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# RESILIENT ENGLISH TEACHERS' USE OF REMOTE TEACHING AND LEARNING STRATEGIES IN GAUTENG RESOURCE-CONSTRAINED TOWNSHIP SECONDARY SCHOOLS

#### ABSTRACT

In literature and education policies, the teaching of English using remote learning strategies is recommended, but for the most part, some teachers are not pedagogically capacitated to teach their respective subjects using technology in South Africa. To explore the experiences of such teachers, this study sought to understand the models and pedagogical initiatives on the teaching of English through remote teaching and learning. Emergency remote teaching is one of the initiatives taken by resilient English teachers in resource-constrained township secondary schools in South Africa, during and after the COVID-19 outbreak. An interpretive, qualitative case study predicated on a constructivist framework was undertaken to explore how English teachers use remote learning strategies in teaching English as a second language in township secondary schools in Gauteng. Data were collected using semi-structured interviews (phone calls) and collecting documents in the form of class worksheet texts and homework activities produced and used by learners during remote learning. Data were analysed using an inductive thematic framework to answer the key research question: What are the digital pedagogic initiatives and strategies used by resilient English teachers to support learners during remote learning? Findings of the study indicate that collaboration, networking, social media communication and other digital literacy practices are teacher initiatives leading to the utilisation of digital connection platforms for socialisation, teaching and learning. Findings emphasise that English teachers should use distance learning, blended learning, mobile learning and online learning as strategies in times of crisis and in resource-constrained environments to help learners achieve their outcomes. Conclusions drawn support the fact that focusing on digital literacies in the English classroom supports proficiency in the use of the language. Participation in online learning programmes and utilisation of digital platforms provide learning opportunities for English learners in resource-constrained secondary schools. Learners eventually improve digital writing and reading skills when they participate in selected remote learning platforms.

**Keywords:** Digital literacy; digital platforms; e-learning; resourceconstrained schools; remote learning; teacher resilience; TPACK; township schools.

## 1. INTRODUCTION AND BACKGROUND

The outbreak of the global Coronavirus (COVID-19) pandemic triggered radical changes in the approach to the provision of educational service. National lockdowns and restricted human movements and interaction had serious implications on curriculum implementation in South African schools. The devastating effects of the Coronavirus led to closure of schools and pushed English teachers in Gauteng township settings to search for options to continue providing service to learners. In addition to the pandemic challenges, three issues in South African education remain pertinent today (Rwodzi, 2018). The first is the pressure of technological advancement and innovation, the second is the English language proficiency of teachers and learners and the third is resource-constrained schools, particularly in townships. This study brings the issues together under the lockdown and post-lockdown circumstances in exploring the digital and pedagogical initiatives used by resilient English teachers to support learning when they teach remotely. Key questions guiding the study were:

- What are the digital pedagogic initiatives and strategies used by resilient English teachers to support learners during remote learning?
- What is the role of digital technology in remote learning in resource-constrained township schools?

In a quest to find insight to the research questions, the background review sought to provide an axiom upon which the purpose of the study is founded. According to Means, Bakia and Murphy (2014), the onset of a crisis perpetuated by diseases outbreak, war or research constraints can lead to remote learning models such as mobile learning, radio and blended learning. According to Czerniewicz, Trotter and Haupt (2019), the choice of online platforms for teaching and learning is a result of disruptions in the conventional classroom teaching. English second language teachers' choices of online remote learning in Gauteng township secondary schools take place within a broader context of factors in the education and socio-economic environment. Yonezawa, Jones and Singer (2011:12) state that, "... adverse teaching conditions in urban schools such as overcrowding or outdated textbooks, pose challenges to teachers' ability to be successful with their students". In addition, difficult community contexts of impoverished neighbourhoods, homelessness or gang violence can contribute to a challenging professional context for teachers.

Apart from teaching, Rwodzi (2018) states that marking, supervision of extra-curricular activities and other personal matters, as mentioned by Yonezwa, Jones and Singer (2011), may be a source of stress for teachers in Gauteng resource-constrained township secondary schools, which may result in early retirement of teachers or changes in profession. In such situations, the classroom management demands and the changing nature of digital-aged learner requirements challenge teachers' conditions of service. As a result of a ubiquitous digital environment and availability of different network providers in some parts of the country, learners in South African township secondary schools have different expectations in terms of learning English as a second language. However, the use of technology in some Gauteng township schools still faces a challenge due to network connectivity, availability of digital devices and the costs of connectivity particularly for township and rural schools (Ferreira, 2013). In addition to the challenges, Van Dyk and White (2019) state that the ranking of schools according to quintiles mean that those in quintile 1 to 2 are the poorest and progressively those in quintile 3, 4 and 5 have relatively stable incomes. For the Gauteng province, most quintile 1 and 2 schools are located in townships and informal settlements. Van Dyk and

White (2019) further explain that poverty levels limit access to adequate financial and material resources required for digital based remote teaching and learning. The focus of this study was to understand the digital and pedagogical initiatives taken by resilient English language teachers in Gauteng township schools when implementing a remote learning approach within the context of the Coronavirus pandemic on education.

