Enhancing Creative Arts Teaching and Learning Through a Blended Learning Approach: Teachers' perspectives

A research report presented to the Faculty of Humanities (School of Education)

By

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ABSTRACT

ICT in education has changed the way people teach and learn. This transformation has provided education systems with new ways to make education available in various learning platforms. Blended learning is defined as an educational approach that combines face-to-face and online learning with the use of technology. This educational approach gives learners the opportunity to learn via online media as well as through traditional face-to-face. During the covid-19 pandemic, the incorporation of blended learning in many South African schools became imperative in order to allow learners and teachers to recover lost teaching and learning time due to hard lockdown imposed by the government. Teachers were pressured to quickly acquire technological devices and sharpen their ICT skills in order to implement blended learning in their classrooms.

The purpose of this study was to investigate ways in which blended learning can be adopted in South African schools to enhance Creative Arts teaching and learning. This qualitative study was conducted in three schools in Gauteng province, and it explored the experiences of Creative Arts teachers who have attempted to use blended learning in their practice. Interviews were used to collect data and data analysis was conducted thematically. According to the findings of this study, blended learning provides learners with modern technological experience which is essential in this digital age. However, the rapid adoption of blended learning in South African schools did not coincide with the process of preparing teachers to successfully implement this educational approach. A number of South African schools struggled to successfully implement blended learning due to a lack of ICT professional development, technical resources, and technical support. According to the study, there is a need to establish an effective ICT professional development program in South Africa, that will provide teachers with the necessary skills and knowledge to effectively incorporate blended learning into their practice.

Key words: Blended learning, ICT, Digital tools, Professional development, Creative Arts

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DECLARATION

I, Bongiwe Hlatshwayo, hereby declare that this project has not been previously submitted for a degree nor has it been submitted as part of the requirements for a degree. I also certify that the project has been written by me. Any help that I have received in my research work and the preparation of the project itself has been acknowledged. In addition, I certify that all information sources and literatures used are indicated in this piece.

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DEDICATION

This dissertation is dedicated to my daughter Nompumelelo Nhlengethwa. Your love, patience, support and encouragement have made this accomplishment possible. It is because of you that I was able to complete this journey.

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LIST OF ACRONYMS

CAPS - Curriculum and Assessment Policy Statement

CABLS - Complex Adaptive Blended Learning Systems

ICT - Information and Communication Technology

FET - Further Education and Training

TPACK - Technological Pedagogical Content Knowledge

CK - Content Knowledge

PK - Pedagogical knowledge

TK - Technological knowledge

PCK - Pedagogical Content Knowledge

TCK -Technological Content Knowledge

TPK -Technological Pedagogical Knowledge

LMS – Learning Management Systems

CHAPTER 1: BACKGROUND OF THE STUDY

1.1. Introduction

Technology is changing and with this change, so is the classroom environment. Blended learning has become an important aspect in many schools through the world including South Africa. This has created a great shift in the education field and has forced many instructors to move away from traditional teaching methods to modern teaching that is supported by technology. The announcement of the Covid-19 pandemic propelled and accelerated educational institutions to consider online or blended learning as a strategy to minimise contact. Blended learning is understood as a system that combines face-to-face instruction with computer-mediated instruction (Graham 2006, as cited in Hrastinski, 2019). This definition is further expanded by Lazem (2019) who describes blended learning as "…a formal education program in which a student learns at least in part through online delivery and at a location away from home" (pg. 183). Garrison & Vaughan (2008) (as cited in Smith and Hill, 2019) defined blended learning as a fusion of face to face and online learning experience. Therefore, we can conclude that blended learning is viewed as an integration of face-to-face learning and online learning with the support of technology.

As part of information and communication technology (ICT) integration in education blended learning aims to enable flexibility for both teachers and learners, increase collaboration, promote self-directed learning and enhance student outcome (Smith and hill, 2019). However, as technology has become a larger part of different educational institutions, the adoption of blended learning particularly in South Africa is still very slow (Hagan, Fegely and Warriner, 2020). This sudden switch from face-to-face to online instruction in South Africa created an urgency for professionalization of teachers in terms of digitalisation. This shift in practice has provided an opportunity and challenges to teachers to reconsider how technology can be used in their classroom to improve learners' engagement.

Creative arts as a learning area is offered in the senior phase level (grade 7-9) with the aim of introducing learners to a range of art forms such as drama, dance, music and visual art. This learning area helps learners develop creative, collaborative, presentation and critical skills, which are important skills needed in the 21st century.

Blended learning can be well integrated in this learning area as it allows teachers to expose learners to digital tools that can enhance their creativity, critical and collaborative skills to prepare them for the digital age. Blended learning makes education more customisable to different learning styles and thus improve accessibility (Jones and Sharma, 2019). This educational approach allows teachers to cater to learners with varying learning needs in order to promote equal quality education, allowing learners to obtain an education without any barriers. With these advantages that blended learning can offer in creative arts, it is imperative for teachers to understand how best they can deliver content to learners both face to face and online. Teachers play an important role in the success of ICT in education, therefore it is crucial for teachers to be well trained in implementing this approach in their practice.

1.2. Problem statement

Kintu and Zhu (2016) as cited in Cronje (2020) state that blended learning has a great influence in promoting learner engagement and improving performance. According to these authors blended learning is said to account for learners' positive attitude towards their schoolwork and contributes to their intrinsic motivation. Furthermore, Waha and Davis (2014) as cited in Calderón, Scanlon, MacPhail and Moody (2021) assert that blended learning improves interaction between teachers and peers, and therefore promotes collaboration and participation. But despite these known efficacies, many teachers still face challenges in implementing blended learning approach in their practices. Digital technology at this era is being used as the 'prime teaching and learning resource in blended learning 'regardless of lack of technological skills teachers have and 'their existing technology-related beliefs and practices' (Attard and Holmes, 2020). The lack of suitable infrastructure and access to technology exacerbate the successful integration of blended learning (Namyssova, Tussupbekova, Helmer, Malone, Afzal and Jonbekova, 2019). In essence, there is minimal usage of digital technology among educators in South Africa, particularly those teaching Creative Arts.

Blended learning informs new ways of teaching and that poses a threat to existing pedagogies and calls for supportive ICT policies and professional development. However, the call for the use of ICT by education authorities comes with little or no support and structure on how teachers can work with technology during curriculum

delivery. The policies are imposed on teachers without considering the knowledge and skills of both teachers and learners in using technology. According to Hodges (2020) (as cited in Dlamini and Ndzinisa, 2020) many instructors find ICT integration very stressful due to lack of instructional guidance. As the technology continue infiltrating and disrupting how we do our practice, the role and expectations of the teacher also keeps on changing as technologies continue to evolve. In the modern era we live in, technology use offers countless benefits that enhance learning of the creative arts. In order to further learning, this research explores the usage of blended teaching and learning as a possible pedagogical approach. In addition, there is a need for professional development in this regard, for the education system to see the fruition of use of technology in a positive way and changing the mind of educators towards embracing digital skills in their practice.

1.3. Aim of the study

Technology-supported learning is rapidly expanding; with much of the emphasis on student learning effectiveness. This study addresses the gap in Creative Arts teachers' use of educational technology to enhance learning. The research attempts to shift the emphasis from student outcomes to teacher input, pedagogy, and technology selection strategy. Blended learning, which combines offline and online methods, is the most common mode of modern technology-supported learning. It is a firm cornerstone of teaching and learning strategy in this era of the twenty-first century skills (critical thinking, collaboration, creativity, communication etc.) combining traditional face-to-face instructional delivery with online learning, either synchronously or asynchronously.

Thus, the aim of this study is to unveil instructional digital tools that Creative Arts teachers can utilize in promoting blended teaching and learning at selected schools in Gauteng Province. The government of South Africa through the department of education and interested groups are encouraging the development of digital learning opportunities. The way blended learning fits into pedagogy and the variety of teaching and learning tools available is critical. The study is more concerned with technology-assisted learning as an institutional strategy among Creative Arts teachers.

1.4. Research questions

Main research question

The main research question of this study is:

What are the perceptions of Creative Arts teachers' on enhancing the teaching and learning of the Creative arts through a blended learning approach?

Sub questions

The three sub-questions to be addressed are:

1. What are Creative Arts teachers' perceptions on blended learning?
2. How do Creative Arts teachers implement blended learning in their teaching?
3. What professional development do Creative Arts teachers require to properly teach utilizing blended learning?

1.5. Rationale

This research study investigates the perceptions and experiences of Creative Arts teachers in promoting blended learning in their practice. This study contributes directly to the field of education, provided teachers are properly professionalised on how to use blended learning (also in this research known as digital technology) effectively within and beyond boarders of the classrooms.

CHAPTER TWO: LITERATURE REVIEW

2.1. Introduction

This chapter examines the literature on the perceptions of Creative arts teachers in promoting an effective blended learning experience. This literature review will focus on important aspects of what constitutes as effective blended learning. The study aims to provide a clear understanding of blended learning and the effort to integrate it within the Creative Arts. Reviewing teachers' perceptions is crucial because it helps one understand teachers' needs and what they find meaningful for their professional development, particularly in terms of blended learning in education.

2.2. Creative Arts as a subject

Creative Arts is one of the subjects offered in senior phase (grade 7-9). This subject consist of four art forms namely; visual arts, drama, music and dance. According to the Creative Arts CAPS document (DBE, 2012) the purpose of Creative Arts as a subject is to develop creative and imaginative individuals who appreciate the arts. The subject exposes learners to various art forms in order to prepare them to pursue any of the arts in Further Education and training phase (FET phase). Creative arts identify and nurture learners' artistic talent; it also equips learners with fundamental skills in the various art forms. The subject also introduces learners to different career paths and fosters an awareness and appreciation of arts from various cultures.

Visual arts as one of the art forms in Creative arts deals with creative practices such as painting, drawing, printmaking, and sculpting. These practices use the hand, the eye, the intellect, and the imagination to conceptualise and create two- and three-dimensional objects through the inventive application of materials and technology. This art form aims to develop learners' critical and creative thinking skill, as they are able to express themselves in symbolic, visual ways. Drama as an art form in Creative arts is referred to as a form of fiction that represents social and environmental issues in a dramatic form. According to the Creative arts CAPS document drama fosters learners to work in collaboration, improve their presentation skills and encourages exploration of themes and issues (DBE, 2012). Drama also focuses on physical and vocal development exercises to help learners prevent injuries during performances,

be more focused and alert, develop their imaginative skill, create good atmosphere between group members and use their creative minds to develop interesting scripts. According to the Creative arts CAPS document the study of music focuses on developing the learners' ability to perform different vocal and instrumental music in order to express the intellectual, emotional and spiritual aspects of human experience (DBE, 2012). This art form uses sound combined with other forms of musical expression such as poetry and dance, often enhanced by technology. Music helps learners develop creative, interpretative and analytical skills and also promotes social cohesion. According to the Creative arts CAPS document dance as an art form in Creative arts focuses on the joy of dancing, safe body movement, fitness and coordination skill (DBE, 2012). This art form has both a theoretical and a practical component that allows learners to acquire skills to create, express and communicate through dance. Through improvisation and composing dance routines, learners develop crucial life skills, such as self-discipline, creativity, critical thinking, leadership and teamwork.

2.3. The concept of blended learning

Blended learning was first introduced over a decade ago (Saboowala and Mishra, 2021), this educational approach gained popularity in South Africa following the announcement of the Corona Virus pandemic, also known as Covid-19. Many educational institutions in South Africa made significant investments in technology to implement the blended learning approach in an effort to reduce contact between teachers and learners while maintaining educational goals. A clear understanding of what constitute as blended learning is very important for the successful integration of this instructional approach. Understanding the concept of blended learning will help teachers understand their role in implementing this approach in their practice effectively.

Blended learning is defined by Ma'ruf, Handayani, Marisda and Riskawati (2020) as a combination of face-to-face learning and online learning. According to Hranstinksi (2019) blended learning has been used interchangeably with the term hybrid learning. The term hybrid learning is defined by Mahaye (2020, pg. 2) as a "…technology-based teaching system that integrates face-to-face teaching approach with online learning system". Albiladi and Alshareef (2019) define blended learning as a new educational

field that combines traditional teaching approaches with distance and online learning. The most referenced definition is the one provided by Graham (2006) (as cited Hrastinsk, 2019) who defines blended learning as learning systems that combine face-to-face instruction with computer-mediated instruction. In general, blended learning can be understood as a combination of web-based learning and face-to-face learning. This educational approach focuses on how content can be delivered face-to-face and online to learners; it essentially examines how traditional methods of teaching can be conjoined with the use of ICT to enhance teaching and learning experiences.

Cronje (2020) however, argues that the definitions of blended learning only focus on the dimension of contact and the utilization of technological tools to deliver learning material, and there is no clear indication how best this approach can be applied in practice. Furthermore, Tshabalala, Ndeya-Ndereya and van der Merwe (2014) state that blended learning is derived from two words, blend and learning. Although this may be the case, most definitions of blended learning focus on the term blend by looking at where teaching and learning is conducted more than how it should be conducted. According to Fitri and Zahari (2019) the major success of blended learning does not only rely on where learning takes place, but it must take into consideration pedagogy and instructional design. Teachers need to be exposed to important instructional designs and pedagogy, they need to be made aware of the purpose of this approach in education, how best they can utilise technological tools in both traditional and online learning platforms, how to promote collaboration between students and between the student and the teacher and how they can create a correlation between material and content best suited for online and face to face learning.

2.4. Types of blended learning

The concept of blended learning gained so much popularity during the Covid-19 pandemic. This educational approach combines traditional teaching methods with new technologies to make learning more flexible and accessible. The concept of blended learning is more complex than explained, this learning approach can be implemented in different ways to address the different needs of learners. The common types of blended learning are explained below

2.4.1. Face-to-face drive model

The face-to-face drive model is the most popular model of blended learning implemented. This type of blended learning makes use of technology with traditional teaching method to improve learning outcome (Pammu, Machmoed, Astuty and Sahraeny, 2021). A traditional classroom setting is the main mode of delivery in this approach complimented by the integration of technology.

2.4.2. Flipped model

The flipped blended learning model allows students to receive content and instruction online (see Figure 1). According to Sahoo and Bhattacharya (2021) the flipped model is primarily conducted over the internet and students study in a remote location away from the school at their own pace. Sahoo and Bhattacharya (2021) state that this educational approach is in line with the concept of blended learning as it allows students to choose where they want to study, how and when.

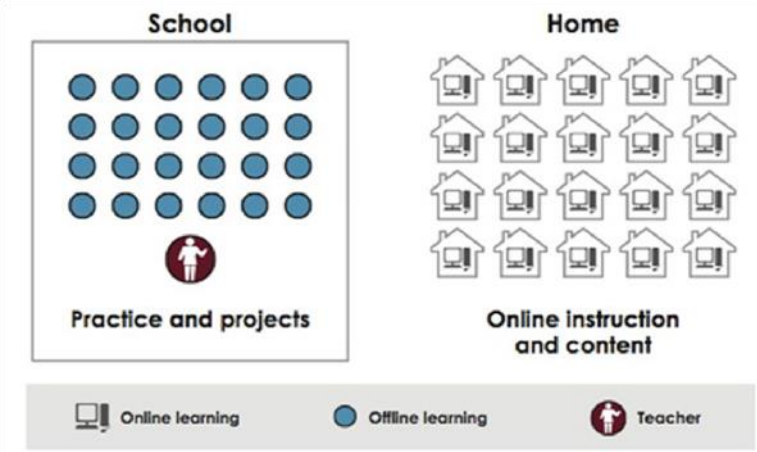

Figure 1: Flipped Classroom Model (Staker and Horn, 2012)

2.4.3. Rotational model

The rotational blended model makes use of online instruction and teacher-led instruction. According to Bryan and Volchenkova (2016) this model allows students to rotate between working online and other classroom-based modalities. The classroom-based modalities include small group or class instruction, group projects and individual tutoring (Staker and Horn, 2012). Figure 2 depicts the station rotation model, in which learners rotate through a series of activities in order to participate in various types of learning. The online station allows learners to learn at their own pace while they study

fundamental ideas. The offline station enables students to engage in hands-on and collaborative problem-solving activities. The teacher-led station gives learners the chance to interact with the teacher one-on-one and provides an opportunity for questions. This model enables the teacher to work with small groups and provide differentiated instruction. Additionally, learners benefit from a variety of teaching methods and receive individualised support (Staker and Horn, 2012).

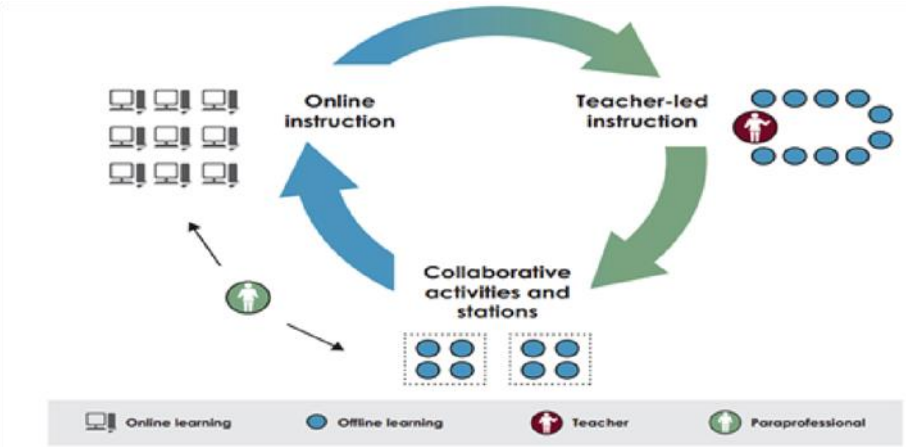

Figure 2: Rotational Model (Staker and Horn, 2012)

2.4.4. Flex model

The flex model is an online learning programme conducted during school hours. According to Sahoo and Bhattacharya (2021) this model can be classified as the backbone for learning. Learning material is provided online and students study online based on their individually customised schedule (Bryan and Volchenkova, 2016), students also get to be trained and assisted by the teacher as needed. Figure 3 shows a blended learning approach for online learners but in a traditional school setting. Education is delivered through a computer, learners come to a computer lab where there are computers for each individual learner, activities are completed independently online and the teacher guides learners individually or in small groups when needed. This model allows learners to apply what they have learned by making use of breakout rooms, learners can discuss with their peers what they have learned to make sure they fully understand the concepts. Learners can also work in groups with other learners by collaborating with their classmates on a shared goal.

