

Foundation Phase Teachers' Practices of E-Learning Strategies in a Rural Context: Challenges and Opportunities for Innovations during the COVID-19 Pandemic

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Abstract

This study explored Foundation Phase (FP) teachers' practices in their quest to improve curriculum implementation by using e-learning strategies in rural schools. Most studies underscore the significance of using contemporary curriculum approaches to guide teachers towards innovations to expedite the decolonisation of rural education using e-learning strategies. The purpose of this study was to understand how FP teachers' practices of using e-learning strategies helped improve the curriculum while ensuring quality education and an improvement in learner behaviour and rural education. The COVID-19 pandemic has raised serious questions about design flaws in the current curriculum and implementation, as it fails to respond to the challenges faced by the majority of learners in schools located in rural areas. This qualitative study used semi-structured interviews, classroom observations and teacher narratives framed by the philosophy of Ubuntu to generate data that were thematically analysed. Ethical issues were given high priority. The study found that most FP teachers struggle to infuse innovative practices targeted at promoting quality rural education into their daily praxis. Further, the facilitation of e-learning through a range of interactive strategies is only possible if issues of access to data and networks are urgently addressed.

Keywords: Decolonisation • e-learning • Foundation Phase • Teaching strategies • Ubuntu philosophy

Introduction

Rurality and rural education continue to present both conceptual and systematic problems that can be addressed by decolonising education. Scholars have advised that 'rural' remains a transient concept, which is dependent on place-based conceptions [1,2]. Current practices in teaching in the Foundation Phase (FP) require serious scrutiny in the quest to address these challenges. Observing FP teachers going through the COVID-19 pandemic, we decided to investigate what FP teachers in a rural area could do to practice decolonised e-learning strategies in rural schools while ensuring improvement in academic achievements that address societal needs.

FP teachers have a responsibility to teach Life Skills, Languages and Mathematics more progressively and innovatively; however, they need to improve their e-learning expertise. Lack of interest on the part of policymakers as well as a lack of political will is evident from the lack of professional training on e-learning in schools. Rural FP teachers have been immensely exposed to Westernised teaching approaches, without a focus on e-learning. However, most FP teachers focus on learning future content (unstructured, electronically driven content), while higher education institutions focus on legacy content (structured, print media-driven content) [3,4]. There is therefore a belief that FP teachers' technological learning is driven by Westernised conceptions with

urbanised education approaches, causing a high failure rate in an international examination of FP teachers in rural areas [5-7].

FP teachers who teach in rural areas might be adept in their teaching approaches but lack technical expertise and reliable resources. Most schools in rural areas are under-resourced, with teachers having to teach all subjects through a trial-and-error approach [8]. The FP teachers are always overwhelmed by the limited support they receive and anxiety because of the unnecessary pressure and suffering brought to bear by the current education system. These challenges have taught us that no matter how impressive the information generated through various digital technologies, it will not assist rural education – in particular, FP teachers – if it is not customised to champion the indigenous knowledge which is dominant in these schools.

The majority of FP teachers in rural areas, especially those from disadvantaged communities, have to add more years of study to complete their qualifications. They should not be excluded from qualifications achieved at higher education institutions because of progression rules [9,10]. The high rate of rural area FP teachers, both internationally and locally, who are not supported with teaching and learning resources is of concern. Schools located in rural areas experience similar obstacles to better-quality learning: meagre funding and resources that necessitate schools to do more with less; issues of it being hard to recruit staff, who find it harder to stay; and remotely situated schools serving areas with a high rate of poverty.

Literature Review

The role of e-learning in schools

This study seeks to continue with the critical pedagogical discussion on how e-learning promotes learning in schools. Garrison argues that while participating in the paradigm shift in teaching and learning that e-learning presents, gradual decolonisation should be addressed beyond the information age [11]. In essence, pedagogical and technological innovations [11] spill over to both primary and secondary education because of the increased risk of coronavirus and the need to redefine primary education as part of

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the decolonisation of curriculum instructions. At the nexus of this critical discourse and convergence is the role of e-learning and teachers' practice [12]. E-Learning is formally defined as electronic-mediated asynchronous and synchronous communication to construct and confirm the knowledge. The main technological foundation is the Internet and other associated communication technologies Garrison and Oye, Salleh and Iahad argue that two specialised applications gave rise to e-learning beyond the general description of e-learning: online and blended learning [11-13].