In the South African curriculum context, lack of understanding of grammatical structures and of English competence among learners is a cause for concern in the education sector. This has also been the experience of the authors of this article as both have been English language teachers and are currently lecturers at universities in Gauteng. In this capacity, both have experienced that learners in Gauteng resource-constrained secondary township schools struggle with using English proficiently. Mutasa (2006) claims that English in education and business positions is at the top of the list of languages used in South Africa and learners from townships are forced to use it for learning at school. Since English is not their first language (Mbatha, 2016), learners in township schools struggle to use English proficiently as a second language in academic domains. Evidence from research clearly indicates that poor proficiency in English affects academic performance (Thanasoulas, 2001; Martirosyan, Hwang & Wanjohi, 2015; Okura, 2016). The need to explore this problem is as urgent as ever under pandemic circumstances. Possible models for emergency remote learning as a mitigation measure against the effects of the Coronavirus outbreak as well as the effects of resource constraints in Gauteng township secondary schools need investigation.

#### 2. LITERATURE REVIEW

Literature informs us that technology can be used as information repository, data storage, transfer and creation of content and text used for teaching and learning (Hartmann et al., 2017; Bhoi, 2017). In support of digital technology integration, Mahalingam and Rajan (2013) make recommendations on the adoption and use of cloud computing for schools. Hartmann et al. (2017) state that the challenge of teacher digital skills competence limits the possibility of expansion of learning in terms of time and space. Dietrich (2018) argues that technology integration based on the Technological Pedagogical Content Knowledge (TPACK) model supports teacher initiatives when they plan, organise and execute lessons using technology during crisis. The gap exists between the content, technological competence (digital competence) and the pedagogic strategies used to teach digital literacy, particularly on remote learning pedagogy (Petterson, 2017; Dube, 2020). In the South African context, English teachers are to use information and communication technology (ICT) extensively in their practices (Department of Basic Education, 2011), but they are not instructed on how to go about it. In view of the curriculum requirements, English second language teachers are expected to take up initiatives and use digital technology to deliver lessons remotely. Networked computers can be used for communication by teachers and learners particularly for a specifically chosen emergency remote learning programme for learning subjects such as English, and for storage of information for future uses and transfer. According to Hodges et al. (2020), an e-learning system as a selected learning programme is understood as formalised teaching. It is one of the popular selected programmes by the DBE in South Africa. The e-learning programme depends on the availability of the digital devices and connectivity. In other contexts, e-learning is described as network enabled transfer of skills and knowledge for academic purposes. It also includes the delivery of an educational service to many recipients at the same or different times but may be in various geographical locations (Rwodzi, 2018). According to Pahomov

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(2014) and Dhawan (2020) the e-learning model of teaching and learning includes web-based learning, online learning and multimodal facilities such as videos. However, this article does not seek to pursue e-learning opportunities but to understand English teachers' pedagogic initiatives when implementing remote learning and borrowing from e-learning principles and practices in resource-constrained township schools in South Africa. Dube (2020) claims that COVID-19 and the implementation of online learning has magnified the challenges faced by resource-constrained learners and teachers. On the other hand, Hodges et al. (2020) say that remote learning occurs when the learner and instructor (teacher) or sources of information are separated by time and distance and therefore cannot meet in a traditional classroom. The settings can be synchronous or asynchronous depending on the circumstances. In other words, e-learning can be a selected model for an emergency remote learning programme (Dhawan, 2020). However, it is important to mention that e-learning, online learning and webbased learning as digitally based programmes, do not directly mean remote learning. Remote learning may in other cases include the distribution of printed material to people in different geographical locations. In combining principles and common practice, English second language teachers in resource-constrained township schools may borrow from all the different forms of learning and use them in their different situations. The use of social media platforms such as Facebook, Tweeter, Instagram and WhatsApp help resilient English teachers to teach and communicate with learners. The use of social media to teach and learn can also be an emergency remote learning programme.