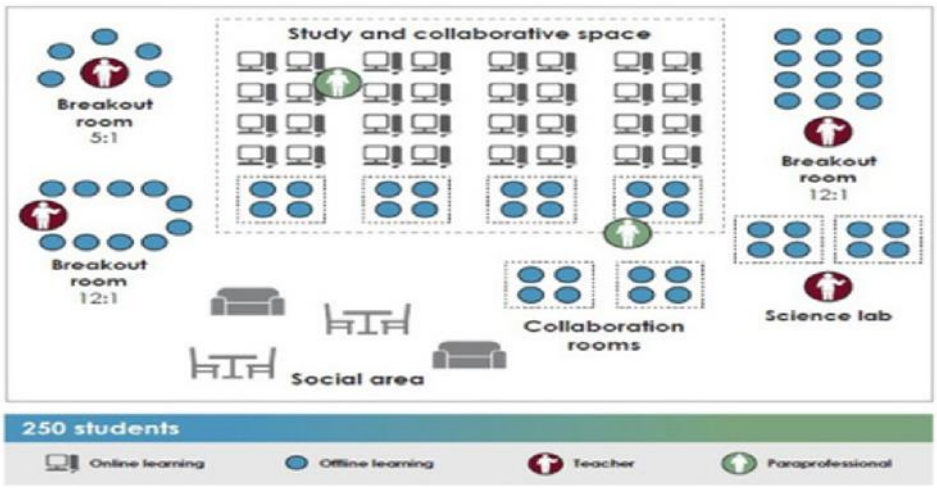

Figure 3: Flex Model (Staker & Horn, 2012)

2.4.5. Enriched virtual model

The virtual model gives students a full school experience (Sahoo and Bhattacharya, 2021). This blended learning model allows students to share their time between attending face-to-face and online. Some formal face-to-face learning time with the teacher is required on a regular basis, but the majority of the learning is done online, outside the physical building (Horn and Staker, 2012). Students in this learning model don't attend school every day, students meet with their instructor face-to-face and if they feel they can accomplish the task on their own, they can do it remotely online. (Horn and Staker, 2012). Figure 4 depicts a blended learning approach that allows the learner to complete the course entirely online, with only a few face-to-face sessions with the teacher.

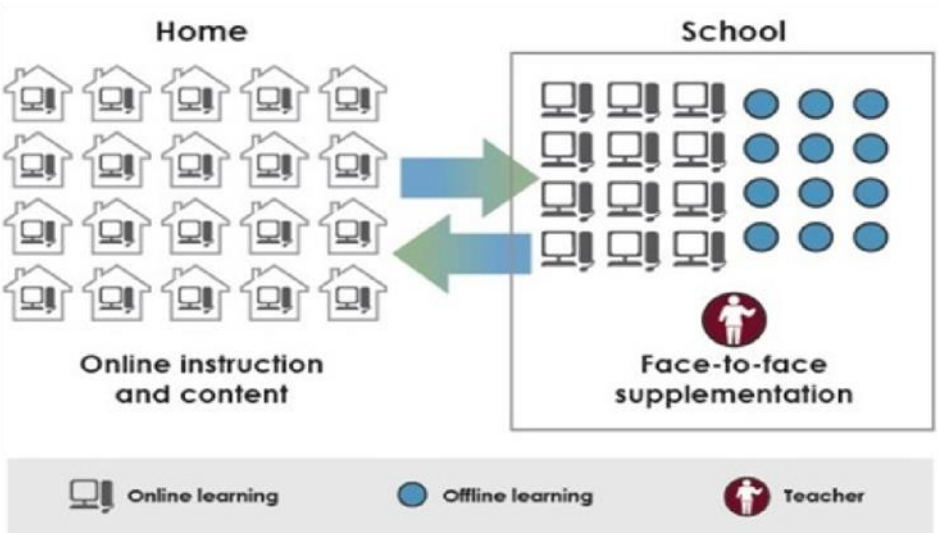

Figure 4: Enriched Virtual Model (Staker and Horn, 2012)

2.4.6. Gamification

Gamification as a blended learning model transforms the academic content into games. This blended learning approach according to Sudevan, Barwani, Maani, Rani and Sivaraman (2021) is a technique used to convert academic curriculum into games, by creating games that are aimed at educating. Gamification stimulates and enhances education through participation, students feel competitive and more stimulated to know the subject (Sudevan et al,2021). This is a motivation strategy for students to be engaged in online learning through play.

2.4.7. Self-blend/ A La Carta Model

This blended learning model encourages students to choose an online course to supplement their traditional studies (Hrastinski, 2019). According to Staker and Horn (2012) the self-blend model allows students to select one or more courses that they will do online to accompany their school lessons. The online course can be taken either on the school campus or on a remote location (Sahoo and Bhattacharya, 2021). Figure 5 demonstrates a blended learning model in which the learner takes a course or courses almost entirely virtually, with the teacher only available to assist when needed online.

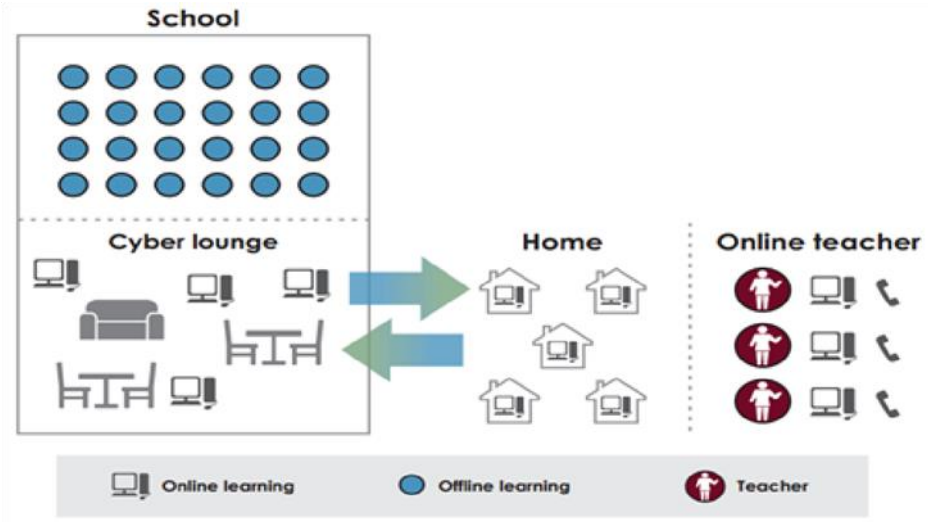

Figure 5: Self-Blend Model (Staker and Horn, 2012)

2.5. The need for blending

Although blended learning does not take into consideration the actual learning process, as it only focuses on the learning environment in which instruction takes place, a number of researchers have highlighted interesting points that promote

blended learning as an instructional approach to education and how it has an impact in the academic performance of learners. Blended learning has been around for some time and is currently popular in many educational institutions worldwide (Su, 2019). This approach in education has a great influence in improving student activity, understanding and student learning outcome (Fitri and Zahari, 2019).

Blended learning allows learners to study at their own pace and space, it allows them to be fully engaged in their learning and promotes collaboration between students and their instructor. One of the main purposes of blended learning in education as highlighted by Rafiola, Setyosari, Radjah, and Ramli (2020) is to equip learners with digital skills that are relevant in this 4th industrial era, which is collaboration, creativity, digital literacy, effective communication, emotional intelligence, problem solving and teamwork. Rafiola et al (2020) further states that combining face-to-face learning and online learning will produce better learning outcome and improve pedagogy and easier access to information. Blended learning allows teachers to work around with different teaching methods that will cater for different learners' needs, this approach also gives learners an opportunity to have easier access to information, as they get to improve their engagement and communication with their teachers and peers.

Blended learning as an instructional approach in education has a great impact in improving learner flexibility, participation and understanding (Attard and Holmes, 2020). This instructional approach allows students to work at their own pace, collaborate with other learners to increase engagement and participation. Through their collaboration better understanding of concepts is achieved. According to Rao (2019) blended learning allows students to study at their own pace and space, this approach gives students a chance to explore new ideas on their own with guidance from teacher. Blended learning gives learners the power to be in control of their learning, it is more learner centred as it allows learners to pace themselves and construct their own knowledge with the help of the teacher who acts as a facilitator of learning. Although many educational institutions in South Africa are using blended learning as a preventative measure to minimise interaction between students and teachers due to the Covid-19 pandemic. It is also evidence that this educational approach has a significant impact on learner performance. Therefore, it is imperative for teachers to consider this instructional approach in their practice, as it exposes learners to competencies that are essential in the current digital age.

2.6. Blended learning environment

Blended learning is defined by Law, Geng and Li (2019) as an educational approach that integrates online learning and offline face-to-face learning. Since blended learning involves both online and face-to-face interaction, it is important to understand how learning should be conducted in both learning platforms in order to achieve harmony between what is done face-to-face and what is done online. According to Allen and Seaman (2010) the substantial proportion of content in blended learning is delivered online and that includes having online discussion and some face-to-face interaction. Muller and Mildenberger (2021, pg3) define blended learning as "a course that blends online and classroom learning, with a proportion of between 30 and 79 per cent of the content delivered online". Despite the fact that blended learning combines online and offline learning activities, the majority of the activities are carried out online, and there is minimal face-to-face interaction between the teacher and the learner.

Muller and Midlenberger (2021) state that blended learning is used interchangeably with the term flexible learning. Joan (2013) defines flexible learning as an approach that enables various modes of instruction to meet the diverse needs of learners by empowering learners to take responsibility for their own learning. A flexible blended learning environment should give learners the freedom to choose when, where, and how they want to learn. According to Smith and Hill (2018) blended learning environment through the use of new technologies gives students higher degrees of freedom to learn at their own pace and space. The flexibility in blended learning is mostly achieved through online learning, therefore to achieve learner autonomy and flexibility most of the work should be conducted and done online. According to Milligan and Littlejohn (2015) in the online learning environment, students have more flexibility in deciding when, how and with what content and activities they engage in.

According to Wu and Luo (2022) blended learning shifts teaching and learning activities online and face-to-face time is reduced but not replaced completely. The face-to-face model in blended learning is used to encourage interaction between students and the teacher. Sudevan et al (2021) argue that there must be direct connection between what is covered online and face-to-face, "…online and classroom learning must be linked to create different paths of understanding and teaching" (pg. 14983).

2.7. Challenges of blended learning in South African schools

ICT in education is frequently viewed as an enhancer of quality education. For decades, the South African department of education has attempted to promote the integration of ICT in education by providing ICT trainings for teachers, investing in technical resources, developing ICT policies, and encouraging schools to promote the use of ICT in teaching and learning. Despite the efforts made to promote the use of ICT in the classroom, several factors continue to pose a serious threat to attempts at technology-enhanced learning. These issues are discussed further below because they have an impact on the successful implementation of blended learning in education

2.7.1. South African teachers' resistance towards blended learning

Many South African teachers were taken aback by the abrupt shift from face-to-face to online learning. The covid-19 pandemic forced educational institutions to transition from traditional teaching to online learning; however, many teachers were unsure where to begin or how to integrate this approach into their practice. As a result of this change, teachers were characterized as 'diehard', individuals who fiercely oppose change. Howard and Mozejko (2015) define change as an act of becoming something different. Educational change is normally referred to as an educational reform, it is the "…development of teachers, students and administrators' knowledge, skills and dispositions in a way that is different from the present situation in order to stay functioning and competitive in such an ever changing society" (Ibrahim, Al-Kaabi and El-Zaatari, 2013, pg.27). One of the barriers to educational reform is teachers' willingness to change; such a habit, according to Hamlaoui (2021), slows the implementation of educational reforms; therefore, it is critical to investigate the sources of this resistance.

The sudden shift to online learning or blended learning mode, required teachers to be fully equipped with necessary knowledge and skill to integrate ICT in their classrooms effectively. However, the level of ICT professional development that teachers have received thus far has not equipped them enough to employ ICT in their practice effectively. This has caused many teachers to fear and resist the new reform in education. According to Antwi-Boampong (2022) teachers adopt reforms when they receive adequate support from management timeously. The adoption of blended learning happened very quickly, and teachers were expected to use it in their

instruction without receiving the proper support or training. The Obsolescence of knowledge and skill led many teachers to resist this approach in education.

Antwi-Boampong (2022) states that the extra workload involved in designing courses and modules to teach in the blended learning mode is demotivating for teachers considering that they are no incentives and rewards for the extra work and time employed. Blended learning instructional design is complex and requires teachers to be technological skilled and knowledgeable to work with learning management systems to design courses that create better engagement and flexibility. In South Africa, teachers were compelled to integrate online, blended learning without any form of guidance. The amount of time invested in locating students online and the extra work employed in designing online resources for students with poor access of technical resources came with so many doubts. Teachers had no hope that this approach will work in South Africa considering the socio-economic inequalities of learners in South Africa. This led many teachers to resist the concept of blended learning.

2.7.2. Lack of effective professional development activities

Professional development is a crucial activity that can improve learning outcomes (Sancar, Atal and Deryakulu, 2021). Professional development is defined by Hassel (1999) as an activity that improves skills, knowledge and competence needed to produce outstanding educational outcomes for learners. Wideen and Mayer-Smith & Moon (1996) define teacher professional development as a change and improvement to teacher's practice in the classroom, by addressing teacher's skills, knowledge and expertise. According to Munje and Jita (2020), the absence of efficient teacher professional development is one of the primary issues preventing the integration of ICT in education.

The introduction of blended learning in education influenced new ways of teaching, posing a threat to established pedagogies. The shift from traditional approach to blended learning sparked resistance and created negative perceptions because of lack of professional development. Despite the known efficacy that blended learning has on learner achievement, teachers still find it difficult to integrate this approach in their practice. According to the study conducted by Dlamini and Ndzinisa (2020) one of the major challenges in integrating ICT in education is the negative perceptions

teachers hold towards the use of online learning platforms. These negative perceptions in most cases come from lack of professional development towards the use of ICT in education.

The UNESCO ICT competency framework for teachers (2018) aims to support effective teacher trainings in the use of technology in the classroom. This framework outlines competencies that teachers need to use ICT effectively in their practice, the framework is then adopted by professional development designers to develop a professional development activity that fit the context of their country. The professional development framework for digital learning (2018) provides a guideline in terms of developing an effective ICT professional development activity for educators, to ensure that educators use ICT effectively to enhance teaching and learning. Both these policies recognise the need for ICT professional development in education by providing guidelines how this can be achieved in different contexts. However, regardless of all this attempt to provide guidance in designing effective ICT professional development activities, most South African teachers find these trainings fruitless. Dlamini and Mbatha (2018) argue that despite the greater opportunities offered by ICT in education, "…teachers' professional development needs are not addressed in a meaningful and systematic way" (pg. 17).

Blended learning requires teachers to have some basic technological skills to successfully integrate the approach in their practice. To meet the demands of this new reform in education, teachers need to be equipped with necessary ICT skills and knowledge to integrate blended learning effectively in their practice. However, the issue of ICT professional development has been an issue in South Africa for decades. Teacher professional development activities in most cases, don't suit the professional needs of teachers. According to Ajani (2020) the trainings and workshops offered by the department of education do not address the developmental needs of teachers and the timing is inadequate and irregular.

In this digital age, ICT professional development is a necessity. This activity provides teachers with the necessary skills and knowledge to use technology effectively, boosting their confidence and avoiding resistance. However, many professional development activities do not serve the purpose in which they are intended for. Ajani (2020) argue that professional development activities must address the developmental

needs of teachers, teachers must be observed, assessed and consulted to determine their professional needs. Most professional development activities do not take into account the needs of teachers; instead, they are conducted in a 'one size fits all' manner. The majority of ICT trainings available are theoretical rather than practical, and they do not prepare teachers for classroom experience.

The concept of blended learning in South Africa is complicated since this method of instruction was thrust upon teachers without adequate preparation or direction. It was not taken into account whether teachers had the ICT knowledge and abilities to implement this strategy in their practice. In most schools, the process was overseen by the school management team, and some schools were required to provide staff training in order to effectively implement this approach. Dlamini and Mbatha (2018) state that the school management and administration must play a role in the adoption and integration of ICT tools in education. Professional development activities that are context (school) related are needed in education; this influences the content and outcome of the training process.

Professional development activities need to be continuous, to ensure effectiveness. Ajani (2020) maintains that adequate training should be designed for teachers every term and support should be provided regularly. A continuous professional development activity helps identify the developmental needs of the teachers during the training process, this makes the training more meaningful and relevant to the teachers. In most cases ICT Professional development activities only last for a short period of time, with no monitoring, feedback and follow-ups to ensure effectiveness. Ajani (2020) further states that they should be adequate monitoring and follow-ups for a professional development activity to be a success.

2.7.3. Lack of technical resources

The covid-19 pandemic highlighted a number of challenges in South African schools related to ICT integration. One of the major barriers to ICT integration in South African schools appears to be a lack of technical resources. Hansson (as cited in Munje and Jita) states that the lack of resources is a potential negative contextual factor that hinders ICT usage in some classrooms. The lack of technological resources in schools has also hampered the implementation of blended learning in South Africa. Technology integration plays a crucial role in the implementation of blended learning

in education. According to Rathore and Sonawat (2015) technology integration involves the use of technology as a tool to deepen and enhance the learning process. Blended learning extends technology integration by utilizing learning management systems to provide students with control over their learning process.

According to the white paper on E-education (2004), teachers and students must have access to technical resources in order to effectively integrate ICT, and this must be a priority in education. However, poor ICT infrastructure in South African schools persists, with many schools still lacking access to technical resources such as computer labs, internet connectivity, printers, projectors, and so on. Bingimlas (2009) states that Lack of technical resources seem to be one of the most demotivating factors in integrating ICT in education. This has also dampened the zeal of educators to integrate blended learning in their practices as they do not have access to technical resources.

The majority of South African learners come from homes with limited access to technological infrastructure. Most learners lack access to the internet and electronic devices required to participate in the blended learning approach. This has resulted in a number of learners missing out on work that was covered by other learners who could afford it; it has also widened the societal gap between the rich and the poor. According to Brown, Skerritt, Shevlin, McNamara, and O'Hara (2022), the digital divide between rich and poor existed long before the pandemic.

From the learners' perspective, a lack of technical resources has also demotivated a number of teachers from continuing with blended learning in their practice; most learners fall behind because they can't access the resources shared online and can't attend online classes. Poole et al (2018) (as cited in Brown et al, 2022) attribute resistance to the use of digital technologies in blended learning to structural issues and a variety of aspects of the digital divide. Due to a lack of digital technologies, teachers were forced to reteach the amount of work covered online during the face-to-face interaction to ensure that every learner benefited equally. Brown et al (2022) States that schools' blended learning experiences was not consistent; some schools suffered the most, while others had the necessary resources but were either not used or were used inefficiently.

