Understanding Online Learning in Higher Education from Practitioners' Perspectives

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Abstract

This study seeks to understand teacher's perspectives about online learning technology and to improve their practice through the integration of online learning technology. In an attempt to achieve these objectives five questions were examined, such as how do teachers describe their perceptions about online learning, what impact does the use of online learning technology have on their practice, what impact does online learning have on their student's engagement in learning, how can teachers reduce online learning attrition/dropout rate and how do teachers describe their adoption of PASTOR model into their practice. The data techniques used in the study were interview, observation, teacher reflective diary and questionnaires. The purpose for using multi instruments was to achieve triangulation. Data from the five questions showed that participants had positive perceptions about online learning after they integrated online learning into their lessons. Participants believed that online technology enhances teacher's practice and student's engagement in learning. Results in the study revealed that most participants believed that mentorship is an effective strategy for reducing student's online attrition/dropout. Finally, data showed that participants believed that my PASTOR model was helpful to their teaching practice, especially in their teaching styles and choice of online technology as the model provided them a methodical structure for implementing and examining their teaching and learning process. The PASTOR model with it defined structure guided participants and I throughout the research process making both participants and I to be more systematic and conscious during the data collection, data analysis, and reflection.

Dedication

I dedicate this study to God Almighty my King and Lord, the one who made it possible for me to complete this research study.

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Chapter One

1.0   Introduction

The proliferation of new technologies across educational sector today is gradually changing the way teachers and management of higher education operates and teach. Horizon Report (2014) cited that higher education sector in the UK is yet to fully exploit the potential of new technologies and internet tools. Pelgrum and Law (2003) observed that the rapid technological development offers new opportunities and challenges to both teachers and management of higher institutions. According to Davies et al (2017) online learning technology should be recognised as important tool for higher education teachers in the UK. Ferdig (2007) argued that online learning technology can help teachers develop their teaching styles, lesson plans that reflect the need of their learners. Golden et al (2006) study revealed that teachers who participated in their study felt that online learning technology helped them become effective and engaging during lessons which in turn reinforced student's knowledge in subject matter.

While Er et al (2009) averred that online learning technologies do not only help reinforce students' knowledge in subject matter but enable teachers and learners to advance their technological skills. Guardian Newspaper Report (2015) highlighted the urgent need for higher education teachers to adopt new technology into their practice. The report stated that online education offers new way to higher institutions in the UK to compete internationally without struggling to meet capacity. The report also encouraged higher education teachers to utilise online learning technology to advance their technology skills and teachers practice. Hemmi et al (2009) highlighted the importance of online learning in teacher practice. They observed that online learning improves teacher to teacher, student to student and student to content engagement. Schroeder et al (2010) argued that the engagement between teachers and students and content encourages active learning and knowledge sharing.

Despite these claims made by supporters of online technology, some research have shown that many teachers are still sceptical about online learning and unclear as to how online learning technology can fits into their lesson plan as opposed to simply posting materials online (Skylar 2009). Hew (2011) observed that online learning technology is not real academic tool for teachers practice, therefore should be kept away from the classroom. Lankshear and Knoebel (2004) argued that online technology application has serious safety challenges if adopted as learning tool as some users display inappropriate behaviour, download and post offensive images as well as disclose personal information of other users. But UCISA TEL Survey (2014) report refuted these claims that online technology is unsafe and not real academic tool. The Survey stated that online technology enhances individual learning, group interaction, information sharing and teacher, student's collaboration.

While Prensky (2010) believe that those who oppose online learning are fearful of new technology and often narrow-minded because it causes a rethinking of their educational role. Wehril (2009) averred that educators must realise that the emergence of this new technologies are not simply new tools but relevant tools for learning and teaching in higher education. However, some educators have argued that the effective way to understand what teachers thinks about online learning technology and how online learning technology can be adopted into teachers practice can be clearly understood when the study is contextualised within an organisation (Garrison and Anderson 2003; Solomon and Schrum 2007; Bennett et al 2012). Hayes (2010) observed that teacher's perception about online learning technology can be understood when the study is particularised within a social context. While Bawa (2016) argued that contextualisation of a study within an organisation will help describe the research variables clearly and create new knowledge.

Therefore, this study was conducted in social context at London Bridge Business Academy a higher institution in the UK. In the school, most teaching and learning usually take place in a classroom setting without teacher's use of online learning technology to teach.

Although, the school has a virtual learning technology (VLE) platform but the VLE tools are not use to deliver online lessons. Most teachers in the school are sceptical about online learning and do not want to integrate online technology into their practice. This scepticism by teachers in the school tend to resonate with Skylar (2009) study that observed that some teachers are still worried about online learning and are unclear as to how online learning technology can fits into their lesson plan. But Cook (2002) study argued that virtual learning environment is a vital online platform for teacher's development as it allows teachers to communicate, post learning materials and assignments like in real time using video or Web conferencing. While Martins (2007) believed that VLE is flexible and convenient for teachers to adopt than other online learning technologies.

During this study, virtual learning environment (VLE) was used as a teaching platform to deliver lessons and instructional content to students in this study. To successfully implement the virtual learning environment, a PASTOR model was developed to help teachers integrate the VLE tool effectively. The model consists of six steps such as practitioner(s) presence, adopting leadership by example, specifying leaning tool(s), teaching and learning implementation, organising and reflection. The model is structurally defined and has a step by step approach for teachers to follow. The cyclical nature of the model allowed participants and I to reflect and review our practice continuously throughout the research process. Therefore, by exploring my experience and the lived experiences of the research participants in this study the result and findings will add to online literature and encourage teachers who may be sceptical or fearful of adopting online learning technology into their practice.

1.1 Background

The incorporation of online learning technology in higher education is considered beneficial to students and teachers (Mason and Rennie 2008; Davies et al 2017). Many educators have argued that using online facilities outside and inside the classroom improves good quality education (Garrison and Anderson 2003; UCISA TEL Survey Report 2014; Horizon Report 2014). Bonk and Zhang (2006) argued that online learning holds out much promise in teachers practice today. Skylar (2009) averred that the way teachers understand and use online technology might be the key to success or failure of online learning adoption in higher institutions. Some reports and studies over the years have shown that online learning is a growing phenomenon in teachers practice. In the United State of America, Babson Survey Research Group 2015 report revealed that 7.1 million higher education students in the US are taking at least one online course as part of their degree programme (Elaine et al 2016).

While in Australian the Federal Government through the closed office for learning and teaching, pressed higher education management to become more innovative and develop effective strategy that will make Australian higher education sector the leader in online learning technology in the world. In line with this vision, the University of Technology Sydney, has invested AU$1.2 billion on a new campus with no conventional lecture spaces as a way of achieving the target set by the government (Niall et al 2016). In Europe, the German Government is investing heavily in higher education sector especially in online technology in order to encourage technology-based delivery of vocational and academic education which many educators in Germany believe is the right direction for teachers practice and students learning (Niall et al 2016).

From all the reports highlighted above about technology investments in the US, Australia and Germany, many studies in the UK have shown that the UK higher education sector is among the leading online learning provider in the world (Elaine et al 2016). Historically, new technology integration into higher education sector in the UK has long been advocated by different institutions in charge of education in the UK (Royal society 2012). In 2016 the UK Government introduced the Teaching Excellence Framework (TEF) in order to encourage quality teaching and enhance excellence online education (Rachel 2017). Davies et al (2017) article titled Rebooting Learning for the Digital Age stated that digital technology should be recognised as a key tool for higher education teachers in the UK because it enhances innovation and excellence.

But Hayes (2010) study observed that online technology use as a resource for learning is neglected in higher education today in the UK. Mazer et al (2007) argued that adequate information and proper application of knowledge and experience of practitioners might help provide better understanding of how online technology can be adopted effectively in teaching practice. UCISA TEL Survey (2014) report called for UK higher education teachers to integrate online technology into their practice and harness the benefits. Er et al (2009) study earlier study called for online learning integration into teachers practice. They averred that online learning experience provide advanced educational opportunities for teachers and students learning needs. Davies et al (2017) believes that online technology can help teachers deliver their course content and learning resources effectively and communicate, collaborate and reflect effectively.

However, Skylar (2009) study revealed that many teachers are still unclear how online technology fits into their practice and are worried about it integration. IFL (2010) survey found that 38 per cent of their members surveyed were not confident in using new technologies for their professional development or support teaching and learning. Kennedy et al (2009) study noted that the way forward is for the development of strategy that can help teachers integrate online learning technology easily

into their practice. Therefore, a practical application of a model may help bridge the gap between non-users of online technology and users of online technology. Just as Suraya et al (2011) observed that while academia provides the platform for theory, practitioners provides practical knowledge. They believe the gap in knowledge between educators (non-users of online technology) and practitioners (users of online technology) can be achieved when they (teachers) adopt online technology into their practice with a defined model.

Pelz (2004) argued that understanding effective strategy requires the development of model that describe steps how teachers can integrate online technology into their practice. Pelz believed that just as certain tactics and strategies do work in face-to-face pedagogy, a step by step approach can help online teachers to effectively integrate online learning technology into their practice easily. Goodyear et al (2001) observed that if teachers are adequately prepared that fear and worries some teachers have may minimise and in turn motivate teachers to engage in meaningful online teaching and learning. I believe by integrating online learning technology into teachers practice in my school and developing a model for teachers to adopt may enhance teacher's knowledge about online learning and improve their practices and in turn bridge the gap between online users and non-users.

1.2   Research Problem

In the beginning of this study, I was unsure how I was going to carry out this study, what is going to be the purpose? Who is going to be involved? And how online can impact teachers practice? This quest and interest motivated me to engage with my friends and colleagues within and outside my school. During my conversation with them, I began to develop a strong sense to investigate my practice and understand other practitioner's views about online learning. Reflecting on my past practice over the years, I can argue that not all my students participated in my class lessons or submitted their work as at when due which gave me lots of concern. My teaching practice over the years has been more of a conventional style classroom teaching, face to face setting using ball pen,

writing board, and slides presentation to teach (Horizon Report 2014). Mullins (2013) referred to this kind of practice as a traditional form of teaching that has no online content delivered. Reflecting over my traditional form of teaching in the past years, I wondered what it will be like to have lessons with my students using online technology and such lesson will be posted on a site. This thought in my mind motivated me to conduct this research. In an attempt to answer this question, I reviewed different online literature and text books about online technology. From my reviews, there seem to be mixed views about teacher's perspective about online learning technology integration into teachers practice.

Critics of online learning have consistently challenged those who support online learning technology integration saying that teacher's improvement and students engagement in learning does not ultimately come from online technology but the instructor ability to teach and manage his/her class effectively (Chang et al 2008). Chang argued that face to face method permits learners and instructors to bond socially which help reduce rate of student's dropout and ultimately help build student confident. Kop (2008) study also criticised the integration of online technology into teachers practice. She called online technology a disruptive tool in teacher education not suitable for academic purposes.

Anderson (2013) claimed that online learning is a 'disruptive invention' that challenges residential colleges. Martin (2007) views online learning as a tool that de-professionalises the teacher and replaces teacher with content. While Hew (2011) argued that online technology has no real academic or education related activities as such students do not see them as academic tools and therefore should be kept away. Chang et al (2008) further argued that students who are not technological inclined may found the introduction of online technology to their learning as discouraging because they may prefer classroom environment rather than their computers, while some may hate typing or communicating via visual aid which could isolate them from learning.

In contrast to Martins and Anderson views, Maddux (2004) observed that online technology integration into teachers practice is a positive step to teacher development. He called online technology a new way of learning and a disruption of the traditional practice. Wehril (2007) agrees with Maddux assertion. In fact, Wehril called critics of online learning narrow minded group that does not see the broad benefits of online technology in the 21st century. He argued that despite criticism against online learning technologies their use has continued to spread and their applications continues to dominant amongst digital native teachers, young adults and teenagers. Coutts et al (2007) observed that teachers who utilise online technology in their practice effectively enhance their practice and pattern their teaching in a way that reflects their learning in their own classrooms.

Allen and Seaman (2014) study revealed that 82% of administrators agreed or strongly agreed that online education can be as effective as a traditional face-to-face approach as compared to 38% of faculty members who felt that way. In the same study 60% of the surveyed faculty staff reported that they would recommend that their students take at least one online course. From these mixed perspectives discussed, I believe exploring practitioner's views about online learning integration into teachers practice will be important for depth understanding and application of a successful online strategy.

1.3   Purpose of the Study

The purpose of this study was to understand teacher's perceptions about online learning and to recommend successful strategy that can improve teachers practice.

1.4 Research Questions

In an attempt to achieve the research purpose, the following key research questions were asked.

- How do teachers describe their perceptions about online learning environment?

- What impact does the use of online technology have on teacher's practice?

- What impact does online learning have on student's engagement in learning?

- How can teachers reduce online learning attrition/dropout rate of students?

- How do teachers describe the adoption of PASTOR Model into their practice?

1.5 Research Significance

Pollard (2010) observed that the contribution of research done by teachers is multidimensional a powerful teachers empowerment tool that practically places teachers in best position for finding out the most appropriate teaching techniques in their practice and professionally help teachers grow as reflective practitioners controlling their learning. This study is important because it focuses on teacher's development and integration of new technology. The practical application of this study benefitted all the research participants and I as we appropriated online learning technology into our practice for the first time.

Another importance of this study was the fact I was able to develop a teaching model called PASTOR model that all the participants adopted into their practice during the course of the study. Also, the adoption of the model provided the participants and I the opportunity to follow a methodical structure in implementing and analysing the research process. The model defined structure of step by step guided all the participants and I to systematically reflect and review our practice in a more meaningful and logical way.

Another significant side of this study is the student's engagement in learning. The students who participated in this study gained valuable insight to how online technology supported their learning and technological skills. During the study, students were able to post their online comments, engaged in discussions with their fellow students interact with their teachers and express their views freely. This study also helped all the teachers to develop an effective online retention strategy that enabled them to engage students during the online lessons. Another benefit of this study was that teachers were able to develop mentorship skills as some students were taught how to use the school virtual learning environment. Finally, another significant part of this study was its contribution to the existing literature of online teaching and learning.

1.6   Thesis Structure

This thesis is divided into five chapters

Chapter One: Introduction: includes an introduction to the research together with a background, research problem and purpose of the study, research questions, research significance and structure.

Chapter Two: Literature Review: includes an introduction, explanation of face to face learning environment, fully online environment and blended environment. The chapter also explains online learning challenges and benefits, types of online teaching and learning technology, teacher's pedagogy, learning theories and online teaching strategies.

Chapter Three: Methodology: outlines the research paradigm, context of the case study, participants, questions to be investigated, data collection, data analysis procedures and validity and pilot study.

Chapter Four: Research Findings: describes the findings of the study.

Chapter Five: explains the research contribution, limitations, implications, recommendations and conclusions. The next section is chapter two my literature review.

Chapter Two

Literature Review

2.0   Introduction

In educational research today teaching quality has remained a dominant factor in raising student's achievement and teacher's effectiveness (Hayes 2010; Elaine Allen et al, 2016). Some scholars argued that quality teaching and learning can be effectively achieved when teachers research their practice (Solomon and Schrum 2007; Bennett et al 2012). Reeves et al (2010) averred that teacher research improve the individual practitioner in the area of beliefs and values (knowledge), self-concept and identity, relationships (with students, colleagues and school managers), artefacts (including conceptual frameworks, procedures and material equipment within the context of the teachers working environment to both support and sustain the development of changes.

