An Inquiry into the State of Preparedness by Inclusive Student Teachers and Lecturers for Online Learning in Teacher Training Colleges in Zimbabwe: A Literature Review

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ABSTRACT

This paper investigates the state of preparedness for online learning in training inclusive teachers, applying the Technological Acceptance Model (TAM) to analyze findings from a case study based on a literature review. The study first examines the adoption of online learning before and after Covid-19, then identifies outputs needed to enhance readiness, and finally proposes actions required for effective transformation to online teaching. It finds that ineffective utilization of online learning is attributed to multiple factors, including inadequate infrastructure, limited internet connectivity, lack of assistive devices, psychological distress, low motivation, insufficient institutional support, and poor system quality. The paper concludes that readiness for online learning can only be enhanced if teacher training colleges invest in appropriate infrastructure, provide targeted professional development, and ensure robust institutional support systems.

Keywords: *inclusive education; online learning; state of preparedness; special needs; teacher training college*

INTRODUCTION

Every path to achievement necessitates careful strategizing and sufficient readiness. Online instruction, similar to other educational approaches, requires dedication, resolve, and self-control. Despite global advances in technology, inclusive education student teachers in Zimbabwe struggle to effectively engage with online learning. Online learning is not accessible to inclusive student teachers in Zimbabwe for multiple reasons. The need for the acquisition of 21st century skills and the achievement of an inclusive society in teacher education requires adequate preparedness for both lecturers and student teachers.

As teacher educators, there is growing concern that failing to integrate online learning into the preparation of inclusive teachers may disadvantage learners with special needs in the following areas:
a) Acquisition of 21st century skills needed for survival in the global village
b) Creation of a more equitable and inclusive society

Our insights are drawn from observations by Crouse, Rice & Mellard (2018) who note with concern that teacher education programs do not consider online learning as a legitimate form of education and moreover that there is little formal professional development pertaining to instructing students with disabilities. Another concern raised by Bett (2016) is that some teachers leave teacher training institutions with scant and inappropriate teaching skills. Our concern as teacher educators is that training colleges are inadequately prepared in the development of 21st century skills as well as in

the use of inclusive pedagogy. Hence, there is a likelihood that inclusive teachers may not apply those skills in teaching learners with special needs. The lack of preparedness may further alienate and marginalize learners with disabilities from benefiting from current educational practices. Adedoin & Soykan (2020) observe that developing countries faced inadequate access to devices and internet bandwidth.

This paper seeks to encourage teacher training colleges to increase their level of preparedness for online learning so that learners, including those with special needs, can fully benefit from knowledgeable teachers.

LITERATURE REVIEW

International Level

The experience of online learning in developed countries has not been cumbersome. Countries such as Australia and the United States are world leaders in online education. Teacher training programs in Indonesia have adopted online learning and placed content online. Evidence brought forward by Huang, Kinshuk and Price (2014) indicates that Italy introduced ICT in education in 1985 and in 2000 launched a teacher professional development program that targeted 180,000 teachers. These initiatives highlight the importance of teacher preparedness for digital instruction – a point echoed by Zimmerman (2021), who reiterates that readiness is influenced by confidence and skills in using digital tools and independence.

In the United States, virtual high schools are common throughout the country since many courses are offered online. In South Korea as well, the majority of professional development programs are offered online. China has made great strides including the launch of the National Medium and Long-term plan for Education Reform and Development (2010- 2020) and the National Development plan for ICT in education 2011-2020 (Huang et al, 2014). Through these initiatives, many teachers have demonstrated improved ICT capacity and literacy. Another study in India revealed that the state of preparedness in using online learning was commendable as evidenced by the fact that 48.6% owned digital devices and 55.4% had good internet connection.

Local Level

The use of online learning at the local level has been met with hurdles. Musarurwa (2011) notes that the use of online learning by teacher trainers serves a dual role: 1) learning through ICTs and 2) learning to teach through them. Learning through and applying online learning in teaching and learning requires sufficient readiness. The level of unpreparedness is demonstrated in various ways. Taru (2020) notes that institutions of higher learning underestimated the unevenness amongst the student population. In some instances, where it is not effectively applied, it has alienated some students, especially those with special needs. In Zimbabwe, a study by Zinyemba, Nhongo and Zinyemba (2021), indicates that lack of preparedness is evidenced by improper infrastructure and lack of basic learning resources needed to facilitate engagement in online learning. According to Taru (2020), the lack of preparedness was further worsened by lack of electricity, lack of assistive gadgets such as laptops, failure by students to buy data, fear of ICTs, and resistance to change by lecturing personnel.