2.8. Teachers' perceptions of blended learning: knowledge and readiness

The successful integration of ICT in education can be determined by teachers' perceptions and practices (Badia, Meneses and Conde, 2014). Perceptions are defined as one's thoughts or opinions about a particular idea, subject, or object, which shape their worldview and attitude. Teachers' perceptions are defined by Kalogiannakis and Papadakis (2022) as thoughts which teachers have about their professional activities, which are shaped by their background knowledge and life experiences and influence their professional behaviour. This research study believes it is crucial to investigate how teachers perceive blended learning, as this can influence the successful integration of this approach in education.

The Corona virus pandemic led to the widespread adoption of blended learning in South African schools, which completely changed the educational system and required teachers to successfully incorporate technology into their pedagogical practices. Teachers' attitudes towards the use of blended learning were influenced by the transition from traditional teaching to unprecedented online education, which required them to adapt to new teaching methods with little knowledge, support or guidance.

Literature (Ooi, Balan & Saeed, 2020; Ekayati, 2020; Tongpoon-Patanasorn and White, 2020) reveals that teachers' perspectives on blended learning are both positive and negative in nature, and they differ depending on the context. In South Africa the concept of blended learning was approached by teachers in different ways depending on the availability of resources and teachers' blended learning knowledge and readiness. This implies that blended learning perceptions are broad because they are influenced by one's background and experiences, and thus should not be studied out of context. Khader (2012) states that teachers' perceptions influence what they do in their classrooms. Furthermore, Qasem and Visawnathappa (2016) assert that if a teacher perceives technology to be useful, it will influence their decision to incorporate it into their pedagogy. It could be said, therefore, that if teachers perceive an educational approach as useful it is likely that they will integrate it into their classroom practice.

According to the literature, teachers tend to have positive perceptions of any educational reform if they can see its usefulness (Ahmedi, 2019; Avidov-Ungar and

Elyashiv, 2020; Gourneau, 2005). Studies show that teachers have positive perceptions of blended learning because they recognise the value this learning approach brings to education (Ooi et al, 2020; Attard and Holmes, 2020; Tongpoon-Patanasorn and White, 2020). Teachers believe that blended learning benefits their practice by encouraging self-directed learning, collaboration, engagement, and application to real-world situations (Sorbie, 2015). Farah and Frayha (2022) assert that teachers have high sense of comfort with blended learning, particularly with its impact on their students' learning.

According to Masalela (2009) blended learning improves various factors in the classroom, like resulting in independent and more engaged learners, new methods of teaching that cater for learners' diversity, collaborative learning, immediate feedback and time management. Sorbie (2015) further states that blended learning enhances the learning environment and improves teacher's pedagogy. This learning approach also maximises instructional time, as teachers do not have enough time in class to complete meaningful discussions and clarify concepts, blended learning gives teachers another way to complete discussions, explain concepts and give feedback online (Naidoo and Singh-Pillay, 2020).

Although blended learning has many educational benefits that improves the quality of education, this educational approach calls for educational institutions to be tech-enhanced, which calls for added budget for technology upgrade and training of staff to adapt to new teaching methods and revaluate their use of technology in the classroom (Ooi et al 2020). In South Africa blended learning was accompanied by limited access to the internet and technology-based resources that affected the teachers' capabilities and motivation to integrate blended learning in their classrooms (Naidoo and Singh-Pillay, 2020).

Some teachers were taken aback by blended learning because they had to figure out how to conduct virtual lessons and communicate with their students in order to provide the best education possible (Farah and Frayha, 2021). Many teachers in South Africa were concerned, frustrated and fearful of implementing blended learning in their practices because they lacked the necessary knowledge, support and guidance. According to Apandi and Raman (2020) blended learning is considered critical in determining the success of the technology implementation in education. Many

teachers according to the organisation for economic co-operation and development (OECD) (2016) have good digital skills and make use of technology frequently, however this is limited to the preparation of lessons and to word processing, presentation, and information (European Commission, 2013, as cited in Apando and Raman, 2020). Blended learning expects teachers to have knowledge to develop online learning material and resources to assist learners as they work from home, and this meaningful integration of technology as a tool to facilitate teaching and learning has been a challenge to many teachers around the world (Fraillon et al., 2014 as cited in Apandi and Raman, 2020).

To successfully create a blended learning environment, teachers must possess the necessary skills and knowledge. This implies that teachers require adequate professional development in order to effectively implement blended learning in their classrooms. According to the study conducted by Naidoo and Singh (2020) many South African teachers lack sufficient pedagogical content knowledge to use blended learning effectively, which discourages them from implementing this approach in their practice. Ma'ruf et al (2020) states that a successful implementation of blended learning relies on the teacher's ability to work with e-learning information technologies. According to the literature, teachers' negative perceptions of blended learning in South Africa stem from a lack of technical resources in schools and professional development focused on blended learning to assist teachers in successfully integrating this approach in their classrooms.

2.9. Role of Blended learning in enhancing the teaching and learning of Creative Arts

This research study focuses primarily on Creative arts and seeks to investigate how blended learning can improve the teaching and learning of this subject in the senior phase. The researcher felt it was crucial to review the literature on the application of blended learning in the Arts and how this pedagogical strategy can enhance the teaching of arts in the classroom. The goal of Creative arts, as described, is to introduce learners to various art forms in order to encourage their growth as imaginative and creative individuals. This subject allows learners to represent human experiences artistically through participation, collaboration, exploration and presentation. This will allow learners to develop critical and analytical skills, skills that are essential in the digital age.

Blended learning, as discussed in previous sections, aims to improve the quality of education by promoting a learner-centred approach, fostering learner diversity, and encouraging learner-engagement and deeper learning. Although blended learning seeks to improve educational quality, studies on the implementation of blended learning in Creative Arts are limited (Li, Li and Han, 2021). Nortvig, Petersen, Helsinghof and Brander (2020) also claim that online teaching and learning experiments in practice-based subjects receive little attention in the research literature. In order to improve the teaching and learning of Creative Arts in the senior phase, this section will examine how blended learning can be successfully incorporated into this subject. According to the literature review, blended learning is an approach that combines face-to-face and online learning. This educational methodology allows teachers and learners to maximise learning experiences and make the most of the resources available to them (Alvarez-Rodriguez, 2008). Blended learning allows learning and teaching to take place both in-person and online, which means that the teacher will not see the learners every day; some days, the learners will receive regular classroom instruction, and other days, they will complete online learning tasks using a learning management system (LMS). This maximises instructional time as it allows the teacher to plan what they will do in class as well as what they will cover online (Schukei, 2020). Schukei (2020) claims that there isn't a lot of time allotted for art making and practice in art lessons, so teachers must consider maximizing art making time and practice during in-person instruction and use the online component of blended learning to monitor instructional based activities such as lesson instructions, background information, art history, brainstorming and instructional video. This can be followed by formative assessment to ensure that learners are completing the content and comprehending (Schukei, 2020). According to Namyssor, Tussupbekova, Helmer, Malone, Afzal and Jonbekova (2019) blended learning exposes teachers to cost effective teaching and learning experience, as they don't have to worry about the need for a bigger classroom space. Vaughan, Cleveland-Innes and Garrison (2013) state that blended learning takes teaching and learning beyond the confines of time and space.

Blended learning transforms theatre art classes by establishing an open-learning community which allows the learners and the teacher to work collaboratively (Crook and Mitchell, 2012). According to Zhou and Li (2018) blended learning provides

learners with a high level of collaboration by utilizing both face-to-face and online collaborative learning activities. Learners interact with each other, teachers, and other experts, and exchange information, this opens new dimensions and thinking patterns (Bayyat, 2020). This also motivates learners to participate actively in their learning process (Bayyat, 2020).

Blended learning is also said to be an effective and convenient method for improving learners' level of performance in dance and increasing learners' motivation to learn (Bayyat, 2020). Bayyat (2020) asserts that blended learning in art provides learners with flexible time to practice their skills using the online component of blended learning by watching videos and using the links provided to access more instructional activities. Keogh, Gowthorp and McLean (2017) further state that this method supports learners' differences and preferences. According to Bayyat (2020) the traditional face-to-face teaching has limited time for practicing skills, especially when the class is overcrowded. Blended learning environment provides art leaners an opportunity to master their art skills by providing them with interactive materials such as detailed instructional videos that they can work with at their own pace and space. This provides support for different learning needs among learners, as they are free to develop their interest in learning activities by controlling the pace of their learning, select suitable material for their learning and manage their time (Vaughan, 2007).

Blended learning also boosts students' confidence in art. According to Wang and Wang (2017) some students may lack confidence to stand in front of their peers to perform. The online component of blended learning enables learners to apply what they have learned during face-to-face by uploading their routines using the learning management system. This helps learners to reflect on each other's' performances, give constructive feedback and compare their performances with those of their peers (Bayyat, 2020).

An effective implementation of blended learning in Creative arts, gives learners autonomy over their learning, promotes deeper learning and increases learner engagement. There is no doubt that blended learning in Creative arts enhances the performance of learners. This learning approach increases collaboration among learners and the teacher, allowing for more information to be gathered and shared. The flexibility of this learning method makes learning more accessible to all learners

regardless of their learning needs. Creative arts teachers need to understand that the current generation of learners are digital natives and therefore incorporating technology in the classroom will not only enhance learning but will also prepare the learners for the outside world.

2.10. Conclusion

In conclusion, this chapter reviewed literature on the concept of blended learning by providing important insight into what constitutes as an effective blended learning experience. This chapter examined various types of blended learning models and their practical application in the classroom. This literature further demonstrates how blended learning can benefit both teachers and learners by providing self-paced learning, increased engagement, deeper learning and instant feedback. However, factors such as a lack of technical resources, teachers' perceptions and absence of ICT skills and knowledge impede the successful implementation of blended learning in South Africa. Literature reveals that there is not enough time or effort devoted to ICT professional development in schools. The next chapter discusses blended learning theoretical and conceptual frameworks.

CHAPTER 3: THERORETICAL FRAMEWORK

3.1. Introduction

There are so many frameworks that have been developed to support the concept of blended learning. This chapter explores three frameworks for blended learning that Creative Arts teachers can use in their instruction. The three models considered in this research study are Complex Adaptive Blended Learning System (CABLS), the community of inquiry framework and the TPACK model. These models were thoughtfully considered because they can be used to guide Creative Arts teachers in incorporating blended learning into their classroom instruction. This chapter begins by defining theoretical framework and demonstrates its significance in research.

3.2. Theoretical framework

The theoretical framework serves as a "blueprint" for the whole research investigation. It serves as a foundation for the research, as well as a framework for defining how the researcher approaches the dissertation philosophically, epistemologically, methodologically, and analytically. A theoretical framework, according to Osanloo and Grant (2016) is a structure that directs research by depending on a formal theory...constructed by employing an established, cohesive explanation of particular events and connections. As a result, the theoretical framework is made up of the selected theory (or theories) that underpins the thinking about how the researcher understands and intend to explore the issue, as well as important terms and terminology from that theory. Theoretical frameworks are also known as conceptual frameworks; however, these concepts are not interchangeable or identical. They might be ambiguous and cause confusion. As a result, it is critical to distinguish these concepts. We separate the two words by emphasizing that a theoretical framework is generated from an existing theory (or theories) in the literature that has previously been tested and confirmed by others and is widely accepted in the academic literature.

According to Merriam (2002), it is the researcher's lens through which to perceive the world. It is the researcher’s job to create a unique application of the selected theory (or theories) in order to apply theoretical concepts to research study. In quantitative designs, theoretical frameworks are traditionally constructed a priori, or before data gathering. A theoretical framework, on the other hand, may include a theory produced throughout the course of the research investigation. To prevent the researcher from

imposing assumptions on the findings, qualitative research designs may begin with a structured or less organized theoretical framework. In the latter situation, the theoretical framework is frequently emerging during the data analysis phase (Osanloo and Grant,2016).

3.2.1. The Complex Adaptive Blended Learning System (CABLS) FRAMEWORK

In order to understand the concept of blended learning and determine its effectiveness, this study engaged the complex adaptive blended learning systems (CABLS) framework. This framework was proposed by Wang, Han and Yang (2015) and was specifically developed to provide a comprehensive view of blended learning design and implementation. The CABLS framework consists of six elements or subsystems. Figure 6 illustrates the six subsystems and their relationships: the learner, the teacher, the content, the technology, the learning support and the institution. The first element in the centre of the model is the learner, the other five elements are arranged around the learner and they are seen as interacting with the learner and with each other. The CABLS framework looks at the roles of all the subsystems required in blended learning and how they interact, so that we can plan a blended learning system that takes all these elements in account.

- The learner in the CABLS framework is viewed as a complex subsystem, that evolves with other subsystems and constantly acquiring new identities (Wang et al, 2015). The learner in blended learning grows from being passive to being active, resulting from undergoing a process of change as they interact with other subsystem. The CABLS framework classifies the learners as a researcher, a collaborator and a practitioner. In a blended learning environment, the learner is expected to participate in engaging activities as an individual, as well as work in group assignments to encourage collaboration and teamwork (Mathur and Shukla, 2022). Learners must collaborate and present their work as a group; learners must also have access to each other's work and provide feedback in order to deepen their understanding and be active learners.
- The teacher comes in as a facilitator of learning, advisor, guide and moderator of learning (Wang et al, 2015). The teacher doesn't teach but provides guidance, mentor, advise and moderate. This approach is similar to the

constructivism approach to learning, which allows learners to be active constructors of their learning while the teacher acts as a knowledge facilitator, providing guidance and advise to the learner (McGee and Poojary, 2020).

- The content is designed in such a way that it moves from shallow learning to individualised learning, collaboration, interaction, problem based learning and deeper learning (Wang et al, 2015). The facilitator must identify the learning outcomes of the content, in a situation where the facilitator is not the one who developed the content, they need to look out for the learning outcomes by using problem solving techniques. The facilitator must use the flipped classroom to scaffold and question techniques to guide learners and they can also use discussion forums (McGee and Poojary, 2020).
- Technology is provided as synchronous and asynchronous; the technology can be online or offline, this element moves from adoption to adaption to suit what the instructor wants to use it for. This element moves from technology integration to technology for learning which calls for new roles for the learners and teachers. According to Wang et al (2015) the technologies we select creates a new role for both the teacher and the learner and also changes the way we work with the content and the learning support we may require. The teacher needs to be sure of the available infrastructure and the level of knowledge in technology transfer by the learners.
- The learning support deals with service or support, this element shifts from academic support to technology troubleshooting, material access, online communication strategies, learning strategies (time management and collaborative skills). The facilitator needs to be ready to provide technical support to the students and needs to be aware of available access devices before facilitation (Mathur and Shukla, 2022). The teacher must be willing to be flexible with the use of accessible devices, use positive feedback and comments, and Provide technical support to students. The facilitator must provide a platform where students can highlight their challenges and receive support such as emails, chats, hangouts. The teacher must also encourage teamwork, as part of learner support, so that learners will give each other support without waiting for the facilitator.

- The institution brings in the strategy, support, service and infrastructure. This element looks at technology infrastructure, moving from traditional classroom to modern classroom (Wang et al, 2015). The learner needs all these elements to be able to progress in a blended learning approach.

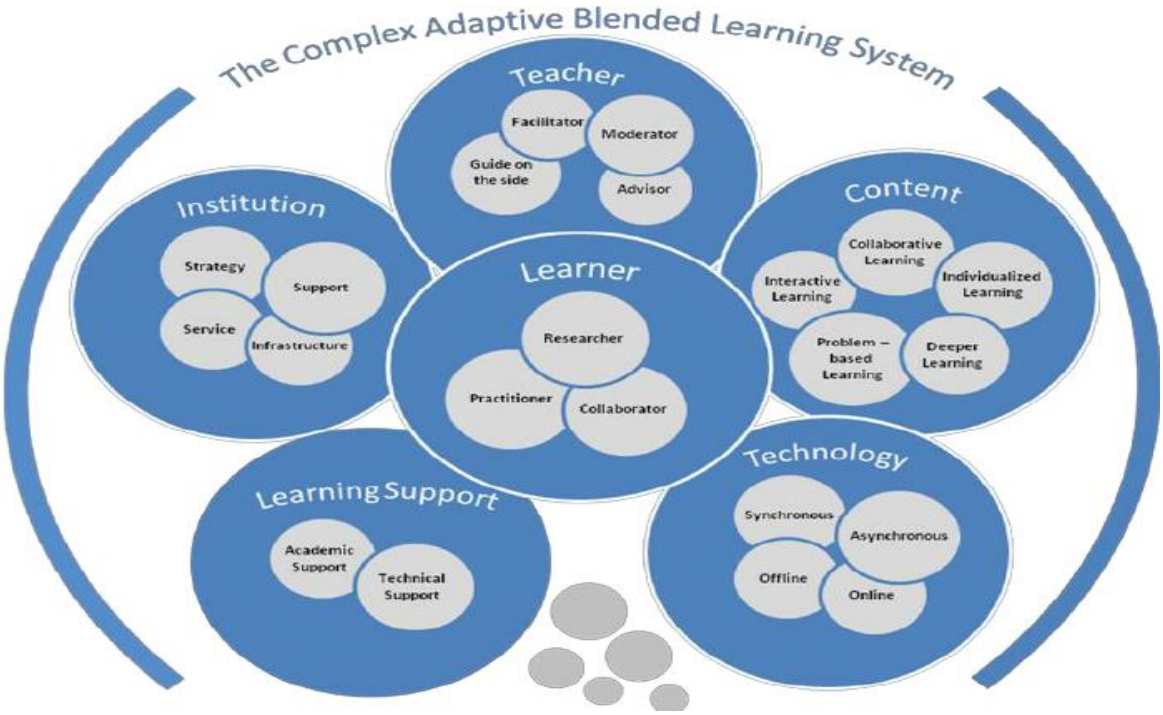

Figure 6. The CABLS framework

3.2.2. The community of inquiry framework

The community of inquiry framework was proposed and developed by Garrison, Anderson and Archer (2000). This theoretical framework structures the process of learning in an online or blended learning environment and advocates for the creation of deep and meaningful learning. The community of inquiry framework provides learners with an opportunity to construct their own knowledge from their individual experiences and learning in collaboration with others by sharing and developing knowledge together to meet the learning outcomes (Khan, 2022). The community of inquiry framework was built upon the pragmatism and constructivism theory, as it focuses on experiential learning, active learning, collaborative learning and learning that reflects real-life situations.

The community of inquiry framework describes the necessary elements to create deep and meaningful learning (Mathur and Shukla, 2021). This framework identifies three

presences in which education experience occurs (See figure 7): cognitive presence, teaching presence and social presence. The term presence is used to emphasise that learning is the state of awareness and connectedness within the individuals in the group in the context of their learning environment. The community of inquiry emphasis on active learning. This framework focuses on meaningful engagement opportunities between the teacher and the learner rather than direct instruction about content. Learners in the community of inquiry learn through active inquiry by asking questions and receiving feedback to advance learning, while the teacher guides and facilitates learning.