Hayes (2010) observed that effective and quality teaching and learning can be link to technological integration. Hayes further argued that online technology use as a resource for teachers teaching and learning is neglected in terms of research. English (2006) observed that teachers research is a way in which teacher can get 'inside information' regarding the educational field which she feels is sorely missing today. For teachers to adopt online learning technology into their practice, improve their teaching practice, reduce online attrition and ensure student's engagement during lessons. Some scholars believed that teacher research is needed (Garrison and Anderson 2003; Solomon and Schrum 2007; Bennett et al 2012; Bawa 2016). In view of English (2006) views about teacher's research and it significance to student learning and teachers improvement, this study becomes timely and vital to teachers development, preparedness and future research.

Reviewing literature there seems to be little agreement about the most way teaching and learning can take place in higher education (Kolowich 2012). Although, some scholars have advocated for only face to face approach while others supported online learning only and others proposed blended learning yet no agreement reached as to the most effective approach for learning (Allen and Seaman 2014; Horizon Report 2014; Kop 2008; Prensky 2010). Therefore, in this section, I will explain the three learning environments mentioned above in order to provide a clear background of this research perspective.

2.1 Face to Face Environment (Classroom Only)

Face to face learning is known as conventional method of learning or traditional learning style (Kelly et al (2013). In this kind of method lessons are predominantly carried out in the classrooms or school premises alone. Teachers are provided with teaching tools like ball pens, power points slides, projector, hand-outs and dusters (Hayes 2010). Chang et al (2008) argued that face to face classroom lessons help learners to be more focus during lessons and motivate learners to easily remember what they are taught better than participating in an e-learning session. Chang argued that face to face format has fewer distractions than online learning environment because learning occurs in specified time and space. Knowles (1975) observed that face to face learning allow learners and instructors to bond socially and create human interaction between learners and their tutors which ultimately help reduce high dropout rate of students. Kelly (1970) also argued that the presence of teachers in classroom builds students confidence and encourage students to build inter personal relationships with their class mate.

Chang et al (2008) study averred that a good classroom instructor creates safe environment for learners and help resolve individual learners needs. Chang argued in face to face learning environment instructor may notice one or more learners with specific learning difficulties and can easily identify them than in online learning environment. The instructor may also watch for signs of these problems

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and offer help to learners during breaks or after class. Another benefit some scholars highlighted about face to face learning is that students who are not technological incline may found the introduction of technology to their learning as discouraging because they may prefer classroom environment rather than their computers or some may like writing than typing (Chang et al 2008). Martin (2007) argued that teachers exercise strong leadership in classroom format than in online learning environment which in turn help students to be more focus and attentive which will lead to learners submitting their work as at when due.

While Meyer (2007) study observed that face to face learning environment is no longer a technology free environment that other digital technologies can be used without converting it to online learning environment such as projector, computers, software etc. Terhart (2003) believe that digital technology in classrooms do not represent a shift in learning environment as both can be used together. But face to face enthusiasts argued that online learning environment is fundamentally different from face to face (Hew 2011). Martin (2007) viewed online learning as a means of commoditising education, de-professionalising educators and commercialising universities while the educator is replace by content. Kop (2008) study viewed face to face as the appropriate form of learning. She believe classroom face to face learning help teachers ensure that their lesson aims and plans are well explained and communicated to students during lesson and immediate provide feedbacks to learners. She also argued that face to face format encourages students to ask questions on the areas they do not understand, make suggestions and contribute to discussions where they deem necessary during lessons and such benefits sometimes do not exist in online learning environment.

However, some scholars have criticised face to face learning environment. Knowles (1975) observed that face to face learning is where the teacher is the 'nexus' from which all learning begins. He argued that this approach is very structure that power comes from the top (teacher) to the bottom (students). Which mean that the teacher takes responsibility of the learning and structure learning according to

his/her experience. Larochelle and Bednarz (1998) criticised this form of learning environment. They argued that the face to face method have lots of defects to be used for dominant pedagogy today. They observed that face to face limits learner's participation and interaction which negatively make learners ineffective and passive during lessons. Armstrong (2012) stated that the face to face approach ignores learner's responsibility but emphasis more on the teachers and such approach is more of a teacher led approach than student led method. With this method teachers depend extensively on textbook and other instructional materials to teach (Ben-Peretz, 1990). Armstrong (2012) study believe that face to face learning environment can be effective depending on the instructor as some learner may feel comfortable with face to face than in online learning environment.

2.2   Fully Online Learning Environment

Fully online learning technology are increasingly becoming a common trend in higher education particularly in higher education in the UK (Mason and Rennie 2008; Horizon Report 2014). There is increased call for teachers to integrate online technology into their practice and harness it benefits (Prensky 2010). Supporters of the online environment believe that online technology is an unprecedented communication medium that facilitates two ways communication (UCISA TEL Survey Report 2014). Another advocate of online learning argued that online learning environments offer the same meaningful interactions like in face to face setting (Hrastinski 2008). Er et al (2009) averred that online learning experience provide advance educational opportunities for teachers and students. Hrastinski (2008) argued that online learning is a flexible technology environment and can help learners to receive information from their teachers in their own free time and contribute at their own convenient with less pressure to act on the information or respond immediately.

Other studies revealed that the asynchronous and synchronous communication features of online technology enhances teachers practice and support students learning (Coutts et al 2007; Allen and Seaman 2014; UCISA Surveys Report 2014). Meloni (2010) highlighted three educational benefits online learning environment provide for learners such as, students and teacher collaboration, student products and portfolios development and learner specific spacing geared towards the individual needs (Hrastinski 2008). Supporters of online learning agreed that online learning environment is a student led approach that encourages students engagement during lessons and provide meaningful interaction (Bonk and Zhang 2006; Skylar 2009). Er et al (2009) study revealed that online learning technology increases student's collaboration during learning. Lorenzo and Ittelson (2005) study cited that online learning encourages personalised learning and create an environment for students to become highly self-reflective.

Despite, the growing support and interest in online learning environment, some research have shown that if students are given opportunity to choose between face to face and online learning some students may prefer the face to face environment than the online learning environment based on the benefits of the social interaction, confidentiality setting and physical location it offers (Maddux 2004). This position tends to agree with Yuen (2009) study that revealed students tend to feel isolated learning online. While Chang et al (2008) argued that both face to face and online learning methods enhance learning, encourage community setting and provide sense of belonging to learners. Chang believe their adoption may depend on the instructors. Chang et al (2008) argued that both methods have the capacity to expand learning beyond the original context and they provide learners the opportunities to broaden their learning experience in myriad ways. I believe both methods are good and should be adopted by instructors in order to achieve effective teaching.

2.3   Blended Environment

Driscoll (2002) described blended learning environment as a combination of mixing at least different methodologies. In his first definition, blended learning was described as mixing of technology based learning, collaboration and virtual classroom. Secondly, he described blended learning as the combination of pedagogy approaches such as behaviourism, cognitive and constructivism. According to Collins Dictionary 2008 edition, describe blended as to blend, as to mix ... together to improve quality. The Oxford English Dictionary defines 'blend' as to 'mix together so as to make a product of a desired quality'. Although, blended learning definition has been subjected to multiple definitions (Oliver and Trigwell 2005). The underlying assumption of all these definition is that something is going to be mixed and improved as a result of the blending action (Heinze and Procter 2006). When teachers and students reviews, reflects and construct knowledge using different methodologies like face to face and online technology knowledge is enriched and experience widened (Bonk and Zhang 2009).

Orey (2003) averred that the mixture of face to face and online technology has the potential to improve learner's knowledge and teacher practice. Bonk and Zhang (2009) study described how the use of blended learning approach enhanced their study. They observed that the mixture of face to face and online learning helped provide different perspectives about participant's views which in turn enhanced their practitioner's knowledge and technology skills. Kvavik (2005) study revealed that 94.9% per cent of student's responses in their research indicated that they would prefer limited or mixture of IT in learning. While 2.2% per cent of students preferred learning in an online format and 2.9% per cent preferred face to face learning without IT (online). Kvavik findings showed that students still preferred blended learning at against only face to face or only online learning. Allen and seaman (2014) argued that blended approach encourages students and teachers to communicate effectively either by online or offline and these platforms offers teachers and students the benefits to be flexible, engage and become self-reflective.

But some researchers have criticised blended learning environment as a platform that makes teachers over work (Salmon 2000; Bonk and Zhang 2009). Bonk and Zhang (2009) argued that blended learning environment create additional work for teachers because it involve in blended arrangement which broaden the teacher work and create difficulty in picking the most suitable syllabus to achieve the right balance between online and face-to-face learning. However, Allen and Seaman (2014) provided a table description of blended learning.

Fig: 2.1 Table below describing blended (Modified from Allen and Seaman 2014).

Percentage of content delivered online	Type of approach	Description
0	Face to face (Traditional)	No online technology used
30% to 79%	Blended	Uses both face to face and online to deliver and support learning activities and of content
79% and above	Fully online	Nearly all content and learning activities are delivered online with little or no face to face meetings.

Fig: 2.1 Table describing blended learning (Modified from Allen and Seaman 2014).

The table above describe the percentage which any of the learning environments can be classified whether face to face or blended or online. From the table, 0% is when no technology is used while 30% to 70% is when face to face and online are applied together which is classified as blended learning. Finally, 79% and above they classified as fully online with little or no face to face. Having described different learning environment, it is therefore important to look at challenges and benefits of online learning.

2.4   Challenges of Online Learning

Despite the increase in online usage and online course expansions in higher institutions in the UK, some research has shown that student's retention rate has continued to recede (Bawa 2016). Bauerlein (2008) study highlighted poor generation of vocabulary as a challenge for users of online. Bauerlein argued that online poses a serious vocabulary challenge to students learning. Bauerlein believe that online create weaker reading and writing skills for users. Bauerlein argued that students 'who write and read messages online often use incomplete sentences, misspell words, use incorrect grammar and the online etiquette allows them to write poorly because it is a very lax environment for writing and sending messages . Bauerlein warned that this trends if not checked may result to an unfortunate situation where students may consistently practice poor writing skills that could hinder their academic performance in school.

Kirschner and Karpinski (2010) stated that students who use online to learn often had average or worse academic results than those who do not. Hamano- Bunce (2011) study revealed that students who use only online technology to submit their assignment showed inconsistency in students' performance. For instance, when one student finishes his/her work quickly than others it created an impression in the mind of the teachers and affected the way the teacher evaluate student's performance. Another challenge is the issue of lurking. Salmon (2000) observed that if online learning is not properly managed many students may become lurkers. Learners who are lurkers are only interested in reading others work but don't share their own ideas or contribute to discussions. For effective online learning experience teachers need to develop strategy that encourages learners to post and engage in discussion rather than just reading other people work or posting what other learners have posted.

Other critics of online technology claimed that student's attrition/dropout is the major challenges online technology is facing (Heyman 2010). Smith (2010) study cited that 40% to 80% students drop out of online classes. While Smith averred that reduction in students attrition can be achieved when teachers and school management understand the strategies required to maintain their online learners.

2.5   Benefits of Online Learning

Supporters of online learning believe that technology is the way forward for teacher's pedagogy development (Horizon report 2014). Alexander (2006) study encouraged teachers in higher education to integrate new technology into their practice. Alexander cited that online technology is relevant to teacher pedagogy development. He also observed that schools should equip teachers and students with latest technology tools that enhance their interactive skills and collaborative competence. Hemmi et al (2009) study revealed that online technology helped learners to engage actively during learning. Their study showed how online technology improved teachers, students and content engagement allowing participants to actively participate in discussions. Brown (2011) study observed that online learning technology are equipped with lots of features such as bulletin boards, instant messaging, email, group chat, post videos and pictures which teachers should take advantages of as professionals.

While Baker (1999) stated that new technology connects students with other students which create a learning community that enhances student's education. Hemmi et al (2009) study cited that when students post, comments and exchange ideas and co-construct their knowledge within the context of the online community they develop a sense of community and that sense of community enrich student's knowledge and improve their academic engagement in learning. Aceto et al (2010) observed that members of online communities learn by making and developing connections (intentionally or not) between ideas, experiences and information through interacting, sharing, understanding, accepting, commenting, creating and defending their own opinions. They believe that these attributes goes hand-in-hand with other forms of learning like knowledge and skills acquisition for practical and

professional development. They also encouraged the use of new technology and tools that supports self-expression and social networking to support communities of practice. Aceto et al (2010) averred that communities of practice are clearly an attractive approach to fostering informal learning and developing work based learning of teachers and students. Garrison and Anderson (2003) highlighted different online learning benefits such as student and student interaction, student and content interaction, student and teacher interaction and teacher and content interaction. The diagram below shows Garrison and Anderson (2003) descriptions of online benefits to users.
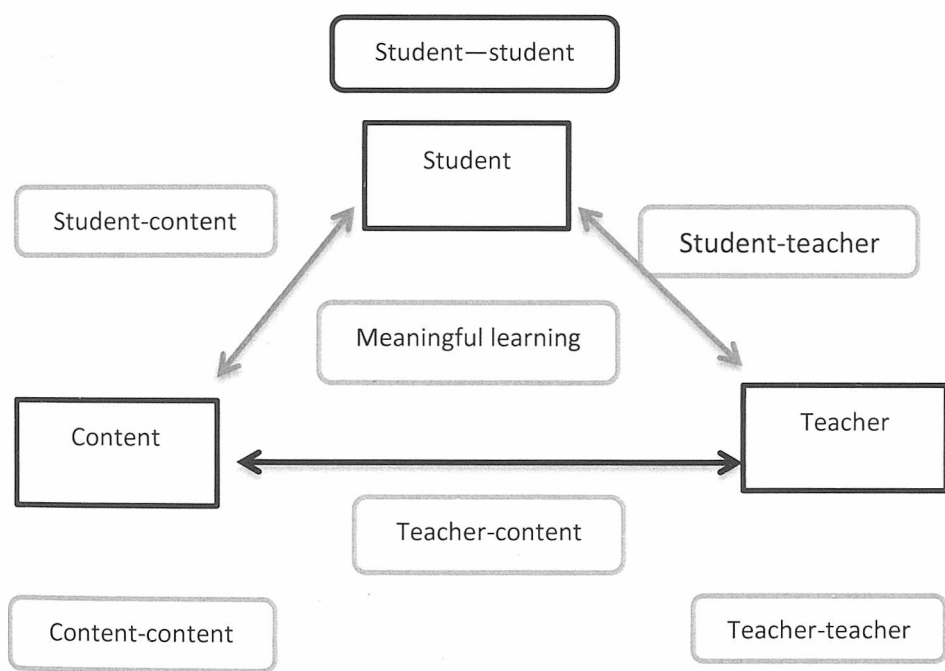
Fig: 2.2 Garrison and Anderson (2003) online benefits to users.

The teachers- student's interaction means that instructors can advise and support learners by providing feedbacks like in face to face format to students. While the student content interaction is when interaction is based on content provided by the teacher to the learners. The student-student collaboration is when students respond to other students post, comments or discussions. Ullrich et al (2008) believed that online learning environment encourages learners to construct, understand and explains their views based on their experiences and knowledge. Bonk and Zhang (2006) study also highlighted more benefits of online learning to teachers and students learning.