In the context of decolonised e-learning, online platforms form the basis for distance education, with learning delivery similar to that of mainstream education [12]. Online learning has to maintain an interactive nature that is completely different from traditional distance education with its historical focus on content delivery and independent learning. In this study, the focus on e-learning is motivated by quality educational experience [14]. One of the intentions was to assess how e-learning has evolved to be a catalyst for building bridges between Western and African ubuntu philosophy. Studies have demonstrated how e-learning represents a necessary paradigm shift concerning distance education.

Alkhattabi and Garrison see e-learning as a complete shift from the ideal of autonomy and the use of structured study materials and e-books that are characteristic of distance education [11,12]. The proponents of this approach to learning have traced its roots to computer conferencing and a collaborative constructivist approach to learning.

The ubuntu philosophical underpinnings

The philosophical meaning of Ubuntu is understood as *motho ka batho*, which means "a human being is a human being because of other human beings." The definition given in this article resonates with the clarion call for FP teachers to begin to use Ubuntu curricula to respond to the demand of the Covid-19 pandemic by using an e-learning platform to make curriculum accessible to learners irrespective of their geographical location in a language of choice. Nussbaum sees Ubuntu as a social philosophy, a way of being, a code of ethics and behaviour deeply embedded in African culture. The ideals of the Ubuntu philosophy need to be stressed as technological innovation demand FP teachers to open learning opportunities beyond the confined of the classroom. Any philosophy that promotes e-learning possibilities to rural learners and makes it possible for teaching and learning remotely warrants serious consideration for the future. Interestingly, both Mabaso and Mbigi see this concept as both uniquely African but truly universal for it is implicitly expressed elsewhere in the world. Ubuntu philosophy posits that there are common bonds or underpinnings that exist between all human beings and other forms of creation. In the school context, Ubuntu should encapsulate humanness, fight for each other, fairness and playing games to stimulate competition, justice and an African values system as "the underlying fortress of African societies for millennia".

Decolonising education

Decolonising the curriculum could equip FP teachers to work toward social change, which requires continuous renewal and extension of the different skills, knowledge and awareness necessary to remain effective in culturally dynamic institutions such as schools [15]. Such practices would elevate teachers to create experiences that extend intercultural understanding in transformative capabilities, whilst creating a curriculum that focuses on learners, which improves learner-centredness. The practice, as Mbembe argues, calls for innovative thoughts and actions in breaking the fortress of the colonial worldview that is detached from African realities [16].

This giant leap proved possible in the context of decolonisation; Mahabeer outlined the role of the new teacher in the transformation process, as willing to shift away from being a mere technician of policy to becoming a conversation change agent. Chilisa calls for urgent action in decolonising e-learning by teachers, by envisioning alternative possibilities and being bold to recognise the voices of the colonised and oppressed through curriculum change [17,18].

The most practical intervention in the arsenal available to teachers to execute a successful decolonisation strategy infusing technology into

their teaching. In essence, Mahabeer saw the success of this strategy in diplomacy as the critical step targeted at schools' curricula, in order to infuse change embedded in policy alternatives [17]. Bold statements from decisive policymakers can systematically transform the colonial legacy by factoring in an indigenous framework and approach that will oppose Western standards and knowledge [19]. Heleta proposed two unique approaches to decolonise school curricula: first, "carefully add new items to the current curriculum" and second, "reconfigure and rethink how curriculum objects and contents are designed" to envision the new education and societal landscape [20].

In the grand scheme of things, the curriculum system needs to embark on the digitisation of content, factoring in cultural and technologically relevant and rigorous factors [3]. Again, Heleta S [20] as well as Khoza SB and Biyela AT [3] question a weak appetite to strengthen both technology and curriculum and, in the process, draw attention to societal, personal and technological understanding as fundamental to decolonising e-learning in the 21st century.

