 2015, p. 5). The result showed that:

- All teachers were professionally qualified as teachers with diplomas and degrees, and that Computer Studies teachers had qualifications that specialized either in Information Technology or Computer Studies. However, participants argued that these qualifications did not necessarily mean that teachers had computer skills that would enable them to integrate ICT in their teaching practices (Simataa, 2015). The results showed that most teachers had basic

computers skills and believed that ICTs had the potential to improve teaching standards, however, they lacked the skills to use computers for teaching practices.

- The study further found that schools had some ICT equipment, but not sufficient enough for teachers to use them for teaching practices. Schools had computer sets that were in the computer laboratories for Computer Studies, while other ICTs were in the administration offices for use by the school management and administrative officers (Simataa, 2015). Therefore, the result showed that schools lack ICT equipment and teachers did not have enough opportunities to interact with ICTs to acquaint themselves with the technology.
- The results of the study also showed that, while other schools were making efforts to secure ICT resources, they struggled with the issue of security risk. This was because these schools have had their computer equipment vandalized, misused, and in some cases, stolen (Simataa, 2015). The problem of burglary and theft of ICT equipment in schools seemed prevalent, making it difficult for schools to amass enough ICT tools to ensure effective integration. The loss of ICT equipment through theft left schools without enough equipment for learners and teachers (Simataa, 2015).

These three key findings of the study clearly show that the status of integration of ICTs in Namibian schools was still somewhat in its basic condition in 2015. Most of the reasons behind the poor advancement in the process of integration were because schools lacked ICT resources and teachers lacked computer skills.

Discussions

Based on the key findings of the study from the preceding section, there are several key issues that hindered the process of ICT integration, and mostly, the same reasons still hinder the process today. These issues are discussed as follows:

The Lack of ICT Skills

The presence of ICT devices in schools does not necessary mean that those devices will be used for their intended purpose. For the most part, schools in Namibia began collecting computer devices since the 2000s, particularly for Computer Studies school subject and for administrative purposes (Simataa, 2015). However, these computers were not purchased for integration in classrooms; and for other schools, buying computers was more of a norm where schools should have computers even when they are not using them. While computers were there in schools in their minimal numbers, the numbers were not the real hinderance to computer technology integration, but the skills.

The role that skills play in enabling teachers and learners to benefit from ICTs cannot be overstated. When the Covid-19 pandemic came, and online education became the only safe manner of continuing the teaching and learning processes, it was established that most teachers and learners are still not completely ready for online education or e-learning (Coman et al., 2020). The unreadiness of the teachers and learners to embrace e-learning has not been because they do not want to, but because they do not have the necessary technical computer skills that can enable them to teach and learn online (Coman et al., 2020).

The basic skills that teachers have are usually too basic for use in online environment, and the same applies to learners. While basic skills enable teachers and learners to type and search for information using the internet on their personal computers and/or smartphones, they are not sufficient for interaction with online learning environments (Butnaru, 2021; Ferri, 2020). Therefore, for teachers and learners to embrace online education sufficiently and efficiently during the Covid-19 period and after, they needed and need to be provided with the necessary computer skills training and training into the online platforms that they use (Butnaru, 2021; Ferri, 2020; Coman et al., 2020; Simataa, 2015). Without the necessary skills, online education will remain

nothing but a concept of thought for many developing countries like Namibia, even if we get more exposed to ICTs.

The Lack of ICT Resources

For one to effectively use ICTs, or even talk about it, they must have access to a collection of ICT equipment. Without such equipment, there is nothing that teachers and learners can do. Teachers and learners are all exposed to ICTs daily, however, this is usually at a personal level and for personal use, rather than professional or academic use (Simataa, 2015). The lack of ICT resources that are essential in the process of online education directly affects the abilities of the teachers to continue teaching away from the physical classrooms, and for learners to keep learning (Ferri, 2020; Lorente, 2020; Coman, 2020).