Below is the diagram of the benefits that Bonk and Zhang 2006 explained.
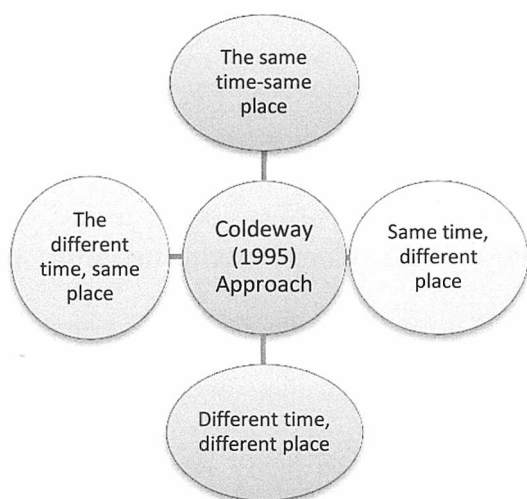
Fig: 2.3 the four benefits of online learning

The same time-same place approach means that some students can interact with other learners using any online technology platforms like Blogs, Wikis, Skype, Facebook, LinkedIn, YouTube and Twitter to communicate at the same time in same virtual space similar to face to face format. This approach can be classified as a synchronous communication (Bonk and Zhang 2006). Synchronous communication means that learning take place in a conversational manner where learners and instructors communicate directly through chat or any other visual means (Bonk and Zhang 2006). Some educators have argued that the synchronous communication help learners and their instructors to communicate in a real time and respond to needs, questions, comments or post from learners (Er et al 2009; Hemmi et al 2009).

The different time, same place approach means that participants use online technology to interact in the same space but in different time. This could be called asynchronous technological communication. The advantage of using asynchronous communication process is the flexibility potent it accord participants (Bonk and Zhang 2006; Er et al 2009; Hemmi et al 2009). This approach allows participants to receive information and contribute at their own convenient with little or no pressure to respond immediately to information without reflecting or digesting the information or putting it into a proper context. This asynchronous communication process can be viewed as beneficial to learners and teachers as both can respond to their post or comments at their own convenient.

The same time different place approach allows instructors and learners to interact independently at the same time but in different geographical location. By this, flexibility in learning is encouraged and learning autonomy is maintained.

The different time, different place benefit allows instructors and learners to communicate separately at different time and in different space. With this approach learning takes place outside a particular location and with no specific time which encourages autonomy and ownership of learning. All these benefits mentioned above could be the reason many scholars thinks online learning is relevant in teachers practice. Having understood different benefits and challenges online learning provides, it is important to look at different ways online teaching technology can be used in teachers practice.

2.6   Types of Online Teaching and Learning Technology

Some scholars have highlighted many ways online learning can be integrated into teachers practice such as Virtual Learning Environment (VLE), Wikis, Blogs, Social Networking Sites (SNSs), WebCT and eCollege, Massively Open Online Courses (MOOCs), Mobile Devices, RSS, wireless connections, Google, Creative Commons, instant messaging, and virtual world (Abel 2005). Despite the different platforms of online technology today, some educators have continued to express concern about the extent to which these tools improve the learning experience of students and teachers practice (Kirkwood 2006). However, in this study I will describe three types of online technology environment such as Virtual learning environment (VLE), Moocs and Social networking sites.

2.6.1 Virtual Learning Environment (VLE)

In the last 20 years, teacher's education has continued to expand through e-revolution (BBC Active 2016). Most schools and universities now have a functioning virtual learning environment (VLE) at the heart of their teaching and e-learning programmes, Moodle, WebCT and Blackboard (BBC Active 2016). As a result of the rise in VLE some scholars have tried to describe virtual learning as a system for delivering learning materials to students via the web (Cook 2002). McMillan Dictionary (2016) defined virtual learning environment as 'a web-based system for delivering educational content'. In this study, virtual learning environment can be described as a virtual classroom that allows teachers and students to communicate with each other online.

Despite the rise of virtual learning environment in the UK, research has shown many teachers are still sceptical about it integration into their practice (Wehril 2009). This concern was expressed by Prensky (2010) textbook: Teaching Digital Natives. He argued that most students are digital native in the use of technology while their teachers are immigrant in the use of new technology. Prensky averred that the effective way to provide quality learning for the digital native is for teachers to speak the same language like their students by becoming digital natives. BBC Active Report (2016) supported the use of virtual learning environment (VLE) in teachers practice. BBC Active Report agreed with Prensky view that teachers should adopt digital technology. The report advised institutions, teachers and educational leaders to integrate VLE into teacher's lessons and allow VLE to become second nature to learners and educators outside of the classroom.

Cook (2002) earlier work averred that virtual classroom allow teachers to communicate with students in real-time using video or Web conferencing. Cook highlighted key features of VLE system that are beneficial to students and teachers such as student tracking, class information, learning materials, and assignments and students log in account to the class website to view information and download assignment materials to their computers. These attributes Cook believe makes VLE a good platform

for teaching and learning. Some scholars stated that VLE offers flexible support to educators who do not need to be in a fixed time or place to support and communicate with students (Cuban 2001; Cook 2002 Guri-Rosenblit 2009). From these benefits highlighted, I believe the adoption of VLE in the main study helped teachers use online learning technology effectively to engage their learners and in turn improve their teaching practice and student's engagement in learning (See Appendix 15 sample picture of the VLE used).

However, some researchers have criticised any adoption of virtual learning environment in teacher's practice (Kop 2008; Hew 2011). Martin (2007) argued that VLE is an environment where academic issues are led by the teachers rather than the students. Others highlighted security concern, users have to physically go and log-into their VLE account to comment or post new posts have discussions and download materials (BBC Active Report 2016). Martin (2007) believed these concerns make VLE institutional in nature as it contains student's records, library systems and content management. In an attempt to minimise these concerns mentioned critics of VLE, I ensured during the study teachers do not record any lessons post with their students in the school record or file and after the study all information are deleted from the school VLE and I ensured all participants followed my ethical guidelines.

2.6.2 Massively Open Online Courses (MOOCs)

There are several definitions of MOOCs from conceptual to technical definitions (Craig 2012). Some researchers cited that MOOCs is a relatively new phenomenon sweeping across higher education in the US but gradually growing in some institutions in the UK (Liyanagunawardena et al 2013; Guardian newspaper 2015). By definition MOOCs take place online (Weigel 2014). Anderson (2013) article quoted the New York Times columnist and Washington Post (2013) study that described MOOCs as a medium for educational accessibility for all and an educational revolution for elite education.

Supporters of MOOCs have argued that MOOCs should be encouraged and be adopted by higher education institutions because it offers workers immerse opportunity to advance their educational career (Boxall 2012; Liyanagunawardena et al 2013). Craig (2012) averred that MOOCs provides low cost routes to accessing quality courses, empowering learners to learn at their own space, combining their study with other study or work, choose their own language as most MOOC classes are offered in different languages whether in English, Chinese, French or other language. Boxall (2012) averred that MOOCs offers businesses the opportunities to bridge their 'skills gap'. While Anderson (2013) postulated that MOOCs give a large number of students the opportunity to study high quality courses online with prestigious universities often at low cost. Liyanagunawardena et al (2013) agreed that MOOCS is ideal for independent study. The Department for Business Innovation and Skills (2013) study observed that if MOOCs is correctly deployed it offer educational institutions a useful lever for restructuring and transition.

Boxall (2012) study argued that the features of MOOCs help users to select courses from any institution offering their choice program(s) the video-based interaction either through peer review or group collaboration, automated feedback, online assessments help learners to develop their technological skills. But critics of MOOCs have viewed MOOC as a means of organisation maximise the value of their branded pedagogical content and potentially shore up revenue (Weigel 2014). Anderson (2013) claimed that MOOCs is a 'disruptive revolution' and a harbinger of the end of residential colleges. Harvard Gazette Report (2013) described MOOCs as 'mere marketing' or at worst an abject failure, singling out low completion rates.

However, many educators and management of institutions are concerned about the academic value MOOCs brings to education (Weigel 2014). Anderson (2013) Study cited a research conducted by Pennsylvania State University in 2013 that examined the behaviour of one million enrolees in 16 courses in the university. The findings showed that completion rates in the university MOOCs

programme averaged just 4% which indicated high drop-out rates. I believe the concern raised by these researchers clearly shows why there has been a mixed view about MOOCs acceptance in most UK's higher institutions.

2.6.3 Social Networking Sites (SNSs)

In the 1990's social networking sites were introduced to the world in form of emails and chat rooms (Valkenbug and Peter 2009). At that time many researchers thought that the use of social networking sites would be meaningless or superficial and may fizzle out with time. While some think spending time on a computer would constitute negative effect to their real life, friendships, academics and relationships but over the years these concerns have gradually faded away (Valkenbug and Peter 2009). In fact, computer and online communication use has exponentially increased and widen in applications and accepted as a new norm globally (Horizon Report 2014). Although there use and application have generated lots of debates among scholars and researchers all over the globe (Solomon and Schrum 2007; Wehril 2009; Suraya et al 2011). As a result of social networking sites popularity today some educators and policy makers have continued to advocate their use in teachers practice (Mazer et al 2007; Hrastinski 2008; Brown 2010).

Barnett (2009) argued that social networking sites have evolved from social use to educational application and then to mainstream culture. Barnett believed what is needed today is for educators to appropriate social networking sites into their practice. So what is social networking site? Boyd and Ellison (2007) described social networking sites as web based services that allow individuals to construct a public or semi-public profile within a bounded system, articulate a list of other users with whom they share a connection, and view and traverse their list of connections and those made by others within the system. The nature and nomenclature of these connections may vary from site to site. Boyd and Ellison definition of social networking sites is vital to this study.

However, in this study social networking sites can be describe as web 2.0 that permits users to chat, interact, communicate their thoughts and feelings online. Brown (2011) study observed that social networking sites like Facebook is equipped with lots of features that is beneficial to online users such as bulletin boards, instant messaging, email, group chat, post videos and pictures. Brown averred that teachers do not take advantages of social media etiquette to teach as professionals. Brown believed that adequate utilisation of social media tools will help enhance teacher's online experience and in turn improve student's engagement in learning. Garrison and Anderson (2003) earlier work had advocated for teachers to learn more about social networking features and adopt them into their practice. They cited that social networking sites features can help teachers understand student's feelings and provide immediate response like in face to face setting.

Mazer et al (2007) stated that teachers who used social networking sites improved contact with students and discussed issues about school work, assignments or examinations information. They also stated that teachers who participated in their study encouraged students to ask questions related to the areas they do not understand, making suggestions and contributions where necessary and feedback given immediately. Coutts et al (2007) study found that teachers who use social networking sites to teach enhanced their practice and facilitate learning. Hemmi et al (2009) study also revealed how Facebook improved teacher's engagement with their students and students learning.

However, some scholars have opposed social networking site for teaching and learning. Lankshear and Knoebel (2004) argued that social networking sites should not be simply appropriated into classroom lessons as young people resent having their cultural norms miss-appropriated. Others observed that social media carries potential risk such as inappropriate behaviours of users, distraction during learning, disclosures of personal information and use of short sentences (Barnett 2009; Brown 2010; Ybarra et al 2007). Having discussed the three ways online technology can be adopted into

teacher's practice; therefore it is vital to consider different teaching and learning theories in the next section.

2.7 Teachers Pedagogy and Learning Theories

The issues about teaching quality and teacher professionalism have continued to dominate teacher pedagogy (Gillen and Barton 2010; Horizon 2014). Phillips and Soltis (2004) argued that diverse investigations have led to the postulation of different learning theories and models within teachers practice. But the debate about the best model for teaching has continued to dominate new pedagogy theories (John 1995; Franklin and Van Harmelen 2007). Belanger (1992) observed that the contribution of research done by teachers are multidimensional; politically it is a powerful teachers empowerment tool that practically places teachers in best position to finding out the most appropriate teaching techniques in their practice and professionally help them grow as practitioners controlling their teaching and learning. Ingrarson and Kleinhenz (2006) stated that practitioners research empower teachers to demonstrate professional standards that highlight their expertise. In view of all these comments made by different researchers and educators about teacher pedagogy, it is important that I explain what pedagogy means.

Smith (2009) described pedagogy as the activities of educators that impact knowledge. Alexander (2008) defined pedagogy as the profession of teachers that aim at improving the quality of teaching. Westbrook et al (2013) described pedagogy as teacher's ideas, beliefs, attitudes, knowledge and understanding about the curriculum, the teaching, learning process and their students, and which impact on their 'teaching practices' that is, what teachers actually think, do and say. Pedagogy came from the Greek word 'Paidagogos' which comes from the word Paidei meaning education while Agoge means guidance/development. Another definition of pedagogy could describe as a person who supervises the instruction of children. In this study pedagogy can be seen as a systematic or logical

way of providing quality teaching and learning to students. Therefore, it will be appropriate to discuss different teaching and learning models.

2.7.1 Learning Models

Bank et al. (1999) identifies three categories teacher knowledge can create a pedagogy setting whether in an online learning environment or face to face learning environment. The diagram below shows the complexities involve in teacher research.

Subject' knowledge
Including
-the essential questions of the subject
-networks of concepts
- Theoretical frameworks
-methods of enquiry
-symbolic systems, vocabularies and models

Personal construct

-educational goals
-view of mind and learning
-prior individual experience including culture, gender, ethnicity

School knowledge
Including
-the process of transformation from 'subject' knowledge
-historical, ideological, educational origins
-discourse, vocabularies, models, etc

Pedagogic Knowledge
-Goals of learning
-Knowledge of learners in the setting
-selection of knowledge that is the subject of the learning -selection of learning and assessment activities -resources – human, material, technological (and the boundaries from which drawn)
-discourse

Diagram: 2.4 Teacher knowledge used in creating a pedagogic setting

Bank et al (1999) model of teacher knowledge as described above means that teacher's profession is multifaceted and affected by the teacher understanding of knowledge. Coffield (2008) argued that teacher knowledge is complex and cannot be viewed from a position where the known can be separated from the knower rather the individual teacher is vital because different teacher in a similar situation can learn and know differently. Gagne (1985) described learning as a change in human disposition or capability that persists over a period of time and which is not simply ascribable to the

process of growth. From Gagne definition of learning I can argue that learning relates to change but not all change can be seen as learning.

Illeris (2007) study defined learning as any process in living organisms that lead to permanent capacity change and which is not solely due to biological maturation or ageing. Illeris study looked at the psychological, biological and social conditions that are involved during learning. He believes that learning is an extensive and complicated process that takes into account learning process and the conditions that influence the process. He argued that learning can be effectively understood through two different processes such as the internal interaction process of psychological process of acquisition and elaboration and the external interaction process of the learner's deals with social and cultural factors of learners. Illeris stated that for effective learning to take place both processes must be actively combined together. He developed a learning theory model understanding learning. The diagram below highlights Illeris main areas of understanding learning.
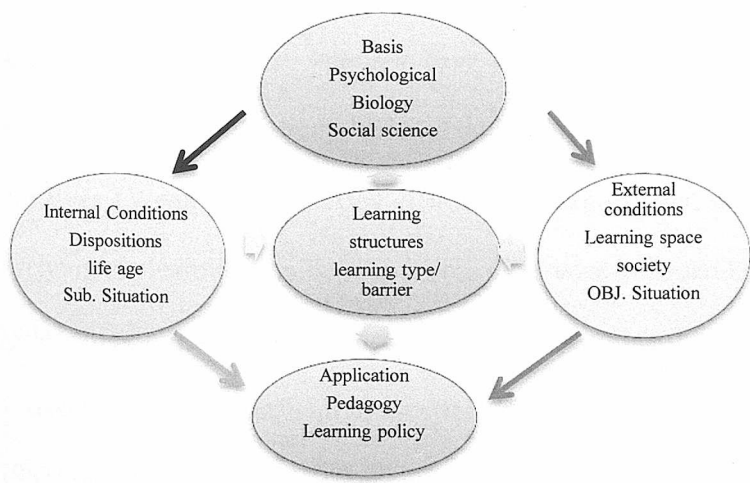
Fig: 2.5 Main areas of understanding learning

Illeris stated that effective learning can only take place when these complicated, complex interactions are properly understood. Although, he argued that most study focuses on the internal learning process which is more psychological than the external that deals with social interactions. He further argued that the behaviourist and cognitive learning theories deals only on the internal psychological process while social modern theories focus on external interaction process alone. He concluded that both

interactive processes must be present for effective learning. Illeris work was important in this study because it helped me and the participants to understand how individuals learn and how individuals learn as a group in a social context. While Bloom (1956) study taxonomy of educational objectives focused on learning outcomes. Bloom argued that there are different domains of planning learning outcomes for students in education such as cognitive, affective and psychomotor. Cognitive learning according to bloom comprises the acquisition and use of knowledge demonstrated by knowledge recall and intellectual skills, comprehending information, organising ideas, analysing and synthesising data, applying knowledge, choosing among alternatives in problem solving and evaluation of ideas or actions. Bloom also observed that affective learning comes from emotions, attitudes, values such as enjoying, respecting and supporting learners. Psychomotor learning he viewed as physical skills which require attributes like art and dance as well as vocational areas like construction or motor vehicle engineering.