Decolonised practices of e-learning strategies

Decolonising teachers' practices of e-learning strategies are essential because it helps teachers to understand their learning needs [21]. Decolonisation is a process of critiquing and renewing the curriculum [3], while scholars like Chilisa B [18] understand decolonisation to mean rediscovering and recovering. The latter implies that previously oppressed and colonised people have an opportunity to rediscover and recover their lost rights, including ideologies, identities, language, history and cultural principles.

Chukwuere JF [19] notes that decolonisation involves the mind, personality, social actions (behaviour), education setting (teaching and learning), curriculum and research practice. In practice, overcoming colonial superiority through decolonisation requires a total change in the thinking patterns of digitalisation and Africanisation [20]. The new era is filled with technologies and the information age expects us to embrace innovation from the digital space [19]. The change is towards recognition that teachers decolonise through the integration of a decolonised education system into digital content and making them technologically oriented.

Most scholars acknowledge how much technology has unleashed into the education space in the form of knowledge and information [22,23]. Improvement in digital technology forced teachers to use e-learning to improve the learning processes and interaction amongst the school community to better respond to global demands [24-26]. The study conducted by Salavati S [27] charges that digital didactics and pedagogy are the main forums set to deliver effective teaching and learning. Only technologically oriented teachers stand a better chance of motivating learners to engage socially and academically [28,29].

Convergence of social learning and e-learning

The purpose of 'social learning' was to nurture the cultures and environment of educational development to develop learning spaces [30]. In this context, learning takes place at home and in schools. The focus here pertains to the role of e-learning strategies to decolonise and debunk certain information in learning spaces. According to Snepvangers and Bulger innovations infused by e-learning platforms improve critical thinking and creativity when learners are engaged within a universal setting, such as virtual and physical spaces. Amid social learning spaces, policymakers and administrators need to invest heavily in infrastructure and facilities that improve both physical and digital spaces. This is significant, as Temple avers that ambitious new leaders should lead the charge and begin to rethink how learning spaces take shape to better understand the relationship between the social and the spatial environment [31,32].

Smith S, et al. [33] support the argument of Ryan A and Tilbury D [30] in proposing that this underdeveloped field considers how new learning spaces can serve as the locations for formal learning in the formal curriculum. The inverse should be true, where social learning spaces enable informal learning outside the curriculum as individuals and groups interact to construct reality and determine their learning experiences [32].

E-learning has emerged as a cost-effective way to deliver teaching and to

learn in the most convenient approach for a large number of learners. This takes place in an exciting way where learners are in a virtual learning environment in which their interactions with learning materials, peers and instructors are mediated and has become the fastest-growing form of education. Research shows that learners who self-regulate their learning processes can achieve better learning outcomes, regardless of the nature of the course, but the effectiveness of learning depends on their ability to use these strategies in a specific context [34]. Hence, the key to success in e-learning is to ensure that learners intentionally adopt and use teaching strategies to manage and direct their learning activities and adjust their e-learning responses to new or changing conditions [35].

Research questions

The research questions which were examined in this study were as follows:

- What are FP teachers' understanding of decolonised practices of e-learning strategies?
- How do FP teachers practice decolonised e-learning?
- What pedagogical strategies do FP teachers use in facilitating e-learning?

Theoretical framework

This study explored Rawls J [36] theory of justice as a theoretical framework in an effort to understand FP teachers' resolve to decolonise curriculum through e-learning. Two main principles underpin this theory in an attempt to frame a socially just distribution of goods and services in a given society. The first principle states that each person is to have an equal right to the most extensive fundamental liberty compatible with the similar freedom of others [36]. The principle of affording everyone equal rights is central and must be sustained in education. The study proposes intensification of the decolonisation of FP teachers' practices of e-learning in the context of rural education, to provide equal learning opportunities and assist rural schools during the opening of schools as lockdown restrictions are eased. Social distancing for rural schools should be prioritised and hygiene is treated as a human right.

