ABSTRACT

Worldwide, COVID-19 has affected the most deprived communities the hardest and exposed many systemic inequalities, leaving nations vulnerable and destitute. The need for quality education, while heeding to international mandates, including enacting the sustainable development goals (SDG), has become more apparent in promoting equitable and inclusive education for all, which remains a challenge in South Africa with its inherited inequalities. The purpose of this study was to understand how the COVID-19 challenge refocused the commitment of five principals from rural schools in two education districts of the Northern Cape province of South Africa to address resurfaced historic inequalities, including digital access and fluency to attain an equitable learning environment. Semi-structured emailed interviews were conducted with the participants. A thematic analysis of their experiences of the pandemic through the lens of flexible learning theory, revealed that teachers and learners often experienced discrimination-related stress, especially with virtual learning approaches, as schools often cannot offer remote services to advance learning. Furthermore, the participants voiced their uncompromising commitment to inclusion while engaging teachers and learners in identifying possible problems and proposing solutions post-COVID-19. Though the current crisis seems to have perpetuated and deepened existing inequalities in disadvantaged rural South African schools, some school principals are hopeful that as the reality has now been laid bare, it may prompt more urgent action. The paper recommends that school principals and teachers will have to refocus teaching practices towards flexible, inclusively delivered teaching through working collaboratively across disciplines so that they build their personal resilience and advance their technological skills to meet the demands of remote and online learning during a pandemic and beyond.

Keywords: COVID-19; flexible learning theory; inclusion and equity; inclusive learning cultures; Sustainable Development Goals (SDG); virtual learning approaches.
1. INTRODUCTION

Education is broadly known as an indispensable apparatus for growth, a means of attaining equal opportunities, inclusion of the marginalised – an additional influential transformative power to support human rights, accomplishing sustainability and building a better future for all (United Nations Educational, Scientific and Cultural Organization [UNESCO], 2017a). Launched in 2015, the 2030 Agenda with its Sustainable Development Goals (SDGs) offers a structure that all United Nations (UN) member states vowed to achieve (United Nations [UN], 2015). The SDGs are a worldwide agenda that comprise numerous, possibly differing policy objectives, relevant to the environmental, economic and social spheres, considering that some goals are reciprocally supportive (Kroll, Warchold & Pradhan, 2019). Sustainable Development Goal 4 (SDG4), which aims to “ensure inclusive and equitable quality education and promote lifelong learning opportunities for all” (UN, 2015) will serve as a guide for this paper to unpack how school principals may enact transformative, inclusive learning cultures in their schools. According to UNESCO (2017a), SDG 4 can be interpreted as ensuring more equitable access to all stages of education, including people from poverty-stricken areas as well as effective learning to acquire applicable knowledge and competencies. Significantly, the Sustainable Development Goals Report indicated that, before the COVID-19 pandemic, development (also in SDG4) remained uneven and that the world is not on track to meet the SDGs by 2030 (UN, 2015). Lately, owing to COVID-19, causing visible and aggravated prevailing disparities and inequalities in education resulting in an unparalleled financial, social and educational catastrophe has increased the challenges in attaining SDGs.

In terms of achieving inclusion and equity in rural schools, the addition of alternative distant teaching, buttressed by the provisioning of digital access, did not ensure that many individuals would immediately be digitally fluent. The supposition of digital confidence, for teachers and learners, in the absence of familiar use, became a supplementary obstacle to inclusion (Czerniewicz et al., 2020). This was documented as the largest intimidation in terms of online learning and teaching. The acquisition of digital literacy skills became difficult to fully pursue and, given the restricted resources and time, constant digital challenges morphed into new forms of educational inequalities (Chinembiri, 2020). Harris and Jones’s observation, “that in order to connect to learn, teachers need to learn to connect” (2012: 8) describes the everyday truths of learners and teachers who try to work collectively during this pandemic.

In ensuring equitable learning opportunities, particularly for underprivileged learners amid COVID-19, it is unavoidable that rural school principals should re-learn their conceptions about leadership to foster inclusive learning environments (Lambrecht et al., 2020; Makoelle, 2020). Certain complex issues continue to complicate the work of rural school principals to promote inclusive learning (Nilholm, 2020) including an understanding of how to build an inclusive learning environment through differentiated instruction. As such, this paper addresses the question: How can rural school principals foster equitable learning spaces through equity and inclusion during and post-COVID-19?

2. EQUITY AND INCLUSION IN INCLUSIVE LEARNING CULTURES

To build inclusive learning cultures, there should be a fundamental focus on fostering equity and inclusion (Organisation for Economic Co-operation and Development [OECD], 2018). Equity is considered a universally just attitude, which carries the impression that the philosophies of justice are agreed on an initial condition that is fair (Chroust, 1942). There are indications
of an augmented awareness in the idea of constructing education that is more equitable and inclusive. However, some confusion exists as to the activities required to move practices and policy forward (Ainscow, 2020). Scholars agree that the application of fairness, individual and social conditions, may be impediments to attaining the scholastic potential (Rawls, 1971 as cited in Kelly & Elliot-Kelly, 2018). Obstacles to educational equity are relatively easy to mention, but rather difficult to overcome, especially in times of a global pandemic. Garcia and Weiss (2020) posit that equity challenges during COVID-19 raise questions of teacher efficacy (Ferguson et al., 2020), if adequate mechanisms to identify struggling learners exist and how lost learning and teaching time is measured (Garcia, 2020). It is, therefore, imperative that school principals seize the opportunity to restructure plans to fostering inclusion and equity (Starr, 2020).