- The teaching presence relates to the teacher's role in a course. This involves planning what will be taught, providing resources to learners and guiding learning through activities and assignments (Zhang, 2020).
- The social presence is defined as the ability of participants to identify with the community, communicate purposefully and develop interpersonal relationships by projecting their individual personalities (Akyol, Garrison and Ozden, 2009). The social presence component expects the leaner to be socially present, by working with others to create a community environment and also communicate with others to build interpersonal skills
- The Cognitive presence is defined by Akyol et al (2009) through the practical inquiry model that consists of four phases: triggering event, exploration, integration and resolution. According to Khan (2022) the cognitive presence is related to the extent to which learners are able to construct and confirm meaning through sustained reflection and discourse. Cognitive presence involves learners who are actively engaged with the learning material and activities, thinking critically about concepts and making connections between ideas as individuals and in groups. When learning with others, the learner is expected to share ideas and knowledge with others, asking thoughtful questions to others so that they explore their thinking.

For every learning experience the learner must have all these presences so that they learn adequately. Community of inquiry framework in blended learning, creates opportunities for self-reflection, active cognitive processing, interaction and peer-teaching (Mathur and Shukla, 2022). Under this framework effective blended learning means creating opportunities, meaningful engagement other than direct instruction.

Create activities that allow learners to construct their own knowledge. Blended learning means taking advantage of the technologies that support dialogue and community not just computer supported content delivery (Khan, 2022).

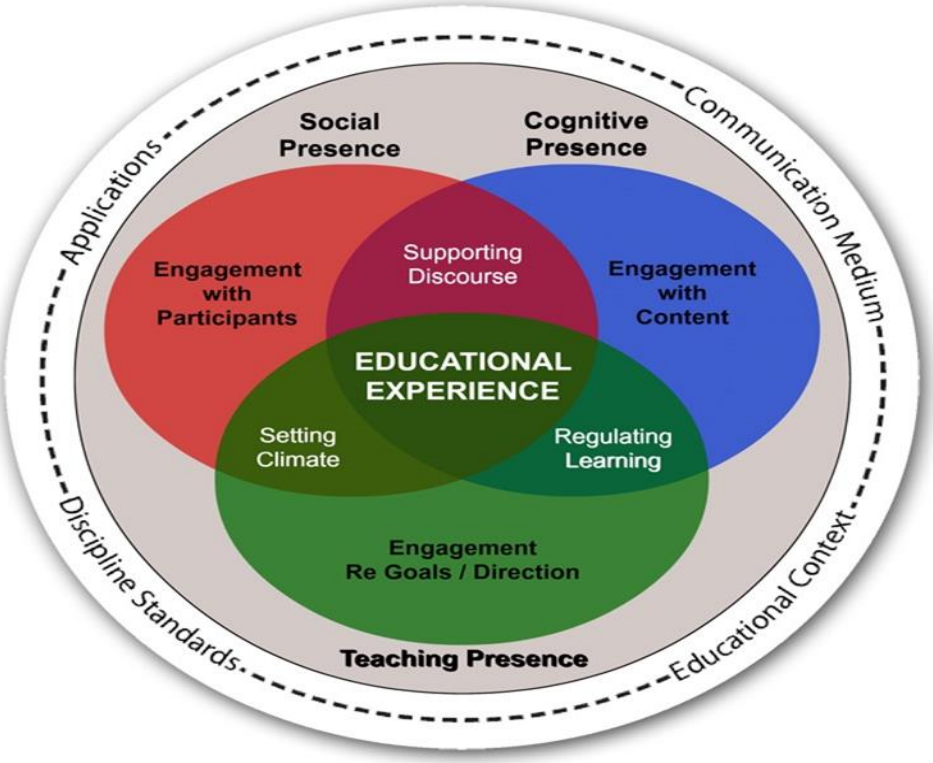

Figure 7: The Community of inquiry

3.2.3. TPACK Model

To measure the effective integration of blended learning this research study examines the TPACK framework developed by Mishra and Koehler (2006). Studies reveal that effective use of technology in the classroom is necessary for the successful implementation of blended learning in education. According to the literature review, one of the barriers to the successful integration of blended learning in education is teachers' lack of skills and knowledge to effectively integrate technology in their classrooms. The TPACK framework by Mishra and Koehler (2006) was constructed from the development of PCK (Pedagogical Content Knowledge) by Shulman (1986), TPACK offers a practical solution to the numerous challenges that teachers face when integrating ICT into their classrooms. The TPACK model is a pedagogical framework use to understand the different but related kinds of knowledge needed by the teacher for the effective pedagogical practice in a blended learning environment.

Mishra and Koehler (2006) claim that teaching is a complex activity that requires one to draw on different kinds of knowledge for it to be effective. Mishra and Koehler (2006) highlight three components of knowledge that are essential in education: content, pedagogical and technological knowledge. To effectively integrate blended learning in the Creative Arts classroom, the teacher must have technological knowledge, content knowledge and pedagogical knowledge.

- Content knowledge (CK) is defined by Mishra and Koehler (2006) as knowledge about the subject matter that is to be taught to learners. Shulman (2004) defines content knowledge as "…the amount of and organisation of knowledge per se in the mind of the teacher" (pg.201). This is basically the knowledge that the teacher possesses about the subject matter that they offer (concepts, skills, theories and procedures).
- The pedagogical knowledge (PK) is the practice or method of teaching used during teaching and learning process (Moreno, Montoro and Colon, 2019). This basically looks at the teaching approach that the instructor applies during teaching and learning, in order to assist the student to learn better. The pedagogical content describes how the instructor disseminates the content.
- Technological knowledge (TK) refers to the teacher's understanding of how to use technology in the classroom to improve teaching and learning. According to Mishra and Koehler (2006) the technology applied must communicate the content and support the pedagogy outlined.
- Pedagogical Content Knowledge (PCK) speaks about the subject-matter expertise related to the instructional process (Shulman, 1986). This is a combination of pedagogical knowledge and content knowledge which is implemented in the classroom by the teacher.
- Technological Content Knowledge (TCK) presents relationship and intersections among technologies and learning objectives. TCK tries to describe how teachers' understanding of technology and content can both influence each other. TCK also entails comprehending how the subject matter can be presented through various educational technology offerings and determining which educational technology tool is best suited for a specific subject matter or classroom (Qasem and Viswanathappa, 2016).

- Technological Pedagogical Knowledge (TPK) describes the relationship and interaction of technology and pedagogical practices, as well as teachers' understanding of how specific technologies can change both the teaching and learning experiences. TPK is also interested in determining how technological tools can be used in conjunction with pedagogy in ways that are appropriate to the development of the lesson at hand (Qasem and Viswanathappa, 2016)
- Technological Pedagogical Content Knowledge (TPACK) presents a relationship between technology, content and pedagogy. These three components need to intersect so that the teacher can be able to teach effectively and engage learners with technology, this interaction is classified as TPACK (Mishra and Koehler, 2006). According to Moreno et al (2019) TPACK refers to the interaction of three main domains, technological content knowledge (TCK), Technological Pedagogical Knowledge (TPK) and pedagogical content knowledge (refer to figure 7).

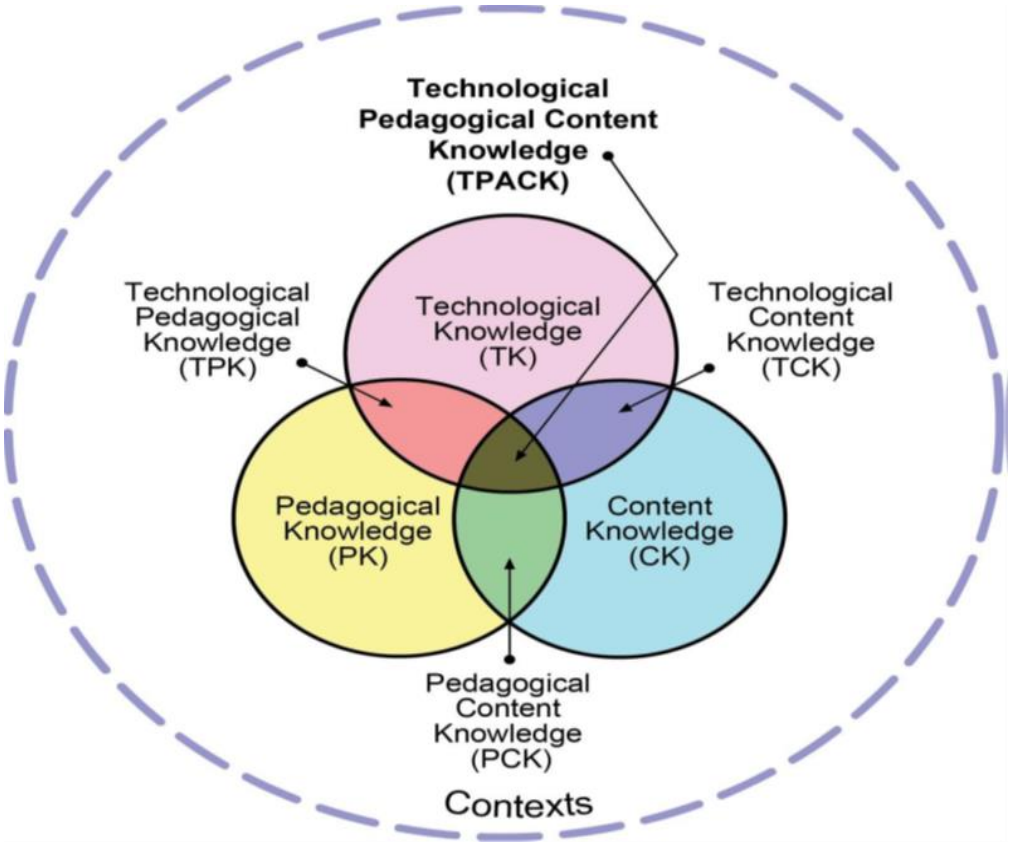

Figure 8: TPACK Model

3.3. The adopted frameworks: CABLS and TPACK Framework

This research study will be guided by the CABLS conceptual framework and the TPACK theoretical framework. To determine the effective implementation of blended learning in Creative Arts this study has adopted the CABLS framework. The effective implementation of blended learning requires one to understand the different subsystems that are involved in blended learning and how they interact and affect each other. Instructional designers need to be aware of the relationship that exists between content, learners and technology and must consider that while designing the blended classroom. Creative Arts teachers who are engaged in the blended learning environment must adapt pedagogies and technologies that are appropriate for blended learning and the learners.

To determine effective implementation ICT in blended learning this research study has adopted the TPACK model by Mishra and Koehler (2006). The TPACK model, as mentioned above is, made up of three knowledge components: the CK, PK and TK. The effective implementation of blended learning requires the teacher to possess all the three components of knowledge. The integration of the three pillars of knowledge provides an effective teaching and learning environment. To promote effective learning and teaching, Creative Arts teachers must know how to use technology constructively to teach content both online and in the classroom. For the purpose of delivering the necessary lessons and establishing attainable educational objectives, Creative Arts teachers must also have strong content knowledge of the subject. Teaching in the classroom and online will require the teacher to hold good pedagogical knowledge that will allow them to implement different teaching methods to cater for learners' needs both online and in the classroom effectively. Creative arts teachers need to understand the importance of all these major components of knowledge and how they impact on each other to promote effective blended learning experience.

3.4. Conclusion

The chapter investigated the roles of the CABLS framework, the community of inquiry framework, and the TPACK model in integrating blended learning in the Creative arts. This chapter examined the CABLS framework in order to assess the design of the blended learning approach. It was noted that this framework attempts to facilitate a deeper understanding of blended learning by emphasizing the various roles that both

teachers and students must adopt in order to successfully implement this approach in education. The community of inquiry was studied in this chapter as part of online education, this framework examines interaction in computer mediated instructional approach both synchronous and asynchronous. This chapter investigated the community of inquiry as part of online education; this framework investigates interaction in a computer-mediated instructional approach. The TPACK model was investigated to determine its applicability in the teaching of creative arts using a blended learning approach. It was noted that this framework examines various components of knowledge (CK, TK, and PK) that a teacher should have in order to effectively integrate blended learning in the classroom. The following chapter examines the methodology that will be used in this study to understand Creative arts teachers' perceptions of blended learning. In essence, this study will use a qualitative approach, with interviews serving as the primary data collection tool.

CHAPTER 4: RESEARCH METHODOLOGY

4.1. Introduction

This chapter describes in detail the research methodology that was adopted in this study under the following sub-headings: research paradigm, research method, sampling strategy and data collection method. The chapter will further discuss the issue of reliability and validity, and the ethical considerations that were employed in this study.

4.2. Research methodology

A research methodology is classified as a procedure of inquiry based on the nature of the research problem (Cresswell, 2014), it is a plan that describes how the research will be carried out, how data will be collected and analysed. Walliman (2011) describes research methodology as a technique that you use to do research. According to Almalki (2016) research methodology is a procedure employed by the researcher that highlights how the inquiry or investigation will be administered. A research methodology can therefore be understood as a pathway that a researcher takes to conduct his or her research. It is a form of a tool that a researcher works with to conduct their research or collect and analyse data for the specified problem. There are three research methods that a researcher can work with to carry out their research study namely, qualitative, quantitative, and mixed methods.

4.2.1. Qualitative method

Johnstone (2000) defines a qualitative method as an approach that is concerned with how individuals view and understand the world and construct meaning out of their experiences. A qualitative research claims to describe the world from the point of view of people who participate in it (Flick, Kardorff and Steinke, 2000). This research approach is mainly concerned about the views, attitudes and experiences of individuals pertaining to a certain issue or area of research focus. In most cases this research approach is interested in understanding why people think or behave in a certain way.

4.2.2. Quantitative method

A quantitative research method is based on the measurement of quantity or amount (Kothari, 2004). It is an approach that tests the objectives of theories by examining the

relationship among variables (Cresswell, 2014). According to Cresswell (2014) these variables can be measured using instruments, so that numbered data can be analysed using statistical procedure. This research method is concerned with gathering numerical data to test the theory. The numerical data collected is then generalised among different groups of people.

4.2.3. Mixed method

Creswell (2014) defines mixed method as a research approach that integrates the two forms of research approach (qualitative and quantitative) by using philosophical assumptions and theoretical frameworks. Almalki (2016) describes mixed method as an approach that employs the elements of both qualitative and quantitative approach to gain deeper understanding of the research problem. This approach to research allows the researcher to collect and analyse both qualitative and quantitative data within the same research study. Mixed method comprises of both the qualitative and quantitative approach viewpoints and data collection instrument. According to Cresswell (2014) combination of both data provides a complete understanding of a research problem.

Taking into consideration the research problem and paradigm of this study which is concerned with the experiences of Creative arts teachers regarding blended learning, this research study will adopt a qualitative research method. A qualitative research method will be suitable for this study because of its concern with the experiences of individuals. According to Mohajan (2018) qualitative research is a form of social action that aims to look at how people interpret and make sense of their experiences to understand the social reality of individuals. Adopting a qualitative research approach for this study will allow for in-depth understanding of the experiences of teachers regarding blended learning. This approach will help the study gain deeper understanding of the kind of professional development Creative Arts teachers need to help them teach effectively using blended learning.

4.3. Research paradigm

The term paradigm is defined by Kivunji and Kuyini (2017) as a philosophical way of thinking. It is used to define the researcher's way of thinking about the world, how they see, interpret and act within that world. According to Creswell and Creswell (2018) a research paradigm is understood as a set of beliefs or worldview that guides action or

research investigation. This worldview is the perspective that informs the meaning of research data, it highlights the researcher's assumptions, beliefs, norms and values. A research paradigm has a significant implication for every decision that is made in the research process, it informs a specific methodological framework that the researcher adopts and how data will be analysed to construct meaning (Henning, Van Rensburg and Smit, 2004). They are three dominant research paradigms applied in educational research, namely, positivist, interpretivist, and critical paradigm. These frameworks are different philosophies of knowledge, that inform a specific methodology that a researcher can adopt. Methodology is concerned with the specific way or methods that we can use to try and understand our world better (Hennings et al, 2004)

4.3.1. Positivist approach

Positivist paradigm is defined as the scientific method to investigation, it is concerned with providing explanations and to make predictions based on measurable outcomes (Kivunji and Kuyini, 2017). This research paradigm is rejection of metaphysics, as it is based on experimentation, observation, and reason to understand human behaviour (Hennings et al, 2004). According to Kivunji and Kuyini (2017) the positivist paradigm refers to the researcher's attempt to formulate hypothesis and test those hypotheses. Creswell and Creswell (2018) further states that this research paradigm is used to research for cause-and-effect relationship in nature. Positivist paradigm "reflect the need to identify the cause that influence the outcome, such as those found in experiments" (Creswell and Creswell, 2018, pg. 6). Positivism therefore assumes that the understanding of human behaviour or knowledge should be grounded on observation, experimentation, and reason. Only knowledge that can be proven scientifically through observation should be considered true.

4.3.2. Interpretivist/ constructivist approach

The interpretivist paradigm aims to understand the subjective world of human experience, it tries to get into the head of the subjects being studied to understand their thinking regarding the study conducted (Kivunji and Kuyini, 2017). This research paradigm argues that knowledge is not only constructed by measurable outcomes, but by people's intentions, beliefs, values and reasons (Hennings et al, 2004). Hammersley (2013) further states that interpretive theory places its emphasis on the

individual and their interpretation of the world. The interpretivist approach believes that reality is socially constructed, people actively interpret their world based on the cultural environment they live in, the culture in which one is brought up influences their beliefs and actions (Hammersley, 2013). The interpretivist paradigm believes that individuals create their own interpretation of the world and therefore it is important to understand the world from the perspective of the individual's experience.

4.3.3. Critical approach

Critical paradigm also known as a transformative paradigm is concerned with social justice issues. This approach seeks to address political, social, and economic issues that lead to social oppression, conflict, struggle, and power structures Creswell and Creswell (2018, pg. 9). This research paradigm aims to change politics to confront social oppression and improve social justice (Kivunji and Kuyini, 2017). Research study that is grounded on critical paradigm is mostly concerned with politics and power relation within social structure, its knowledge is mostly situated socially and historically. It also relies on the experiences of individuals regarding social and political issues to address social oppression in order to improve social justice. Creswell and Creswell (2018) state that this philosophical worldview is focused on the needs of individuals in our society that may be marginalised.