Policy and Practice in Online Learning

Without policies or awareness of online policies, participating online may not be secure. Online safety is of vital importance; therefore, there is a need to safeguard learners as well as instructors. Policies are crucial for guaranteeing quality, consistency, adherence to rules by departments, and conveying expectations. Institutions of higher learning need to adopt policies that protect their

consumers. The focus should be on one or more of the following areas: training of employees for proficiency in delivering and managing course content; training learners for competence; and orientation of new students to the online learning environment.

Online learning in Zimbabwe was long implemented before the outbreak of COVID-19. The influence and practice of online learning in Zimbabwe are guided by the Nziramasanga Commission of 1999, which stipulates the need for a standard curriculum covering areas such as ICTs in all teacher training programs. The government of Zimbabwe developed and adopted an ICT policy in 2005. The goal was to spearhead social change (Chari, 2009). In addition, transformation, growth, inclusiveness, sustainability, innovation, and partnerships are focal areas. In spite of policy guidelines, Zimbabwe seems to be inadequately prepared for implementing online learning. Silumba & Chibango (2020) reiterate that the use of online learning in Zimbabwe is a fallacy. Similarly, Rana & Rana (2020), also describe online learning as characterized by poor, insufficient ICT infrastructure facilities for teachers. Preparedness for online learning can only be enhanced if organizations take into account pertinent issues when formulating policies, such as the need to understand a school's culture, the value of ICT, and ethical considerations.

Educational institutions need to set policies that clearly express what the instructors expect to ensure that students have direction on what they can expect. Specific regulations are essential for students' privacy, e-mails, discussions, assignments, attendance, and plagiarism and cheating. For each of the components described above, policies must clearly express expectations. This write-up is an advocacy appeal to educational institutions to raise their state of preparedness by producing and providing policies that are easily comprehended by all their users.

Statement of the Problem

The sudden increase in the use of online learning during and after Covid-19 in Zimbabwe is a paradigm shift in education. The use of ICTs in education in Zimbabwe is enshrined in the ICT policy of 2005, later revised in 2015. In spite of policy provisions and technological developments around the globe, teacher training colleges that train inclusive teachers are seemingly not utilizing online learning resources in training teachers who serve learners with special needs. This disparity may negatively affect the acquisition of 21st century skills by both the teachers and learners. ICT skills are necessary for survival in the labor market as well as in fostering inclusion across the globe. The under-utilization of online learning by teachers' colleges is a cause for concern, especially the state of preparedness of both the lecturers and students. The outbreak of Covid-19 forced educational institutions to implement online learning without adequate preparation. The state of preparedness for both lecturers and students remains questionable. This paper identifies glaring gaps in the area of infrastructure, knowledge, and access as requiring further enquiry. The objective of this paper is to encourage the adoption of online learning, particularly in the training of inclusive teachers. Educators note with concern that if teachers fail to effectively apply online learning resources, learners with special needs may face significant disadvantages: first, due to their impairments, and second, due to limited access or inability to use online resources in their daily lives.

Research Questions

What is the state of preparedness of inclusive student teachers and lecturers for online learning in teacher training colleges in Zimbabwe?

Research sub-questions
- What are the factors influencing the uptake of online learning during and after the Covid-19 period?
- What are the output requirements for the successful adoption of online learning?

- What activities must be undertaken to ensure readiness for online learning in teacher training colleges?

Objectives of the Study

This paper seeks to:
- Identify factors influencing the utilization of online learning
- Explore output requirements necessary for the adoption of online learning.
- Identify critical activities to ensure preparedness for online learning in teacher training colleges.