Although the focus on inclusivity has been amplified, barriers such as teacher competencies (Abdrasheva et al., 2016) and readiness to deal with inclusion and diversity in classrooms, exist (Scalcione, Almurzayeva & Shynkeyeva, 2016). When COVID-19 ambushed the world, it exposed glaring unequal teaching practices including online and blended learning, which increasingly contribute to educational exclusion (UNESCO, 2020).

3. THE IMPACT OF COVID-19 IN FOSTERING EQUITABLE LEARNING OPPORTUNITIES

COVID-19 is construed as a “wake-up call” that has reshaped the intersections of equity, inclusion, teaching and learning online and ultimately how school principals will respond to the influence of this pandemic on education (Czerniewicz, 2020). Whilst some teaching and learning activities continued through digital technology (Zhang et al., 2020), some schools were challenged with poor internet access, lack of ICT knowledge, a reduced system structure and faintness of content expansion (Almaiah, Al-Khasawneh & Althunibat, 2020). Furthermore, issues such as corporeal detachment and inadequate opportunities to reach and connect, as well as emotional distress exacerbated existing barriers to teaching and learning (Huber & Helm, 2020). School leadership practices that foster inclusive, multidimensional learning will require new programmes that sufficiently include leadership actions that create equitable learning opportunities for all learners (Leifler, 2020).

Arakal (2020) contends that the aim of creating equitable learning opportunities should be to promote mastery of the relevant competence development that will be feasible only when learners have the flexibility to pursue learning beyond the artificial boundaries set by an academic calendar and formal assessment. To this end, teachers should vigorously engage in activities such as pre-class preparation, post-class reflection, assignment delivery and project mentoring (Arakal, 2020).

In a study on flexible learning as an instructional modality during COVID-19, Cortes (2020) found that learners were elated at the prospect of flexible learning. Learners embraced the programme because the learning activities they engaged in provided opportunities for authentic learning, active learning and learner autonomy. In a similar study, learners were confident that they could easily adapt to new learning methods if teachers inspire flexible and equitable learning spaces (Amir et al., 2020).

COVID-19 requires transformation in the way teaching and learning have been perceived, and, therefore, this historical moment poses for the need to conduct studies that explore
educational directions as far as resetting educational priorities and reconceptualization of the learning space are concerned (Cahapay, 2020).

4. THEORETICAL FRAMEWORK

Flexible learning represents scholastic ideas concerned with providing learners with opportunities of how, what and when learning happens (Shurville, O’Grady & Mayall, 2008). This implies that teachers should implement a learner-centred educational strategy that offers a range of choices from the location and time of learning to learning activities, resources, instructional methods as well as educational support for learners and teachers (Huang et al., 2020). Such a strategy may be an ideal adaptive response to radically changing situational demands, such as COVID-19, and may be regarded as the flexible application of knowledge in new contexts (Huang et al., 2020).

Flexible learning incorporates an element of transactional distance encouraging teacher and learner interaction, the arrangement of instructional programmes and learners’ self-directedness (Moore, 1990). First, flexible learning requires specific behavioural attributes. Second, structure indicates the inflexibility or tractability of the programme’s didactic goals, the teaching strategies and the capacity for differentiation. Third, learner self-directedness is the extent to which the learner may determine the objectives, experiences and evaluate decisions of the learning programme. We argue that an application of flexible learning theory in this paper is relevant as learners and teachers may be equipped to improve their competencies and make their learning productive and dynamic. Flexible learning provides skills to individuals to plan their actions according to their importance, occupy their minds with positive thoughts, removed from external fear while promoting equitable, quality education (Joan, 2013).

Thus, when individuals, “function within and act under conditions of unavoidable uncertainty” (Shulman, 2005: 13), the aim should be to flexibly, “provide effective and inclusive education, during pandemics [such as] COVID-19” (Huang et al., 2020: 1). School principals should motivate stakeholders to think beyond their circumstances and include them in educational actions that challenge the taken-for-granted expectations of learning. In this way, tasks may be executed more carefully to imitate the situations in which education specialists act (Cassidy et al., 2016). Learning may transpire in different ways, including online learning (virtual classes offered over the internet); e-learning (applying automated skills to access an instructive curriculum outside of a conventional classroom) and m-learning (a form of distance education where mobile device educational technology is used) (Joan, 2013).

5. RESEARCH DESIGN

This paper employed a qualitative research approach. Busetto, Wick and Gumbinger (2020) assert that qualitative research studies the realities of individuals and is particularly suitable for responding to questions about what works for whom, why, how and when, whilst concentrating on enhancement of intervention programmes (Valverde-Berrocoso et al., 2020). A qualitative research approach was apt for this paper for its distinct emphasis on responsivity, openness and flexibility to context (Russell & Gregory, 2003). Fossey et al. (2002: 717) reiterate that “sampling, data collection, analysis and interpretation are related, rather than following one after another in a stepwise approach”.

Semi-structured email interviews were conducted, containing open-ended questions in Afrikaans and English, which were then emailed to the participants (McGrath, Palmgren &
Lijedahl, 2019). The participants’ home language is Afrikaans, although they were also able to converse in English. Due to safety regulations and because of challenges sometimes experienced with Zoom or Microsoft Teams, the best possible mode of engagement was through email interviewing. Email interviews are online, semi-structured and asynchronous low-cost instruments, which offer participants relative privacy and afford participants time to reflect on research questions in their own free time (James, 2016). Semi-structured interviews (DeJonckheere & Vaughn, 2019) encouraged two-way communication and allowed enough time to the participants to open up about their experiences during COVID-19 and provided qualitative data to compare with previous and future data.