This research centres on behavioural sciences, as it looks at peoples' experiences and perceptions of their world. The study has therefore adopted the interpretive paradigm approach as a framework as it is concerned with understanding the viewpoint of the participants. This study has made use of the interpretive paradigm because it focuses on engaging with the subjects being studied to gather data that will help try to answer the research problem. This research study is concerned with understanding the experiences of teachers regarding blended learning and how they use blended learning in their teaching, an interpretive paradigm is grounded on the need to understand the individual rather than universal law. The interpretive paradigm believes that knowledge or the reality is socially constructed and therefore it is important to look at the worldview from the perspective of individuals rather than on mere observation and experimentation.

4.4. Case Study

This research study constitutes a case study. A case study approach is defined by Stake (2005) as a process of building a deep understanding of a "boundary system" or particular entity (such as a person, organisation or phenomena) by investigating the particular contextual influences and complexities using many data sources. Yin (2009) defines a case study as an empirical inquiry that investigates a contemporary phenomenon within its real-life context. A case study approach aims to investigate a particular person, group or an organisation in-depth, using different data collection methods such as interviews, questionnaires or observations. Yin (2012) states that a case study method allows investigators to retain the holistic and meaningful characteristics of real life events such as individual life cycles, small group behaviour, managerial processes school performance and neighbourhood change.

The case study approach is best selected for a qualitative research as it is best fit for data collection and analysis. A case study research aims to answer the 'how' or 'why' questions asked about a particular entity over which the research has no control (Yin, 2003). A single case study focuses on a specific phenomenon arising from a particular entity, allowing for an in-depth understanding of that single phenomenon (McMillan and Schumacher, 1993). A single case study thoroughly investigates a single case, which can be an individual, an institution or a concept. The study then collects data using various data collection methods. A multiple case research study allows for an in-depth understanding of different cases as a unit, by comparing their similarities and differences.

In the case of this research, the study used the multiple case study to investigate the perceptions of Creative arts teachers in integrating blended learning in their practice. Participants in this research study came from various schools, indicating that they are not from the same state of context, and thus their backgrounds, experiences, and perceptions of blended learning differ. According to Yin (2003) multiple case study allows the research to compare differences and similarities within and between cases making a stronger and reliable research. The research study treated each case as if it were a single case. The similarities and differences that exist within and between the cases were then compared and used as information contributing to the whole research, in order to understand Creative arts teachers' attitudes toward the use of blended learning in their practice.

4.5. Sampling of participants

A sample is a group of people that are taken from a large population for measurement (Nayak and Singh, 2015). According to Nayak and Singh (2015) the sampled population need to ensure that the findings from the research can be generalised to suit the whole population. This study made use of purposive sampling, purposive sampling is defined by Alkassim and Tran (2016, pg.2) as the deliberate choice of a participant due to the qualities the participant possesses. This research study sampled Three schools from the Ekurhuleni North district. Two participants were selected in each school to take part in this study. The participants consisted of the Creative Arts teacher who uses blended learning and an ICT committee member, in total 6 teachers took part in this study. According to Creswell (2014) qualitative inquiry should not generalise to a population, but must provide an in-depth exploration of the central issue and this can be achieved through purposeful selection of participants. This research study has purposefully selected the above individuals and sites because of their in-depth knowledge and understanding of blended learning, this has helped the researcher to gather useful data to develop a detailed understanding of the research question.

4.6. Data collection instrument

Data collection method is the procedure of collecting and measuring information for research (Abawi, 2017). This simply refers to ways in which the researcher gathers information from the selected participants to address the research problem. Data collection instrument is the tool that the researcher uses to collect the information required for research. Data collection instruments in qualitative study require the researcher to work closely with the participants (Cresswell, 2014). There are different data collection instruments in a qualitative study that researchers can work with, these are interviews, observation, group focus, questionnaire, laboratory experiments, quasi experiment, scales, archival documents, and government sources. The most common instruments used are interviews and focus groups as they allow the researcher to intensively engage with the participants. This research study made use of interviews as data collection instrument in order to enable the researcher to engage with the participants closely. This allowed the researcher to gain deeper understanding of the research in question.

4.6.1. Interviews

Dilshad and Latif (2013) define interviews as a form of communication between people, with the aim of obtaining research relevant information from the interviewee to achieve the research objectives. semi-structured online Interviews were conducted between the researcher and the Creative Arts teacher in the five schools selected. Another online semi-structured interview was between the researcher and the ICT committee member in the five schools selected. A semi-structured interview is defined by Bernard (1988) (as cited in Cohen and Crabtree, 2006) as a formal interview between the interviewer and interviewee, the interviewer develops and uses an interview guide that consist of questions and topics that need to be covered during the conversation. The interviewer follows the guide, but is able to include open-ended questions during the interview.

The interviews were conducted online, Chen and Hinton (as cited in Lobe, Morgan and Hoffman, 2020) state that online interviews are versions of traditional methods with the use of internet instead of face-to-face interaction. With the impact of Covid-19 and the focus of this research, the researcher saw it fit to conduct these interviews online with the consent of the participants. The researcher led the interview by posing guiding open-ended questions. Open-ended questions allow the participants to voice out their experiences unconstrained, they also permit the researcher to explore reasons for the closed-ended responses (Creswell, 2012, pg. 218-220). This allowed the researcher to gather useful detailed information from the participants. The interviews were recorded with the consent of the participants, this allowed the researcher to be fully engaged in the interview without any disturbances. The recordings (information) were then transcribed into words for analysis.

4.7. Data analysis

Data analysis is an essential component of any research study because it helps make sense of the data collected in order to formulate meaning to the research question. According to Henning et al (2004) qualitative data analysis is an ongoing process that aims to capture understanding of the data in writing, it is a procedure that requires the researcher to “convert ‘raw’ data to find patterns of meaning” (pg. 102). This study adopted ‘The qualitative process of data analysis’ by Creswell (2012) (see figure 7) to analyse data. The data was collected from the interviews and transcribed the same

day, allowing the researcher to capture responses on time and verify the conclusion. To get a general sense of the material, the researcher read through the transcribed data. The data was then coded into categories of related ideas and concepts. The data was then interpreted in relation to the research questions using relevant literature.

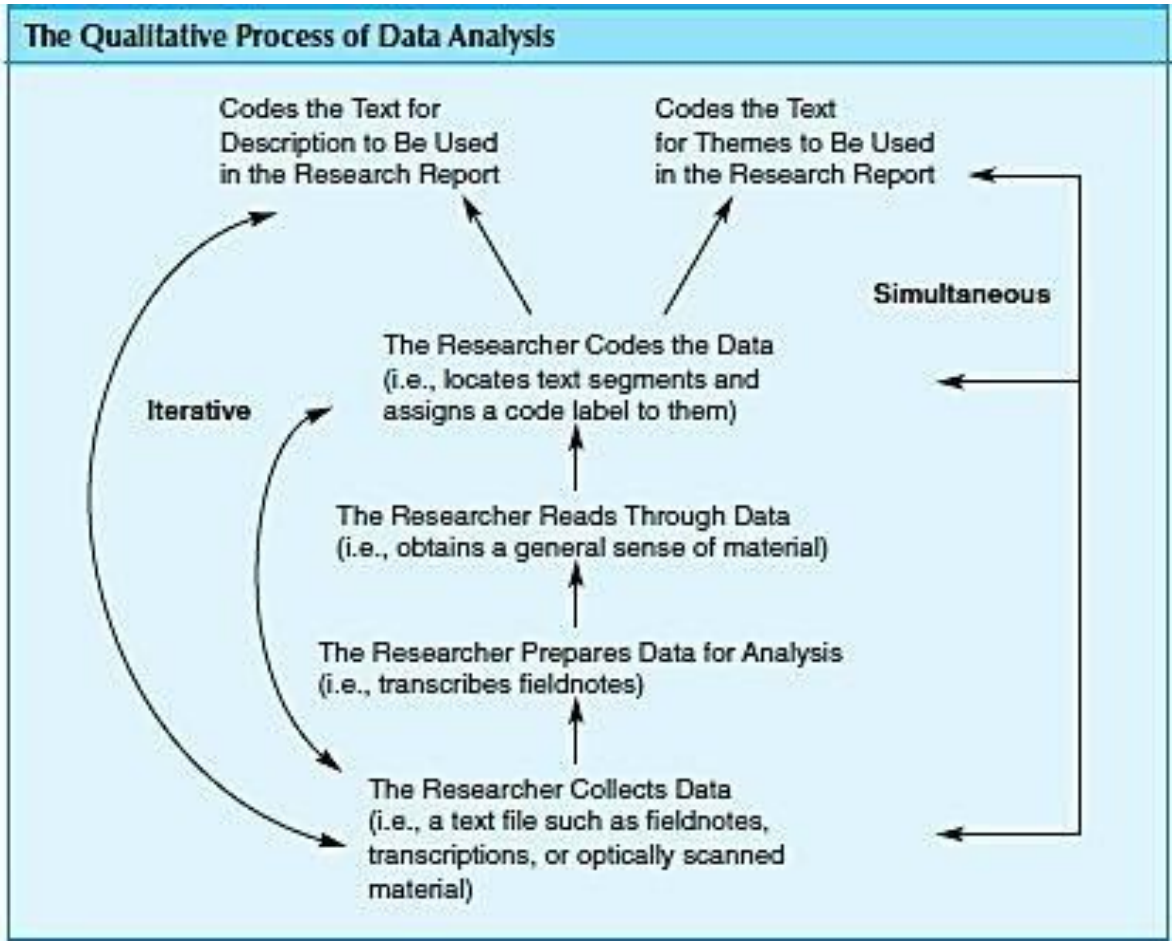

Figure 9: The qualitative process of data analysis (Creswell, 2012, p237)

4.8. Reliability and Validity

This study aimed to collect reliable data from the participants. Creswell (2012, pg. 159) defines reliability as a "…score from an instrument that is stable and consistent". Creswell (2012) further states that if the score can be reproduced when other researchers administer the instrument multiple times at different times, the research instrument is considered reliable. To ensure reliability and validity the transcribed information from the interviews were taken back to the participants in order to verify the data collected. This was done to remove or reduce any misunderstandings and misinterpretation of information to ensure accurate results analysis.

4.9. Ethical issues

When carrying out a research study it is important to keep ethical issues in mind, in order to protect your research participants and institution. According to Arifin (2018) it is important to apply ethical principles in all research study, to ensure that the identity of your participants is protected and to manage distress during interview. Creswell and Creswell (2018, pg. 90) state that ethical issues should be applied throughout the research process, “prior to conducting the study, beginning a study, during data collection and analysis, and in reporting, sharing and storing the data”.

The participants in this study were informed about the purpose of this research before data collection. Participation information sheet was issued to all participants to highlight the purpose of the study. Participation in the study was also voluntary and the participants were informed that they have a right to withdraw from the research study at any time should they wish to do so. Consent forms were given to all participants to indicate their participation. The participants were also informed that this study research is not for personal gain or otherwise, but for academic purposes only. Participants were also informed that they won’t be paid for participating in this study, but will anonymously acknowledged for participating in the study.

To ensure anonymity and confidentiality the names of the participants and their schools were not disclosed. The schools were replaced by pseudonyms such as school A, school B and school C. Furthermore, the real names of teachers were replaced by teacher 1A, teacher 2A, teacher 1B, teacher 2B and teacher 1C, teacher 2C, respectively. The participants were assured that the information provided during data collection will not be used for any other purpose other than the one stated on the information sheet. In addition, data collected during interviews will be treated with confidentiality and will be stored in a password protected laptop which only the researcher has access to. Data will then be erased after 3-5 years.

The ethical clearance application was submitted to the university of the Witwatersrand (Wits school of education) and the clearance to carry out the research was granted (See Appendix A). The researcher was granted permission by the Gauteng department of education to access the schools before data was collected (see Appendix B). A letter to the principal was issued to all sampled schools to get consent

to use their organisation. Letters granting the researcher permission to conduct the research were provided by the different schools.

4.10. Conclusion

This chapter described the methodology used in this research study, including participant sampling, data collection technique, and data analysis method. The qualitative method approach was used in this research, and the interpretivist paradigm was used as lens to help the researcher gain clear understanding of the phenomenon being studied. In this chapter, ethical and privacy considerations were also addressed. The following chapter presents the findings gathered from the interviews, along with a detailed description of data analysis and an interpretation of the findings.

CHAPTER 5: DATA PRESENTATION, ANALYSIS AND SUMMARY OF FINDINGS AND DISCUSSION

5.1. Introduction

This chapter presents, analyses and interprets data obtained from this empirical research. Data for this study was gathered through recorded interviews to ensure accurate data capture; some interviews were conducted in person, while others were conducted online. The responses were then transcribed in order to make it easier to present, analyse, and interpret the collected data. The data gathered from the interviews was intended to provide a more in-depth understanding of teachers' perceptions in fostering blended learning in Creative Arts. Furthermore, the chapter analysed data to identify identical themes in order to answer the research question, "What are the perspectives of Creative Arts teachers on the use of the blended learning approach?"

5.2. Data presentation

Data is typically collected in raw form, and the information can be difficult to interpret; therefore, data must be summarised, processed and analysed in such a way that it can be easily interpreted (In and Lee, 2017). To avoid losing vital information that can benefit both the author and the readers, manipulated data must be effectively presented in the form of textual (descriptive) presentation, table frequency, and diagrammatic display (graphs), this makes it easier for the writer to present extensive, complex information, grab the reader’s attention, and sustain their interest (Babajide,2022; In and Lee, 2017). Textual presentation is the method of explaining findings, identifying trends and providing contextual information in a narrative description (In and Lee, 2017). According to Yang (2013) textual presentation presents data in words, sentences and paragraphs.

The table frequency is best suited in presentation of individual information for both quantitative and qualitative data (In and Lee, 2017). The tabular presentation organises large amounts of data into rows and columns, making it simple to read and comprehend. The diagrammatic display makes use of graphs, charts & maps to add visual aspects of data collected (Babajide, 2022). Diagrammatic displays are effective for facilitating comparison and revealing trends, patterns and relationships over time (Liu, 2013).

The data collected from this research study was processed and presented in both table frequency and textual presentation. Data was presented in relation to the following research areas: (1) Teachers' understanding of blended learning; (2) Teachers' experiences in promoting blended learning in their practice; (3) Challenges of integrating blended learning in education and (4) Professional development. Before the data is presented and analysed, profiles of the schools and participants are given. Pseudonyms have been used in lieu of the names of study participants and participating schools due to ethical considerations. Schools were coded A, B and C from the first school to the last school and the teachers were coded T1A, T2A…, T2C respectively.

5.2.1. Background of the schools and their participants

The three secondary schools (school A-C) that participated in this study are located in in the East Rand region of Gauteng. The reason for choosing these schools was to compare schools with similar backgrounds, to examine whether they have the same experiences or challenges since they are in the same suburb. The schools are fee paying schools, under quintile 5. The majority of the learners come from middle-income families. Not far from the schools there is an informal settlement and some of the children from this area attend in these three schools. Learners who cannot afford to pay the fees are exempted fully or partially. The total population of learners in each school is below 800 served by 35+ teachers. There is no overcrowding in classes, the schools monitor its enrolment with the aim of having less than 35 learners in each class.

The schools embrace modern technology to make education more accessible. The schools have fully operational websites that provide visitors with relevant academic and background information. The schools also run social media platforms (Facebook, Instagram, Tik-tok and WhatsApp) for communication purposes. Teachers have access laptops with internet connection, their classrooms have projectors and white boards. The schools have computer laboratories with top of the range system, the computer labs have internet access and can be used by both teachers and learners. School B incorporates Google education in their practice, to keep up with the department of education vision on ICT integration in schools. School A and C also uses the D6 premium communicator for communication and curriculum purposes.

5.2.2. Teacher profile

Table 1 below presents the profiles of the Creative Arts teachers in the three schools sampled. This data was collected through interviews. The table depicts the teachers' profiles from T1A to T1C. The schools will be referred to as A-C, A (for school A) and B (for school B) and so on. The Creative arts teachers will be referred to as T1 (for Teacher 1) – T1A refers to Creative arts teacher in school A and T1B will be the Creative arts teacher in school B and so on. **Table 2** presents the profiles of the ICT co-ordinators in the three schools sampled. The data was also collected through interviews. The table shows the teachers' profiles from teacher T2A to teacher T2C, which will be referred to as teacher 2A (for ICT co-ordinator in school A), teacher 2B (for ICT co-ordinator in school B) until teacher 2C.

The study used interviews to collect data from both the Creative arts teachers and ICT co-ordinators. Interviews were conducted online. The Creative arts teachers were between the ages of 25 to 35 years and they all have more than three years teaching experience in the field. The Creative arts teachers were all females with arts as their specialisation. The ICT co-ordinators age ranged from 25 to 50 years. It was noted that the ICT members who participated in this study were CAT (computer application technology) teachers and they were all male.

Table 1: Creative Arts teachers' profiles

Participants	Teaching experience	subjects	Qualification	Art forms offering
T1A	10 years	Arts and English	B.Ed. hons	Dance & visual arts
T1B	3 years	Commerce and Arts	B.Ed.	Drama & Dance
T1C	3 years	Arts (Music)	B.Ed.	Music & Dance

Table 2: ICT co-ordinators' profiles

Participants	Teaching experience	subjects	ICT member experience	Qualification
T2A	3 years	CAT & English	2 years	B.Ed. hons
T2B	20 years	CAT & Life sciences	7 years	BSc in computer science
T2C	24 years	CAT (computer application technology)	20 years	M.Ed.

5.2.3. Teachers' understanding of blended learning

Blended learning is defined in literature by Graham (2006) as an educational approach that allows students to learn through online media as well as traditional face-to-face instruction. This instructional approach enabled learners and teachers to integrate ICT into the classroom and allowed for a fluid education between school and home. Although the history of ICT integration in South African school has not been positive, blended learning has given teachers and students the opportunity to seek out cutting-edge technologies to aid in the teaching and learning process. Mhlanga (2021) states that Covid-19 pandemic speeded the digital revolution of the education sector in South Africa

Although blended learning significantly changed how teachers used technology, it also changed how they guided and evaluated student learning. To meet the educational needs of their students, blended learning required teachers to improve both their teaching and technological capabilities. However, some teachers saw blended learning as a simple way to avoid physical contact while still meeting educational goals. In many cases, teachers assigned work to learners to complete without actually teaching. Many teachers find it difficult to incorporate blended learning into their practice because they lack knowledge and understanding of this educational approach.