Literature show that this lack of ICT resources makes it difficult for teachers to teach from their homes, and difficult for learners to continue learning while at home. Therefore, in order for online education to become realistic in a country like Namibia, there is an urgent need to provide teachers with portable ICT devices which they can use to teach without being limited by location, now and after the Covid-19 pandemic (Lorente, 2020). As long as the teachers and learners do not have ICT resources, including access to the internet, online education is almost impossible for many developing countries (Ferri, 2020; Lorente, 2020; Picciano, 2017). This means that online education will only be feasible for the Namibian education system if teachers and learners have constant access to ICT devices.

ICT Security

For schools, theft of computers and other ICT devices remains a serious problem, and this makes ICT security a persistent concern for schools in many countries, including Namibia (Chisango & Marongwe, 2021; Simataa, 2015). While the issue of security in terms of theft or burglary is a serious concern for schools, the same

level of concern does exist at the homes of teachers and learners. Even though the burglary and theft for ICT devices is not too high in the home, it does not necessarily mean that thieves cannot break in, as the portability of ICT devices make them constant items of interest.

The issue of safety comes in terms of use, especially for learners who use ICTs and experience cyberbullying. The element of online education means that teachers and learners should have constant access to ICT devices and the internet, and constantly access their learning platforms (Ferri, 2020; Huang et al., 2017). However, with all this needed access to ICT facilities for online education comes the element of exposure to cyberbullying and exposure to wrong online content.

Without adult supervision for learners in their homes, they become exposed to all forms of content that is available online through the different online platforms, including social media (Ferri, 2020; Abaido, 2019; Huang et al., 2017). Through the same platforms, the element of safety is challenged by cyberbullying from online bullies (Ferri, 2020; Abaido, 2019; Huang et al., 2017). These two elements have presented concerns and continue to be concerns in most discussions of online learning, and it does not seem like there are best ways available to fully resolve them.

Conclusions

In general, practical integration of ICT in Namibian schools still needs to be fully realized, as there are still many elements that need to be addressed before complete and successful integration is achieved. While integration remains an issue, there are still elements of concern that are hindering the process of integration, and consequently, hindering the implementation of online education in Namibia.

The elements of concern to ensure success in online education include lack of computer skills. Teachers have basic skills; however, basic computer skills alone are not sufficient to enable them to advance online education or e-learning. Therefore, this lack

of appropriate computer skills means that teachers need to be trained into the necessary skills to effectively adjust to online education. Seeing that e-learning or online education has become the norm, it is imperative that teachers are equipped with appropriate skills to enable them to teach beyond the classroom.

The other element of concern is that schools lack ICT equipment, which extends to the teachers. Therefore, teachers are expected to teach online, yet they do not have portable devices such as laptops and notebooks to empower them to teach wherever they are. Teachers may have their own devices, appropriate enough to enable them to teach without the restriction of the geographic locations. However, while others have portable laptops or notebooks, others have desktops which they cannot move around with. Therefore, to address this concern, teachers need to be provided with all necessary ICT devices which are appropriate for unrestricted online learning.

Recommendations

To address the established findings of this article, the Namibian Government, through its MoEAC, should consider taking the following measures:

- Provide all teachers with ICT training into the use ICT devices to enable them to manipulate these devices for continuity of the teaching processes. In the same manner, the MoEAC should also come up with online learning platforms that schools can use, and train teachers and learners to use the platforms.
- Provide teachers with appropriate resources that would enable them to continue teaching even when they are not in the physical classrooms. These resources would include devices such as laptops, notebooks, online teaching and learning materials, and the unlimited access to the internet.

By ensuring that teachers are trained into using ICT devices, how to navigate and manipulate online platforms, and that they are provided with the necessary resources, the MoEAC would successfully enable the teachers to implement online

education or e-learning. It is vital to recognize that online education was, and is, the progressive strategy of education continuity during the Covid-19 pandemic period and after the pandemic. This is why it is imperative for the government to empower and enable the teachers, as direct implementers of the strategy.

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