A multiple case study design was used as five schools were purposively identified for data gathering to capture the real-life experiences of school principals in rural areas (Baxter & Jack, 2008). Creswell postulates that a multiple case study, “explores a real-life, contemporary bounded system (a case) or multiple bounded systems (cases) over time, through detailed, in depth data collection involving multiple sources of information and reports a case description and case themes” (2013: 97). Multiple case studies can be applied to either calculate conflicting outcomes for anticipated reasons or predict comparable outcomes in research projects (Yin, 2011; 2017) and in this way the findings may be validated as authentic and valuable (Gustafsson, 2017). This qualitative case study was undertaken from the view of relativist ontology, as the researchers believe that there is no impartial world or facts, because everything is comparative and generated by people (Guba & Lincoln, 1994). The world and the truth of the participants’ experiences about education priorities during COVID-19 reflect products of their own mind and creations of their individual thinking.

5.1 Population and sampling
The focus of the study was on rural school principals in the Northern Cape province of South Africa. Five school principals from different rural schools in two education districts were purposively selected. The principals’ experiences ranged from three to ten years. Purposive sampling is valuable when the research is angled towards an explicit case and when academic scholars know what they want to do research on (Barglowski, 2018). The sampling procedure was thorough in choosing the precise collection of participants in order to circumvent deceptive findings that may not epitomise the populace being studied (Youn, 2006). The selection was based on the geographical location (rural location) of the schools and five principals were interviewed and pseudonyms were ascribed.

5.2 Data analysis
After the email interviews were completed, the entire conversations were pasted onto an MS Word document. The participants were identified through a two-step coding process (Fritz & Vandermause, 2018) and thematic analysis was used to analyse the data to provide a comprehensive, sensible clarification of the respondents’ lived experience (Riessman, 2008). The researchers worked through all the transcriptions to develop an original coding structure that they critically assessed. The data were coded in order to capture the significances of proclamations and the codes were scrutinised to recognise relationships and patterns. Thematic analysis is advantageous in that the methodical procedures include the explanation of the recognised themes, exploring dissimilarities and comparisons between the themes, connecting the participants’ distinct experiences to the broader social framework and connecting the interpretations to the literature (Nowell et al., 2017).
5.3 Trustworthiness and ethical considerations

Qualitative research frequently lends itself to the potential of researcher bias as researchers collect and analyse data (Miles & Huberman, 1994). Reducing the potential for researcher bias is the ideal and may be achieved by dynamically linking the research participant in inspecting and authorising the results, a process known as member-checking (Doyle, 2007). Such member-checking is regarded as a mechanism of maintaining credibility (Merriam, 2009). The researchers applied member-checking by returning the interview transcriptions as well as written findings and conclusions to the principals via email to validate its accuracy and assess the trustworthiness of the results.

The email interviews were conducted in Afrikaans and English to ensure that the respondents understood all the questions and to allow them to verbalise themselves completely and in-depth, therefore ensuring more credible accounts of their realities. Informed consent was obtained from the participants and the Northern Cape Department of Education. Preceding the interviews, researchers engaged participants in a short discussion via Zoom where they were informed about the purpose of the study. Participants consented voluntarily to partake in the study and for the conversations and email responses to be transcribed and used (McGrath, Palmgren & Lijedahl, 2019).

6. FINDINGS

Scholars acknowledge that the notion of inclusive education has moved beyond uniquely referring to persons with special educational needs (SEN) to extend to all persons at risk of exclusion or marginalisation in society. The inclusion of learners in disadvantaged rural communities facing poverty and potential learning difficulty, is the focus of this paper. Three overarching questions shaped the data collection and analysis:

- How would you characterise the learning that takes place in your school? What type(s) of learning approaches were implemented during the COVID-19 pandemic?
- What teaching strategies help to increase the participation and achievement of all children, including those identified as having special educational needs or requiring additional support for learning?
- Which examples of inclusive pedagogy can you cite that was useful for teachers to support learners?

Several themes related to flexible, inclusive learning cultures and promoting inclusion and equity were derived from the data and included (1) principals’ commitment to inclusion and equity; (2) fostering inclusive learning cultures and (3) principals advancing flexible learning and practising care.

6.1 Principals’ commitment to inclusion and equity

As nations continue to navigate the COVID-19 pandemic, school principals face the enormous responsibility of ensuring the well-being of staff and learners, while ensuring quality delivery of education priorities. Although principal Chris indicated that he frequently felt overwhelmed by the pressures of his job at this time, he added that they created opportunities for learners to be included in teaching and learning activities.

What we tried to do was to use workbooks for subjects, inform parents what to do and learners were afforded opportunities to complete certain activities. The books were
collected once a week for marking, keeping all safety protocols in consideration. We are not a big school, so this was easy.

Principal Chris’s action indicates a teaching and learning transaction to ensure inclusivity. First, access to resources may positively influence learners’ willingness to learn and enable them to learn at their own pace (Tety, 2016). Second, schools’ efforts to ensure inclusion by supplying learning materials to learners may enable them to feel a sense of belonging within the constraints imposed by the pandemic (OECD, 2020).

Principals were unanimous about learner disadvantage but were optimistic regarding their goal to create inclusive learning environments. Principal Jodie mentioned that people do not always acknowledge that, although inclusivity is difficult to achieve, the possibilities are endless.

Some learners experience a lot of psychological and psycho-social problems. But we expected this. With the help of the Department of Education, motivational pamphlets were distributed in the community and we asked parents to use our WhatsApp group to tell us about learners’ behaviour and how they engage with learning activities at home.

The Province of Nova Scotia in Canada concedes that this kind of interest in learners’ well-being is important because “inclusive education is a commitment to ensuring a high-quality, culturally and linguistically responsive and equitable education to support the well-being and achievement of every student” (2019: 1).