While assessing the knowledge of the participants regarding blended learning, some of the participants displayed limited to no knowledge of this approach in education. In general, blended learning is an educational approach that openly evaluates and

integrates the benefits of in-person and online instruction to accomplish important educational objectives (Garrison and Vaughan, 2008). T1B mentioned that blended learning is about,

> *Using two or more different methods of teaching. The idea is that, when learners do not understand a concept taught, the teacher must use the other method.*

Notably, T1B response entails that blended learning is about varying teaching methods to reach learners' understanding. It is indeed clear from the participant that the idea of using technology as an instruction of learning is absent. The participant believes that to deepen learners' understanding, the teacher has to employ different teaching methods. This indicates that the participant is still rooted to Shulman's idea that a teacher should have two bodies of knowledge, that is, content and pedagogy.

However, T1C expressed mixed up knowledge about blended learning. To her, blended learning concerns "*the use of technology to conduct online learning*". It is evident that the participant has not grasped the full idea of what blended learning entails. Her explanation describes that there is no face-to-face lesson occurring. T2A also demonstrated the same understanding of blended learning. The participant mentioned that this learning occurs mainly online.

> *Blended learning is also classified as online learning, the approach allows learners learn through the use of media tools such as Zoom and MS teams [T2A]*

This view entail that blended learning is an online learning platform through the use of technology. It is also not clear from participant T2A how the idea of using ZOOM and MS Teams differ from face-to-face learning. Blended learning through the use of virtual platform such as Zoom or Teams is also classified as face-to-face method of teaching. T2B is of the opinion that blended learning is just a strategy employed to maintain social distancing. This is his remarks,

> *Blended learning is a strategy to avoid social contact between teachers and learners, but still allowing for learning to take place…teachers sent work to learners using WhatsApp groups [T2B]*

During the pandemic, one of the primary platforms used by many schools to foster blended learning was WhatsApp Messenger. Kumar and Sharma (2017) define WhatsApp messenger as a social platform that can be used as an e-learning tool to

send multimedia messages such as videos, photos and audios. Participant T2B is of the opinion that WhatsApp is a learning management system that can be used for blended learning. Although social media platforms can be used for communication and information sharing between teachers and learners, they cannot be considered as learning management systems. According to Annamalai (2019), the Whatsaap messenger focuses on cognitive load, information exchange and basic knowledge sharing, but it is not appropriate for learning achievement and course design, which require intensive reading, writing and individualised feedback.

Participant T2B also views blended learning as a strategy to avoid physical contact, the participant thinks that blended learning only happens online to avoid the spread of the Corona virus. Despite the fact that blended learning was introduced to many schools in South Africa during the pandemic, this teaching strategy had already been in use for some time. As highlighted in literature, blended learning combines in-person instruction with online learning with the aim of letting learners progress at their own pace and gain some autonomy to improve learning outcomes.

T1A demonstrated some understanding of blended learning. The participant mentioned that this learning occurs both face-to-face and online.

> *Blended learning is also classified as hybrid learning, it combines traditional learning and the use of media tools to allow learners to learn at their own space and pace. [T1A]*

The participant's view entail that blended learning is a combination of face-to-face and online learning with the help of technology. It is also clear from the response provided by T1A that the idea of using blended learning in education improves learning outcomes, by giving learners the autonomy to construct and pace their own learning. The participant's view is of the opinion that blended learning is based on the community of inquiry framework by John Dewey and the constructivist view to learning. Constructivism views learners as active makers of their own knowledge (Ahmed and Schreurs, 2012). Blended learning provides learners with the ability to construct, pace their own knowledge. This educational approach gives learners the autonomy to seek and construct their own knowledge through exploration with digital tools

Participant T2C is of the opinion that blended learning is about working in collaboration. This is his remarks,

Blended learning focuses on the collaborative nature of learning. This approach allows students to interact with each other to construct their own knowledge. Students interact with each other and their teacher through different communication and assessment tools such as blogs and e-portfolio.

Participant T2C is of the opinion that learning is socially constructed. According to T2C blended learning allows for learning to occur through sharing and discussion using different communication and assessment tools. It is therefore clear from the views of the participants that the coming of the blended learning approach heavily impacts the education system. Blended learning is a mixture of different educational paradigms hence a professional development activity is needed.

5.2.4. Teachers' experiences in integrating blended learning in Creative arts

Creative arts as a subject was introduced in the South Africa curriculum with the aim of exposing learners to different art forms, such as dance, music, drama and visual arts (CAPS,). Creative arts aim to develop learners into creative, imaginative individuals who appreciate the arts. Creative arts expose learners to different life skills, literacy skills and learning skills that are needed in the 21st century, such as creativity, working in collaboration with others, communication skills, critical skills, social skills, technology and media skills. This informs us that Creative Arts as a subject aim to prepare learners for the digital era and the constantly changing workforce. The use of technology in the arts has changed how learners create and share their artistic skills, this puts a challenge on teachers to think how best they can adopt technology to make art relevant in this digital era in their classrooms.

The introduction of blended learning in education as highlighted above has forced teachers to think of ways to use technology to enhance teaching and learning. The use of technology in the arts plays an important role in this new world. The performing arts (Drama, dance and Music) make use of technical resources to give the audience an immersive experience; the use of artificial sound effects, lighting and videos are some of the technical resources that can be employed by learners to enhance their performances in the classroom.

Due to lack of skills and knowledge in ICT, as well as lack of resources especially in low socioeconomic schools, many teachers offering arts find it difficult to integrate technology in their practice to promote an effective blended learning experience.

Participants expressed both positive and negative experiences of blended learning in their practice despite their mixed up understanding of blended learning. T1C noted the following:

> *Blended learning allows the teacher to provide assistance to the learners at all times. This helps them to fully understand the content before moving on to the next topic.*

The comment by participant T1C is of the view that blended learning is a remedial activity that teachers can employ to deepen learners' understanding. The participant does not indicate how the use of digital technology is employed in this instance to promote an effective blended learning experience which gives learners the autonomy to construct and pace their own knowledge. However; the comment by T1C indicates that blended learning allows teaching and learning to happen at any time, learners can access educational resources at any time and pace their learning process. This approach also allows the teacher to provide support and give immediate feedback. T1B believes that blended learning creates an inclusive classroom environment, where the needs of all learners can be met. The participant explained that,

> *we teach different learners, who have different learning needs, who have different social backgrounds, some of these learners have physical impairment that makes it difficult for them to access education in a normal classroom setting. Thus we use blended learning to promote inclusivity. [T1B]*

Blended learning is a combination of online and face-to-face learning environments, this approach uses different learning tools that allows learners to access education regardless of their abilities. T1B seem to consider blended learning as a solution to inclusive education, yet she does not specify how blended learning is used to meet learners' needs to promote inclusion. Blended learning makes use of digital technology that can support e-learning, providing learners the opportunity to access education from home, however blended learning also makes use of face-to-face learning. Based on the response by T1B they are of the view that blended learning only happens online and that promotes inclusivity for those learners who cannot access education in a normal classroom setting. Regardless of the method employed to promote inclusivity, participants mentioned learners' attitudes towards the use of blended learning. T2A highlighted how her learners' attitude changed because of blended learning

> *blended learning allowed my learners to show off their technological skills and knowledge in a negative way, learners took video recordings that were not for learning purposes, which were also offensive to some extent, [T2A]*

It is clear from T2A experience that blended learning exposes learners to the use of technology in education, however learners do not use these digital tools for educational purposes. Instead of making use of these digital tools and knowledge to enhance their learning experience, learners use them for their own personal benefits, mostly for socialising to gain popularity and that can be distractive. This is evident that learners also need to be orientated in the effective use of technology for educational purposes. The participants also applauded how blended learning allows learners to take full autonomy of their learning and improve their collaboration skill

> *blended learning allowed my learners to take charge of their own learning, most of the time they will send me messages on WhatsApp messenger to send them more work, some of these learners are learners who are actually shy in class and never ask or respond to questions [T2A]*

T1A supported this view, by indicating that,

> *blended learning allowed my learners to work in collaboration, they were able to share with each other resources and information that others have missed, especially those who joined the WhatsApp group later, some will even go to an extent of explaining to others what needs to be done. It was very impressive to see learners working so well together*

According to T2A and T1A blended learning increases student engagement by encouraging learners to take charge of their own learning by allowing them to develop a sense of autonomy in seeking information online independently while also working in collaboration with others. Even though some of the participants expressed positive experiences, they also believed that this approach is not effectively implemented in schools because of a number of challenges experienced by both teachers and learners. Some of their views regarding their experiences were as follow:

> *Blended learning is not implemented as it should be, teachers are only making use of social media tools such as WhatsApp messenger to communicate and send work to learners without actual teaching and learning taking place (T2C)*

T2C is of the opinion that teachers are not equipped and skilled enough to apply blended learning in their practice. As noted in literature, one of the barriers to effective blended learning implementation is lack of blended learning knowledge and understanding caused by a lack of professional development. This method of instruction combines online and in-person learning, however; simply distributing assignments to learners online does not constitute learning, particularly if there is no social interaction or post-test feedback. T1A also raised the issue of inequality in education brought by blended learning, this was her view:

> *There is no uniformity and fairness. This approach only favours those who can afford. Without technical resources and internet connectivity this approach is doomed.*

Participant T1A feels that blended learning does not accommodate all learners, particularly those who do not have access to digital tools or internet connectivity. This method of learning is disadvantageous for those who cannot afford to learn online. The responses from the participants demonstrate that some teachers are aware of the value and need for blended learning in the classroom. However, a number of problems make it difficult to successfully implement this strategy in education. Although teachers have highlighted some of the benefits of blended learning, the following topic focuses on some of the difficulties that teachers have encountered during the integration of blended learning in their practice.

5.2.5. Challenges of integrating blended learning in education

Participants demonstrated varying levels of understanding and experience with blended learning; some participants shared positive experiences, while others shared negative ones. Although some of the participants shared positive experiences and a thorough understanding of blended learning, the majority of the participants highlighted a number of challenges that hindered their successful implementation of blended learning. The following were some of the issues raised by participants: resistance to change, a lack of technical resources, a lack of ICT skills and knowledge, inadequate professional development activities and other factors.

5.2.5.1. Resistance to change

In recent decades, South African education system has undergone through tremendous changes due to advances in technology. The transition from traditional

teaching methods to modern teaching methods supported by technology has had a significant impact on the role of teachers in education. The CABLS framework as it is presented in the literature, emphasizes the new roles that educators must adopt in order to implement a successful blended learning strategy. According to the literature, educational reforms typically face some form of resistance due to a lack of knowledge, fear of the unknown, and a threat to power, among other factors. Resistance to change is defined as an unwillingness to adapt to new ways of doing things. Some participants argued that the challenges faced by teachers are due to teacher resistance to change. Some of their views were as follows:

> *Some teachers are resistant to change especially older teachers. Some learners are more knowledgeable and skilled than them. This makes it uncomfortable to use technology to avoid being embarrassed [T2B]*

> *Some teachers are not fond to learn, training is provided but they are just not motivated [T2C]*

T2C observed that older teachers reject change, they find it difficult to incorporate ICT in their practice as they are not well skilled and thus rejecting change. T2A indicated that teachers are not motivated to develop themselves, although training is provided. Resistance to change as highlighted in literature looks at the attitudes and actions of individual teachers that affects the successful implementation of an educational reform. According to the literature, teacher resistance to a reform is most often the result of not knowing enough about the change or seeing a reason for it. Given that blended learning was imposed on teachers without clear guidance and support, teachers were likely to reject the reform as it posed a threat to their practice.

Some participants believed that resources and training were available for teachers to use in order to effectively integrate blended learning into their practice; however, they felt that teachers are overburdened with work, making it difficult for them to make time for ICT professional development. These are some of the participants' views:

> *ICT is moving fast; teachers are too busy to learn; they are overwhelmed with work [T2A]*

> *Sometimes when I experience technical challenges, my lesson gets affected and that delays me. In most cases I have to wait for that one ICT technician to come and assist and that means waiting for hours and that is demotivating [T1B]*

Participant T2A believes that the amount of work teachers must do prevents them from having time to attend ICT professional development trainings. Teachers are frequently overburdened with work, making it difficult for them to actively participate in professional development activities, which then impacts on their work performance. T1B believe that incorporating ICT into their practice can be time consuming, especially when they encounter technical difficulties. The participant argues that this has a significant impact in syllabus coverage as they have to wait for technical support. The CABLS framework under technology element, emphasis on the importance of ensuring that technical support is available before facilitation of blended learning. Therefore, this entails that teachers should be equipped with technology skill and knowledge to address minor technical problems that may occur during the lesson.

Based on the responses of the participants, it is clear that the constant transition in the education system impacts on the roles of teachers, their knowledge, ICT skills and perceptions. Although some participants felt that resistance to change is one of the challenges that impact on the successful implementation of blended learning, it is also evident that resistance to any reform in education is caused by lack of understanding, a lack of technical resources, time for professional development and lack of training and support

5.2.5.2. DIGITAL TOOLS

Digital learning tools are learning platforms and electronic tools that facilitate learning. These resources play an important role in the integration of blended learning in education, they are employed as a channel of communication between teachers and learners to advance learning at home or in a classroom setting. Some of the participants reported that lack of digital tools was one of the main challenges that affect the successful implementation of blended learning in their schools

> *Our school only has one media centre, with only few computers working. The lab is only used by the CAT learners and other teachers and learners are not allowed to be there [T1B]*

> *In our subject department we share the laptop amongst 7 teachers. Most of the time I can't access the laptop because someone else will be using it. You cannot even store your school work in it [T1C]*

Digital learning tools are a prerequisite in the successful implementation of blended learning. Literature review reveals that having access to digital tools does not guarantee that ICT is successfully integrated in that school. The successful integration of ICT in education depends on the ability of the teacher to make ways to work with the available technology and merge it with pedagogy. The CABLS framework emphasizes the importance of determining what resources are available in the school, as well as what resources learners have access to in order to create a successful blended learning experience. Some of the participants felt that the digital tools provided by the school were of poor quality, while other participants complained about how resources were unfairly distributed among the teachers.

> *The laptops and computers bought by the school are not of good quality, they are too slow. Unfortunately, the school has budget constraints [T1A]*

> *I was given a laptop that was previously owned by my HOD and the laptop had so many problems. Only the HODs have projectors in their classes [T1C]*

Participant T1A identifies school budget constraints as a barrier to the provision of digital resources; many educational institutions in South Africa struggle to purchase digital tools because they lack sufficient funds, and maintaining these tools can also be costly. T1C contends that there is an unequal distribution of resources in schools, and that this challenge can be discouraging for teachers who want to use technology in their classrooms but do not have access to it. Despite the fact that some schools lack digital learning tools, participants also stated that schools do make an effort to provide digital learning tools, but the main concern is theft and vandalism in schools. The majority of the schools in this research study reported theft of projectors and computers in the previous year. T2A and T2B mentioned that,

> *Crime in South Africa is a serious problem, our school lost about 6 projectors in some classes last year [T2A]*

> *We had to tighten our security first before we could upgrade our computer laboratory and install projectors in classes [T2B]*

The level of theft and vandalism in South African schools is a cause of serious concern because it is one of the biggest barriers to providing learners with an equal and high-quality education. Participant T2A highlighted how crime in their school led to loss of valuable resources that were meant to enhance the delivery of quality education. T2B

states that schools are forced to invest so much money in installing tight security systems because of the level of crime in South Africa. The problem of theft and vandalism in South African schools hinders schools' efforts to integrate blended learning in education. This act of conduct set schools back and cripples their budget in the effort of rolling out digital learning tools to transform learning and teaching. The participants' efforts to apply blended learning to their teaching also raised the issue of load-shedding. The issue of load-shedding in South Africa continues to be one of the biggest threats in integrating blended learning in education. Participants indicated the following challenges that emerged as a result of load shedding:

> *Our online lessons were affected by load shedding, some of learners couldn't attend because they didn't have internet access due to load shedding. [T1A]*

> *The issue of load shedding is a serious problem, depending on electricity means you can't continue with your lesson when the electricity goes off. [T2A]*

Participant T1A believes that load-shedding is a serious threat towards the successful integration of blended learning in education. According to T1A, load-shedding had a significant impact on the online component of blended learning because learners were unable to access the lesson due to internet connectivity. T2A explains the inconvenience of relying on electricity and how it affects teaching and learning. The participant believes that load-shedding is also disruptive to face-to-face teaching that is reliant on technology, especially if the school has no backup electricity generation capacity. According to the participants, load-shedding is a significant obstacle to the effective implementation of ICT in education, and that impedes the successful implementation of the blended learning approach. Although most teachers' online class schedules were impacted by load shedding, T2C felt that some of the students also took advantage of the load-shedding issue:

> *Sometimes they all claim that they are affected by load-shedding and had poor connection simply because they just don't want to attend or submit their work on time. [T2C]*

T2C believes that learners use load-shedding to their advantage. The participant claims that learners use load-shedding as a justification for why they do not attend their online classes or turn in their work on time. It is clear from the responses of the participants that the issue of load-shedding is a serious concern in the effort of

implementing blended learning in South African schools. Load-shedding is stressful for both teachers and learners, interferes with the delivery of instruction that makes use of digital tools and derails the transition towards the digital era. T1A mentioned "The issue of load-shedding is very frustrating, sometimes my lesson doesn't go as planned because of load-shedding. I have to think of other ways to quickly make up for the time wasted"

The issue of internet access and connectivity was brought up by the participants as another obstacle to the implementation of blended learning. Internet access is required for the successful implementation of the online component of blended learning. The issue of internet access and connectivity in South Africa is a major concern as the country transitions from traditional to modern education. Participants noted several internet problems they encountered while attempting to implement blended learning, T1C explained,

> *Learners complain a lot about data being expensive whenever I send them work online or when I try to conduct online classes with them [T1C]*

Participant T1C believes that mobile data in South Africa is prohibitively expensive, posing a serious threat to the adoption of blended learning in education. Due to the fact that access to the internet is still a luxury for many South African households, the switch from traditional teaching to online or blended learning exposed the digital divide between learners from various socioeconomic backgrounds. T1B explain that,

> *Some of the learners miss out a lot because they don't have internet access. I have to cater for those learners when we meet face-to-face, to promote equal education. [T1B]*

T1B claims that the lack of internet access has a negative impact on learners because they miss out on work that they are supposed to do online. The participant also claims that a lack of internet connectivity affects teachers because they must cover work that has already been completed online in class to promote equality for students who cannot afford to attend online. This causes delays and frustration for those learners who were able to attend and complete their work online. This also shows that there is a huge disparity between the wealthy and the poor, which widens the gap of inequality in South African

schools, allowing the wealthy to advance in their education and leaving the poor behind. Even though inequality is a major problem in South Africa, some schools have made an effort to develop strategies for students who don't have access to the internet at home. T2C explains,

> *learners can make use of the computer laboratory that provides them with the GDE Wi-Fi access to make up for the missed work done online, however learners abuse the system. They can't pay attention during lessons, they get easily distracted, they become too excited. [T2C]*

T2C response emphasizes the role that schools must play in ensuring that digital learning tools are available and assessable to all learners in order for blended learning to be effectively implemented, which is in accordance with the CABLS framework under the institution element as highlighted in Chapter 3. T2C also claims that learners misuse the digital tools provided to them in order to improve teaching and learning. The participant claims that learners fail to pay attention in class because they are easily distracted and excited. This suggests that educational institutions should educate their learners how to use digital tools for learning in a responsible and safe manner. The responses of the participants presented in this section clearly show that a lack of internet access and connectivity has a significant impact on the successful integration of blended learning in South African schools. Although some schools in this study have attempted to assist learners in gaining access to digital learning tools, some learners find it difficult to use these resources for educational purposes. T2A reported that:

> *learners also need to be technologically skilled and knowledgeable, the school has to workshop them as well. Some of my learners indicated that they learn better when I am teaching face-to-face because they struggle with these digital tools when learning online. [T2A]*

Participant T2A is of the opinion that learners should be taught how to use technology effectively for educational purposes. T2A claims that learners force teachers to revert to traditional teaching methods because they are unable to use digital learning tools. This is a blatant example of how a lack of knowledge and comprehension of integrating ICT into education negatively impacts both teachers and learners and breeds resistance. The challenges outlined in this section pose a significant threat to the successful adoption of blended learning in South Africa.