In circumstances such as the current Coronavirus challenge, emergency remote learning is an option for resource-constrained secondary school learners because English teachers and learners cannot converge in a conventional classroom with high COVID-19 restrictions. In support of a digitally based remote learning model, Pahomov (2014) and Dube (2020) state that learners' active participation in the digital environment, particularly when the Coronavirus restricts movement and interaction, improves their digital competence skills, thereby developing communicative skills and proficiency in English as well as solutions to real-life problems. In addition to the digital literacy process, Moodley (2013) says critical thinking as part of the process involves the ability to carry out logical and mental constructions clearly and rationally, explore problems, integrate all available information and arrive at a hypothesis or solution through systematic means. In this study the concept of digital tools refers to critical thinking support tools that can be used to make logical relationships and interpret data for possible alternatives to human problems. In view of the role of digital literacy in a remote learning programme, Hague and Payton (2010) state that it also includes the ability to read, interpret, analyse and write comprehensible textual matter for communication, transfer, storage and retrieval in English learning contexts. For this study, a lack of resources such as digital tools can lead to other choices of remote learning programmes such as distributed learning (printed material). However, this study focuses on remote learning options involving digital literacies.

Remote learning can be a result of a lack of material resources. According to Ebersöhn (2016) the term "resource-constraint" refers to the limited supply or access to quality of services in communities. Resource-constrained schools for this study refer to schools where resources such as textbooks, classrooms and digital equipment are in limited supply – particularly those located in townships (Rwodzi, 2018). According to Ouma (2019) resource constraints can be at two levels in the education system. Material resource constraints refer to the shortage of digital devices and network facilities and connections, while intellectual resource constraints refer to limited skills to function on digital platforms. In an effort to elevate intellectual capacity,

Du Plessis and Mestry (2019) say that there is a need to put pedagogic strategies in place to improve the working conditions of teachers in line with technological developments and the teaching in impoverished schools and consequently improve learner achievement. English teachers are resilient because they need to support learners in achieving their outcomes. In addition, resilient English teachers are under pressure from the technological developments for their role to remain significant. Furthermore, teachers have to be resilient because the nature of teaching involves learning new things and upgrading existing knowledge. English second language teachers' initiatives for this paper refer to creations and inventions as they resiliently attempt to integrate digital tools in English language learning (Rwodzi, 2018). English teacher resilience is demonstrated by their learning of new skills, re-skilling and personal motivation to develop competence and proficiency. In addition to skills development, Mhlanga and Moloi (2020) say that tasks involving connectivity, texting, collaboration and video gaming in educational contexts support remote learning programme. Ferreira (2013:75) identifies three forms of resilience: capacity to absorb stress forces through resistance or adaptation, maintaining certain basic functions and structures during a high risk event and the ability to recover from an event or "bounce back". For this study, English teachers endure the risk conditions of the pandemic in addition to existing challenges in the profession. Developing suitable approaches to emergency remote learning strategies and adjusting to the circumstances is part of the resilience leading emergence of new practices and ways of supporting learners in their academic work (Mhlanga & Moloi, 2020). English teachers learn new skills and modify existing skills as a process of adjusting and adapting to new settings.