The COVID-19 pandemic has taught all South Africans to embrace local indigenous knowledge, hinged on the context of rurality, to enable social justice as a tool to speed up decolonisation with the sole purpose of allowing learners to use their liberated minds to learn. Meda L [37] challenged Western scientists to join hands with FP teachers in transforming practices to go beyond the model of the colonial power of thinking, in the quest to decolonise e-learning as part of a social justice project.

The second principle, according to Rawls [36], argues that "social and economic inequality are to be arranged so that they are both (a) reasonably expected to be to everyone's advantage and (b) attached to positions and offices open to all." In line with this principle, the notion that the less privileged in society have to be elevated cannot be overemphasised, giving them a voice to explore learning in their indigenous languages and to realise their full potential. Historically, Western dominance in education and commerce perpetuated colonial education by completely displacing the indigenous perspective on learning. One way to curtail this dominance is by continuously investing wisely in local indigenous education technologies as a new drive to respond to academic freedom and full participation, starting with the decolonisation of e-learning.

The maximum learning in rural areas depends heavily on the local language and epistemology, implying the need to break free from the bond of Western thinking by incorporating African indigenous knowledge systems into the curriculum, to heighten the attitude and awareness of learners to value and take pride in their ways of knowing and thinking [37]. Social justice theory is relevant to South Africa's framing of the education system in an ongoing effort to promote the decolonisation of education in schools.

Put differently, the philosophy of ubuntu and its related application is pervasive in almost all parts of the African continent. It is a good business decision to promote ubuntu as part of integrating all aspects of day-to-day life throughout Africa, as a concept shared by all tribes in Southern, Central, West and East Africa amongst people of Bantu origin [38].

Methods

This study took the form of a qualitative case study. The case under analysis was a group of FP teachers who are using e-learning material uploaded to their tablets to decolonise curriculum in rural primary schools located outside of greater Pinetown in KwaNyuswa, KwaZulu-Natal. The sample in this study includes four FP teachers teaching across the curriculum, two Heads of Department (HoDs) and one subject advisor. All four FP teachers were females who have, against the odds, adopted innovative technology as a teaching instrument in all the different subjects offered in primary schools. Hence the sampling of participants was purposeful. These FP teachers are identified as T1 to T4, while the subject advisor is assigned the pseudonym SA and the two HoDs in the phase are identified as HD1 and HD2. The researchers ensured that ethical issues were addressed. Participants were informed in advance of the purpose of the study, its voluntary nature and their rights to participate or not and to withdraw at any time if they wished to. Where the data were going to be kept, for how long, how they would be disseminated and the purpose for which they would be used before being destroyed were explained in detail.

This study took place during alert level 4 from 1 to 31 May 2020 of the Covid-19 pandemic when the movement was highly restricted. Therefore, data were generated using online platforms such as Facebook, WhatsApp, telephone conversations and SMSs. An interview with the subject advisor (SA) took place through Zoom and lasted for 45 min longer because of the need for probing in order to understand how the teachers were coping and supported to use of e-learning in the rural context. The teachers and HoDs were interviewed using telephone, SMS and WhatsApp conversation for 30 minutes during lunchtime to avoid disruptions. Most of the questions were open-ended for the interviews and the interview protocols for both teachers and SMT members were different.

This study decided on these platforms to ensure the safety of the participants during the data collection period process. These instruments helped to triangulate the findings and adequately interpret the data. An explanation of the purpose and potential benefits of the study was provided to the participants. The researchers ensured that ethical issues were addressed. Data were generated through semi-structured interviews and narratives with teachers. The main purpose of the semi-structured interview questions was to give teachers ample opportunity to talk about their practices without interruption while answering specific questions about their challenges and practices when using e-learning resources during teaching and learning in rural primary schools.

Data generated from all participants were recorded digitally on all platforms. The data analysis process was painstaking, where the researchers first retrieved data and played several times to develop themes, compare these data with transcripts and classify themes into meaningful and manageable categories. The end product saw the emergence of four main themes, which are presented in the Results and discussion section.