Principal Manny expressed his appreciation to the Department of Education (DoE) for the support it provides in terms of resources and promoting inclusivity.

They especially help us with learning material for learners with special education needs. This is difficult, but at least we are trying out something to ensure that these learners and their parents feel part of our teaching and learning efforts in these times.

Generally, these kinds of efforts are framed within a belief that, “diversity, be it based on ability, racial, cultural or linguistic communities, socioeconomic status or gender identity, is valued and that a quality education for all students is a human right” (UNESCO, 2017b). It is evident that in an effort to promote inclusion and equity during COVID-19, this principal embraced a commitment to dismantling exclusions that are representative of academic oppression of individuals with special educational needs (Slee, 2019).

Principal Grace added that her school is a multi-grade school and that they receive curriculum support from the Department of Basic Education (DBE) with regard to planning, limited educational resources and books. She mentioned:

the teachers received tablets from a mobile operator and were trained how to use it. Teachers use the tablets as an additional source for teaching. It should be borne in mind that multi-grade schools are disadvantaged in that we have to cover the same amount of content in the curriculum as other schools.

Principal Grace indicated that the School Governing Body (SGB) approved that teachers may use the tablets adding: “When teaching went online, the educators continued working with their tablets. An educator has been appointed to monitor the use of tablets as well as access to the school’s Wi-Fi within the school premises.” The use of tablets, seemed to have helped the teachers to gain competences to design programmes so that they could prepare to work with learners with diverse learning needs, including those who need additional learning
support. Notably, organising and using digital technology may assist with the alignment of learning content and existing curricula while providing teachers with a way to ensure that learning opportunities correspond to educational objectives of inclusion and equity (Ali, 2020).

Challenges associated with teaching and learning amid COVID-19 raise significant issues about the quality of education provided in rural schools. Notwithstanding this fact, principal Steve noted that learning becomes “easy” amid the disadvantaged learners’ experience:

We also invite different community leaders to share their experiences and insights with the learners, like on world-events, the current epidemic and they even participate in pen-pal partnerships and inter-school activities with local and international schools.

Further probing revealed that learners were encouraged to share their experiences by writing to learners from other schools. Principal Steve elaborated:

We organised with schools in our area and some contacts abroad that learners write about their experiences so that we learn from such experiences, to see what others do to improve learning. The teachers retype learners’ letters and forwarded it to schools.

Alawamleh, Al-Twait and Al-Saht (2020) reiterate the importance of knowledge and information exchange whilst it has the ability to improve individuals’ learning experiences. Such activities may contribute to the acquisition of knowledge and creativity in addressing the needs of learners (Leifler, 2020).

6.2 Fostering inclusive learning cultures
To the question on the teaching strategies utilised to help intensify the involvement and attainment of all learners, including those requiring additional learning support, principal Manny answered:

Visual learning is very effective in our situation. I encourage teachers to sometimes send short video clips to learners’ parents to show them at home and parents are asked to share those videos in case others don’t get it from the teachers.

We hold the view that such an inclusive approach may contribute to transformation that embraces social justice (Ngwenyama, 1991 as cited in Dube, 2020). Sharing these sentiments, principal Grace mentioned:

We realised that the use of tablets to make teaching and learning interesting is very functional, particularly for learners with physical disabilities; we use it to improve their reading skills, as well as their creative and critical abilities.

We probed principal Grace on how the use of tablets by learners are managed. Principal Grace circumvented this question therefore we speculate that learners may not be in possession of tablets. Since learners are at home because of the lockdown, tablets might have been used only at the school.

In contrast, principal Jodie said: “Because our learners are mostly physically challenged an acceptable amount of interest is being shown when it comes to homework and test dates.” Principal Steve was convinced that it is the school principals who should determine the direction and learning culture within schools. He said adamantly:

The onus is on us to ensure that all learners have equal opportunities to learn, we have to be the creators and directors of their learning. We focus on their abilities and not
McClain-Nhlapo and d’Addio (2020) assert that such accountability contributes to inclusivity. By insisting parents are accountable to the school, positive and pro-social attitudes are cultivated. This may also contribute to showing acceptance and appreciation of ideas and being sensitive to the educational needs of learners.

Before COVID-19, many schools adopted the use of digital technology. Principal Chris reflected on the online teaching situation at her school, proclaiming:

During the COVID-crisis my teachers were available for their learners and parents on WhatsApp. Also, we were lucky at our school, because we use a programme called Future Fun Caps even before the lockdown period. On the other side, some teachers engage with learners on WhatsApp and aid learning through the use of Facebook Messenger.

The capacity for shifting teaching strategies and pace stand out as a valued source of inclusivity and equity (Anderson, 2011 as cited in Rapanta et al., 2020). Principal Chris concluded: “This was by no means easy because we were so careful about what we have to do to include learners and also what learners should be doing to learn.”

6.3 Principals advancing flexible learning cultures and care

School principals are liable for interceding between extremely multifaceted demands of inclusive education and the structures at the particular school within their range of action, including the distribution of resources and development of lesson improvement, as well as nurturing collaboration between teachers and other academic employees. It appears that principals who embrace an inclusive learning culture, value and respect difference and empower learners to reach their full potential. Moreover, school principals in inclusive schools must ensure the improvement of learning opportunities for all (Lambrecht et al., 2020) by communicating with and supporting their stakeholders. This may be achieved through encouraging inclusive behaviours by fostering high expectations of learners and implementing more effective instructional practices to close the achievement gap. With respect to flexible learning opportunities, principal Jodie indicated that they are very sensitive to learners’ learning needs as they recognise that not all learners learn at the same pace. She mentions pertinently: “The use of technology is particularly useful for learners with physical disabilities – it provides them a sense of belonging and that they have something which they can master.” Although principal Jodie regarded the use of technology as significant, tasks online demand time, effort and resources. This led principal Jodie to remark: “The idea of flexible learning is good, but is never easy, but we try because resources and teacher skills are real problems.”