Previously, researchers used to recommend teacher professional development (TPD) programmes in situations where human contact was permissible. Postholm (2012) mentions standardised, school-centred and self-directed models as part of TPD programmes that can be implemented in schools. With regard to TPD theories, Pettersson (2017) postulates that the unpreparedness as well as the need for re-skilling and the demand for professional adjustment to new crisis situations require English second language teachers to be creative and initiate strategies to integrate technology for emergency remote learning programmes. Based on the writings of Wanjala (2016) and Wastiau et al. (2013), poorly-prepared teachers and a lack of electronic writing skills as well as competence in reading and interpretation of electronic texts and visuals, affect progression in digital literacy and effective emergency remote learning programme in the teaching of English. Gilster (1997) identifies and summarised key competences, which include assembling knowledge, evaluating information, searching and navigating non-linear routes in order to discover patterns and relationships. Rwodzi (2018) says assembling knowledge involves accumulating constitutive data and processing it by intellectual procedures into meaningful and usable units. The practice of English language teachers in South African curriculum prescriptions would include selecting contextually relevant English units such as grammar, comprehension passages and business and social communication products (Rwodzi, De Jager & Mpofu, 2020). Evaluation information involves accreditation, authentication and relating to diverse situations and contexts. In expanding Gilster's (1997) notions relating to the roles of teachers as instructors, evaluating includes upraising, validating and relating content to real life situations for problem solving and creativity. Subscribing to similar notions, Lankshear and Knobel (2006) claim that searching competence for English second language teachers involves the ability to use electronic devices to identify information sources. English teachers have a responsibility to break the content into manageable units in a carefully selected language code which matches the level of learners. In support of the above views, Gallardo-Echenique et al. (2015) state that digital literacy is a convergence of several literacy practices including elements of ICT literacy, information literacy, media literacy and visual literacy, all fundamentally and practically relevant for an emergency remote learning programme. In the context of Gauteng township secondary schools, the set of digital skills and practices involving digital tools could help create English learning opportunities. When learners become proficient, they gain access to content knowledge repositories. For this study, digital literacy covers an awareness, attitude and ability of individuals to appropriately use digital tools to identify, manage access, integrate, create media expressions, communicate with fellow learners, analyse, evaluate, construct new structures of knowledge and enable constructive social action (Rokenes & Krumsvik, 2016). The set of practices all aim to provide valuable education and language service to learners. English teachers' initiatives and creativity is an invaluable asset for the success of learners.

For the purpose of an effective remote learning programme, Hague and Payton (2010) posit that initiatives are generational steps involving creativity, innovativeness and an ability to demonstrate job ability with the integration of digital technology especially in adverse conditions (Matos, Pedro & Piedade, 2019). In this context, initiatives include human creations, modifications and curation of existing strategies and skills to suit new settings (Rwodzi, De Jager & Mpofu, 2020). As mentioned earlier, initiatives resemble properties of human courage, learning readiness and being proactive in changing the learning landscape for the benefit of the learner (Pahomov, 2014; Savage & McGoun, 2015). Resilient English language teachers adapt to new English curriculum demands by showing courage, readiness and a positive attitude in order to adjust to new English language learning settings. Gu and Day (2007) posit that teacher resilience is a psychological construct that incorporates the study of personal factors such as self-esteem, self-efficacy, motivation, resourcefulness and health for the purpose of surviving in adverse conditions. In the current South African situation, resilient English language teachers have to grapple with Coronavirus' devastating effects and death threats as well as creating opportunities for their learners to continue with their education (Czerviewicz, Trotter & Haupt, 2019). In view of the circumstances, resilience is understood to be a series of socially and intellectual protective factors minimising or reducing the impact of English language teaching challenges. Resilient English language teachers negotiate academic challenges in the standard process of adversity (Richardson et al., 1990). English language teachers under the remote learning programme need to learn, unlearn and re-learn pedagogical skills due to the changing nature of the learning environment. In this case, the relevance and importance of digital technology is that it is fast and convenient for information processing and retrieval (Ebersöhn, 2016). As an intervention measure to the above context, Mafenya (2013) and Dube (2020) claim that teachers need to learn about technology functions and capabilities before they teach subjects such as English First Additional language with technology. The availability of the networks guarantees connectivity for online teaching and learning within regions and across borders (Dube, 2020). This situation supports the use of emergency remote learning programmes during a crisis due to the availability of the digital technology infrastructure despite that some learners cannot afford the digital devices and the costs of connectivity.

As lecturers, we have realised that undergraduate students from resource-constrained township schools have poor computer application skills leading to universities' justification for the teaching of end-user computing as a subject for all first-year students. In this study, we thus assumed that teachers struggle with digital technology for teaching, not only because they have few computers in their classrooms, but also because of crowded classes and pedagogic choices for English as a second language (Andrei, 2017). English teachers should engage learners in English language experiences that challenge previous conceptions of their existing knowledge to allow responses to drive lessons to seek elaboration of learners' initial responses and encourage the spirit of questioning as well as developing an autonomous initiative (Hague & Payton, 2010). In support of the above view, Savage and McGoun (2015) state that the resilient English language teacher's role is to create an enabling environment that is academically interactive, socially immersive and informative even in emergency remote teaching and learning using digital technology. In addition to the pedagogic strategies, Matos, Pedro and Piedade (2019) and Altavilla (2020) indicate that the process of digital technology integration in learning of subjects such as English requires the teachers to inculcate a positive mind set (mental readiness), develop digital literacy skills and understand their environment as they embark on a project to facilitate teaching and learning in crisis situations. Distinctly, the whole approach should not focus on digital technology but its use in providing English educational service.