5.2.6. Professional development

According to literature, professional development is the most crucial activity that gives teachers the ability and knowledge that they need to enhance their instruction by keeping abreast of contemporary issues. The majority of the participants in this research study emphasized the importance of ICT professional development as an activity that will provide them with the skills required in this digital age. T1B explained,

> *ICT integration in education is important in this day and age. However, the ICT training I have received at university level, has not equipped me enough to prepare for the real world. What we learnt at university is easy said than done, the lessons were more theoretical than practical and didn't cater for different school contexts. [T1B]*

Participant T1B contends that the type of ICT training provided at tertiary level does not adequately prepare teachers for the real world. According to the professional development framework for digital learning (2018), information technology skill is considered a fundamental competency that a new teacher must possess. Higher education institutions are encouraged to train new teachers in the use of ICT in the classroom. Participant T1B further states that the training offered at University is theoretical than practical and does not cater for different school context. The training provided at the tertiary level has not been matched by the contexts of South African schools, making it difficult for novice teachers to implement the ICT skills and knowledge acquired at the tertiary level.

The majority of the participant expressed a need for ICT professional development inn their practice. The participants believe that ICT professional development helps teachers to constantly develop themselves and adapt to changes in education, they also feel that professional development activities should be an on-going process. These were some of their responses,

> *ICT professional development is essential in this current age, so many changes are happening and teachers need to be able to adapt to these changes [T1A]*

> *ICT professional development provides lifelong professional development. This activity should be ongoing; they should be refresher courses to help teachers stay up to date with current trends [T2C]*

Participant T1A stresses the importance of ICT teacher professional development; the participant believes that this activity is critical in this digital age and assists teachers in adapting to changes. Participant T2C also agrees that ICT professional development is important, the participant argues that this activity should be an ongoing process, to ensure that teachers stay up to date with contemporary issues. The majority of the participants stated that they had received some form of ICT training, albeit at varying levels. However, Participants contended that these trainings are only available for a limited time, rendering them ineffective. The UNESCO ICT competency framework for teachers (2018) consider teacher professional development as a lifelong process. According to the framework, ICT trainings must be a continuous process that is monitored throughout to deepen teachers' knowledge and expertise in the use of technology in the classroom. Participants argued that most ICT trainings are only available for a few hours or days, with subsequent monitoring to assess teachers' progress in integrating ICT into their practice. *"…the training I attended on blended learning took about 5 hours, the facilitator was moving too fast I didn't grasp anything honestly speaking" [T1B]*

As technology has evolved, so had the role of teachers; therefore, teachers must be properly trained in order to adapt to changes happening in education. A continuous ICT professional development will equip teachers with the necessary skills and knowledge to keep up with these changes. Some of the participants raised their views on the quality of professional development that they have received in the different levels of their profession. These were their responses:

> *The facilitators are not well equipped and knowledgeable about the use of ICT in education. Sometimes they train us on what we already know, the training just becomes ineffective [T2A]*

> *The training is not well explained, teachers don't understand how ICT in education can benefit them, that makes it difficult for teachers to be interested in getting involved and benefiting from the training [T1B]*

Participant T2A believes that the ICT facilitators are unqualified to provide training for teachers because they lack the necessary knowledge. The participant asserts that the provided training only covers fundamental ICT knowledge and does not adequately prepare teachers for the current era. The majority of the participants stated that the level of ICT training they received did not always cater to their professional

developmental needs. Although the majority of the participants stated that ICT trainings offered by the department of education were not adequate for effective ICT integration, Participant T1B felt that teachers should pursue self-training to develop their ICT skills:

> *To equip myself for ICT integration in education, I enrolled for private ICT courses on some teacher development website to help me integrate blended learning effectively in my practice, the trainings were very helpful as they gave me practical knowledge needed to integrate blended learning in my practice. [T1A]*

Participant T1B is of the view that teachers must take responsibility for their own professional development. According to the UNESCO ICT-CFT (2018) the successful implementation of ICT in education depends on the teachers' ability and willingness to merge technology with pedagogy. However, some participants felt that providing ICT professional development should be the responsibility of school leaders. T2A stated;

> *Schools must form active ICT committees that will be responsible for providing ICT training and support to teachers. This will also allow for continuous monitoring [T2A]*

According to the response provided by T2A, ICT professional development should be provided at the school level in order to address teacher challenges in the context of the school; this will also allow for ongoing monitoring and development. Participants' responses indicate that ICT professional development is important, but the way it is planned and coordinated is ineffective. The teachers in this research study recognise that blended learning has resulted in a pedagogical shift in their practice and that they require proper training to adapt to the changes occurring in the education system. Participants also stressed the need for ongoing professional development activities to maintain their motivation and keep their skills relevant.

5.3. Data analysis

For data to be accurate and reliable, it must be analysed and interpreted. Data analysis is a process of organising, accounting for and examining meaningful content of the data collected (Maree, 2007). Data analysis is the most crucial part in a research study as it provides useful information to answer the research questions. Data analysis in a qualitative research study involves examining the data presented, interpreting its meanings and taking parts that are most relevant to the research question. There are

two main approaches to analysing data in a qualitative research, these are thematic analysis and discourse analysis.

Thematic analysis deals with distinguishing patterns or themes that come out of the processed data (Aronson, 1995). Thematic analysis finds patterns in the data presented and label recurring concepts and label them into themes. Discourse analysis pays attention to social contact and structure, by analysing what is said and how it is said (Kamalu and Osisanwo, 2015). This section provides analysis of the processed data by making use of thematic analysis. The researcher identified and grouped themes that emerged from the study in terms of the theoretical framework and the research questions. In this study the main themes that emerged are:

- Teachers perceptions of blended learning
- Challenges of blended learning
- ICT professional development of Creative Arts teachers

Theme 1: Teachers' perceptions of blended learning

This research examined the perceptions of Creative arts teachers in integrating blended learning in their practice. The study found that the participants hold both positive and negative perceptions towards blended learning. The Creative arts teachers believe that blended learning can enhance teaching and learning and assist them in resolving the difficulties they encounter when teaching Creative arts in the classroom. The participants stated that blended learning allows them to maximise teaching and learning time while also facilitating an interactive learning environment. Sahni (2019) confirms that blended learning enhances teaching and learning, it motivates students, as it allows them to have control over time, place and pace for learning. Sahni (2019) further states that this learner autonomy and flexibility leads to higher student achievement and improves student engagement.

Teachers' understanding and perceptions of any educational reform is noted in literature by Farah and Frayha (2022) as the direct influence on behavioural intention to use technology. This study discovered that some of the participants have a good understanding of blended learning and the benefits it brings in terms of improving teaching and learning, which seemed to be a strong motivator for their incorporation of blended learning in their practices despite the challenges they faced. According to

Farah and Frayha (2022) teachers' understanding of any educational reform is important in influencing their actions towards the use of that approach in their practice.

Understanding blended learning plays a crucial role in the successful integration of this approach in education. The data collected in this study confirm that blended learning is complex and failure to understand this approach can constrain the effective implementation of blended learning in education. The study found that some of the participants' lack of understanding and knowledge of blended learning results in negative perceptions of this teaching strategy. At the time of the introduction of blended learning, teachers were sceptical about the change and they were also worried about the pandemic. Some of the participants also mentioned how their perception of blended learning was impacted by the lack of professional development to get them ready for this change and by the lack of technical resources and support.

The schools' ICT coordinators were the main advocates for blended learning because they had experience with it long before the Covid-19 pandemic. This could also be because of the fact that they have been integrating ICT in their practice, as the majority are IT specialists in their respective schools. Their integration of blended learning exceeded that of the Creative arts teachers. For instance, T2A has been using gamification in his classes, to allow his students to learn online through play. T2C has been conducting some of his assessments online way before the pandemic. T2C indicated that online assessment is more secured and allows him to provide learners with feedback much quicker.

Themes 2: Challenges of blended learning

Based on the experiences of teachers in integrating blended learning in their practice, this study found it important to investigate the challenges that affects successful integration of blended learning in education. The experiences highlighted by the participants were mostly positive, considering the benefits that comes with blended learning. However, a number of issues have been raised as barriers to the successful integration of blended learning in education.

Blended learning is considered the most effective and popular style of instruction used by educational institutions in this contemporary era because of its perceived success in offering flexible, timely, and continual learning. The study conducted by Rasheed, Kamsin and Abdullah (2020) reveal that teachers' technological anxiety, complexity,

and illiteracy, as well as students' technological illiteracy, are the problems teachers face while employing online technology for instruction. Brown (2016) identifies technology anxiety and illiteracy among teachers as the reasons why teachers do not prefer to use blended learning. Brown (2016) further states that teachers' technological illiteracy has resulted in delays in engagement between learners and their teachers, causing students to get disinterested and procrastinate in their study activities. According Antwi-Boampong (2022) teachers find blended learning management systems user unfriendly and this is largely due to their lack of technical expertise to navigate the platform to deliver content. The findings of this study confirm that teachers' lack of technical skills pose a significant barrier to the implementation of blended learning in schools. The study reveals that some teachers struggle with ICT integration and thus resist using technology in their classrooms for fear of being embarrassed in front of their learners. Some participants also brought up the fact that some of the learners are more technological savvy than their teachers, so teachers avoid using technology in the classroom because they might feel less knowledgeable and skilled than their learners. This has had a significant impact on the implementation of blended learning, as this educational approach employs a variety of technologies, such as e-learning, as a medium of instruction.

The findings of this study confirm that a lack of technical resources affects the successful integration of blended learning. Hadijah and Bahasa (2017) state that implementation of blended learning can be a challenge for teachers if they are not supported by adequate accessibility to technology resources. According to Abel and Alvarez (2020), limited access to computer laboratories and other technologies is perceived to be hindrances in the implementation of blended learning. This research study reveals that a lack of technical resources has an impact on the successful implementation of the blended learning approach in the classroom. The study reveals that teachers must find innovative ways to engage learners online while working with limited resources, which causes significant stress for both teachers and learners and has an impact on educational quality. At times learners may also lack access to technology at home, which makes it challenging for teacher to implement the online component of blended learning. This presents a challenge because teachers must cover the amount of work that was previously done online during the face-to-face session in order to accommodate learners who do not have access to technology at

home. Blended learning according to the findings has widened the digital divide amongst schools and revealed the inequalities that exist within the South African education system.

Lack of technical support was cited by some participants as one of the reasons they do not integrate ICT in their practice. T1C captured it as “Incorporating technology in the classroom is time consuming, at times I have to wait for hours to get assistance when I experience technical difficulties”. Abel and Alvarez (2020) state that the blended learning approach is more rigorous when it comes to the teaching material design, technical support and development of web-based platform as it requires more time than traditional face-to-face teaching. Ma’arop and Embi describe blended learning as a burden as it increases teachers’ workload and time required to design the course platform, upload instructional material, evaluate learners’ online output and deal with technical issues. The CABLS framework under the technology and learner support sub-systems emphasises the importance of overseeing who provides support for technology troubleshooting for the successful implementation of blended learning both online and offline. The study reveals that there is inadequate orientation provided to teachers to apply the online component of blended learning and deal with minor technical issues.

According to Raphael (2016) blended learning necessitates that both learners and teachers work online, and poor internet service affects everything that must be done online. The research findings reveal that poor internet connectivity is one of the challenges that teachers have to deal with when applying the online component of blended learning. Cullinan, Flannery, Harold, Lyons and Palcic (2021) states that blended learning brings concerns around the differences in learners’ access to digital tools while at home and the quality of broadband connection. According to Cullinan et al (2021) this variation impacts on the type of blended learning model that schools can deliver or constrain as students engage with online content. The participants indicated that poor internet connectivity hinders the implementation of blended learning and slows down the learning process. The study reveals that the majority of learners struggle to access online lessons because of poor internet connectivity and the high cost of network data in South Africa. In most cases, learners struggle to join the online classes, download or upload activities, which jeopardizes the pace and delivery of the lessons as planned by the teacher. It was also noted in the findings, as stated by the

participants, that some learners use poor internet connectivity and the cost of network data as an excuse to miss out on online submission and lessons.

According to the study conducted by Antwi-boampong (2021) lack of regular electrical power hinder the effort to adopt blended leaning for teaching and learning. The issue of load shedding in South Africa is one of the major challenges that has a significant impact on the successful integration of ICT in education and, as a result, on the implementation of blended learning in schools. Participants in this study identified load shedding as one of the challenges to incorporating blended learning into their practice because it affects both the online and offline components of blended learning. The study reveals that load shedding is disruptive to teaching and learning that is reliant on technology and most schools don't have alternative electrical generation capacity. Baber and Qaisar (2022) research study revealed that the use technology is associated with electricity and internet, and thus slow internet speeds and load shedding are major impediments to the adoption of blended learning.

Theme 3: ICT professional development of Creative Arts teachers

Due to the rapid pace of technology advancement, educational institutions must constantly examine whether they are providing the necessary technological support to satisfy the needs of their teachers. To build a reliable and robust technological infrastructure support and a variety of learning management systems, educational institutions must have a clear understanding of their teachers' technological literacy, competency, and proficiency levels. This is a requirement for implementing a successful blended learning strategy. The concept of ICT professional development `appeared very strongly from the respondents. According to Medina (2018), one of the major barriers to educational Institutions is giving appropriate training to teachers in order for them to reap the benefits of the online component of blended learning.

Moore, Robinson, Sheffield and Phillips (2017), state that the increases in online instruction and blended learning comes with the need for quality professional development programs that foster real change in the classroom. The findings of this study reveal that the majority of the participants were not trained to apply the blended learning approach in their practice, and as a result, they demonstrated little to no understanding of the concept during the interview processes. As there was no policy governing the incorporation of blended learning South African schools, the participants

disclosed that this approach was imposed upon them with no clear guidance or support. Tshabalala et al (2014) states that the absence of blended learning policy in educational institutions poses as a serious challenge towards the integration of the approach in education as the process is uncoordinated.

According to Tshabalala et al (2014) inadequate training of instructional developers on blended learning is perceived as the main constraining factor in the implementation of blended learning. Tshabalala et al (2014) further states that the lack of adequate training of staff members influences the instructors' decision not to use blended learning in their practice as they lack adequate knowledge of the approach. Some participants stated that they had received some form of blended learning training from their school management team, but that the training was inadequate because it was rushed and completed in a short period of time. The study's findings show that the majority of the participants did not receive appropriate blended learning training prior to implementing this approach in their practice, which resulted in some participants finding blended learning difficult to implement in their practice and developing negative perceptions towards this approach.

Successful implementation of blended learning requires careful planning and design of professional development initiatives, considering the dramatic shift towards the integration of digital teaching tools in educational institutions (Garone, Bruggeman, Philipsen, Pynoo, Tondeur, and Struyven, 2022). The findings of this study reveal that ICT professional development for teachers in South Africa is not carefully planned, as it does not adequately prepare teachers to incorporate ICT into their practice. Some of the participants mentioned that while they had received ICT training at the university level, it wasn't sufficient to prepare them for the real wold because the content was more theoretical than practical. According to the TPACK framework by Mishra and Koehler (2006), teachers' professional development activities must prepare and equip teachers with three domains of knowledge: technology, pedagogy and content knowledge. However, the findings reveal that the training offered at university level does not provide novice teachers with the necessary skills and knowledge to successfully integrate ICT into their practice; this suggests that trainings do not take into account the three domains of knowledge, as teachers struggle to apply what they have learned in practice. According to the study's findings, the majority of the participants, have taken part in ICT training provided by the department of education.

The findings show that the participants consider these training inadequate, as the facilitators spend most of the time teaching Microsoft suite applications rather than demonstrating to instructors how to use technology to teach. Additionally, some of the participants claimed that the trainings' content was meaningless because they cannot apply it in their classrooms.

Considering the changes taking place in the educational sector, professional development activities should provide teachers with the tools they need to enhance their classroom practice. Cost is another factor contributing to institutions' resistance to offering teachers quality training support. For instance, not all institutions are able to cover the cost of providing their teachers with "quality matters" (QM) professional development. Blended learning teachers who are not supported by their institutions in pursuing such professional development may not be able to fulfil the promises made to their learners through blended learning.

5.4. Summary of findings and discussion

The results of this study have brought to light a number of issues that, in the eyes of students, teachers, and educational institutions, prevent the genuine implementation of the blended learning mode of instruction. Primarily the lack of skills and knowledge to integrate ICT into teaching practice. The CABLS and the TPACK framework were used in this study as lenses to determine the implementation of blended learning in Creative arts classrooms. The CABLS framework focused on how to structure a blended learning system within the context of the creative arts. This framework gives teachers the knowledge they need to structure an online/blended learning environment. The CABLS framework draws its strength from constructivism and experiential learning as it views the teacher as the provider of guidance and support while learners participate in their own learning by creating their own knowledge. Furthermore, the CABLS framework suggests that for blended learning to be implemented successfully factors such as learning infrastructure and digital technology, must be available to both the learner and the teacher.

The TPACK framework, on the other hand, provides teachers with a technological body of knowledge. In other words, teachers must be equipped not only with pedagogical and content knowledge, but also with technical knowledge. The current generation of learners lives in a technologically advanced society so there is a need

to incorporate the use of digital technology to enhance explaining some rather difficult concepts in Creative arts. Blended learning makes use of various technologies to achieve maximum learning goals such as increased engagement and participation. Therefore, for the teacher to effectively use digital technology in the classroom he/she needs a thorough knowledge in the use of technology (TPACK). This can be followed by the implementation of CABLS framework for lesson structuring.