Principal Steve retorted that they use what they can: “We use messages, WhatsApp and emails for those parents who have. We make assignment easier to accommodate everyone and the teachers have to learn how to adapt”. With little or no warning, teachers had to transition to an online environment. In tandem with shifting learning and teaching to the online sphere, school cultures have also moved online, and the challenge remains to maintain their vitality.

Principal Manny said:

I would say that relationships in our school have strengthened, because we realise that we need each other now more than ever… so there is a culture of support, hey. Teachers
frequently share how to make their lessons and virtual interactions flexible, but most importantly as a school we always try to stay positive and optimistic.

In meeting the challenges that inclusion brings, every person will have to attain new knowledge, attitudes and ways of doing. More importantly, members of the school community should be included in furthering the schools’ educational goals where team diversity results in promoting an inclusive climate (Schneider et al., 2013; Mor Barak, Cherin & Berkman, 2016).

It was evident that principals engaged with their teaching staff on how to navigate the pandemic by setting an example of what behaviours define the school during remote learning. Collectively, teachers in their schools set examples through modelling, consistent response and repetition, lesson creation, being innovative, setting and maintaining communication and giving feedback to parents and learners.

7. DISCUSSION
As diversity has become a fixture in our communities and schools, the divide between the privileged and the underprivileged intensified. Inequality does not happen haphazardly but shows discrete patterns that are regularly related with social class, race, sexual orientation, ethnicity, gender, language and mental and physical ability (Ryan, 2006). Inclusion is best served in schools that emphasise teaching and learning as an imperative to improve the quality of education for all, while developing the capacities and commitment of professional teachers. Consequently, derived from the analysis, this paper suggests the following education priorities principals should consider in answer to the research question: How can rural school principals foster equitable learning spaces through equity and inclusion during and post-COVID-19?

Figure 1: Towards equitable learning opportunities
Albeit being under pressure, the principals’ responses reiterated the fact that COVID-19 requires a rebuilding, reconnecting and reimagining of schools’ education priorities to ensure equitable learning opportunities.

First, to ensure access to resources, principals should (Di Pietro, 2020): (a) rethink the role of broadcasting educational activities because it complements online programmes and it delivers teaching to those who do not have access to the internet; (b) approach various
stakeholders like the DoE and digital network companies to get access to virtual learning environments (VLE). This may provide learners with educational resources, connect them with teachers who facilitate remote lessons; and (c) encourage teachers and parents to strengthen communication to ensure that everyone understands what they should be doing regarding new teaching and learning approaches. In so doing, principals are ideally positioned to seize moments to redesign educational priorities to ensure inclusion and equity for all (Garcia & Weiss, 2020).

Second, for a post-pandemic understanding of how education should be provided to ensure equitable learning opportunities, schools should consider a more robust implementation of blended learning. In the realm of technology, blended learning is dubbed as the “new normal” which can simply be understood as an instructional approach that integrates traditional classroom methods and online digital methods in teaching for the future (Bernardo, 2020). The implementation of blended learning requires that teachers and learners should be prepared to ensure control over time, setting, track and pace (Huang et al., 2009 as cited in Anoba & Cahapay, 2020).

In transforming learning and practising the belief that a child’s ability to learn is not inert nor pre-determined, but that it may be transformed by teachers, parents and learners engaging in a partnership, school principals should take the lead (Hart & Drummond, 2014; Ashikali, Groeneveld & Kuipers, 2020).

8. CONCLUSION

This paper attempted to answer the question: “How can rural school principals foster equitable learning spaces through equity and inclusion during and post-COVID-19?” Principals’ beliefs, understandings and experiences of equity and inclusion during COVID-19 are representative of the brave faces they have to show whilst attempting to find new ways to collaborate. Principals emphasised that, although it is work in progress, efforts can be made to ensure learners experience equitable learning opportunities. School principals’ efforts to ensure an inclusive learning environment with equal opportunities may be regarded as a start to bolster feelings of continued efficacy and development.

This paper supports other findings in the academic literature on equitable learning opportunities during COVID-19. For instance, Popa’s (2020) study suggests that COVID-19 presents education and learning with a unique challenge: to further define the nature of education against the backdrop of the current, highly volatile context to search for a more efficient way to transform education in schools. Bubb and Jones’s (2020) study found that the pandemic has given an opportunity to rethink education and focus on the “what, how, and where of learning”, including the relationship between teachers and parents. The study suggested that all stakeholders (teachers, parents, learners) should learn from and help each other to see what was achieved and investigate ways how to improve learning opportunities.

Future debates on how to prepare school principals to effectively reset education priorities amid a pandemic in the quest for equitable learning opportunities through inclusion and equity incorporating fourth industrial revolution principles. We argue that access to resources and adaptive teaching skills may be regarded as possible ways to lead innovation and to think beyond the shadow of the pandemic towards transformed learning.
REFERENCES

Abdrasheva, B.Z., Nurzhanov, A.D., Ishanov, P. Z., Rymhanova, A. R. & Zhumataeva, M.A. 2016. Problems and prospects of development of inclusive education. *Education & Science without Borders*, 14: 55–57.