Significance of the Study

Technological advancements as well as the advent of Covid-19 have pushed teacher training colleges to a new world of online learning. Teacher training in the modern day is guided and influenced by several factors which include: technological advancements, demand for 21st century skills, inclusion as well as the fulfillment of statutory requirements. This paper will add to the body of knowledge regarding the training of inclusive teachers. The paper aims to raise awareness among teacher training programs, universities, students, and lecturers about the necessity of embracing online learning and keeping abreast of technological developments.

METHODOLOGY

A case study approach was employed in this paper. A case study is a method used to explore a complex phenomenon within its real-life context. Annamalah (2024) notes that a case study is valued for its theoretical depth and its ability to generate data that is both contextually and empirically rich. This method was selected because it allows for a detailed account of a specific topic within a particular location. In this instance, it facilitated an in-depth investigation into the state of preparedness for online learning in teachers' colleges. Furthermore, the case study allowed for the critical analysis of the implementation of online learning at the selected institution. Given the numerous teachers' colleges in Zimbabwe, this study focused specifically on one college that specializes in training inclusive education teachers. It is acknowledged that the challenges experienced in other colleges regarding online learning may differ from those experienced at the United College of Education.

In addition to the primary study site, the research included a review of scholarly articles on online learning and readiness for online teaching and learning, published between 2009 to 2024. Saunders, Lewis, and Thornhill (2019) urge researchers to evaluate secondary data for relevance, currency, and ethical appropriateness within the research context. Accordingly, this study selected literature that was relevant, recent, credible, contextually appropriate, and methodologically sound.

Theoretical Framework

This paper employs the Technology Acceptance Model (TAM) model to comprehend the level of readiness among inclusive student teachers and lecturers for online teaching and learning. The paper is structured into three sections. The first section examines the adoption of online learning before the COVID-19 pandemic and identifies the factors that deter users from utilizing online platforms. The second section identifies the desired outcomes and outputs necessary to enhance the level of readiness for online learning. The third and final section offers a comprehensive plan of action required to attain the desired transformation (i.e., the target level of readiness).

The Technology Acceptance Model (TAM) was propounded by Davis in 1989 (Markyan & Papaginnidis, 2023). The objective of the model is to predict the acceptance and utilization of technologies for academic purposes. This model is useful in understanding the state of preparedness for online learning, especially given the context of the scarcity of resources during Covid-19 (Wu, Wider, Wong, Chan, & Maidan 2023). The paper incorporates the TAM model to explore the experiences of forced adoption of online learning during the Covid-19 era, to identify the outcomes and outputs required for readiness and the provision of a comprehensive plan of action to enhance preparedness for online learning.

There are two constructs projected by TAM, namely: Perceived Usefulness (PU) and Perceived Ease of Use (PEOU). According to Zobeidi, Hamayoon, Yazdanpanah, Komendantova & Warner (2023), perceived usefulness refers to a person's belief that the use of technology improves their work performance. In order to achieve readiness for adopting online learning, both the students and lecturers must believe that the use of online learning will improve their functionality. Indeed, the behavior of users is largely influenced by the analysis of the benefit that they expect to receive after engaging in a certain behavior. If the action is rewarding, the intention to continue is maintained; conversely, if the behavior is punishing, then there is discontinuity. Therefore, perceived usefulness influences the extent to which one accepts and uses online learning. In summary, Lazim, Ismail & Tazilah (2021) reiterate that PU can influence a student's desire to use a new platform and their acceptance of online learning.

The second construct is Perceived Ease of Use (PEOU). As explained by Zobeidi et al. (2023), it is the belief or conviction that technology is easy to use and free from effort. Several studies indicate that both students and lecturers possessed minimal or no competencies for the use of online learning (Albrahim, 2020; Muchemwa, 2021; Bansa & Asrini, 2020; Swan- Gillert, 2017). The results above cast serious doubts about the state of preparedness for online learning, especially because adoption of online learning often made no considerations for PEOU. Institutions of higher learning are called upon to make online learning management more user-friendly to attract students to use it. This observation is buttressed by Markyan & Papaginnidis (2023), who argue that PEOU stimulates the acceptance and affects one's attitude toward using technology. In order to ensure Ease of Use, this paper identifies the outputs required such as motivation, digital literacy, and instructional design in order to increase readiness and acceptance of online learning.