# 3. JUSTIFICATION FOR THE NEED FOR REMOTE LEARNING INTERVENTIONS

To support learners struggling with mastering content and proficiency in English, additional or emergency remote learning strategies have to be adopted. Thanasoulas (2001) contends that students who come from under-privileged educational backgrounds are unable to effectively understand and interpret information presented in digital form in order to use it for examination purposes and other career opportunities. The general focus of the study is on the initiatives by resilient English teachers in resource-constrained secondary schools on implementing a remote learning strategy using digital technology. The paper seeks to inform and share experiences of resilient English teachers on use of online platforms to support learners especially in times of a crisis. For computer technology to support strong cognitive functions in learning and encourage higher achievement of learning outcomes, teachers have to reconceptualise the way digital devices and software are used in the integration of language learning theories and practice (Jonassen, 2006). The reconceptualised procedure should result in a shift away from a teacher-centred approach to instruction that attempts to engage learners in activities that support knowledge construction. In the modern paradigms of language teaching, English teachers are not necessarily knowledge reservoirs, but are facilitators who should enable learners to discover and understand their environment (Hokanson & Hooper, 2000). In support of the process of understanding the environment, Rwodzi, De Jager and Mpofu (2020) posit that there needs to be an increase in teacherlearner interaction in authentic scenarios. Additional time for tasks and other out-of-school literacy practices compels learners and teachers to engage in remote learning using digital technology in Gauteng resource-constrained township schools.

#### 4. CONCEPTUAL FRAMEWORK

The study utilised the Technological Pedagogical Content Knowledge Framework (TPACK) (Mishra & Koehler, 2006). Kurt (2018) and Dietrich (2018) state that specific technological tools (hardware, software, applications and associated digital literacy practices) support effective learning if integrated with the various ways in the TPACK framework. Technological, pedagogical knowledge accounts for the relationships and interactions between technological tools and specific pedagogical practices while pedagogical content knowledge describes the

relationship between specific learning objectives (Kurt, 2018). Mishra and Koehler (2006) based their model on Shulman1986's pedagogical content knowledge and identified these three core components at the centre of good teaching practice. Teachers need to choose appropriate technology, select the ideal methods and integrate with the relevant content to be delivered. In this study, the key principles and guidelines from the TPACK framework were blended with sets of beliefs in social constructivism that place virtual learning at a high level of collaboration, a feature that is advocated by digital literacy practices in remote learning because it personalises learning and encourages technological integration.

In support of the TPACK model, constructivist theories of learning (Vygotsky, 1987) were also used. These theories propose that learning takes place through active construction of knowledge in different contexts necessitated by social interaction. According to Pappert (1988), constructivism is a process by which knowledge is built by learners, thereby implying mental activity involving combining of old structures and new structures to form different forms of knowledge, which is used to solve contextual problems. In support of the constructivism trajectory, Abbas, Lei-Mei and Haruil (2013) say that a constructivist perspective supports the combined use of digital technology and other remote learning capabilities in the process of providing educational service and also during crisis. While cognitivists and constructivists attune to mentally based processes, Ebersohn (2017) posits that human adjustments to new and adverse conditions require emotional intelligence and mental cooperation, all destined to support resilience for performance accomplishment. The psychological process of adjusting by incorporating behaviourist and cognitive concepts is part of adaptive resilience because it involves modifications in teaching methods, approaches and strategies (Ebersohn, 2017). In support of the adaptive resilience of English teachers during adverse conditions, Bates (2018) and Altavilla (2020) strongly recommend English second language teachers' need to understand that their roles have dramatically changed in comparison to the traditional system. Learning should be led by planning, organising, interacting with learners and determining strategies for effective teaching in the new circumstances where face-to-face is no longer possible. Social constructivist theories of learning dominate today and propose that learning takes place through active construction of knowledge in different contexts necessitated by social interaction (Young, 2002). The views on constructivism as indicated by Bates (2018) place virtual learning at a high level of collaboration, a feature that is advocated by digital literacy practices in remote learning because it personalises learning and encourages technological integration.