Ainscow, M. 2020. Promoting inclusion and equity in education: Lessons from international experiences. *Nordic Journal of Studies in Educational Policy*, 6(1): 7–16. https://doi.org/10.18820/20020317.2020.1729587

Alawamleh, M., Al-Tait, L.M. & Al-Saht, G.R. 2020. The effect of online learning on communication between instructors and students during Covid-19 pandemic. *Asian education and Development Studies*, 2020: 1–21. https://doi.org/10.1108/AEDS-06-2020-0131

Ali, W. 2020. Online and remote learning in higher education institutes: A necessity in light of COVID-19 pandemic. *Higher Education Studies*, 10(3): 16–25. https://doi.org/10.5539/hes.v10n3p16

Almaiah, M.A., Al-Khasawneh, A. & Althunibat, A. 2020. Exploring the critical challenges and factors influencing the E-learning system usage during COVID-19 pandemic. *Education and Information Technologies*, 2020: 1–20. https://doi.org/10.1007/s10639-020-10219-y

Amir, L.R., Tanti, I., Maharani, D.A., Wimardhani, Y.S., Julia, V., Sulijava, B. & Puspitawati, R. 2020. Student perspective of classroom and distance learning during COVID-19 pandemic in the undergraduate dental study program Universitas Indonesia. *BMC Medical Education*, 20(1): 1–8. https://doi.org/10.1186/s12909-020-02312-0

Anoba, J.L.D. & Cahapay, M.B. 2020. The readiness of teachers on blended learning transition for post-covid-19 period: An assessment using parallel mixed method. *International Journal of Teaching, Education, and Learning*, 4(2): 295–316. https://doi.org/10.20319/pijtel.2020.42.295316

Arakal, J.J. 2020. Covid-19 lockdown: Here’s why flexible learning is the need of the hour. Available at: https://www.indiatoday.in/education-today/featurephilia/story/covid-19-lockdown-here-s-why-flexible-learning-is-the-need-of-the-hour-1690143-2020-06-18 [Accessed 11 January 2021].

Ashikali, T., Groeneveld, S. & Kuipers, B. 2020. The role of inclusive leadership in supporting an inclusive climate in diverse public sector teams. *Review of Public Personnel Administration*, 27(1): 4–22. https://doi.org/10.1177/0734371X19899722

Barglowski K. 2018. Where, what and whom to study? Principles, guidelines and empirical examples of case selection and sampling in migration research. In R. Zapata-Barrero & E. Yalaz (Eds.). *Qualitative research in European migration studies. IMISCOE Research Series* (pp. 151–168). Springer, Cham. https://doi.org/10.1007/978-3-319-76861-8_9

Bernardo, J. 2020. *DepEd eyes blending online, classroom learning for next school year*. Available at https://news.abs-cbn.com/news/ [Accessed 18 January 2021].

Bubb, S. & Jones, M. 2020. Learning from the COVID-19 home-schooling experience: Listening to pupils, parents/carers and teachers. *Improving Schools*, 23(3): 209–222. https://doi.org/10.1177/1365480220958797

Busseto, L., Wick, W. & Gumbinger, C. 2020. How to use and assess qualitative research. *Neurological Research and Practice*, 2(14): 1–10. https://doi.org/10.1186/s42466-020-00059-z
Cahapay, M.B. 2020. A reconceptualization of learning space as schools reopen amid and after COVID-19 pandemic. *Asian Journal of Distance Education*, 15(1): 269–276.

Cassidy, A., Fu, G., Valley, W., Lomas, C., Jovel, E. & Riseman, A. 2016. Flexible learning strategies in first through fourth-year courses. *Collected Essays on Learning and Teaching*, IX: 83–94. https://doi.org/10.22329/celt.v9i0.4438

Chinembiri, T. 2020. *Mobile data pricing policy brief*. Research ICT Africa, June. Available at https://researchictafrica.net/wp/wp-content/uploads/2020/06/Tapiwa-Chinembiri-Mobile-Data-Pricing-Policy-Brief2-2020-FINAL.pdf [Accessed 30 October 2020].

Chroust, A. 1942. Aristotle's conception of equity (Epieikeia). *Notre Dame Law Review*, 18(2): 119–128.

Cortes, S.T. 2020. Flexible learning as an instructional modality in environmental science course during COVID-19. *Aquademia*, 4(2): ep20024. https://doi.org/10.29333/aquademia/8444

Creswell, J.W. 2013. *Research design: Qualitative, quantitative, and mixed methods approaches*. Thousand Oaks, CA: Sage.

Czerniewicz, L., Agherdien, N., Badenhorst, J., Belluigi, D., Chambers, T., Chili, M., De Villiers, M., Felix, A., Gachago, D., Gokhale, C., Ivala, E., Kramm, N., Madiba, M., Mistri, G., Mgqwashu, E., Pallitt, N., Prinsloo, P., Solomon, K., Strydom, S., Swanepoel, M., Waghid, F. & Wissing, G. 2020. A wake-up call: Equity, inequality and Covid-19 emergency remote teaching and learning. *Postdigital Science and Education*, 2: 946–967. https://doi.org/10.1007/s42438-020-00187-4

DeJonckheere, M. & Vaughn, L.M. 2019. Semi-structured interviewing in primary care research: A balance of relationship and rigour. *Family Medicine and Community Health*, 7(2019): 1–8. https://doi.org/10.1136/fmch-2018-000057

Di Pietro, G., Biagi, F., Costa, P., Karpiński, Z. & Mazza, J. 2020. *The likely impact of COVID19 on education: Reflections based on the existing literature and recent international datasets*. Luxembourg: Publications Office of the European Union.

Doyle, S. 2007. Member checking with older women: A framework for negotiating meaning. *Health Care for Women International*, 8: 888–908. https://doi.org/10.1080/07399330701615325

Dube, B. 2020. Rural online learning in the context of COVID-19 in South Africa: Evoking an inclusive education approach. *Multidisciplinary Journal of Educational Research*, 10(2): 135–157. https://doi.org/10.17583/remie.2020.5607

Ferguson, K., Hysick, A., Murat, R. & Susso. A. 2020. The reinvention schools really need: Four New York teachers of the year push back at gov. Cuomo. *New York Daily News*, May 17, 2020.