Although TAM ignores personal features as having less impact on acceptance of online learning (Zobeidi et al., 2023), attention must be given to external variables. Institutions of higher learning need to attend to policy development, professional development, and resource allocation since these impact on the state of preparedness and acceptance of online learning. The provision of good policies, resources, and training is a predictor of increasing self -confidence, self-efficacy, system quality, and improving attitude. In this way, resistance to change is minimized and acceptance of online learning is enhanced.

LITERATURE REVIEW

Uptake of online learning pre COVID-19 period and factors for reluctancy

Online education is restricted for numerous reasons, particularly for those residing in Africa. In Zimbabwe, as observed by Muchabaiwa & Gondo (2022), virtual learning has remained a struggle and tends to exclude children with special needs, such as those with visual and hearing impairments. This issue was not only encountered in Zimbabwe; elsewhere, in Indonesia, online learning was delayed by the accessibility of devices by individuals who developed lesson content (Wadjaja, Rahman, Hajiri, Rahman & Rif'ah, 2021).

Further evidence from the literature indicates that various issues constitute an impediment to the state of preparedness for online use. Bhaumik and Priyadarshini (2020) emphasize the limited use of the internet, especially in underdeveloped nations, noting that the formal education system is still at a nascent level. Further insights from Dehghan, Esmaeili, Paridokht, Jvadzache & Jalali (2022), demonstrate that e-learning was unsuccessful in universities and institutions owing to a lack of preparedness. In Malaysia, a study by Taskin & Erzurumluk (2021) indicated that the transition to online learning brought several problems. This problem could originate from the fact that a virtual classroom was prematurely provided since it was induced by the COVID-19 pandemic (Zinyemba, Kundai & Zinyemba, 2021). A comparable finding was also made by Bozchaloei, Rasooli & Mohammadi (2022), who indicated that students who were less ready for online learning experienced psychological distress. The situation prevailing in underdeveloped nations is contradictory to that in developed countries, as observed by Chimbunde & Pfuurai (2023), who say that online learning and instruction are of the utmost importance in developed countries.

There are various factors at play that determine the acceptance of online learning. Such elements need to be addressed to raise the current level of preparedness for online learning. According to the TAM model, Perceived Usefulness and Perceived Ease of Use influence the willingness and acceptance of online learning. Although literature provides evidence that the outbreak of COVID-19 was 1) abrupt and 2) necessitated urgent modifications, the quick shift to online made it impossible for institutions to plan for the transformation (Yakubu & Dasuki, 2021). This, on its own, compromises perceived usefulness as well as perceived ease of use.

Infrastructure has also remained a hindrance to the uptake of online learning. Bhaumik & Priyadarshini (2020) describe ICT infrastructure as encompassing hardware such as computers, scanners, photocopiers, mobile phones, projectors, and broadcasting devices. The shortage of the above-listed gadgets for online deployment is symptomatic of a lack of preparedness. In Nepal, the governing body did not have an explicit plan for equipping government agencies with ICT infrastructure and educating instructors to use digital technologies (Rana, 2018). This observation raises serious concern about the status of preparedness for online learning. Without infrastructure, the integration of online learning is nearly unattainable. Further findings brought up by Kapta and Hayath (2022) reveal that schools and colleges do not have the IT infrastructure to deliver online classes and learning materials for blind and deaf students. This comment supports the study provided by Malapile & Keengwe (2014), which claimed that governments cannot offer sufficient funding for ICT infrastructure (Rana & Rana, 2020).

Apart from infrastructure, another element that undermines the level of preparedness for online learning is psychological preparedness for both students and instructors. Psychological preparedness varies from person to person. Taskin & Erzurumluk (2021) recognize it as a significant predictor of fulfillment and drive in the online learning environment. A study carried out by Dehghan, Esmaeli, Paridokht, Javadzache & Jabili (2022) found that there is a poor level of e-learning preparedness. On the contrary, Hapanyengwi & Zengeya (2021) found that the majority of the students were mentally ready because they had received training in the usage of e-learning systems. Lack of psychological preparedness is characterized by despair, worry, fear, and bewilderment. In many circumstances, it is often unnoticed (Hossain, Rahman & Chowdhury, 2022).