#### 5. METHODOLOGY

This research was a qualitative, descriptive case study. The qualitative approach is concerned with subjective understanding of attitudes, opinions and behaviour. Qualitative research is grounded in knowing sciences that allows researchers to talk about action, experiences and attitudes (Cohen, Manion & Morrison, 2011) and to help the researcher understand the social problem in its natural context (Silverman, 2016). It provides an interactive platform for researcher and participants to understand the phenomenon under exploration. A case study includes designing the study, collecting data and analysing and presenting the results in a particular format (Yin, 2016). The research process involves a selection of participants and sites as cases as well as putting procedures in place that adhere to the case study design principles. Creswell (2013:20) posits that "...individuals seek an understanding of the world in which they live and work". Humans develop subjective meanings of their experiences and

the meanings are varied and multiple that lead researchers to look for the complexity of views rather than narrow the meanings into a few categories or ideas.

In pursuit of the need to understand emergency remote learning opportunities, we used purposive and convenient sampling to select participants. The selection was influenced by the fact that the chosen schools are previously disadvantaged and that the schools have awareness of the use of technology in teaching and learning. The selected participants are English teachers teaching the subject at Grade 9, 10 and 11. Only gualified resilient English teachers who had an experience of more than five years teaching English participated. The reason for choosing the schools in the selected district was also a result of convenience in terms of proximity of the researchers to research sites and accessibility via technological connection. Selected teachers participated voluntarily and consent forms were completed for learners in order to comply with ethical considerations in the study. The total number of participants was nine English teachers out of a total of 42 experienced English second language teachers in the district. Data for the semi-structured interviews were collected through phone calls due to COVID-19 movement restriction and social distancing. The examination and analysis of documents digitally produced also included analysis of communication records as well as discussions on digital platforms that indicate that participation provides opportunities for emergency remote learning programme. The process of data collection and analysis stretched for 2-3 months, due to availability of participants and a chance for member checking (Birt et al., 2016). We made appointments with participants and adhered to their time of availability.

Data were analysed using inductive thematic analysis. We analysed interview recordings, extracts from digitally shared texts and social media chats. The aspects from the conceptual framework were used to map the data against which yielded themes and patterns. We included the voices of the participants which are anonymously presented for trustworthiness and ethical compliance respectively (Korstjens & Moser, 2018).

#### 6. FINDINGS AND DISCUSSION

The research questions required an understanding of the digital pedagogic initiatives undertaken by resilient English teachers during remote learning in resource-constrained township secondary schools. The analysed data and findings attempt to answer the research question. In view of the context and focus of the study, major themes that emerged from the thematic analysis are: 1) collaborative participation of English teachers and learners on digital platforms; 2) presence of learners and teachers in online groups creates learning opportunities; and 3) electronic reading and writing using digital platforms improves English language proficiency and extends learning time for learners during crisis. The three themes are briefly discussed in an attempt to provide insights to the research questions.

Theme 1 shows that English teachers use collaboration as a digitally-based pedagogic initiative during COVID 19 lockdowns to assist learners, which is in line with the key principles of the TPACK model of technology integration (Mishra & Koehler, 2006). The principles of TPACK include a change in teaching strategies as a result of the selected appropriate technology, pedagogic choices and the level of content to be delivered in accordance with the psychological level of development of the learners. Findings show that resilient English teachers form social media groups with their learners and use the platform to ask critical questions which ignite debate. Collaboration involved teamwork which was coordinated using online platforms. The learning process included sharing past examination question papers,

discussions on a variety of topics and transferring of information using pictures, emojis and written texts on different social media platforms. In support of the role of the TPACK model, Mishra (2020) further indicates the role of contextual factors in the revised diagram of the TPACK model and reinforces the use of technological pedagogical content knowledge in remote learning. This view was supported by the fact that resilient English teachers embarked on an initiative to use technology due to COVID-19 lockdown restrictions.

Theme 2 indicates that communication in groups is a pedagogic choice where English teachers and learners constructively discuss, share and transfer information using digital connection. Participants indicated that reading and writing in English using social media platform groups form part of learner constructivist practice. This finding concurs with Czerniewicz et al. (2019) who indicate that resilient teachers can opt for remote learning when faced with adverse circumstances. Group work discussions relating to English language parts of speech, literary works, essay writing and comprehension passages forms part of remote learning when tasks are completed on social media or online platforms. For example, English teachers and learners discussed the use of emojis in creative electronic writing indicating the influence and role of digital technology in learning English. This shows a strong link between social constructivism and the TPACK model when teachers and learners use technology for connecting and learning English. Participants say the use of emergency remote learning is strongly associated with technological developments in English teaching and learning. Digital innovative practices in emergency remote learning refer to participants' actions and motivation towards the use of digital literacy in English (Savage & McGoun, 2015). In this study, innovations included pedagogic strategies, learner tasks and participation on digital connection platforms for the purpose of teaching and learning of English as a second language. For effective emergency remote learning, the innovations on pedagogic strategies and learner tasks are what Leask and Pachler (2013) regard as technology integration in teaching different subjects at schools. The use of a collaborative approach is supported by Andrei (2017) who state that self-directed online learning and other digitally based learning programmes form the remote learning programme in resource-constrained schools for learners who have access to the digital tools and connectivity.