Fossey, E., Harvey, C., McDermott, F. & Davidson, L. 2002. Understanding and evaluating qualitative research. *Australian and New Zealand Journal of Psychiatry*, 36: 717–732. https://doi.org/10.1046/j.1440-1614.2002.01100.x

Fritz, R.L. & Vandermause, R. 2018. Data collection via in-depth email interviewing: Lessons from the field. *Qualitative Health Research*, 28(10): 1640–1649. https://doi.org/10.1177/1049732316689067
Garcia, E. 2020. The pandemic sparked more appreciation for teachers, but will it give them a voice in education and their working conditions? Working Economics Blog (Economic Policy Institute), May 7, 2020.

Garcia, E. & Weiss, E. 2020. COVID-19 and student performance, equity, and U.S. education policy Lessons from pre-pandemic research to inform relief, recovery, and rebuilding. Washington, DC: Economic Policy Institute.

Guba, E.G. & Lincoln, Y.S. 1994. Competing paradigms in qualitative research. In N.K. Denzin & Y.S. Lincoln (Eds.). Handbook of qualitative research (pp. 105–117). Thousand Oaks, CA: Sage.

Gustafsson, J. 2017. Single case studies vs. multiple case studies: A comparative study. Available at https://www.diva-portal.org/smash/get/diva2:1064378/FULLTEXT01.pdf [Accessed 03 November 2020].

Harris, A. & Jones, M. 2012. “Connect to Learn: Learn to Connect.” Professional Development Today, 14(4): 13–19.

Hart, S., & Drummond, M. 2014. Learning without limits: Constructing a pedagogy free from determinist beliefs about ability. In L. Florian (Ed.), The SAGE handbook of special education, second edition (pp. 500–515). London: SAGE. https://doi.org/10.4135/9781848607989.n39

Huang, R.H., Liu, D.J., Tlili, A., Yang, J.F., Wang, H.H., et al. 2020. Handbook on facilitating flexible learning during educational disruption: The Chinese experience in maintaining undisrupted learning in COVID-19 outbreak. Beijing: Smart Learning Institute of Beijing Normal University.

Huber, S.G. & Helm, C. 2020. COVID-19 and schooling: evaluation, assessment and accountability in times of crises-reacting quickly to explore key issues for policy, practice and research. Educational Assessment, Evaluation and Accountability, 32: 237–270. https://doi.org/10.1007/s11092-020-09322-y

James, N. 2016. Using email interviews in qualitative educational research: Creating space to think and time to talk. International Journal of Qualitative Studies in Education, 29(2): 150–163. https://doi.org/10.1080/09518398.2015.1017848

Joan, D.R.R. 2013. Flexible learning as new learning design in classroom process to promote quality education. i-manager’s Journal of School Educational Technology, 9(1): 37–42. https://doi.org/10.26634/jsch.9.1.2401

Kelly, A. & Elliott-Kelly, C. 2018. Towards a philosophy of equity in educational effectiveness research: Moving from utilitarianism to a Rawlsian paradigm. School Effectiveness and School Improvement, 29(4): 529–544. https://doi.org/10.1080/09243453.2018.1470990

Kroll, C., Warchold, A. & Pradhan, P. 2019. Sustainable development goals (SDGs): Are we successful in turning trade-offs into synergies? Palgrave Communications, 5(40): 1–11. https://doi.org/10.1057/s41599-019-0335-5

Lambrecht, J., Lenkeit, J., Hartmann, A., Ehlerl, A., Knigge, M. & Spörrer, N. 2020. The effect of school leadership on implementing inclusive education: How transformational and instructional leadership practices affect individualised education planning. International Journal of Inclusive Education, 2020: 1–15. https://doi.org/10.1080/13603116.2020.1752825
Leifler, E. 2020. Teachers' capacity to create inclusive learning environments. *International Journal for Lesson & Learning Studies, 9*(3): 221–224. https://doi.org/10.1108/IJLLS-01-2020-0003

Makoelle, T.M. 2020. Schools’ transition toward inclusive education in post-soviet countries: selected cases in Kazakhstan. *SAGE Open, 2020*: 1–13. https://doi.org/10.1177/2158244020926586

McClain-Nhlapo, C. & d’Addio, A. 2020. Emerging from covid-19 pandemic: A social inclusion approach to educating learners with disabilities. Available at: https://www.ukflet.org/2020/emerging-from-covid-19-pandemic-a-social-inclusion-approach-to-educating-learners-with-disabilities/ [Accessed 13 January 2021].

McGrath, C., Palmgren, P. & Lijedahl, M. 2019. Twelve tips for conducting qualitative research interviews. *Medical teacher, 41*(9): 1002–1006. https://doi.org/10.1080/0142159X.2018.1497149

McMillan, J.H. & Schumacher, S. (Eds.). 2014. *Research in education: Evidence-based Inquiry*, seventh edition. Boston: Pearson.

Merriam, S.B. 2009. *Qualitative research: A guide to design and implementation*. San Francisco, CA: Jossey-Bass.

Miles, M.B. & Huberman, M. 1994. *An expanded sourcebook: Qualitative data analysis*, second edition. Newbury Park, CA: Sage.