Bloom's taxonomy educational objectives is use to set categories of thoughts and learning objectives (Anderson 2001). Some scholars have argued against Bloom's taxonomy as straightforward to measure learning which may be invaluable to a teacher who seeks to design a programme or frame objectives (Wenger 1998). Avis et al (2010) argued that the difference between the cognitive and psychomotor learning can be seen as the difference between knowing that and knowing how. Wenger (1998) study highlighted a particular aspect of learning in the psychomotor learning domain. Wenger averred that it can be difficult to ascertain knowing how language or any other symbolic form. Polanyi (1983) observed that knowledge could be tacit rather than explicit and not understandable in form of normal procedures or codes. Avis et al (2010) study cited that tacit knowledge may only be transfer by means of observation or the learner becoming immersed in the social practice of a particular organisational culture, in this way tacit knowledge is gained by becoming a member of a community of practice.

Supporters of Bloom taxonomy averred that Bloom taxonomy is a guide for teaching practitioners to develop critical thinking and learning activities with their learners (Fee 2011). They agreed that Bloom's taxonomy gives the teacher clear vision to review his/her objectives, activities and module goal. Meyer et al (2007) stated that new approach can develop critical thinking skills where learners can build their own knowledge and utilise previous experiences to interact with one another. Meyer et al (2010) study cited that Bloom taxonomy is appropriate for practitioner who involve in study that seek to develop their practice and understand practitioners views. Having explained different learning model and Bloom taxonomy in education, I shall briefly explain other learning theories like experimental and behavioural models, cognitive and constructivism models but will limit the discussion to functionalist and interactive models.

2.7.2   Experiential and Behavioural Models

Kolb experiential learning theory can be adopted in classroom environment and online learning environment (Carver et al 2007). Kolb learning theory believed learning is created through the transformation of experience (Kolb 1984, p.38). He postulated experiential learning cycle as a useful structure where experience, reflection, conceptualisation and experimentation forms practical headings. He argued that teachers can begin any stage but must follow each stage in sequence. These concepts isolate critical incidents but work well when attending to learn details of a situation. Kolb believe that when teachers and learners follow each stage in sequence both teachers and learners develop skills of awareness and attentiveness. Below is Kolb experiential learning cycle diagram.
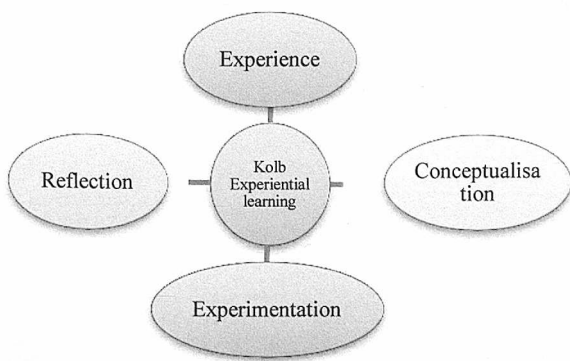
Fig: 2.6 Model of experiential learning

The first experiential learning stage is the experience stage- Kolb argued that learner at this stage actively experience activity such as field work or lab session. The second stage is the reflection stage whereby the learner actively reflects back on that experience. While the third stage is the conceptualisation stage where the learner attempts to put together a theory or model of what he/she has observed. The fourth stage he called the experimentation stage is when the learner is trying to plan to test a model or plan future experience. Kolb's model revealed how experience is translated through reflection which in turn used for active experimentation and new experiences. Kolb observed that learners can begin any stage but must follow each other in sequence. Carver et al (2007) study that focused in online experimental e-learning argued that the more students' experiences and interactions are drawn into the course design and activities the more online education can bolster agency, belongingness, and competence among online students.

But some scholars have viewed Kolb and Carver et al learning theory as simplistic not contemporary and out-dated (Illeris 2007). Although, Kolb experiential learning model has been expanded by Peter Jarvis in 1987 book titled adult learning in social context. He observed that Kolb theory did not take into account the social interaction that takes place during learning (Javis 1987). He developed his own model of learning that includes social functions of learning with other types of learning. Below is Javis 1987 model of learning.
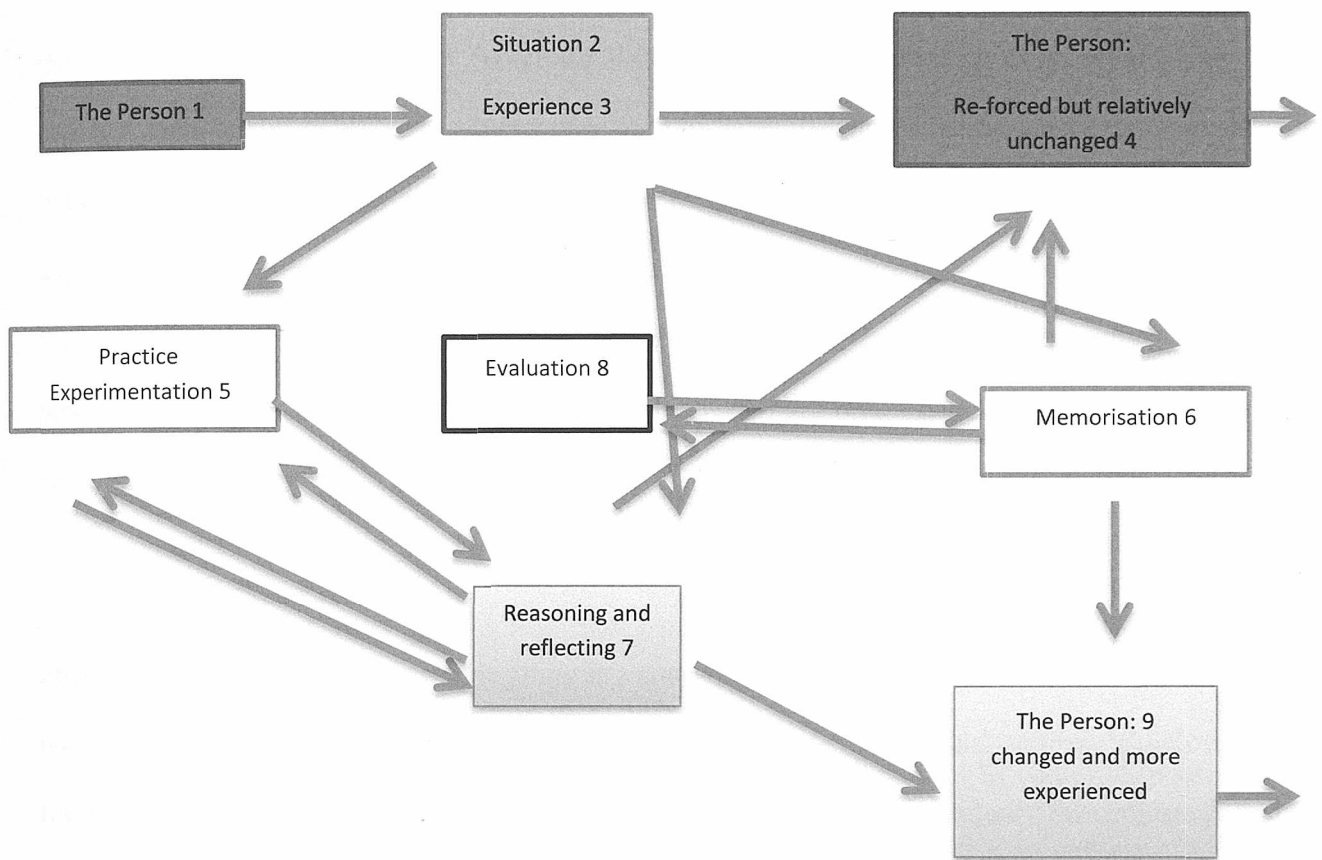
Fig. 2.7 Jarvis 1987 model of learning

Jarvis 1987 model of learning cited that experience is always a social issue that focuses on the person who learn. Jarvis work moved learning from experientialism to existentialism of human learning (Jarvis 2006). Some scholars have criticised Jarvis work as too complicated and too focus on individual social experience. However, Kolb and Jarvis theories are important in understanding learner's experience and knowledge existence. Both theories amplify human experience and social interaction during learning. Vygotsky (1987) earlier study viewed social interaction as main source for cognitive learning and behaviour. He believed that cognitive learning can develop through a process orientation rather than an end point of developmental processes.

Vygotsky theory considered learning as largely situation specific and context bound activity (McInerney and McInerney 2002; Woolfolk, 2001). He argued that learning development does not precede socialisation rather social interactions lead to development of mental functions. Vygostsky believe that learning take place through social interaction between learner and learner(s) or a more experienced learner (Vygotsky 1987). Much as Bloom taxonomy model is important to understanding learner's cognitive process, Vygotsky social theory of learning is vital to the understanding of social process in learning. Especially, where interaction and learning took place between myself and the research participants.

James and Biesta (2007) considered learning as a social practice. They observed that learning does not only occur in the head, mind and brain of students but happen in a social setting. Which means learning is not something done by individual only but with others in a community that influences and is influenced by individual members. This position agrees with Wenger (1991) observation that learning involves the construction of identities so that knowledge, social membership and identity are inextricably linked. Therefore, the work of Vygotsky (1987) on cognitive development in learning becomes essential and stands as a central role of the social process in this study. During the study participants and their learners were able to assimilate into their learning community and create knowledge based on their existent understanding through interaction with their immediate learning environment. By this, the research participants and learners were able to make sense of their experiences and interacting with objects, especially with lessons content and other students post and comments. According to social constructivists, new knowledge results from constructed activities generated by learners with other learners.

Behaviourism Model attempt to look at learning in a scientific form which occurs as a result of knowledge based on repeatable and variable experiments (Ally 2008). Westbrook et al (2013) observed that behaviourism supports teacher-controlled or centred approach where the teacher is the sole authority figure. Westbrook argued that teachers can use online learning environment to control or stimulate learning as they can provide reward to learners and set rules to learners on how they should behave. However, most behaviourism scholars believed that the focus of behaviourism theory is to get learners to respond to external stimuli which mean that learner's behaviour is caused by external incentives and teacher responsibility is to construct content by managing the learning tasks in order to ensure learners possess the appropriate skills to function in the expected behaviour (Bruner 1996). By this, learners actions becomes vital than the knowledge they acquire or reflect not think. Pavlov's conducted research experiment using dogs to understand how dogs learn. The study focused on dog's salivation when presented with food.

In the study dogs initial unconditioned response in the case when food is served could be transformed into a conditioned response by repeating the same sound. The study concluded that the original unconditioned stimulus (the food) may not be needed for the dog's salivation on hearing the sound conditioned stimulus (Bruner 1996). Carr (2003) argued that conditioning as a model of learning has lot of limitations. This problem was addressed by Thorndike animal experiments which became as operant conditioning. In the experiment animals learned through a process of trial and errors to escape from cage. Carr (2003) observed that behaviourism is not concern in the way people understand or grasp the sense of meaning of knowledge and social practices. Although learning may involve causal processes that establishes stimulus response. Like other learning theories behaviourism has been criticised as being learners focused that measure learner's actions and words but ignored learner's intellectual and emotional potential. Behaviourism is seen as a model that ignores the impact of learner's environment such as the social effects students experience during learning (Ally 2008).

2.7.3 Cognitive and Constructive Models

Cognitive theorist attempts to remedy the limitations of behaviourism school of thought by stating that learning occur by active construction and imposition of principles or rules on experience (Carr 2003; Chu and Tsai 2009). Jean Piaget could be said to be the founding father of the cognitive theory. In his 1936 work he focused on child development. Cognitive model aim at individual way of knowing how knowledge is structured by learners own understanding (Chu and Tsai 2009). This model believed that new knowledge comes from prior experience and constructed by individual perception. Most cognitive scholars believed that learning take place when learners use memory, motivation and reasoning (Carr 2003; Pass et al 2004). They also agreed that learning requires a change in the schematic structure of long term memory which take place from slow and difficult to smooth and effortless. This change happens because as the learner becomes increasingly familiar with the object the cognitive characteristics associated with the object are altered so that they can be handled more efficiently by working memory (Pass et al 2004).

Cognitive theorist believe that learning take place internally within the thinking processes of the learner and this thinking process hold true for both children and adults (Carr 2003). Although, Knowles (1998) argued that adult learn different from children that adult learn more through self-control and self-directed way than children. Boud (1994) observed that learning is always rooted in prior experience and that any attempt to promote new learning must in some way take account of that experience. In cognitive perspective a teacher can have one or more schemas such as developing lesson plan during teaching but training program may alter the teaching plan schema of the teacher through the process of acquiring new information that will aid his/her practice. Since knowledge is not fixed but is seen as dynamic, constructive and reconstructive in experience and new inputs. This means that reality is based on accumulated experience and a personal perception of procedures or processes (Von Glasersfeld 1990).

Other educators have suggested that cognitive model help learners to unify what they know with what they learn (Philips and Soltis 2004; Westbrook et al 2013). Others believe that knowledge lies principally on the mind of the individual and is personal (Westbrook et al 2013). But some scholars have criticised extreme cognitive model as a theory that does not recognise the fact that learners learn in various ways because their abilities and previous knowledge may be different (Knowles 1998; Ally 2008).

Constructivism model focuses on how learners learn and construct their learning (Enochsson and Rizza 2009; Chu and Tsai 2009). Constructive theory views learning in two different ways. Firstly, in the psychological perspective because most constructivists think that learners gain information from the environment into cognitive structure which mean that learning is an active process. Secondly, the philosophical perspective views learning as subjective and not objective in reality. This means that reality is based on accumulated experience from a personal perception of procedures or processes (Von Glasersfeld 1990). The constructive theory of learning does not agree that different types of learning can be known independently from the context and content of learning on like the cognitive model that think learning can occur by schemas.

Constructivists have argued that you cannot isolate units of information to make prior assumptions of how that information will be used during learning process (Von Glasersfeld 1990; Chu and Tsai 2009). They believe that learning takes place in a context and the context forms the link in which the knowledge is generated (Westbrook et al 2013). They also argued that every field has its own unique ways of knowing by moving learners to think as an expert user of that domain (Westbrook et al 2013). This model enables learners to think and explain their own ideas to their teacher instead of memorising what was taught (Enochsson and Rizza 2009). Learning is constructed and reconstructed by the learner's interests and his or her prior knowledge. But some researchers have challenged this position they described constructivism as deficit approach that relegates the place of the teacher to that of the students which

teachers have to change and learn from students. In another word, constructivism can be seen as a reversal of learning where students are providing guidance to their teachers (Trapscott 2009). Therefore, the involvement of students in this study was important as it helped students to construct their own knowledge during online lessons.