Participants understand digital connection as online facilities and platforms that are used for teaching and learning of different subjects and transfer of information from one source to another in learning contexts. According to Fewkes and McCabe (2012) social media as part of digital technology intervention on emergency remote learning refers to computer-mediated technologies that create platforms to share information on educational, social and career interests. Participants confirm that digital platforms can be used to share social information, entertainment and schoolwork discussions. Therefore, sharing on social media is a strong social constructivist tenet leading to learning (Andrei, 2017). In view of the availability of social media and other academic platforms, English second language teachers connect with learners to discuss homework, respond to questions, share experiences and provide guidelines on completing tasks or reading programmes. Participants in this study confirm their use of digital platforms such as Facebook, Twitter, WhatsApp and Instagram. Participant (P3) says:

Oh yes! I use Facebook, WhatsApp, and Twitter to communicate with my learners and to share and provide guidelines for completing assignments. Ummmm I, eeeh have discussed different types of essays/ or forms of writing such as descriptive, discussive, creative etc. The discussions include social issues and sharing of short videos and music. KKKKKK the learners also enjoy the jokes shared during the discussions.

Resilient English language teachers indicate that remote learning takes place using digital platforms. Social media also connects English teachers and learners for discussions. Evidence from the analysed online documents show conversations involving academic work and collaboration among learners and teachers (Altavilla, 2020). The major challenge for this model of learning is for learners who do not have digital devices and consequently do not have access to digital connection for participation on emergency remote learning programmes. Some participating teachers suggested during the telephone interviews that the education authorities could use a radio broadcast or provide digital devices to learners in cases where financial resources permit. In other cases, English teachers suggested cloud computing models or television programmes (Bedell, 2014). However, most participants indicated the need to set up the infrastructure and train teachers on how to use the models. Furthermore, participating resilient English teachers indicated that television and radio broadcast may not be as personalised as social media platforms on cellular phones. The implication for the circumstances commanded by Coronavirus means the choice of a digitally based emergency remote learning programme benefits learners with access to digital devices and connectivity. Despite the recent Coronavirus pandemic, participating English teachers suggest adopting a cloud computing programme by the Department of Education (DoE) in different districts and provinces for learners' easy access to information repositories. In cases where digital resources are limited, resilient English teachers are circulating hand outs and modules to support learner participation but during the lockdown, distribution remained difficult. Participants confirm that the models particularly on assessments that they are using are not yet authorised by DoE for formal assessments on the remote learning options.

English teachers connect with colleagues from other teaching and learning environments within and across provinces and districts. Digital texts analysed indicated that the digital platforms provide opportunities for teachers to share content, videos, rubrics, teaching notes and other curriculum documents through social media. In this case, learners benefit when content and other essential information disseminates to learners in different geographical spaces. Participant (P4) said:

Yes! I connect with English teachers in other provinces, districts, circuits and clusters for the purpose of sharing information. Learning also takes place when we get access to information and ask question relating to the teaching and learning of English as a second language.

Communication and discussion by English second language teachers on digital platforms is a form of informal teacher professional development as teachers share the skills and experiences in their respective subjects. The skills and experiences shared are repatriated to their respective teaching and learning contexts. The responses from participants indicate that remote learning takes place even at the level of staff development.

Digital tools on an emergency remote learning continuum provide access to videos on YouTube, pictures, cartoons, texts, diagrams, tables and graphs – all combined to communicate and present content to teachers and learners (TPACK and Constructivism combined in practice). Shared videos on social media and scanned or pictures of worksheets and information sources show that resilient English teachers use technology to create learning opportunities for learners. Participants confirmed that digital literacy in emergency remote learning contexts breaks boundaries between learning environments such as schools and social situations (hidden curriculum as propounded by Bowles and Gintis, 2002) and extended the English learning to social settings, thereby providing pragmatic learning opportunities

(Leask & Pachler, 2013). The experience of merged learning environments makes digital literacy a socio-cultural practice and excites learners when they combine work, play and learning (digital generation multitasking way of doing things) in one continuous process (Reid, 2016). Participants shared learner tasks, English marking guidelines, subject teaching notes, past examination and preliminary question papers as well as experiences using digital connections. The crucial fact is that digital technology breaks environmental boundaries and eliminates limitations on access to information for English teachers and their learners. There are more opportunities for interaction online by the two partners. However, the digitally based remote learning model effectively works for learners who have access to digital devices and connection. Evidence from interviews and discussions indicate that the movement restrictions necessitated by the Coronavirus eliminate the option to exchange storage devices with learners who are not digitally connected.