Discussion

Narratives are used to present the findings from four FP teachers, two HoDs and one subject advisor after the three data generation methods were administered. This method of data analysis is consistent with Ramathan L [39] recommendation of the use of triangulation in data analysis for quality results. The findings are discussed for each of the seven participants and the theoretical framework was used to analyse and interpret the data in order to reconceptualise it against the appropriate literature.

The current state of e-learning in the FP in rural schools

The first theme to emerge from the data was the current state of e-learning in the FP in rural schools. The emergence of e-learning has sparked fierce discussion within education circles and amongst other important advocates for equal rights to quality rural education. There is general agreement on the efficiency and potential reach of e-learning for far-flung areas like KwaNyuswa

and its surroundings. Issues that always arise regarding the provision of e-learning in many rural schools are affordability, quality and relevance to the rural population.

The physical terrain, which may be characterised by mountainous areas, puts many rural and farm schools at a disadvantage from beginning to enjoy the basic right to e-learning education and information technology due to network failure. Advocates for rural education question the legitimacy of such intervention, which begins to convince policymakers that it is the panacea for bridging the gap that has existed for centuries between the haves and the have-nots. The first participant highlighted the networking dilemma as an issue that needs to be addressed as a matter of urgency.

T1: "... here, there is a poor-quality computer network for educational purposes in KwaNyuswa and Telkom as a service provider doesn't have a reliable network ... however, it is the only affordable network provider compared to private networks or competitors, but [we] require a digital telecommunication infrastructure in rural and remote communities in order to provide equitable communication for teachers and learners ..."

In many schools, the school management team (SMT) and the school governing body (SGB) try their best to service computers in the laboratory every three months, by hiring a computer network specialist. In recent times, neighbouring schools and the schools which were visited have reported a high incidence of burglary targeting computer servers and computers. Increased security has spared these schools from catastrophic disasters in terms of equipment. As a result of this initiative, the majority of rural schools are upgrading their connectivity with a high-speed downlink from the Internet:

T2: "... as a school we are very lucky to have dynamic leaders and SMT who listen to our views and implement them to the best of their abilities. Improved network capability was motivated by interest from teachers to use e-learning in our school ..."

Most schools are funded from norms and standards by the Department of Basic Education and other local partner organisations; as a result, very few rural schools were provided with computers and/or a local area network. The majority of these schools had poorly resourced 'computer centres' and that is why very few were connected to the existing network. Despite little financial support, the larger urban schools had more access to programs, projects and services facilitated by private companies. The opposite is true for rural and deprived farms schools, due to the lack of digital telecommunication infrastructure in rural schools and remote communities around KwaNyuswa and the surroundings.

Participants were happy to embrace this rare opportunity to be the first group of educators to see the transition from traditional pedagogy to 21st-century pedagogy. According to these participants, rural schools are capable of implementing successful e-learning strategies and instructions, provided there is the political will and fiscal-driven support powered by the desire to address human rights. This energy was coming from the subject advisor, who is working closely with these schools.

SA: "... all the schools around this beautiful rural area need to transform and embrace technology. The so-called 4IR has more power to transform and modernise our schools to be the centre of excellence. Teachers are the most important frontline workers who need our support as subject advisors... the irony though is that we are challenged when it comes to this new e-learning technology teachers are advocating..."

The emergence of the global novel coronavirus (COVID-19) saw leaders press the panic button in trying to answer the difficult question of how e-learning can be introduced into the mainstream FP curriculum in rural schools. This was because urban schools were starting to mobilise physical, financial and human resources in response to the pandemic and enjoyed the proximity to the most advanced technical skillsets money can buy. The rural FP teachers agreed that the D6 learning platform was the most trusted by urban schools for managing and harnessing information and learning:

T2: "... hearing that schools in urban areas are using D6 to send reading notes, homework and other important information motivates us to use

e-learning platforms available at our disposal to decolonise FP curriculum ..."