In a study by Dehghan et al. (2022), female learners were more ready for learning online as opposed to their male counterparts; such learners tended to be more successful. Individuals who are cognitively not ready frequently endure distress. Psychological preparation is influenced by elements such as gender, college advancements in technology, and the type of schooling. This is an aspect often ignored by the TAM model, but one that has an impact on acceptance and use of online learning.

Another hindrance to online involvement that needs be addressed is motivation. According to the TAM model, motivation is influenced by PU and PEOU. Both students and lecturers must be motivated to engage in online learning. Filgona & Okoronka (2020) characterize motivation as the internal urge to accomplish a given action. It is the most significant factor, both in learning and online use, since it determines the extent to which the learner decides to use their time and energy they have to engage in a specific task. Motivation needs to be assessed prior to implementing online learning.

Online users might be inspired to pay attention to their online educational setting. The learning environment must be accessible, safe, beneficial, and empowering (Filgona & Okoronka 2020). Accessibility means the internet is navigated with ease. Evidence brought out by Chiu, Lin, and Lonka (2021) demonstrates that motivation changed with groups, that is:

1) the thriving group increased instructional competence;
2) the surviving group suffered and challenged their abilities to impart knowledge via the internet because they felt alone and unsatisfied.

The findings demonstrate that if motivation is not considered, its influence is detrimental. Working in an online world requires endurance. Educators need to be attentive to how to keep motivation high online. One means of sustaining motivation could result from providing technical training in dealing with ICT devices (Dehghan et al., 2022). Educators can also improve motivation by assessing the requirements of learners, their passions, purposes, and attitudes. Organizations could improve motivation by ensuring that their operating systems are easy to manipulate.

Closely tied to motivation is students' interest. Without an interest in a task, performing it is practically impossible. Engagement in a task can be inherently or extrinsically driven. Students who are intrinsically motivated have the ability to engage in online learning for self-pleasure and fulfillment. Such students work autonomously and are self-determined. On the contrary, individuals who are extrinsically driven are at risk; the problem is that external motivators can impair intrinsic motivation (Filgona & Okoronka 2020). In order to bypass this, educators need to build activities for online learning that excite and keep students' attention. Planning for such eventualities is a sign of preparation.

The second section addresses the intended results and outputs necessary to improve the adoption of online learning. This section addresses components like digital literacy, instructional design, and support systems essential to promoting a more suitable environment for inclusive student teachers and lecturers to accept online learning effectively. The section offers a framework for obtaining increased uptake of online learning techniques. The era of online learning is an era of anytime and anywhere learning. Achieving such a transformation is not always straightforward. The level of readiness can never be fully realized until outcomes and output results are clearly established. Additionally, the development of skills makes it feasible for teachers to assist their learners in a virtual environment. First and foremost, instructors need to possess prerequisite abilities that boost their preparedness in the online context. McLoughlin (2017) suggested that educators must understand that online pedagogy is distinct, and as such, there is a requirement to familiarize themselves with virtual learners and online technologies. Lack of knowledge and abilities for online learning by both lecturers and students undermines all the effort spent preparing. The findings brought forward by Chimbunde & Pfuurai (2022) reveal that instructors lacked knowledge and skills to transform online content from hard copies to soft copies and to express it on online platforms. Both lecturers and students need to have technological skills if they plan to operate in an online environment. According to Ferreira, Behrens, Torres & Marriot (2018), lecturers need to utilize technological skills in adopting virtual environments, resources, and interfaces. In order to attain online proficiency, teachers and students need training.

The argument is further buttressed by Albrahim (2020), who believes that preparedness can only be proved when lecturers possess skills in pedagogical skills, content skills, technical skills, management and institutional skills, and social and communication skills. The condition of being ready to go online for far too long has been a fantasy. This is so because evidence from the literature indicates that specialists have little expertise on how to make full use of ICT and how to incorporate it into teaching (Bansa & Asrini 2020). This finding speaks to the necessity of training so that instructors can give adequate help to learners. Without proper content abilities, it may be difficult to create the required transformation (to teach online). Educators must be competent at creating activities and course outlines for students, including the usage of synchronous and asynchronous resources.