On another positive note, participants were making positive adjustments to challenging situations in cases where they had to design activities and tasks (content knowledge), select methodology that is suitable for the learner needs (pedagogic knowledge) and implemented strategies in order to meet their learners' educational outcomes. The major challenge in Coronavirus contexts is to support learners who do not have access to digital devices and printed texts cannot be distributed physically because of movement restrictions. In addition to material shortages, some learners cannot afford the costs of connectivity even in cases where devices are available (Ouma, 2019). The participants suggested cloud computing to be a possibility that schools and universities could pursue seriously to solve the current and future challenges of limited human contact as well as increasing English language learning time in emergencies (Hartmann *et al.*, 2017).

During discussion group chats, google searches, emails, tweets and SMSs were used to ask questions relating to the learning of English and responding to issues under discussion on topics such as literature analysis and to create texts, make meaning and transfer information to other digital platforms for the emergency remote learning programme (Savage & McGoun, 2015). Participants indicated that learners' reading habits and patterns improved as evidenced by their presence on digital platforms. In support of developing a culture of reading, the reading of digital texts help learners to become text participants, text decoders (code breakers), text users and text analysts (Reid, 2016; Ouma, 2019).

Theme 3 indicates that learners read, write and interpret information on digital platforms. Based on the findings from interviews and digital texts analysis, learning English as a second language using digital tools makes learners become aware of the phonological structure, reading strategies, spelling and grammar competence using different fonts, colours and sizes. This process takes place during reading, writing and interpretation of electronically written texts. Analysed data from digital documents indicated that learners construct sentences, choose appropriate words for the register and consult online dictionaries using online facilities. The interviews revealed that learners and teachers developed critical thinking skills and evaluated and analysed content and information sources when they used digital literacy in English learning in remote learning contexts.

Views shared during interviews indicated that participants engaged in critical thinking during planning of learner activities and completion of tasks and this forms part of the TPACK planning process (Moar, 2017). Participants confirmed that they carefully selected content, designed English tasks and identified sets of English language skills to be imparted. The

process affords the English teachers opportunities to conceptualise, develop pedagogical strategies and make adjustments by inclusion of digital technology and software in the teaching of digital literacy for an emergency remote learning programme. The creation of texts such as poems and essays, for example, creates a context for learners to use their experiences to formulate texts that communicate sense and logic to the readers thereof (Savage & McGoun, 2015). Human interaction continued for academic purposes using digital technology during the Coronavirus lockdown period in South Africa.

### 7. CONCLUSION

This study confirmed that resilient English teachers are taking initiatives in the use and teaching of digital literacy in secondary schools to improve proficiency. English teachers take up the initiatives as support for an emergency remote learning programme. English teachers use digital facilities such as social media, internet, digital equipment and mobile devices to communicate and discuss English language learning material while they are in different geographical spaces. Key points emerging from the study indicate that teachers are connecting with learners as individuals and in groups for academic group discussions, sharing, developing electronic documents, curating, communicating and transferring of English information for learning purposes by using digital connection platforms. Findings further indicate the communication, conversations, transfer of information and discussions support learners in achieving their desired outcomes. Communication and conservations in groups on social media platforms create opportunities for collaboration and sharing and critical thinking which are opportunities for learning. A limitation for the study was that it could not be extended to rural settings due to financial constraints. The study recommends that the DoE develop an all-inclusive and precise set of guidelines and pedagogic prescriptions on the use of digital technology and social media for learning purposes. Based on the TPACK model, inclusion of digital technology (hardware and software) in remote learning forms part of resilient English teacher initiative in bridging the gap between learners and teachers due to COVID-19 conditions. Clearly, resilient English teachers in township schools are willing to integrate digital technology in their teaching. A set of guidelines on technology integration would go a long way in supporting their willingness to try new technologies. New methods of learning through collaboration, networking, texting and group chats are essential for simultaneous socialising and learning for an emergency remote learning programme. Further research could expand into online assessments for learners in resource-constrained township schools in South Africa.

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