The study identified a number of connected challenges with teachers' usage of technology. According to the findings, teachers are eager and enthusiastic about using technology for pedagogical instruction. The majority of technological obstacles that teachers face is related to their incapacity to effectively employ current technology for teaching. The findings of this study reveal that Creative arts teaches struggle to effectively employ technology for teaching and learning in the blended learning environment, which means they are unable to use and leverage the benefits of such technologies for teaching. The schools’ management teams should assist teachers in making appropriate use of technology in their online classes, by providing them with appropriate training.

CHAPTER 6: CONCLUSION, LIMITATION AND RECOMMENDATIONS

6.1. Conclusion

The aim of this study was to examine teachers' perception of blended learning to enhance Creative arts teaching and learning. The main research question that the study set out to answer was: What are the perspectives of Creative Arts teachers on the use of the blended learning approach? To get to the root of this research question the study investigated three schools within the Gauteng province that have attempted to integrate and promote blended learning in their practice. The findings of this study reveal that an effective blended learning approach can make education more flexible and accessible to all learners, regardless of their learning needs.

Masalela (2009) states that blended learning produces advantageous outcomes like flexibility, participation and collaboration. In agreement with Masalela, Kaur (2013) asserts that if teachers fully grasp and apply blended learning in their classrooms, it is likely that this strategy can foster learner autonomy. The study found that the majority of the teachers who participated in this research have rudimentary integrated blended learning to some extent in their classrooms, despite their lack of blended learning knowledge. The findings of this study revealed that professional development focused on blended learning is urgent to equip teachers with the necessary knowledge and skills to better apply blended learning in their practice.

Response towards the Findings

1. ***What are Creative Arts teachers' perceptions on blended?***

The participants indicated positive experiences of blended learning in their practice, despite the challenges that they had to overcome to integrate this approach effectively. Teachers believe that blended learning can make a difference in Creative arts. The findings show that blended learning in Creative arts allows learners to develop a more sense of confidence in showcasing their talent and also encourages them to work better collaboratively with other learners as compared to a traditional classroom setting. Learners are also more confident when interacting with the teacher online rather than in person. The Participants also mentioned that the CAPS document does not provide enough instructional time for Creative arts, little time is provided for practicing and creating art. According to the findings, Creative Arts teachers prefer

blended learning because it allows them to maximise their instructional time. The study indicates that applying blended learning in Creative Arts allows teachers to plan what will be completed in class and what instructional activities can be done online. Schukei (2020) suggests that instructional based activities such as lesson instructions, background information, art history, brainstorming, idea generation, instructional videos, and so on can be done online to allow the teacher to maximise art making time and troubleshoot problems during face-to-face instruction.

2. ***How do Creative Arts teachers implement blended learning in their teaching?***

The study revealed that there are numerous obstacles that prevent the successful implementation of blended learning, including insufficient technical resources, lack of technical support, poor internet connectivity and load-shedding. In addition, the findings revealed that a lack of technical resources had a significant negative impact on the successful integration of blended learning. This causes teachers great stress because they must think of creative ways to make the most of the resources they have at their disposal. The study demonstrates that a lack of technical resources reduces teachers' motivation to implement blended learning in their classrooms. The study also revealed that a lack of technical support poses a barrier towards the successful implementation of blended learning, as it discourages teachers from using technology in their classrooms. The findings show that teachers not only lack adequate technical resources, but also struggle to receive support to troubleshoot technical problems that may arise during lessons. Lack of technical support has had a significant impact on the integration of blended learning because it disrupts lesson delivery and reduces the effectiveness of teaching, particularly during online lessons. According to the findings, technical issues reduce teacher confidence and discourage teachers from implementing blended learning in their classrooms. Bingimlas (2009) demonstrates how the absence of technical resources and support contributes to the spread of unfavourable perceptions of blended learning. Inadequate training to use available technologies was also discovered to be a significant challenge in the implementation of blended learning in schools. The study shows that teachers lack the necessary skills and knowledge to effectively integrate ICT into their practice, which results in a negative attitude toward ICT use in classrooms and hinders the successful implementation of blended learning.

1. ***What professional development do Creative Arts teachers require to properly teach utilising blended learning?***

The study discovered that there is no clear support system available to address teachers' developmental needs in effectively integrating blended learning into their practice. According to Naidoo and Singh-Pillay (2020) the majority of South African teachers implemented blended learning in their classrooms without receiving clear instructions, guidance and support. According to the findings, teachers need a professional development activity focused on blended learning in order to fully understand this approach and know how to best implement it in their practice. Participants believe that an effective professional development program that emphasizes blended learning will equip them with new ICT skills that they need to advance their instructional strategies that support conceptual understanding and application. The study also revealed that teachers require ongoing teaching development activities that will monitor the integration of blended learning in the classroom and also address the developmental needs of teachers as they emerge throughout the integration process. The participants also expressed a need for subject-specific practical training. The study found that the ICT professional development activities offered by the department of education are ineffective because they are a "one-size-fits-all" and not curriculum-focused. Participants stated that the ICT trainings received are theoretical and sound rehearsed.

Response to the main question

What are the perspectives of Creative Arts teachers on the use of the blended learning approach?

According to the study, teachers have both positive and negative perceptions of blended learning. The response to this question was broken down into two themes: positive perceptions and negative perceptions. **Positive perceptions**: The findings indicate that teachers are enthusiastic about blended learning and understand how it can improve their practice and their pupils' learning experiences. Findings reveal that teachers find blended learning useful in meeting the diverse learning needs of their learners. Participants reported that using blended learning enables teachers to use a variety of instructional approaches to meet the diverse needs of their learners. According to the findings, teachers favour blended learning because it allows them to

make the most of their instructional time. The study reveals that blended learning increases learner engagement and autonomy. Participants reported increased learner engagement, with learners showing greater interest in their learning when using technology. The study also demonstrates that teachers favoured blended learning because it gives learners more autonomy and responsibility for their education.

Negative perceptions: Although the participants emphasized the positive benefits of blended learning, the findings also revealed that there are a number of challenges that impede the successful implementation of blended learning and contribute to negative perceptions of this approach in education. According to the findings, the majority of the participants in this study did not receive effective professional development training centred on blended learning. Without adequate direction or support, the participants were compelled to apply blended learning, which required them to transform their regular routines into something entirely different. Because of the lack of clear structure and failure to adequately address teachers' needs in order to implement blended learning effectively, many teachers developed negative perceptions of this approach. Other challenges, such as a lack of technical resources, technical support, poor internet connectivity, load shedding and poor management of blended learning in schools, hampered the effective implementation of blended learning, prompting some participants to oppose this educational reform.

6.2. Limitation of the Study

The study was conducted within certain limitations and must be read with those limitations in mind. The study's first perceived limitation was the small sample size and that fact that it was restricted to one province. The data was collected in three public schools in the Gauteng province, with a total of six participants, so the findings are limited to the nature of the participants' settings and cannot be a true reflection of all schools in South Africa. Due to Covid-19 some of the interviews were conducted online to avoid physical contact, this deprived the researcher to observe the contexts of participants. In addition, the study had no lesson observations to confirm that indeed there is a serious challenge in integrating blended learning in South African schools. Furthermore, five schools were selected to take part in this research, but during data collection processes two schools pulled out from the research study. This limited the study as findings were only limited to three schools.

6.3. Recommendations

The study focused on South African public schools that attempted to use blended learning in their classrooms. It has been drawn, from the responses of the participants, that the majority of teachers in South Africa implemented blended learning in their classrooms without participating in a professional development activity that provided them with the necessary skills and knowledge to effectively apply blended learning in their practice. Furthermore, the study revealed that some South African schools are not well equipped with digital tools necessary to successfully implement blended learning. These factors influence the efficacy of blended learning as well as teachers' decisions to implement blended learning in their classrooms. According to the findings noted above, this study suggests the following:

- This study recommends an ICT professional development activity that will provide teachers with necessary skills and knowledge to effectively integrate blended learning in their classrooms. The department of basic education should consider offering ICT practical workshops to help teachers gain confidence and competence in using technology in their classrooms. One of the challenges that the participants in this research study encountered was ICT training that was time limited and not subject specific. The Department of education should consider providing ongoing subject-specific ICT training to teachers. The trainings must provide teachers with the necessary knowledge and skills to incorporate blended learning in their classrooms and also monitor progress and address the needs of teachers during the implementation process. This research study also suggests that teachers seek ways to improve their integration of ICT in education in order to implement effective blended learning in their classrooms. Teachers can try to apply the concept of communities of practice by consult other teachers whenever they need help or even training one another to avoid having to wait for the department of education to provide them with training. Teachers can also collaborate with other colleague who teach the same subject to create their own ICT (blended learning) program for their specific subject, avoiding ineffective ICT trainings that are not subject-specific and curriculum-focused.
- The scarcity of technical resources in schools is a major concern, and having access to these resources is one of the prerequisites for implementing blended

learning in the classroom. In order to facilitate an effective blended learning experience, the study suggests that the department of education make technical resources, such as computer labs with internet access, available in schools. Additionally, schools should keep track of and maintain these technological resources by keeping an inventory of them and investing on their upkeep. To address the issue of inadequate technical support mentioned in the findings, the study suggests that teachers be trained to troubleshoot minor technical issues in order to avoid wasting teaching and learning time while waiting for assistance. A qualified IT specialist can be hired by schools to handle any technical difficulties that teachers may encounter. The issue of vandalism and theft in schools was briefly mentioned in the findings; this is a major concern in South Africa because it jeopardizes the successful implementation of ICT in education. The study recommends that the department of education and schools should collaborate closely with community members as stakeholders in education to prioritise school safety. In addition, there is a great need for the department to make significant investments in appropriate measures to safeguard technical resources in schools.

- The study also indicated lack of proper planning within schools regarding the implementation of blended learning. Schools need to establish an effective ICT committee that will be responsible for training/workshopping both teachers and learners on ICT use, draw up a proper planning of how blended learning will be implemented within the school, the committee must also monitor the progress of both teachers and learners. This will help identify those individuals who require assistance in adapting to the new technologies. Schools need to also monitor and guide students about the use of digital tools responsibly.
- This study recommends further research that will investigate ICT policies that guide ICT integration in South African schools, the role of the ICT committee in planning and implementing ICT policies in schools.
- Further research should examine online or blended teaching and learning in practical subjects like Creative Arts, because there is a presumption that practical subjects only focus on active participation or hands-on activity rather

than theory, and as a result, learners are more likely to achieve better learning outcomes from traditional face-to-face instruction than from online instruction.

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Appendix A: Ethics Clearance

SCHOOL OF EDUCATION ETHICS COMMITTEE

CONSTITUTED UNDER THE UNIVERSITY HUMAN RESEARCH ETHICS COMMITTEE (NON-MEDICAL)

CLEARANCE CERTIFICATE	**PROTOCOL NUMBER: 2022ECE018M**
PROJECT TITLE	Teachers' experiences in promoting blended teaching and learning in Creative Arts.
INVESTIGATOR	Bongiwe Hlatswayo
SCHOOL/DEPARTMENT OF INVESTIGATOR	WSoE
DATE CONSIDERED	20 MAY 2022
DECISION OF THE COMMITTEE	Approved unconditionally
RISK LEVEL	MINIMAL RISK
EXPIRY DATE	Date of submission of the Research Report
ISSUE DATE OF CERTIFICATE	**CHAIRPERSON** Dr. Batseba Mafole-Mbokane

cc: Dr, Alton Dewa

DECLARATION OF INVESTIGATOR

To be completed in duplicate and **ONE COPY** returned to the Chairperson of the School/Department ethics committee.

I fully understand the conditions under which I am are authorized to carry out the abovementioned research and I guarantee to ensure compliance with these conditions. Should any departure to be contemplated from the research procedure as approved I/we undertake to resubmit the protocol to the Committee.

_____ **Signature**

Date _____/_____/_____

Appendix B: GDE Approval

GAUTENG PROVINCE
Department: Education
REPUBLIC OF SOUTH AFRICA

8/4/4/1/2

GDE RESEARCH APPROVAL LETTER

Date:	22 April 2022
Validity of Research Approval:	08 February 2022– 30 September 2022 2022/154
Name of Researcher:	Hlatshwayo .B
Address of Researcher:	5681 Msongwela Drive
	Etwatwa ext 3
	Daveyton
Telephone Number:	061 4168 040
Email address:	417317@students.wits.ac.za
Research Topic:	Teachers experiences in promoting teaching and learning in Creative Arts
Type of qualification	Masters in Education
Number and type of schools:	5 Secondary Schools
District/s/HO	Ekurhuleni North

Re: Approval in Respect of Request to Conduct Research

This letter serves to indicate that approval is hereby granted to the above-mentioned researcher to proceed with research in respect of the study indicated above. The onus rests with the researcher to negotiate appropriate and relevant time schedules with the school/s and/or offices involved to conduct the research. A separate copy of this letter must be presented to both the School (both Principal and SGB) and the District/Head Office Senior Manager confirming that permission has been granted for the research to be conducted.

25/04/2022

The following conditions apply to GDE research. The researcher may proceed with the above study subject to the conditions listed below are met. Approval may be withdrawn should any of the conditions listed below be flouted:

Office of the Director: Education Research and Knowledge Management
7th Floor, 17 Simmonds Street, Johannesburg, 2001
Tel: (011) 355 0488
Email: Faith.Tshabalala@gauteng.gov.za
Website: www.education.gpg.gov.za

1. *The letter would indicate that the said researcher/s has/have been granted permission from the Gauteng Department of Education to conduct the research study.*
2. *The District/Head Office Senior Manager/s must be approached separately, and in writing, for permission to involve District/Head Office Officials in the project.*
3. ***Because of the relaxation of COVID 19 regulations researchers can collect data online, telephonically, physically access schools, or may make arrangements for Zoom with the school Principal. Requests for such arrangements should be submitted to the GDE Education Research and Knowledge Management directorate.***
4. ***The Researchers are advised to wear a mask at all times, Social distance at all times, Provide a vaccination certificate or negative COVID-19 test, not older than 72 hours, and Sanitise frequently.***
5. *A copy of this letter must be forwarded to the school principal and the chairperson of the School Governing Body (SGB) that would indicate that the researcher/s has been granted permission from the Gauteng Department of Education to conduct the research study.*
6. *A letter/document that outlines the purpose of the research and the anticipated outcomes of such research must be made available to the principals, SGBs, and District/Head Office Senior Managers of the schools and districts/offices concerned, respectively.*
7. *The Researcher will make every effort to obtain the goodwill and cooperation of all the GDE officials, principals, and chairpersons of the SGBs, teachers, and learners involved. Persons who offer their cooperation will not receive additional remuneration from the Department while those that opt not to participate will not be penalised in any way.*
8. *Research may only be conducted after school hours so that the normal school program is not interrupted. The Principal (if at a school) and/or Director (if at a district/head office) must be consulted about an appropriate time when the researcher/s may carry out their research at the sites that they manage.*
9. *Research may only commence from the second week of February and must be concluded before the beginning of the last quarter of the academic year. If incomplete, an amended Research Approval letter may be requested to conduct research in the following year.*
10. *Items 6 and 7 will not apply to any research effort being undertaken on behalf of the GDE. Such research will have been commissioned and be paid for by the Gauteng Department of Education.*
11. *It is the researcher's responsibility to obtain written parental consent of all learners that are expected to participate in the study.*
12. *The researcher is responsible for supplying and utilising his/her research resources, such as stationery, photocopies, transport, faxes, and telephones, and should not depend on the goodwill of the institutions and/or the offices visited for supplying such resources.*
13. *The names of the GDE officials, schools, principals, parents, teachers, and learners that participate in the study may not appear in the research report without the written consent of each of these individuals and/or organisations.*
14. *On completion of the study, the researcher/s must supply the Director: Knowledge Management & Research with one Hard Cover bound and an electronic copy of the research.*
15. *The researcher may be expected to provide short presentations on the purpose, findings, and recommendations of his/her research to both GDE officials and the schools concerned.*
16. *Should the researcher have been involved with research at a school and/or a district/head office level, the Director concerned must also be supplied with a summary of the purpose, findings, and recommendations of the research study.*

The Gauteng Department of Education wishes you well in this important undertaking and looks forward to examining the findings of your research study.

Kind regards

.....

Mr. Gumani Mukatuni
Acting CES: Education Research and Knowledge Management

DATE: 25/04/2022

Office of the Director: Education Research and Knowledge Management
7th Floor, 17 Simmonds Street, Johannesburg, 2001
Tel: (011) 355 0488
Email: Faith.Tshabalala@gauteng.gov.za
Website: www.education.gpg.gov.za

APPENDIX C: Interview Guide

Interview guide: Teacher

Duration: 15-30 minutes

Participant's profile

1. What is your academic professional qualification?
2. How many years of teaching experience do you have?
3. How long have you been teaching Creative arts?
4. Which art forms are you offering in Creative arts?

Professional development

1. How do you define teacher development?
2. What ICT professional growth opportunities are being provided for teachers in your school?
3. Do other outside organizations provide adequate support for ICT professional development needs of educators in your school?
4. Does the district provide adequate ICT support for professional development of educators?

Blended teaching and learning

1. What is blended learning?
2. What is the purpose blended learning?
3. What is your experience in using blended learning?
4. What role do you think blended learning play in promoting effective teaching and learning?
5. What digital tools do you use to promote blended teaching and learning in Creative arts?
6. In your opinion, does blended learning enhance teaching and learning of Creative arts, explain?

Learners

1. How well do you think your learners understand blended learning?
2. How do learners at your school feel about blended learning?
3. Do you think blended learning can assist learners to improve their learning experience?

Interview guide: ICT committee member

Duration: 15-30 minutes

Profile of participant

1. What is your academic professional qualification?
2. How many years have you been teaching?
3. How many years have you been in this school?
4. How long have you been an ICT committee member?

Professional development

1. How do you define professional development?
2. How important do you think ICT professional development is?

Blended learning

1. What is blended learning?
2. What do you think is the purpose of blended learning?
3. How is blended learning planned and coordinated in your school?
4. How effective do you think this programme is in your school?
5. To what extent is your institution equipped with ICT infrastructure to promote effective blended learning experience for both teachers and learners?
6. What do you think are the challenges of blended learning in your school?

Educators

1. Do you think educators at your school understand blended learning?
2. How do you think educators at your school feel about blended learning?
3. Are you supporting your teachers by workshopping them on how to integrate ICT in blended learning? Explain
4. In your opinion, what could be the reason why educators are facing challenges in integrating ICT in their teaching?