Another component that ensures the state of preparation is system quality. Linh (2021) describes it as the competence of a system to allow its users to do jobs securely, effectively, and efficiently. TAM refers to this as Perceived Ease of Use (PEOU). The operating system that is used for online learning has to be easy for all users to use. Linh (2021) emphasizes that the simplicity of use affects the attitude and conduct of the users. If the system is difficult to access, there is a considerable possibility that users may develop negative sentiments and stop its use. Therefore, institutions must make sure that their operating systems are dependable, flexible, and allow for information functions.

The third and final section of this article proposes a roadmap of activities that need to be conducted in order to accomplish the necessary shift in preparedness among inclusive student instructors and lecturers for online learning. The section highlights specific actions such as professional development programs, budget allocation, and regulatory reforms that will pave the way for a successful shift towards effective online learning practices. The section includes practical solutions designed to boost preparedness for online learning.

Professional development programs

Professional growth is a key component of online preparation. Institutions need to evolve and modify their organization in line with the change by training workers for the new change. Staff members need to have the proper expertise and abilities. According to SREB (2009), quality teaching and learning can be strengthened through professional development. The above views are further buttressed by Glory, Bhatia & VRM (2021), who underline that professional development builds a basis for classroom pedagogy and functions as a force for change. In order to boost knowledge levels regarding the use of online, organizations must participate in continuous learning and improvement via seminars, conferences, forums, self-teaching, and webinars. Leary, Dopp, Turley, Cheney, Simmons, Graham & Hatch (2020) emphasized that through professional development, lecturers learn the necessary technical and pedagogical abilities. Teaching online necessitates those lecturers be equipped with the skills to design, deliver, and evaluate course content. Leary et al. (2020) stressed that it is crucial to capture the demands of instructors in conducting professional development.

While an observation by Zinyemba, Nhongo & Zinyemba (2021) that the virtual classroom was hastily provided is indicative of a lack of readiness for online learning, a myriad of techniques for professional development are accessible for institutions. SREB (2009) proposes tactics such as partnerships, hands-on training, and experiments, seeing models of effective online education, and the utilization of case studies with individualized instruction. Through these tactics, lecturers can demonstrate their capacity to use software programs and subject-specific tools, gain expertise for online teaching and learning, manage methodology, support academic integrity, and avoiding plagiarism. In addition, instructors must also demonstrate competence in establishing and executing evaluations in online learning. Such expertise is termed by Ferreira, Behrens, Torres, and Marriot (2018) as "professional practice."

Institutions of higher learning are urged to engage in professional development so that staff members exhibit a range of skills such as content, design, technology skills management, institutional skills, as well as intrapersonal and interpersonal abilities. In many instances, this is made practicable if it is included in the institutional programs. UNESCO (2017) advises that countries adopt ICT competency standards for their workers and that the framework focus on literacy in technology, knowledge enrichment, and knowledge production. Lecturers who do not exhibit these skills often face irritation, anxiety, and bewilderment while participating online.

Resource Allocation

Apart from professional growth, the requirement for resources cannot be overemphasized. Without adequate resources, it is almost impossible to engage in distance learning. Muchabaiwa & Gondo (2022) emphasize that universities in impoverished countries are not just severely underfunded; they are unable to buy the essential information and communication technology (ICT) supplies and infrastructure. Evidence from research conducted by Chimbunde & Pfuurai (2022) reveals that both teachers and students lack the requisite gadgetry for online interaction. This problem is compounded for deaf and blind learners. In Zimbabwe, online resources are severely constrained, especially because the government made the integration of ICT mandatory, yet there was inadequate funding for infrastructure and ICT training. In order to raise the state of readiness for online learning, both educators and learners need exposure to online learning materials. It is of crucial importance to guarantee that resources satisfy the needs of internet users. Resource supply can be implemented at both institutional and personal levels. Educational institutions are expected to make online assets available to students and lecturers. These can be given as both services and infrastructure. Institutions need to provide technical support such as a learning management system, tools that are cloud-based, web-based conference platforms, Skype, whiteboards, electronic journals, e-newsletters, and networks, as well as the infrastructure required for online learning.

Users have an obligation to procure their own resources, which include laptops, tablets, smartphones, iPads, and many other electronic gadgets. Knowledge of how to utilize these technologies is crucial. Hence, the need for familiarity with using online course platforms, online learning websites, Massive Open Online Courses (MOOCs), video-based systems, open educational resources, language learning, and online libraries such as podcasts and audio books. UNESCO (2020) advises that the choice of tools should be convenient and swift and help students obtain data with ease. Therefore, the state of preparedness can be realized only if both organizations and individual users are adequately resourced.