T3: "... in my class, I managed to convince my HoD and Principal as well as the SGB to allow us to communicate with parents using social networks and other available platforms, as an effort of driving towards e-learning against all odds ..."

These participants were quick to point out that they are motivated by their children, who study in urban schools as they aspire to a better-quality education. As teachers in rural areas, nothing can stop them from dreaming about and implementing e-learning where they find themselves. They seem to know where the bottlenecks are that work against their innovations, hard work and dedication to the craft. Most FP teachers have basic computer skills, setting them up for the challenge of partnering with well-resourced schools in facilitating e-learning in schools situated in deprived contexts.

The participants have been questioned by parents at rural schools as to why they send their children to opulent schools. Understandably so and these are very constructive discussions of the painful realities faced by all South Africans, whereby teachers find it convenient to teach poor children in rural schools but not their own. However, the main concern for the FP teachers is why neglect technology when some of them are willing to give it a try.

The question of e-learning modalities remains unanswered or unresolved, as many policymakers take rural education for granted. Instead of using their common sense to double up their efforts and attention to the most marginalised in society, they rather work to engineer mega technology and support innovation that is not attainable and too abstract for rural consumers.

Today rural schools are without any form of the e-learning platform and are burdened by poor network connectivity, poor infrastructure and poor or weak subject advisors, who know nothing about e-learning except politics and the dishing out of patronage in the rural schools:

T2: "Most teachers are afraid to raise their voice, questioning the intention of their immediate leaders about why they are not contemplating the initiative that will empower teachers for 4IR and experimenting with e-learning as part of educational tool ..."

T3: "... you cannot believe the kind of narrative most unions are peddling to garner support from everyone. They threatened any person who proposes the implementation of innovation linked to e-learning about the law and other fictitious threats should they continue to push this e-learning narrative ... most of their members are computer illiterate and old in the FP..."

In most of the in-depth discussions with participants, they expressed that certain powerful people in society are afraid to support important technological innovations. Instead of looking at these innovations as opportunities, they believe that they bring more confusion and will threaten their jobs. This was a strange argument coming from participants – purporting to delay e-learning to save veteran teachers from having to learn about technology. The forces intent on derailing any effort from either the state or private sector are real; however, the outbreak of the novel coronavirus opened the opportunity for urgent attention to and the need for e-learning technology.

Integrating e-learning education into social learning in rural schools

The second theme that was worth analysing concerns integrating e-learning education into social learning in rural schools. It is very important to understand how participants conceptualised social learning within the context of the e-learning revolution. Social learning was seen as spaces (physical or virtual) where education takes place. These spaces are very important in harnessing the spirit and love for both virtual learning and e-learning; these spaces are available with development. The consensus was that these social learning opportunities don't exist in many rural schools, because no one understands their significance:

T2: "... as teachers in the FP spaces are very important where learners get opportunities to play and interact with technology while learning and where also they can learn basic computer skills ..."

T4: "... as we experiment with technology and e-learning platforms, this important question is being raised, but honestly, no one knows the significance of social learning ..."

The views of participants about the existence of social learning for FP learners were not convincing. In this regard, every participant acknowledged the need to improve spaces for social learning and e-learning experimentation. FP learners are at an age when they learn better when they have designated social learning spaces, where they can explore available technology while playing. In rural schools, most teachers don't understand the significance of the need for social learning spaces, due to low levels of Internet access dedicated to learners. The available space for playing is vast, but not seen as meant for e-learning exploration and using technology to learn. The following excerpts indicate how participants understand the constraints facing the rural school as they scramble for social learning spaces:

T2: "... social space for e-learning is not available in my school. Yes, I have learned that most urban schools use a technology called Wi-Fi to connect all learners to the Internet with strict conditions ... Some of the conditions are that the Internet must be used for academic purposes and play and the policy spelt out clearly what it should be used for. In contrast, our learners don't have access to cell phones, as they are discouraged to bring them along ..."

T3: "... I am glad my school declares all spaces as social and physical platforms where learning can take place; the challenge is turning these social learning spaces into real e-learning spaces. Without Wi-Fi, these spaces remain ordinary social learning spaces without any significance to e-learning ... over the last two years we have been pushing to have our Internet, but financial challenge ..."