Moore, M. 1990. Recent contributors to the theory of distance education. *Open Learning, 5*(3): 10–15. https://doi.org/10.1080/0268051900050303

Mor Barak, M.E., Cherin, D.A. & Berkman, S. 1998. Organizational and personal dimensions in diversity climate: Ethnic and gender differences in employee perceptions. *The Journal of Applied Behavioral Science, 34*(1): 82–104. https://doi.org/10.1177/0021886398341006

Nilholm, C. 2020. Research about inclusive education in 2020 – How can we improve our theories in order to change practice? *European Journal of Special Needs Education, 2020*: 1–13. https://doi.org/10.1080/08856257.2020.1754547

Nowell, L.S., Norris, J.M., White, D.E. & Moules, N.J. 2017. Thematic analysis: Striving to meet the trustworthiness criteria. *International Journal of Qualitative Methods, 16*: 1–3. https://doi.org/10.1177/1609406917733847

OECD. 2018. *PISA 2015. Results in focus*. Available at https://www.oecd.org/pisa/pisa-2015-results-in-focus.pdf [Accessed 30 October 2020].

OECD. 2020. *The impact of COVID-19 on student equity and inclusion: supporting vulnerable students during school closures and school re-openings*. Available at https://read.oecd-ilibrary.org/view/?ref=434_434914-59wd7ekj29&title=The-impact-of-COVID-19-on-student-equity-and-inclusion [Accessed 11 January 2021].

Popa, S. 2020. Reflections on COVID-19 and the future of education and learning. *Prospects, 49*: 1–6. https://doi.org/10.1007/s11125-020-09511-z

Province of Nova Scotia. 2019. *Inclusive education policy*. Available at https://www.ednet.ns.ca/docs/inclusiveeducationpolicyen.pdf [Accessed 11 January 2021].
Rapanta, C., Botturi, L., Goodyear, P., Guàrdia, L. & Koole, M. 2020. Online university teaching during and after the Covid-19 crisis: Refocusing teacher presence and learning activity. Postdigital Science and Education, 2, 923–945. https://doi.org/10.1007/s42438-020-00155-y

Riessman, C.K. 2008. Narrative methods for the human sciences. London, UK: Sage Publications.

Russell, C.K. & Gregory, D.M. 2003. Evaluation of qualitative research studies. Evidence Based Nursing, 6(2): 36–40. https://doi.org/10.1136/ebn.6.2.36

Ryan, J. 2006. Inclusive leadership and social justice for schools. Leadership and Policy in Schools, 5: 3–17. https://doi.org/10.1080/15700760500483995

Scalcione, V.N., Almurzayeva, B., & Shynkeyeva, O. 2016. The peculiarities of training in a comprehensive school of Kazakhstan and Italy. Universal Journal of Educational Research, 4(5), 1016–1023. https://doi.org/10.13189/ujer.2016.040511

Schneider, B., Ehrhart, M.G., & Macey, W.H. 2013. Organizational climate and culture. Annual Review of Psychology, 64: 361–388. https://doi.org/10.1146/annurev-psych-113011-143809

Shulman, L. 2005. The signature pedagogies of the professions of law, medicine, engineering, and the clergy: Potential lessons for the education of teachers. Math Science Partnerships (MSP) Workshop. Available at http://www.taylorprograms.com/images/Shulman_Signature_Pedagogies.pdf [Accessed 02 November 2020]. https://doi.org/10.1162/0011526054622015

Shurville, S., O’Grady, T. & Mayall, P. 2008. Educational and institutional flexibility of Australian Educational Software. Campus-wide information systems. Emerald Group Publishing Limited, 25(2): 74–84. https://doi.org/10.1108/10650740810866576

Slee, R. 2019. Belonging in an age of exclusion. International Journal of Inclusive Education, 23(9): 909–922. https://doi.org/10.1080/13603116.2019.1602366

Starr, J. 2020. Responding to COVID-19: Short- and long-term challenges. Available at https://kappanonline.org/covid-19-leadership-short-long-term-challenges-starr/ [Accessed 02 November 2020]. https://doi.org/10.1177/0031721720923796

Tety, J.L. 2016. Role of instructional materials in academic performance in community secondary schools in Rombo district. Unpublished MEd dissertation. Tanzania: University of Tanzania.

Titone, C. 2005. The philosophy of inclusion: Roadblocks and remedies for the teacher and the teacher educator. The Journal of Educational Thought (JET)/Revue de la Pensée Éducative, 39(1): 7–32.

United Nations. 2015. Transforming our world: The 2030 agenda for sustainable development. Available at http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E [Accessed 11 January 2021].

UNESCO. 2017a. World education forum. Quality, equitable and inclusive education and lifelong learning for all by 2030. Transforming Lives through Education. Incheon, Korea: UNESCO.

UNESCO. 2017b. A guide for ensuring inclusion and equity in education. Paris: UNESCO.

UNESCO. 2020. Covid-19 impact on education data. COVID-19 education disruption and response. Available at https://en.unesco.org/covid19/educationresponse [Accessed 02 November 2020].
Valverde-Berrocoso, J., Garrido-Arroyo, M., Burgos-Videla, C. & Morales-Cevallos, M.B. 2020. Trends in educational research about e-Learning: A systematic literature review (2009–2018). *Sustainability*, 12: 1–23. https://doi.org/10.3390/su12125153

Yin, R.K. 2011. *Applications of case study research*. Thousand Oaks, CA: Sage.

Yin, R.K. 2017. *Case study research and applications: Design and methods*. Thousand Oaks, CA: Sage.

Yount, W.R. 2006. *Research design and statistical analysis for christian ministry*. W.R. Yount: Fort Worth, Tex.

Zhang, W., Wang, Y., Yang, L. & Wang, C. 2020. Suspending classes without stopping learning: China’s education emergency management policy in the COVID-19 outbreak. *Journal of Risk and Financial Management*, 13(3): 55. https://doi.org/10.3390/jrfm13030055