2.7.4 Functionalist Model

The functionalist school of thought based their argument on the professional knowledge of teachers. According to Armstrong (2012) study stated that functionalist model is basically aim at social control of expertise. Armstrong argued that functionalist model is basically focused on how a profession need to be like and how members need to act. The functionalist model centres on how knowledge is transmitted from teachers to leaners (Eraut 1994). Knowles (1975) observed that functionalist approach is where the teacher is the 'nexus' which all learning emanates from. He further argued that this approach is structurally formed and power comes from the top (teacher) to the bottom (students) learners. In this approach the teacher takes responsibility of the teaching and structure learning according to his/her experience.

Johnson (1972) argued that the functionalist approach fails to deal with the questions of power and this power may put the teacher ahead of the learners. He averred that the notion of professionalism is the ability of an occupational group to attain autonomy. Functionalist model could be seen as teacher led approach. With this method teachers depend extensively on textbook and other instructional materials to teach their students (Ben-Peretz, 1990). Larochelle and Bednarz (1998) criticised the functionalist approach citing that the teacher led approach has lots of defects to be used for dominant pedagogy today. They argued that teacher led approach limits learner's participation and interaction which negatively make learners ineffective and passive. As technology advances and teachers practice evolve the functionalist model cannot seen as an effective approach for the 21st century teacher because knowledge today cannot be concentrated on the teachers alone (Prensky 2010).

However, Chang et al (2008) study observed that the functionalist model can be applied to online learning as some students may still find online learning difficult which will require the teacher skills and experience to guide them. Chang et al argued that some students can generate knowledge by listening and following the instruction of their teachers. But Oblinger and Oblinger (2005) argued that new generation students learn differently and are immersed with technology and their learning goes beyond the teacher experience which requires students input during lessons so as to make students engaging and effective during lesson not passive. Armstrong (2012) stated that the teacher led approach ignores learner's responsibility but emphasis on the teacher's knowledge. I believe, for students to engage effectively in learning both teachers and students must engage in learning and exchange ideas which in turn boost learners academic confidence.

2.7.5   Interactionist Model

Interactionist model stands contrary from the functionalist approach (Eraut 1994). The interactionist approach is concerned with everyday actions and interactions of professionals and how they make their social world as participants and constructor of their career (Armstrong 2012). This approach views professionalisation as a social and political project or mission designed to enhance the interest of an occupational group (Hargreaves 2001). Interactionist approach is linked with social constructivists approach (Westbrook et al 2013). Vygotsky (1987) work on social constructivism observed that learners themselves make sense of their experience by interacting with objects, especially with those that lead towards attractive knowledge and information.

According to most social constructivism scholars, new knowledge results from constructed activities generated by learners. This means that learners unify what they know with what they learn 'rather than being instructed and expected to repeat facts on test' (Solomon and Schrum 2007, p.35). The work of Vygotsky (1987) on social environment in learning becomes essential because it takes into account the learning community. Vygostsky argued that students learning happen within a community

setting and knowledge generated through that process. Some researchers have challenge constructivism model citing that control over the learning process shifts from the teacher to student with the learner playing an active role in the learning process (Ullrichet et al 2008, p.24). Mason (1988) advised teachers to adopt an effective approach that can aid learning and promote democratic learning so that those learners who are perceived as introverts can get involve in learning. Ullrichet et al (2008) argued that the interactive model enhances democratic learning. While Westbrook et al (2013) observed that through interaction students who are introverts can work with other students that ultimately build their confident. This argument fits in with Vygotsky (1987) observation that learners themselves make sense of their experiences by interaction with objects, especially with those that lead towards attractive knowledge and information.

But some scholars have observed that there is no difference between the functionalist models from the interactive approach. Terhart (2003) contended that the interactive model does not introduce a shift from the functionalist approach that the dualist framework of thinking is not a change in paradigm that a paradigm shift requires a deeper level of correction. Fox (2001) study tends to be in line with Terhart views about interactive model but Fox study focused on learner's active participation. In his argument he observed that interactive model easily dismisses the roles of passive perception, memorisation and all the mechanical learning methods in functionalist didactic lecturing. Biggs (1998) noted that while interactive model including one-tone or small group classroom interaction it does not guarantee effective teaching. Larochelle and Bednarz (1998) believe that there is difference between the functionalist approach and interactive approach.

In their study, they noted that in functionalist model knowledge is generated by the instructor whereas in the interactive model knowledge is generated by the learners and instructor. The interactive approach has been criticised by some scholars who view the interactive approach as too learners oriented (Philip and Soltus 2008). They cited the limitation of interactive model as an approach that

emphasis on individual or social community only by this the conclusion of individual or community idiosyncrasy is drawn (Philip and Soltus 2008; Attwell 2010). They challenge the notion that there exist no absolute truth and any truth is as good as others (Philip and Soltus 2008). Some educators have viewed interactive approach as a method that does not take into account the teacher's expertise because it ignores the fact that some learners may need some level of control and guidance during learning (Fox 2001; Armstrong 2012).

However, recent studies have supported the interactive approach as an effective online learning method for teaching and students learning (Attwell 2010). Attwell study looked at Vygotsky's ideas in relation to 'technology enhanced learning. Attwell argued that the online technology tools provide more access to teachers and students to exchange ideas and interact in a more meaningful way that create knowledge. Lu and Churchil (2012) study revealed how online platform does not only enhance student's interaction with their teachers but develop student's technological skills. Some studies have shown that teachers who adopt interactive approach during online teaching enhances their students learning as well as their teaching practice (Whittaker and Cartwright 2000; Garrison and Anderson 2003; Bonk and Zhang 2006; Lu and Churchil 2012).

From this stand points I and the research participants decided to adopt the interactive model in order to encourage interaction and engagement with learners during the online lessons which in turn helped them improve their practice and ultimately improve their student engagement in learning. Having explained different teaching and learning theories it is essential at this point to described different strategy teachers can adopt when integrating online technology into their practice. to do this, I will describe four different strategies of integrating online learning into teachers practice such as Pelz three models, Savery VOCAL model, Schmidt five step models and my (PASTOR) model.

2.8   Online Teaching Strategies

In this section, I will discuss three different strategies proposed by different scholars along with my PASTOR model and the criticism against each model and explain how each scholar intended their model be applied in teachers practice. The first model to discuss is the Pelz model.

Pelz Three Models Strategies

Pelz (2004) postulated three principles model of effective online pedagogy, social presence, cognitive presence and teaching presence.

The table below shows Pelz three models strategy.

Social Presence	Pelz social presence means that teachers and learners personal characteristics should be clearly discussed and expressed. **Affective**- Pelz believed that online participants should be encouraged to express their emotion, feelings, and mood during lessons. **Interactive**- During learning there should be evidence of reading, attending to post, understanding what is posted and responding to others responses **Cohesive**- Evidence of responses that build and sustain a sense of belongingness, 'group commitment, common goals and objectives.
Cognitive Presence	Cognitive presence is the extent to which the teacher and the students are able to construct and confirm meaning through sustained discourse (discussion) in a community of inquiry. Such cognitive presence should demonstrate factual, conceptual and theoretical knowledge of discussion and response should depend upon the source, clarity, accuracy and comprehensiveness of the knowledge.
Teaching Presence	Teachers should facilitate and direct cognitive and social process of learning in order to realise meaningful and educationally worthwhile learning outcomes.

Fig: 2.8 Pelz (2004) Three Models Theory

From the table Pelz model highlights the importance of social presence, cognitive presence and teaching presence of the teachers and learners using online. However Pelz model does not consider the reflective aspect of the teachers and learners. Schmidt (2002) believe an effective online model should contain students feedback, reflection and revise to further improve and develop the course which Pelz model fail to acknowledge.

Savery VOCAL Model

Savery (2005) expanded Pelz model, Savery model encapsulated in the acronym VOCAL (Visible, Organised, Compassionate, Analytical, and Leader-by-example). His model expanded Pelz theory of effective teacher online pedagogy.

The table below explains each acronym of Savery model.

Visible	Savery averred that for an effective online learning the teacher must maintain visible presence in order to avoid student's critical attitudes of the teacher effectiveness and lower levels of affective learning.
Organise	The teacher must be well organise both in teaching delivery and time management in order to demonstrate good leadership.
Compassionate	Savery believe that online sometimes create intimacy among users therefore there is need for the teacher to be compassionate to students needs and student's feelings as they emerge during learning.
Analytical	Teachers need to manage the online learning assessments properly in order to ensure that students are completing their assessment and achieving learning outcomes. This includes the timely return of assignments as well as the analysis of student data.
Leadership by example	The online instructor should set the tone for students. That means the do and don't, as this leadership act will enhance positive attitude to the learning environment and performance of students through teacher-student interactions.

Fig: 2.9 Savery (2005) VOCAL Models

From the table above, it shows that Savery model is very comprehensive and insightful. The leadership by example section encourages teachers to establish Do's and Don'ts for users which includes the rules of web etiquette, posting comments in discussion forums, and communicating concerns. But Savery model is seen as teacher led approach than student oriented. Savery model does not consider the reflective aspect of the teacher and learners during learning. Therefore this model cannot be applicable to this study as I seek to carry out reflection throughout the study stages.

Schmidt and Brown Five Steps Model

Schmidt and Brown (2004) postulated five steps model for effective online pedagogy such as the examination of teaching style, assess preferred learning styles, study teaching tools, select and try tools and then reflect, implement, reflect, and revise. This model recommended that teachers should fully understand and complete the first three steps before moving on to select and try tools and then reflect, implement, reflect, and revise.

Schmidt and Brown (2004) Five step model
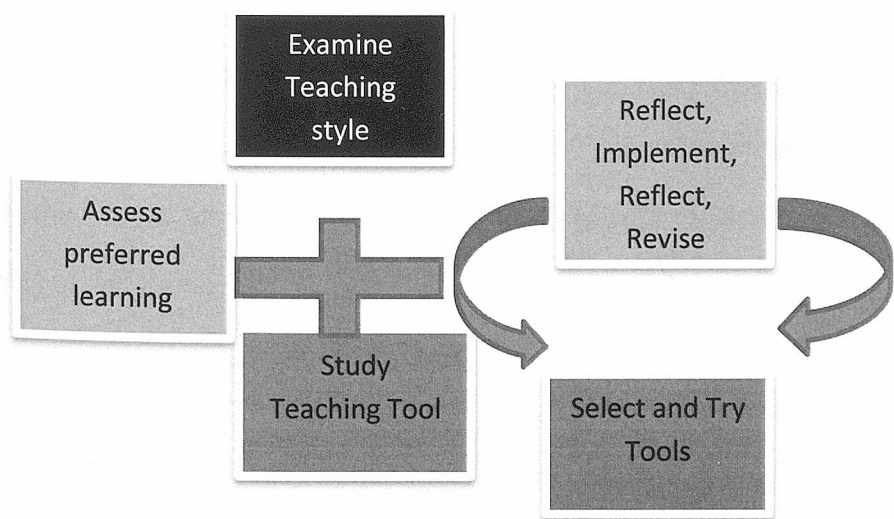
Fig: 2.10 Schmidt and Brown (2004) five step models

The diagram above reveals Schmidt and Brown (2004) five steps model. This model is both teacher oriented and students oriented but the implementation is complex and may be practically difficult for teachers to implement. I believe that Schmidt and Brown model is more of a set of procedures which cannot be applied in practical term, since the model recommended that teachers should first complete the first three phases such as examine teaching style, assess preferred learning and study teaching tool before moving on to select and try tools and then reflect, implement, reflect and revise stages. This phase by phase approach can be sometime confusing as some variable that require reflection at the examining teaching style or assessing preferred learning phase may not be taking into account because the model does not allow users to do so. Users have to observe the three phases first before reflecting at the last phases. This limitation reveals why I thought this model is not suitable for this study because I and the participants in this study were able to reflect each phase of this study and review the progress. This critical reading provides me with a foundation and framework for further study.

Combining all three models I formulated PASTOR Model

The model that participants and I used in this study was my Pastor model I developed. The model combines the three models mentioned earlier but added specifying learning tool and deliberate reflection process as a deliberate step. The six steps are Practitioner (teacher) Presence, Adopting Leadership by Example, Specifying Leaning Tool(s), Teaching and Learning Implementation, Organising and Reflection.

Below is my six steps model for effective online teacher pedagogy called (PASTOR model)
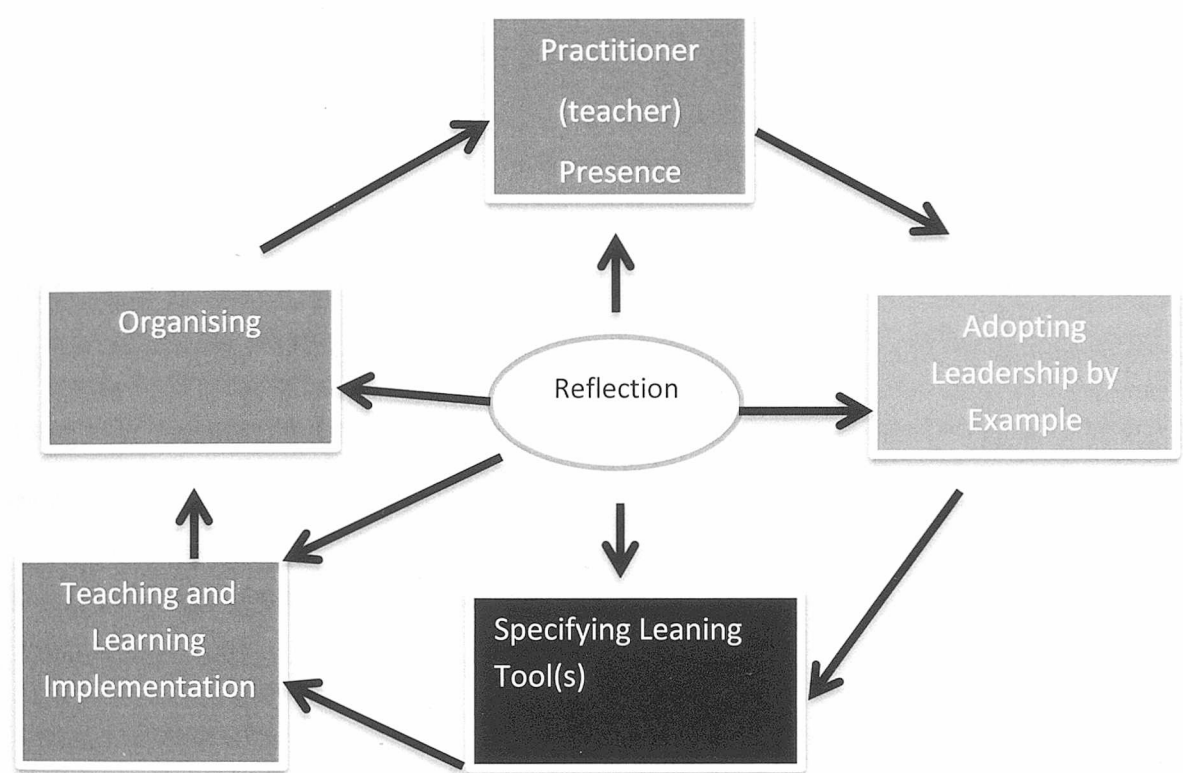
Fig: 2.11 My Six steps model of online technology in teacher pedagogy called (PASTOR)

The cyclical nature of this model will enable teachers to reflect and review their practice continuously. Each step in this model does not prescribe itself alone but integrate with other steps at each phase with reflection.