Participants who are senior teachers (HD1 and HD2) highlighted the following areas as those that most rural schools use as social spaces: computer labs, playgrounds, outside of the school, classes and the main hall. These spaces are important, but without the necessary infrastructure such as Wi-Fi, the implementation of e-learning remains a distant dream. The provision of spaces for social interaction that learners utilise for socialisation extends beyond free play outside and free play inside the school and the complexity of social spaces enabled self-awareness and growth.

A study conducted by Morales EE [40] identified the development of academic resilience as a key factor in powering the development of supportive relationships that build self-belief for growth in an academic environment. One of the important issues raised by participants in the effort to address social learning was the availability of a computer laboratory:

HD1: "... unlike many schools in my neighbourhood, we are lucky to have a fully-fledged computer laboratory where our students spend most of their time browsing the Internet and playing ... at times it runs out of Internet connectivity..."

HD2: "... we use our computer laboratory specifically for typing assignments, tests and other related important activities ... as you can imagine, only teachers are allowed to make use of these social learning spaces ... Students are not allowed to use these social learning environments without our supervision as Heads of Department, we control these spaces..."

Salazar (2013) explores how teachers use computer laboratories as social learning spaces to elicit deep learning and proposes that more research is needed to fully understand how social learning supports learning. It was surprising to learn that teachers are the ones who are depriving their learners of a social learning space – in Salazar's words, this is the "worst inhumane form of deprivation and naïve judgment" (2013:7). It is not easy to comprehend how defenders of education could justify this reckless behaviour. The participant concerned was threatened with dismissal for questioning this behaviour; this illustrates an inhumane dereliction of duty by depriving learners of e-learning [41].

Decolonised practices of e-learning strategies

The third theme focused on the urgency and discursive practices shaping their understanding of decolonised practices to improve the implementation

of e-learning in a rural context. Decolonisation and rurality are amongst the most political terms and slogans used by politicians to garner support, without there being a clear understanding of them. It is shown below how participants described these closely related concepts; however, none of these teachers claims to better understand what it means to decolonise the curriculum within the context of rurality. Suffice it to say, students from the universities started the calls for 'Rhodes Must Fall' and 'Fees Must Fall', which translates into free universal education across the education landscape. In the case of basic education, indeed universal free education was implemented, with all the challenges associated with it:

T3: "... I sense that decolonised education ... might mean the provision of quality education for all South Africans, irrespective of socio-economic background ... those marginalised and in deprived context must be prepared to participate in the economy and improve their environment..."

T1: "... to me, this concept does not mean anything, the only thing as teachers is to champion better innovations for our learners... they need empowerment and we are the only vehicle to implement this decoloniality and rurality education ..."

In this position, teachers as 'transformative intellectuals' suggest that their pedagogical competence elevates them to a high echelon of the epistemological epicentre. The participants are aware that things are changing faster than anyone can imagine and that new teaching strategies are inevitable and will change the landscape of education. They seem to forge ahead and respond to the requirements of equality legislation which makes it unlawful to deprive opportunity to a person based on age. The perception of participants (T2 and T4) in this section as 'using electronic communication in the form of a click' signifies the teachers' awareness of the importance of changing to e-learning and 21st-century pedagogy.

T2: "... as a school I and my HoD have started to experiment with innovations like adaptive learning, blended learning ... these are very challenging strategies but learning today..."

T4: "... it is not easy to change towards new technology, but one has to live with the new reality and new strategy is here to stay in our schools ... the sooner one starts the better... strategies like gamification are very important to get used to them and synchronous learning and important for me in FP..."

The participants' reflections indicated the resistance to change from traditional forms of learning to e-learning models. The selection of an e-learning teaching strategy was an individual choice informed by the availability of infrastructure and teacher readiness as well as the grade. T2 teaches Grade 2 and the e-learning strategies were based on the learners' needs in a way that makes them feel a sense of ownership of their work. For instance, my school encouraged us as teachers to use the computer laboratory according to a planned timetable as an integral part of learners' instructional materials in the 21st century.