FINDINGS

An analysis of the literature reveals that there are numerous challenges encountered in using online learning. The literature indicates that the level of unpreparedness varies from country to country. Developed countries are better prepared to implement online learning compared to underdeveloped countries. The use of online learning is restricted in developing countries for numerous reasons; both the students and lecturers do not possess appropriate devices and gadgets; there is a lack of internet connectivity and lack of appropriate infrastructure.

In addition, other factors at play include psychological distress, which is characterized by fear, worry, and despair; low motivation; lack of interest; inability by lecturers to design instructional material; lack of support from the institution; lack of digital literacy, and system quality. The study further explored four major dimensions of readiness required for effective online learning implementation:

Technological Readiness

Technological readiness is a key component for organizations such as teachers' colleges. Today's society learns better through technology. Teachers' colleges in Zimbabwe are seemingly slow in integrating online learning, hence the need to align their training with global trends. As once remarked by George Couros, if technology is in the hands of great teachers, it is transformational. He emphasized the need to be equipped and prepared to leverage technology effectively.

Pedagogical Readiness

The extent to which educators are adept in designing, delivering, and evaluating instruction within a digital world is key for online engagement. Pedagogical readiness extends beyond familiarity with technology. Pedagogical readiness is the ability of educators to comprehend student engagement, digital assessment, and online pedagogy. Educators need to be effectively trained to design digital content and deliver online. in teaching learners with special needs, there is a need for educators to recognize individual diversity.

Student Factors

Student readiness is key for online learning implementation. Student readiness encompasses factors such as technological proficiency, motivation, communication, time management, and access to digital infrastructure. According to Poon (2013), students who possess strong time management skills are likely to succeed in an online environment.

Institutional Readiness

Educational institutions need to effectively plan, implement, and sustain digital education efforts. Institutional readiness encompasses the organization's capacity to provide technological infrastructure, human resources, content development, and student preparedness. Bacold (2023) reiterates that e-learning readiness must be evaluated first before embarking on online learning. Educational institutions such as the college under study need to be evaluated for online capacity before embarking on online learning.

CONCLUSION

This article aims to promote the acceptance of ICTs and the status of preparedness for online teaching and learning in teacher training colleges in Zimbabwe. The research applies the TAM model to analyze the circumstances that either enhance or hinder readiness for online learning. The first portion of the paper covers the penetration of ICTs and the use of online learning before Covid-19. The second phase identifies the outcomes and results needed to comprehend the required change. The third component presents a plan for raising the state of preparedness for online learning. The paper reviewed literature that offered evidence on the uptake of ICTs and the adoption of online learning. The paper also cited motivation, technological support, infrastructure, familiarity with internet devices, and knowledge and skills as characteristics that need modification in order to actualize the state of preparation. The paper ends by giving a roadmap for institutions to consider. Institutions need to design specific policies appropriate for their needs, provide the needed resources for online participation, and embark on professional development to empower employees as well as learners with the necessary abilities for online learning. In fact, college-based policies should clearly articulate the practice and implementation of online learning in the college. Both the students and lecturers should be fully knowledgeable about the policy and how it governs their operations.

RECOMMENDATIONS

Based on the findings of this paper, the researchers make the following recommendations:
- Teacher training colleges should consider online learning as a legitimate approach to the training of inclusive teachers
- Teacher training institutions should undergo rigorous training and orientation for both lecturers and students on Learning Management Systems applicable to their own situation
- Teacher training institutions should provide support to both students and lecturers regarding maintenance of devices as well as instructional design
- Online learning users should take responsibility and acquire technological skills
- Teacher training colleges should develop appropriate infrastructure so as to motivate online users.
- The researchers also urge teacher training colleges to introduce a module on online learning and inclusivity so that skills are cascaded from teachers to learners.
- Teacher training institutions should equip students on students how to accommodate students with special needs in online learning.
- Teacher training institutions should also design a module specifically for diverse forms of impairments and how these can benefit from online learning.

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