The first step- Practitioner teacher presence- this means that teachers and learners personal characteristics should be clearly expressed such as being affective - meaning encouraging learners to express their emotion, feelings, and mood using online features. Secondly, interactive - meaning evidence of reading, attending to learner's comments and feedbacks and creating dialogue by responding to their posts. Thirdly cohesive - evidence of responses that help provides a sense of belongingness, group commitment, or common goals and objectives that are clearly seen and acknowledged by participants.

The second step- Adopting leadership by example - this means online instructor should set the tone for participants. By setting a clear ground rules for all participants to follow in order to avoid inappropriate behaviour or unacceptable acts as this leadership action will help enhance positive attitude to learning and ultimately improve teacher-student interactions.

The third step- Specifying learning tools - at this stage instructors should specify which technological tools they want to adopt whether virtual learning environments, social networking sites, Wikis, Blogs or emails before the adoption of any online learning tools. It is important for the instructor(s) to consider the issue of online affordability whether all the participants agreed to the learning tool or not.

The fourth step- Teaching and learning implementation - teachers should facilitate and direct cognitive and social process of learning in order to realise meaningful and educationally worthwhile learning outcomes and manage the online learning assessments properly in order to ensure that students are completing their assessment and achieving learning outcomes.

The fifth step- Organising- the teacher must be well organise both in teaching delivery and time management in order to demonstrate good leadership.

The sixth step- Reflection- teachers should adopt reflection at each stage to review their practice and improve in areas they may be weak. In order to ensure that this model is not an abstract or a set of procedures, teachers should adopt reflection which means making the entire process a iterative reflective step that involve continues learning and reflection to generate knowledge.

In this study, I ensured that each phase in the model was not prescribed by the steps itself but by the reflection and learning of all the participants and I in the generation of knowledge. The cyclical nature of the model allowed participants to reflect and review their practice continuously. By adopting the PASTOR model participants and I were able to integrate online learning into our practice and ensured that the model was not an abstract or a set of procedures,

Summary

In this section, I was able to explore ideas presented by various scholars and researchers who contended that online technology are commonly use among young adults, teachers, universities and colleges. I was able to highlight different benefits of online usage in teacher's practice and its expansion within the higher education sector. I was also able to review literature that described different learning technology such as virtual learning environment (VLE), massive open online courses (MOOCs) and social networking sites (SNSs) and their importance to education. I explained the position of various scholars and researchers who supported online technology integration into teachers practice and those who argued against it. With current complexities and advancement of technology it is clear that if online technology goes away, something new will replace it being just as popular among students (Honor 2009). Therefore, online learning technology remains relevant and important for teachers practice in higher education sector.

I was able to described different learning environments teachers can adopt and different online technology models. I explained what face to face learning environment means and online learning environment as well as blended learning environment. I also described different online pedagogy model and their criticism. This section also looked at different learning theories like experimental and behaviourism models, cognitive and constructivism model, functionalist and interactionist models and their limitations. Finally, I was able to explain different online teaching models and my PASTOR model and limitations. Having explained my literature review, the next chapter in this project is the methodology chapter. The chapter described my philosophical assumptions and my research design and data collection techniques as well as my pilot study.

Chapter Three

Methodology

3.0 Introduction

This chapter described the research methodology that was adopted and the research method chosen as well as the data collection techniques used. This section also provides justification for the chosen methodology and the instruments used to collect data and the description of my pilot study to test the research questions and research design. The overall aim of this study was to understand teacher's perspectives about online learning technology and improve their practice through the integration of online learning technology. In order to achieve the purpose of this study the following set of five questions was developed to guide the study.

- How do teachers describe their perceptions about online learning environment?

- What impact does the use of online technology have on teacher's practice?

- What impact does online learning have on student's engagement in learning?

- How can teachers reduce online learning attrition/dropout rate of students?

- How do teachers describe the adoption of PASTOR model into their practice?

Having stated the research questions above, it will be appropriate to discuss and justify the basic assumptions of the philosophies of research methodologies and my chosen method.

3.1 Paradigm Choice

Over the years the common features of practitioner's research has been it variety of research methodology and different philosophical models (Pring 2004; Cohen et al 2011). Some scholars have highlighted several philosophical models for teacher research from functionalist, radical structuralist, critical to radical humanist (Burrell and Morgan 1979). But in this study, I will limit the discussion to

interpretivism model. Bullough and Pinnegar (2004) observed that the consideration of one's ontology should be a central feature of any discussion of practitioner research. Therefore, it is vital for me to briefly explain what my ontology and epistemology are before discussing my research paradigm.

The word ontology came from the two Greek word ontos and logos- ontos can be describe as 'being' while logos means 'discourse'. Ontology as a technical term in philosophy means what exists and the nature of reality (Heyman 2009). Ontology focuses on whether reality is objective and external or whether it is based on one's own consciousness or perception. My ontological view in this study is that I see reality as subjective not objective not detaching from the objects since the generation of knowledge can be achieve through collaboration, communication, participation and contributions of participants. In order hand the word epistemology came from a Greek word etymology. Episteme is viewed as knowledge or science while logos mean to 'discourse'. Epistemology refers to how we know and the relationship between the knower and the known. Epistemology is a study of knowledge of how things 'exist' (Heyman 2009). My epistemological view in this study is that I do not see reality as separate from me the researcher and research participants. My perspective of reality is that as a researcher I am part of the reality in which I exist and my interpretation will be based on my subjective view and participants views of reality in a social context.

This position tends to agree with Interpretivism paradigm which assumes that reality cannot be studied without social actor's involvement. The issue of subjective realities relates to the fact that reality is something that is perceived by people meaning that the same situation might be perceived differently depending on who provides the account of it. Any choice I make regarding my philosophical paradigm does not claim superiority of one paradigm over another.

Interpretivism paradigm was chosen due to the assumption that observer interacts with subject being observed and reality cannot be studied without social actor's involvement (Orlikowski and Baroudi 1991; Walsham 1995). Interpretive research traverses fields such as phenomenology, ethnography, hermeneutics and action research. The characteristics of interpretive research include: multiple subjective realities; dynamic socially constructed meaning; researcher reflexivity; study of people in their natural settings and multiple interpretations (Oates 2006).The focus of interpretative study is to understand what is happening within a social context, in this view value-free data cannot be obtained since the enquirer uses his or her preconceptions to guide the process of enquiry and the researcher interacts with the humans objects of the enquiry changing the perceptions of both parties (Mackenzie and Knipe 2006).

This position tends to agree with my view that reality cannot be studied without social actor's involvement. I do not see reality as separate from me the researcher and all participants. It is my view that as a researcher I am part of the reality in which I exist and my interpretation will be based on my subjective view and all participants' views of reality within a social context (Oates 2006). As part of the reality we will explain the particularity or uniqueness of the situation and context. This means that the study will be in natural settings instead of laboratories so that a maximum level of real life complexity can be gained instead of reaching one conclusion as would be with other research. My position in this study is that I see reality as subjective and not objective. Subjective in that I interpreted reality based on my experience and practitioner's experience.

I believe that new knowledge was created based on participants and my subjective interpretation (Whitehead 1989). I also believe social reality is constructed through interaction with other people to understand their live experience in order to make sense of their involvement because the knower cannot be set apart from the known (Clandinin and Connelly 1995; Beattie 2000). Anderson (1998) agreed that researching and interpreting human experiences in social context cannot be best

represented quantitatively because qualitative research is a form of inquiry that explores phenomena in their natural settings and uses multi-methods to interpret, understand, explain and bring meaning to them. In addition, Yin (1989) observed that using the qualitative methodology in case study is a preferred strategy for research project that deals with contemporary phenomena within a real life setting. Based on these reasons mentioned above the qualitative research was chosen as the suitable approach for this study.

Creswell (2009) described qualitative research as a means of exploring and understanding the meaning individuals or groups ascribe to a social or human problem. Some scholars have described qualitative data as exploratory in nature wherein variables are unknown and context important (Morgan and Drury 2003). Qualitative research allows for detail description of event in a community or in a conversation and includes the meaning of messages, feelings and effects (Bouma and Ling 2004). While quantitative method is suitable for large data and statistical measurement (Denscombe 2010). Oates (2006) observed that quantitative data means, data or evidence based on number. Quantitative data may include experiments, observations, social surveys, content analysis and official statistics (Silverman 2009).

The major difference between qualitative and quantitative data is that quantitative research can be measured and represented by numbers and not suitable for social study (Pettigrew et al 1992). Blumberg et al (2005) observed that quantitative research does not enable the researcher to obtain unexpected information and does not explore unanticipated avenues. Therefore, quantitative research is not suitable but qualitative research is since this study aims to illuminate participant's feelings and provide rich insights on online technology, teacher's actions and the research outcomes.

3.2   Why Case Study

Educators have argued that case study research improve teachers practice as well as contribute to knowledge (Benbasat et al 1987; Yin 1989). Some believe case study research describe relationships that exist in reality in one organisation (Blichfeldt 2006). Supporters of case study have noted that reality can be captured in details when researchers use more variables to perform an in-depth exploration of issues than survey research (Silverman 2009). Oates (2006) averred that other research method tends to generalise their theory but case study focuses on uniqueness of each research situations. Yin (1994) cited that using qualitative methodology in case studies is a preferred strategy for research studies that deals on contemporary phenomena within a real life context. He viewed case studies as being the preferred methodology for studies focusing on 'how' or 'why' questions. Since this research is a study aimed at improving teachers practice and adopting effective online learning strategy, case study method was viewed as the most suitable method for this study.

For the purpose of this project, case study can be described as an in-depth investigation of a single instance of a phenomenon in its real-life context (Yin 1994). Case study is used when there are unknowns or when very little knowledge exists about the factors of the inquiry (Benbasat et al 1987). Some of the weaknesses of case study are reflected on its restriction to a single organisation and finding which cannot be generalise since different organisations are unique on their own. I adopted case study in this project because it allowed me to collect detailed data on a single organisation and participants that would not normally be easily obtained by other research designs. Case study highlighted the particularisation of this research as it was limited to one organisation and with few participants. Using case study methodology gave all the participants and I the avenue to understand the essence of the online learning experience, perceptions and improvement of learners. Case study also provided opportunity to all the participants and I to document our experiences using the PASTOR model more precisely. Since case study is context bound the phenomena was interpreted and

explained through both the participants lens and I. Having chosen case study as a method to conduct this study, it will be vital to describe the context in which this study was conducted.

3.3   Context of the Case Study

This study was conducted in London Bridge Business Academy a higher education college and privately owned institution. The school is a business school that offers both full time and part time programmes. Lessons in the school are predominantly done in classrooms and most teachers are sceptical about online learning and do not want to integrate such tools into their practice. Fifty per cent (50%) of students in the school comes from countries within the European Union while ten per cent (10%) comes from Africa and Forty per cent (40%) are home students. Sixty per cent (60%) of students are full time while forty per cent (40%) are part time students. Seventy per cent (70%) of students in the school English is not their first language. This uniqueness and diversity of the school makes it suitable for this study to be conducted in the college. Also, the adoption of online learning tools for teachers practice is a new development in the school which makes this study relevant for non-users of online technology.

Having chosen case study as a method for this study, it is important that a pilot study is conducted to determine the research design and to refine my research questions as well as understand my perspective about online learning and the impact of online learning to student's engagement during learning. Chang (2007) advised researchers to first pilot their study before embarking on the main study as this may limit errors and future problems. Glangregorio and Goldsmith (2010) noted that despite the importance of pilot studies in teachers research such study is still ignored by researchers or receive little or no attention. Whithely and Whithely (2005) averred that pilot study are underutilised in qualitative research and such situation is an undesired situation considering the fact that pilot studies are catalyst in the design of research questions, collection of background information, refinement of research approach. From this stand points made by these researchers above, pilot study

can be seen as a vital project for me to undertake before conducting the main study. Therefore, the next section will explain my pilot study before the main study.

3.4   Pilot Study

Before conducting the main study it is imperative to ascertain whether or not the research design and questions needs refining. Furthermore, it was equally important for me to gain some experience before embarking on the main study since this might help to avoid problems (Chan 2007). The importance of pilot study in this research cannot be under emphasised as pilot study provided me and the participants the practical steps in solving real problems. Pilot study can be said to be pragmatic and adaptable to situation on ground (Sampson 2004). Van teijlingen and Hundley (2002) defined pilot study as a small investigation that test the feasibility of procedures and gather information prior to a larger study. They argued that pilot study is appropriate in qualitative research. Cohen et al (2007) stated that pilot study is a suitable form to improve teacher practice and gaining knowledge of a research process. They argued that pilot study can help teachers develop their teaching skills and support them uncover some of their teaching problems in advance prior to their main research.

3.4.1   Aims of my Pilot Study

The aims of the pilot study were to test my research methodology, design, understand the impact of online learning and student's engagement in learning. Another focus was to understand whether Facebook group page can be a suitable platform for online learning. By conducting a pilot study it accorded me the opportunity to refine my questions so that participants could understand them and proffer appropriate answers. I also believe by undertaking a pilot study it helped me prepare for the main research.

3.4.2   Research Design of my Pilot Study

Many scholars have argued that case study research improve teachers practice as well as contribute to knowledge (Benbasat et al 1987; Yin 1989). Supporters of case study have argued that reality can be captured in details when researcher uses more variables to perform an in-depth exploration of issues (Clandinin and Connelly 1995; Beattie 2000; Blichfeldt 2006). Oates (2006) averred that other research method tends to generalise their theory but case study focuses on uniqueness of each research situations. A case study method was used during the pilot study. The purpose for this is to contextualise the study, describe and particularise the online phenomenon within an organisation. By this gained better understanding of online learning and describe how online learning can be successfully integrated into teachers practice.

3.4.3   Pilot Study Participants

The participants of the pilot study were students of London Bridge Business Academy. Student's participation was voluntary. The pilot study was conducted in the first semester of 2013/2014 section. Participants were current full time business students. Participants were HND level 5 students. During the piloted study the total number of students in my class was 45 students but only 30 students agreed to participate. The students that participated in the pilot study were my business study learners who are different from the teachers used in the main study. The reason for chosen my business students for the pilot study was to understand the impact online learning have on students and to understand how student's engage in learning and to review my research design and questions. The participants in the pilot study do not share the same background as those involved in the main study as they are my students while in the main study participants were my fellow teachers. However, they all shared similar experiences regarding online technology use during lessons in posting, communicating and interacting with others.

3.4.4 Pilot Study Plans

I created Facebook group page called BAM students to interact, communicate and provide feedbacks to participants. Taking into account the composition of the students for this study, I decided to use classroom sample method to select participants. The picture page below shows the Facebook group page that was created.

Fig: 3.1 Facebook Group Page
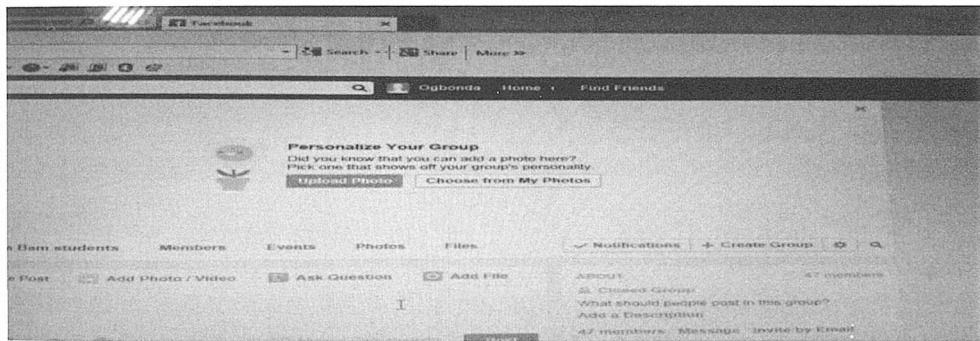
The picture page above is the Facebook group page that I created for the pilot study. It was used throughout the pilot study to engage with students during lessons; Facebook group page features were used to deliver lessons. The Facebook group page was a 'closed' group restricted from public but open to research participants only. The content of the group page was not open to the public. Students were told to use their Facebook name to access the group page in order to be known and encouraged. I ensured basic features of the Facebook group page were used such as photos, posting messages, comments on student's posts. I created a professional account to maintain the teacher student's professional relationship and invited the participants via their email address.