The approach at these schools was that parents download an app that students and parents can install on mobile devices for quick access to updates, communication with teachers and links to supplementary digital curriculum. The team of young teachers started to help older teachers to leverage technology to improve teaching and learning on a small scale. Surprisingly, when they started this initiative there was no clear vision, plan, or coordination to implement it. Today these schools have bought a programme from SchoolNet SA to manage curriculum and assessment activities for schools. The blended learning initiative is helping shift instruction within the schools from the traditional model with some use of technology to a more student-centred approach with technology. In this regard, technology in our school allows for increased work in 21st-century modalities (creativity, collaboration, critical thinking and communication). It was not easy for teachers to explain what an adaptive learning strategy is and how it was used as an important e-learning strategy. Time did not allow us to go more in-depth in trying to understand whether this approach was implemented in rural schools and to what extent it could be successful.

In the case of gamification and synchronous e-learning, participants

spoke about web conferencing which allows the use of multimedia resources in addition to the text. FP learners like to learn using objects and they can make sense when they are exposed to the virtual class session. Participants took their time to create a presentation that contains images and text to prolong the attention of FP learners. One of the most energetic young teachers conceded that this strategy is in its infancy at her school, but during this COVID-19 pandemic parents were asked to connect during the day:

T3: "... the idea of using this platform was to try and encourage my learners to get involved and keep them busy.... Virtual live streaming using Zoom was used but more challenges curtail our work during lockdown ..."

During the session, the teacher makes sure that the live narration of the presentation is manipulated to remain educational but interesting and to provide learners with auditory support to enhance their listening along with visual and textual information on the screen. Learners love seeing themselves on the screen and you can imagine the excitement and focus during these virtual lessons. Our schools are not used to having access to this high technology due to their cost and the fact that they are unsafe for young learners to manage. Sometimes they lose attention very quickly and disrupt other learners because they take it as a game and social platform.

Many challenges come with this kind of teaching. Teachers pointed out that learners want to be physically together during the virtual class. As teachers, we need to learn how to operate web-conferencing tools to enable learners to inhabit online 'breakout rooms' and do small group interactions from different locations. They noted that due to technical challenges, these group activities can incorporate various perspectives, giving the space needed for learners to bring their cultural background and knowledge to their work as part of rurality and rural education.

The role of e-learning in rural schools

The final theme, the role of e-learning in rural schools, explored how a pedagogical focus on the development of e-learning and criticality can subtly influence and inform the individual attitudes of teachers to adopt an e-learning platform. The participants acknowledged that teachers need their opinion to be heard and they feel that 21st-century education cannot be shelved forever. This emphasises how education as a movement is embodied in changes towards betterment through advancement in technology. The subject advisor expressed the following:

SA: "... I am glad that in my lifetime, e-learning is pushing us around and everybody feels the pressure about this important innovation. The footprint of e-learning is very big and no one can ignore the impact it plays and will continue to play in the lives of humanity globally...."

"... the role is helping us to deal with information and capacitate all of us the same way. In the past information was better reserved for the few elites with better resources to handle, but today e-learning can transcend boundaries at a speed never seen before ... I am sure teachers have learned from the past that change is here and it starts within every class they teach ... whether government comes to the party or not, our life has to focus on the e-learning and change the course of history forever."

It took the novel coronavirus for FP teachers in rural areas to finally voice our concern openly to leaders and society and this observation affirms Chukwuere JF [19] idea of the value of exploring already available technology to implement e-learning in our schools.

Conclusion

Developing cultures and environments for learning harnesses the emancipatory power of spaces and interactions outside the formal curriculum, mainly through the use of new technologies and co-curricular activities. The notion of social justice in education brings together issues of innovative pedagogy linked to e-learning education into the system of education. The data suggest how hierarchical relationships in the e-learning community of practice foster the efficient use of traditional and modern platforms critically, for interconnectivity in the learning environment.

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Conflicts of Interest

None.

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