The Facebook group page design has a structure which includes; discussion, photo, video, files and events tabs. Throughout the study I posted information in line with my course module on the wall for discussion. I also used the info tab for additional course information. The photo and the event tab for course and meetings were used as well as reminders. In order to promote democratic learning and openness, students were encouraged to comment on my posts, contribute different posts and challenge

other people posts on the group wall. They were encouraged to share video files or articles by posting them on the wall, contribute their own view in the discussion tab, or create new discussion topics. To understand participant's views about online learning I developed questionnaires and administered the questionnaires via email address in order to gain initial understanding of the technological level of participants. Later I conducted three semi-structure interviews and one group interview to determine participant's perception about Facebook group page use for lessons.

3.4.5   Data Collection Procedures

Qualitative approach was used to collect data from the research participants to pre-test the strategies that will be adopted during the main study. The instruments were questionnaires, interviews, observation and teachers diary. The purpose for using multi instrument to collect data from learners was to pre-test the strategies and instruments for the main study. Another reason for using the multi instruments was to understand the perceptions of students about online learning and the impact of online have on their learning and achieve triangulation. The following instruments were used during the pilot study such as questionnaires, interviews, observation and teachers diary.

Teacher's Diary

My teacher diary contained data that connected to participants during interviews, online observation, reflection and my role as researcher (Baurain, 2010). The teacher diary covered information before, during and after the pilot study and described how I was progressing. This includes notes about the discussions I had with the participants prior to the start of the pilot study and information gathered during and after the pilot study. The teacher diary also contained information about my reflection when planning and organising my teaching online.

Questionnaires

Another instrument used was questionnaires. The questionnaires used during the pilot study were divided into five sections (Wilson and McLean 1994; Bulmer 2004). The questionnaire contained close questions which require yes or no answers with open ended questions. The first section was aim at understanding the participant's background, their names, gender and their student's statues. While the second section contained questions about perceptions of the learners. The third section was aimed at determining the impact of Facebook group page on participant learning. While the fourth section contained questions about the effectiveness of Facebook site to students learning. The fifth section was an open ended question aimed at giving the respondents the opportunity to express themselves. All the questionnaires were administered via participants email. The result of the questionnaires helped me understand the perceptions of participants and their views about online learning.

Observation

This instrument was used to cover the Facebook group page content activities online as well as the communication between the learners and I their instructor (Patton 2001). Observation technique was used to cover online interaction among leaner's posts and comments. Observation technique also helped me collect data that expresses participant's opinions, experiences and feelings.

Interview

Semi - structure interviews was used to interview participants. The semi-structure interviews questions were aimed at collecting more details from learners. Part of the reason for conducting interviews was to know why many of the participants fail to return their questionnaires and understand their feelings, perceptions and fears for not posting any comment in the first two weeks of the pilot study. Another reason was to determine the participant's perceptions about the Facebook site and its influence on their learning. The interview was also aimed at given all the participants an opportunity to reflect and provide written feedback regarding their experiences during their lessons.

Before collecting any data or interviewing, I emailed each participants consent form via their email address to fill and return. In the form I explained in details how I intend to address ethical issues and maintain confidentiality and security of data. The research participants who choose to sign the informed consent form were thanked for their willingness to participate voluntary and were given a signed copy of the form. The semi-structure interviews and group interview helped me understand the impact of online learning on student's engagement in learning and their positive views about Facebook group page for teaching and learning.

3.4.6 Specifying Learning

In order to specify my learning I had to reflect and engage with all participants regularly. I engaged critically with literature about social networking sites (Facebook) educational theories and other professional development materials. This literature helped me developed research questions and research design appropriate for the main study. During the pilot study I met regularly with my critical friends to discuss plans and how my research progress is going as well as reviewing each phase of the study. At the final stage of the pilot study no additional data were collected but it did require my continued reflection on and learning from data already obtained prior to the main study.

3.4.7 Benefits from the Pilot Study

This pilot study is important to the main research because it helped me revise my research plan and designs research to suit my research objectives as well as understand student's views about online learning especially Facebook group page. During the pilot study I learnt more about the participants and myself than I ever thought possible. Most of the participants surprised me by participating actively by posting comments clearly, commenting on others views, posting text for discussion and discussing freely without the use of abusive words. Despite the fear some researchers have about the use of Facebook for learning, participants in the pilot study engaged constructively, posted materials

relevant to lessons and debated issues freely and openly. Additionally, participants sacrificed their time in spite of their tight timetable schedules and course work load. Yet many of the participants posted their comments and messages more often which showed their acceptance of online technology for learning. Participant's actions, determination and willingness to use Facebook group page to learn for the first time is amazing and impressive for teaching and learning.

Reviewing participant's comments in regards to online learning, data showed that most of the participants think that teachers should integrate online technology into their practice, two participants said I like the idea of online learning while another participant said I will like to see my teachers use Facebook to teach. However, this was not the case with a selected number who did not participate effectively as they felt that Facebook is not academic in nature and should be kept away from class lessons. During the interview one of the participants felt that Facebook group page is not a physical classroom and does not encourage effective engagement as he would have done in a face to face class lessons.

Reflecting over my experience during the pilot study, I can argue that the use of Facebook group page to teach was a new learning curve for me and the process of constantly checking and writing lessons online and communicating with students was also a learning process which I felt improved my practice and student engagement during lessons. I also realised that I have made considerable technological progress using online technology. I was able to understand the digital language of participants and their use of short sentences. In conclusion, I believe that online technology should be integrated into teachers practice if teachers must meet the 'Net Generation' demand.

3.4.8 Pilot Study Influence on the Main Study

The experience gained during the pilot study helped me to manage participant's time, my time and the research process during the main study. The experience gained also increased my confidence to research teachers practice and read other research methodologies materials. The results of the pilot study guided me in the design and implementation of the main study. The pilot study increased my likelihood of acquiring reliable evidence and answering the main study's purpose as well as building my confidence to a suitable method for data collection. In dealing with research instruments during the pilot study I was unsure of the optimum amount of information to collect, observe and consider. After the pilot study, these uncertainties were resolved as concepts became apparent and widened my view regarding online learning environment.

Another important influence the pilot study had on me was my change from Facebook group page adoption to virtual learning environment because not all students wants Facebook to be used for their lessons. This was not done because I decided to adopt virtual learning environment but noticed some learners expressed dissatisfaction with some features of Facebook. In order to mitigate this, the school virtual learning environment was used for the main study. This understanding helped me change the way I conducted the main study with participants and critical friends. Also, the pilot study provided me sufficient flexibility to understand and adapt the study so that its goals are met to aid understanding.

Conclusion

The pilot study was a clear platform for me to re-strategies, redesigns my approach to meet the objective of the main study. Data analysed during the pilot study revealed that participants want teachers to use online learning technology. Data also showed that students were engaging, posting and commenting on other posts which in turn enhanced their learning and collaboration. From the

experience gained, I recommend that a pilot study should be conducted first in any research before proceeding to the main study in order to ensure appropriateness of research instruments. The next section shall be the implementation stage of the main study.

3.5 Research Areas Explored During the Main Study

This study is a case study designed to understand teacher's perceptions about online learning and to recommend successful strategy that can improve their practice. The research questions were developed through depth review of literature and discussions with my critical friends and teachers. I used a comparative analysis across each case to understand and explain the five areas of investigation. The five specific areas of investigation were, teacher's perceptions about online learning, impact of online technology on teacher's practice, impact of online learning on student's engagement in learning, teacher's strategy to reduce online learning attrition/dropout rate and teachers description of my PASTOR model. Having described areas which this study will explore, it will be relevant to explain the main study participants.

3.6 Main Study Participants

Simon (2002) observed that the selection of participants in a teacher study does not have to be done through random selection but the researcher is to handle the selection within the condition that is available. Keeping to Simon observation, a convenience sample was adopted as a sample technique for this study. Convenience sample was appropriate because it aided data collection and analysis. The underlining concept for adopting convenient sample was that it helped me to select participants at my convenience (Patton 2002). Although, some researchers have criticise the convenience sample as a weaker sampling technique for data collection because they believe researchers make little or no attempt to ensure that their samples are representative of the larger population unlike random sampling (Remenyi et al 2005). Another limitation of convenience sampling is the fact that

researchers cannot generalise their findings (Patton 2002; Simon 2002). Despite these limitations, I adopted convenience sampling technique because it highlighted the research particularisation and the findings cannot be generalised as a result of the uniqueness of the organisation and participants. Secondly, convenience sampling encouraged data descriptions and reduces time wastage (Koshy 2010). The convenience sample technique adopted helped me to make quick decision about research participants. I selected 22 teachers, six teachers from my school and the other sixteen teachers were invited teachers from other higher institutions. All the participants were full time and part time teachers. Participation was voluntary which means participants can withdraw at any time they like.

The first formal meeting of this study was held in a classroom in my school premises which I administered my initial questionnaires to the 22 participants present on that day. At the end of the meeting only 20 participants returned their questionnaires, the remaining two participants failed to complete their questionnaires citing that they are busy and could not combine their teaching work with this study demand. However, the 20 participants left agreed to continue to the end of the study. This challenge noted what Cohen et al (2007) study observed about teachers research as a messy place, full of contradictions, richness, complexity, connectiveness, conjunctions and disjunctions. In line with Cohen statement, I was able to focus on the 20 participants to provide depth understanding of the phenomenon. The 20 teachers participated in all the four meetings held throughout the study.

Each teacher worked individually to adopt the school virtual learning environment into their teachings. The 20 participants were 9 men and 11 women. Their age range includes the following 12 participants are between 20 to 30 years, the other 6 participants are between 31 years to 40 years and the final 4 participants are between 41 and above. The 20 teachers that continued with this study teach different courses such as English, Finance, Marketing, Human Resource Management, Sales Operations and Business Study. Information gathered from the 20 teachers was helpful to gain depth understanding about their perceptions and attitudes towards online learning. In each stages of the

research process participants and I had meetings comparing notes, reflecting over the research process and reviewing their practice. The reason for using initial questionnaires at the start of this study was helpful because it provided me the opportunity to compare initial participant's responses to their final responses. The use of questionnaires also provided me the platform to collect a range of information with relative ease which was followed up with the introduction of the PASTOR model and later interview. The PASTOR model was introduced during the second meeting. In the second meeting, I conducted a training section with the participants informing them how the PASTOR model works, clarify and answer questions from participants to ensure they understand the model. Data revealed that participants understood the model and are happy to adopt the model into their practice.

3.7   Research Instruments

Typically in a case study research, strategies for data collection can be obtain in different form such as questionnaires, interview, observation, teachers diary (Merriam 1998). Oates (2006) agreed with Merriam views that the nature of case study typically involves using more than one instrument for data collection. Therefore, I believe a multi instruments approach is appropriate for this study because it will help me gain more insights and allow for reflection (Oates 2006). Multi- instruments approach was suitable for this study because it enabled triangulation. The use of multi instruments allowed me to collect different data and compare them to achieve triangulation. Saunders, et al (1997) postulated two major advantages of applying multi- instruments in a research study. Firstly, that it allows the researcher to use different data collection instruments for different purposes. Secondly, that it enable triangulation where different data collection instruments are used to provide convergent evidence from the data collected.

McNiff et al (2002) observed that one needs to generate evidence to make a claim to knowledge to say that one now knows something one did not know before. They argued that to ensure that the claim is not seen only as individual opinion researchers have to support their claim with validated evidence drawn from the data.

The table below shows the instruments used in this study.

Research Questions	Data collection strategies
How do teachers describe their perceptions about online learning environment?	Initial Questionnaires Interview
What impact does the use of online technology has on teacher's practice	Research diary Interviews Observation
What impact does online learning has on student's engagement in learning?	Interviews Research diary Observation
How can teachers reduce online learning attrition/dropout rate of students?	Research diary Interviews
How do teachers describe the adoption of PASTOR model to their practice?	Final Questionnaire Interview

Fig: 3.2 Research Questions and Instruments

The table above agrees with Oates view about case study and multi- instruments. Oates (2006) observed that the nature of case study typically involves using more than one instrument for data collection. My choice of the instruments was influenced by my intention to understand practitioner's views about online technology and determine effective method to integrate such technology into teachers practice as well as ensure rigour and authenticity within the data collection is achieved.

3.7.1 Teacher's Reflective Diary

The first instrument that was used in this study was teacher's diary. In fact, this data collection technique was used at the beginning of the study during an informal discussion with some participants at the school. Although, this meeting was not formal, since I have not started the investigation online but served as an introductory form of knowing what participants may think about online technology. My teacher diary contained data that connected to the research participants through interviews, online observation and reflections as well as my role as a researcher (Baurain 2010). My teacher diary contained information before, during and after the study. My teacher's reflective diary also covered how the research was progressing such as notes about my discussions with participants during meetings.

The teacher diary was used as a source of information and reflection when planning and organising each stage of my PASTOR model. Some researchers and scholars have used different terminology to describe research write up (Yang 2009; Koshy 2010). Koshy argued that some have used research diary while others have used field notes as their write up. In order to differentiate field note from research diary some scholars have argued that field notes assume a broad straightforward descriptive account while research diary seen as diary that records observations, thoughts, questions and interpretation of events as they happen and the reflective thinking that take place during the research (Newbury 2001). Yang (2009) observed that diaries allow teachers to clarify their thoughts and enhance their professional development.

Although some studies have challenged the use of diary they argued that diary is difficult to maintain as researcher is required to write regularly and sometime this may not be the case because when research is not going according to plan there may be that tendency for the researcher to stop writing (Burgess 1982; Lincoln and Guba 1985). While Koshy (2010) argued that researcher may be tempted to write too much which could be difficult to analyse. However, teacher diary remains central to this

study because the content of the diary helped me construct my research story and offered me the opportunity to check my progress. In my teacher reflective diary I noted some of the discussions held during my first meeting with participants and the final meeting with all the participants (See Appendix 6 and 7 teacher reflective diary samples).

3.7.2   Questionnaires

The second instrument used was Questionnaires. This instrument was administered to participants face to face during my first meeting. The initial questionnaires were developed from literature reviewed. The initial questionnaire data was administered and collected at the first formal meeting before the introduction of my PASTOR model. Oates (2006) observed that research questionnaire should be carefully designed to meet the research's requirements by covering all the questions that need to be answered. The questionnaire was designed to understand both initial participant's perceptions about online learning and final perceptions. The initial questionnaire contained both open and close sections. This instrument was used to collect data about teacher's responses to online learning. The initial questionnaire was divided into five sections in order to achieve the following aims:

a) To understand the views of teachers about online technology.

b) To determine the impact of online technology on teachers practice.

c) To examine the best learning strategy for online learning technology integration.

d) To understand the view of teachers about different learning environment.

e) To review participants comments in an open ended question section.

The questionnaire was designed in response scales and rating in order to address the questions highlighted above. The response scale in the questionnaire vary from 1 to 5 which (1) represent (No) while (5) represent very (good) opinion. The questionnaire data were both structured and numerical (Wilson and McLean 1994; Bulmer 2004). Using questionnaires at the start of the study was helpful because it provided me the platform to understand participant's initial opinions and their final views about online learning. The completion of questionnaires at the beginning and the end of the study helped provide baseline data and final data about teacher's perception and their attitude towards online technology. In addition to this, the analysis of the initial questionnaires enabled me to shape the nature of the questions I asked during the interview section.

Second Open-Ended Questionnaire

The final open ended questionnaires provided me with the opportunities to understand respondents view about online learning. The open ended question was administered at the end of the research in the final meeting. The purpose for this is to compare the initial questionnaires data collected to the final questionnaires data. The reason for this comparison was to establish whether any changes on the participant's perceptions about online learning and whether online learning has positive effect on participants teaching. The open ended questionnaires helped me to understand participant's views regarding my PASTOR model. Just as McNiff and Whitehead (2002) observed that evidence is not data it is drawn from data. The evidence in the questionnaires was drawn from the data by means of a constant comparison of data. I analysed data obtained from the open ended questions by understanding common responses which indicated consensus on the general perceptions of the entire participants. Once the responses to each question had been analysed I focused on the important factors that directed my analysis as described earlier in the section. I found common themes and combined the data to gain insights regarding their perceptions and view about online learning.

3.7.3   Interviews

Interview was another instrument adopted in this study. Interviews are considered as the most frequently used method for qualitative data collection (Ryen 2002). Interview seeks to cover both a factual and a meaningful conversation (Kvale 1996). Interviews provided me very different data from observation and questionnaire used. Interview allowed me the researcher to capture the perspectives of research participants, staff, and others who associate with the research (Lofland and Lofland 1995). During this study, I used semi-structured interviews technique to interview participants as a follow up. The reason for this is to gain deeper understanding about participant's responses to the questionnaire administered and their perceptions about my PASTOR model.

The follow up interview was also aimed at given all the participants an opportunity to reflect and express their views. Seidman (1998) observed that "a researcher's goal . . . is to understand the meaning people involved in education, make of their experience, then interviewing provides a necessary, if not always completely sufficient avenue of inquiry" (p.4). The semi-structured interview questions corresponded with the research questions and aligned with the online learning process. The semi-structured format of the interview allowed me to remain present and stay alert and adapt to participant's responses. The semi-structured interview schedule allowed me to remain direct and responsive during the interview by maintaining and focusing on the research topic through a careful use of probing questions. The research participants expressed divergent thoughts and experiences which were recorded. The interview schedule assisted me in managing and organising the data collected.

During the main study, few participants were available for the interview due to their busy schedules. I was able to interview 6 participants; three research participants were interviewed each week while the other three participants were interviewed the following week. During the interviews the research participants discussed their thoughts, feelings and experiences about online technology and the

PASTOR model. The 6 teachers who participated in the interview were interviewed individually; each participant was interviewed 20 to 25 minutes in a classroom. All the interviews were audio recorded and transcribed later. I took notes during the interview to contribute to my recollections of the interviews. I noted tone and hesitation, facial expression and body language. I also noted themes as they emerged. I used clarifying and probing questions to clarify key questions from participants and probe deeper into a participant's response.

I conducted the semi-structured interviews in a manner that gave the participants enough freedom to speak honestly from their experience while maintaining enough control of the interview to stay on topic. The sequencing of the key questions and use of some probing questions were responsible to the research participant's comments and receptiveness. Participants were informed that procedures were in place to ensure their anonymity and confidentiality of their responses. I explained to participants that they would be referred to by a pseudonym and their actual names will not appear on any of the research materials. Interviewees were told the informed consent forms are stored separately from my original research materials.

I explained that access to their data is controlled by placing the data in a locked filing cabinet in my home and office and the audio recordings will be stored in an encrypted folder on a hard drive on my personal computer. I also explained to them any use of transcripts, recordings and other research materials in the future research and publications will depend on their approval and their confidentiality and anonymity shall be maintained. Following the transcription of each interview, each participant was asked to review the transcription of his or her interview. Each participant check helped to ensure the accuracy of the data. The interviews provided me with a context and a better understanding of participant's opinion towards online teaching and my PASTOR model.

The following are the interview schedule questions asked during the interview.

1   What is your perception about online learning environment?

2   What situations have influenced your perceptions about online technology?

3   Does online learning enhance your teaching practice?

4   What do you like about online learning technology?

5   What impact does online learning has on student's engagement in learning?

6   What have you learnt so far using online learning technology?

7   How can you differentiate between traditional Face to Face teachings from online teaching?

8   How can teachers reduce online learning attrition/dropout rate of students?

9   What do you think about the integration of online learning technology into your lessons?

10   What have you learnt best so far?

11   What have you learnt least?

12   How do teachers describe the adoption of PASTOR model into your practice?

13   Any advice or suggestion you can give?

14   Can you recommend online technology to others?

Observations:

3.7.4 Observations

Another instrument used in this study was observation technique. Observation method allowed me to gather and gain first-hand information (Patton 2002). O, Hanlon (2003) noted that observation is one of the main strategies for collecting data in qualitative research. It relies on researchers being in a position to effectively observe record and collect data from participants; a method by which live data is gathered from live situations (Cohen et al 2007, p.305). Observations also provide different range of data and capture a great variety of interactions and data. Throughout the research process I observed each participants post and interaction with their learners online. By observing all the participants online I was able to develop a holistic perspective and clear understanding of each context within which the project operates (Cohen et al 2007).

The observation of each participant helped me gather supporting evidence from participant's responses. The observation technique was used to collect data that seek common theme, expresses participant's interaction, engagement and feelings of what is going on during the research process and what I did and what I learnt during and after the online learning and meetings (see Appendix 5 observation sample). In addition, I used observation to gather evidence to support two areas in which this study focused upon such as online learning impact on teachers practice and online impact on student's engagement. During this research process, I conducted 20 observations, each participant was observed individually. Each observation lasted between 20 to 30 minutes.

During the observation data revealed some learners were not posting quickly as they should which made some of the teachers to wait for learners response before posting another work. As a result of this challenge, I became concerned not to lose any data so I decided to record my observation data in my teacher's reflective diary. This allowed me to record all the information I observed completely and without restriction.

3.8   My Research Role

Over the years I have adopted face to face method in my teaching practice but in my mind I have wondered what it will be like to have lessons with my students online and such lessons posted on a site. This view motivated me to conduct this study which could be seen as a bias. I do have a bias because I believe the integration of online teaching and learning technology into teacher's lessons can improve teachers practice. Secondly, I felt it is time for teachers to appropriate new technology into their practice. Thirdly, my experience during the pilot study may also be a contributing factor for my support for online technology. In order to minimise this bias I worked with critical friends/peer review they were responsible for debriefing me systematically and thereby introducing objectivity in the processes.

In addition to my bias, I played a dual role of an informal participant and researcher. It is possible that because I played a dual role as an informal participant and researcher the findings may have been influenced. My position as an insider may aid my claim of knowledge because as an insider with tacit knowledge of the way the school system operates and my familiarity with participants this position may influence the outcome and in turn enhance the credibility of my claim. Also the dual insider role played can be seen as bias to this study. In other to overcome all these factors mentioned, I paid close attention to my biases by consulting any evidence of bias with my colleagues, critical friends and supervisors.

Stoddart (1986) stated that being non-obvious is simplified by taking part in the on-going activities of the participants without bringing specific attention to oneself. Being a non-obvious informal participant and researcher in the main study provided me the unique lens to interact with participants and have limited influence to participant's views about online learning. In attempt to reduce bias in this study, I also decided to be as non-obtrusive as possible by organising four meetings throughout the study. At each meeting I tried to respond to questions that were directly related to the online

research process and my PASTOR model. During observation I tried to observe only things that are directly related to this study as it helped me to remain focus and be less distracted.

3.9   Research Validity

I adopted Feldman definition of validity (Feldman 2003, p. 26). Throughout the whole process of this study I endeavoured to ensure the validity of my claims to knowledge is in three different ways. Firstly, I ensured the connection and corroboration of the different instruments of data collection (triangulation) are followed with a common pattern. To further ensure triangulation I used multiple data sources (interviews, teacher's diary, observations and questionnaires) to reveal the complexity and uniqueness of the experience and behaviour of participants. Feldman (2003) believed if multiple data sources are used to analyse data they provide a complete picture of the research issue. Secondly, I subjected the research process and findings to critical reflection. Brookfield (1995); Meyer (2012) supported the process of critical reflection on theory and practice. They observed that unexamined common sense is a notoriously unreliable guide to action.

Boud and Walker (1998) stated that reflection must not be limited to issues outlined by the teacher within the teacher's comfort zone. Therefore, I and the participants reflected on all activities taking place throughout the study process. Evidence gathered from participants supported the importance of critical reflection. I wrote from the stand point of both participants' views and my own view referencing them and then returning to the participants for review. Guba (1985) observed that having participants in the study check the data and help to verify the data collected and interpretations. Thirdly, I worked with critical friends/peer review that was responsible for debriefing me systematically and thereby introducing further objectivity in the process. McNiff et al (1996) describe a critical friend as a colleague or companion who is willing to discuss and share ideas regarding the research process. In an addition, I ensured critical friends authenticated and verified my field notes

(McNiff et al 1996, p. 43). I also discussed my field notes, progress, concerns, and planning with my critical friend who are experts in the field of higher education.

3.10   Ethical Compliance

One of the major issue that is valuable in this case study was the subject of ethics. Hilsen (2006) argued that ethics in case study may be used on three stands: human inter dependency, cogeneration of knowledge and fairer power relations. Holian and Brooks (2004) observed that a common sense approach to ethical consideration should always be used when conducting research, firstly, the question what is the potential for harm and for good? And secondly when does normal work become research. In compliance to Holian and Brooks assertion about ethics, the following ethical issues were considered. First of all, I requested an oral approval from my head of school before the commencement of this research. I also provided copies of my set of ethical guidelines, consent form to all participants who showed interest. I ensured participant's confidentiality was maintained as well as informing them that participation was voluntary and they can withdraw at any time.

3.11   Data Analysis Procedures

McNiff et al (2002) observed that one needs to generate evidence to make a claim to knowledge to say that one now knows something one did not know before. The data collected in this case study were analysed on an on-going basis using the constant comparative method and Yin's replication strategy (Glaser and Strauss 1967: Yin 1994). This non-mathematical method guided me throughout the research to identifying themes and patterns within individual cases. The data were grouped and matched based on common themes and patterns that emerged through the analysis process. These approaches helped me to analysis each individual case seeking for emerging theme and patterns and then comparing the results with additional cases to identify emerging themes and patterns.

During the analysis stage Glaser and Strauss' constant comparative method and Yin's replication strategy were adopted to analyse the results from each participant during interviews, observations, teacher's reflective diary and questionnaire administration for each case. The data collected were organised and assembled by date, data collection method, research questions, questionnaire questions and interview questions. This method helped me to identify changes and improvement in the part of the participants. These results were compared and analysed for emerging themes and patterns.

Also, results from each case of participant such as interview, observation, questionnaires and teachers reflective diary were combined, compared and analysed for emerging themes and patterns. This was done by listening to the audio tapes of the interviews scripts for key words and phrases. Each interview tapes were listened to according to each individual interview questions and common words and phrases and potential themes were recorded. Themes were categorised using the research questions as a framework from which to start. To help ensure the reliability of the data, themes and patterns were distinguished if they were evidenced from two different participants and when appropriate two different sources (Miles and Huberman 1994). The data were design specifically to identify and categorise each participants and theme. Dates were used to identify when specific data sources were recorded.

3.12   Study Duration and Implementation

This study was conducted from September 2013 through September 2017. This project can be used to inform practitioners about teacher's perception about online learning, impact of online learning to teacher's practice, the impact of online learning to student's engagement in learning, teacher's strategy in reducing online attrition and adoption of my PASTOR model for effective online teaching and learning. Before I discuss this study timeline, it is important I state other activities I undertook during the course of this study such as seminars and conferences attended in my university and outside of my university (see appendix 20). Other course of action I took during the period of this

study includes two paper presentations in London Bridge Business Academy (see appendix 21 and 22). The table below shows the timeline for the preparation and implementation of this study.

Timeline for the Study

Activities	Duration
Identified areas for study	May 2013
Context for study	May 2013
Identified participants for pilot study	June 2013
Pilot study conducted	September 2013- February 2014
Second adjustment and review of my research methodology and design	March 2015- August 2015
Intermission period	September 2015-September 2016
First formal meeting with main study participants (first questionnaires administered and returned)	First week of September 2016
Second Meeting (introduction and adoption of PASTOR model)	From second week of September 2016
Completed observation	Third and fourth weeks of September 2016
Completed interview	First and second week of October 2016
Conducted critical friends review	Third week of October 2016
Participants and I critical reviewing of data	Fourth week of October 2016
Analyse data	November 2016
Third meeting (validated results with participants)	Fourth week of November 2016
Completed final questionnaires administered	First week of December 2016
Analyse data	Second and third week of December 2017
Fourth meeting (validated results with participants)	Second week of January 2017
Conducted critical friends review	Third week of January 2017
Completed final report	Fourth week of January 2017

Fig: 3.3 Timeline for this study

Summary

In this section I was able to describe the research philosophy and the reasons for my choice of a particular philosophical paradigm. I also looked at my ontology and epistemology as it affects my research aims and context. I explained why case study was chosen as the method for this project. This section also focussed on the research instruments process used. I began by explaining the several ways data was collected and research instruments techniques used such as questionnaires, interviews, observation and teacher's diary. All the research instruments were used to achieve triangulation and authenticate claim of knowledge. I also looked at how data was analysed, validated and shows the timeline of this study. This chapter also contains the importance of a pilot study, pilot study aims, design, data collection procedures, benefits and influence pilot study had on me as well as what I learnt. The next chapter is my findings section.

Chapter Four

Findings

4.0   Introduction

This chapter analyse and interpret participant's perceptions of online learning, it impact on their practice and student's engagement in learning, strategy to reduce online learning attrition/dropout and teacher's description of PASTOR model. I conducted this study in an attempt to understand teacher's perspective about online learning and recommend effective strategy teachers can adopt to effectively integrate online technology into their practice. Anderson (1998) suggested a general qualitative research approach for analysis of cases which organises the data into descriptive themes (p.158). This case study is organised to facilitate this strategy suggested by Anderson. The descriptive analysis of data was from transcribed interviews, teacher's reflective diary, online observations and questionnaires.

The data analysed in this study were grouped and matched based on the themes and patterns that emerged through the analysis process. A total of nine themes were identified with supporting data. Eight of the themes were directly related to the research questions while the other one additional theme emerged not necessarily connected to the research questions but more relevantly addressed the overall picture of engaging in online learning and teaching environment. Reviewing my research questions I developed a framework to summarise the findings. The table below illustrates the relationship of research the questions and the emerged themes.

4.1   Emerging Themes and Definitions

Research Questions	Emerged Themes
How do teachers describe their perceptions about online learning environment?	Positive
What impact does the use of online technology has on teacher's practice	Improve teachers practice Flexible Collaboration
What impact does online learning has on student's engagement in learning?	Improve students learning
How can teachers reduce online learning attrition/dropout rate of students?	Mentors
How do teachers describe the adoption of PASTOR Model into their practice?	Reflection Structure
Addition theme	Time

Fig: Table 4.1 illustrates the relations of research questions, emerged themes.

4.2   Definition of Themes- For the purpose of this study the following themes can be described as:

Positive- means that teacher perceives online learning as favourable to their practice.

Flexibility- refers to online synchronous communication and asynchronous communication nature that is convenient to users. Synchronous communication means where all participants in the learning environment meet at the same time in the same online platform. For example, a VLE chart exchanging dialog through a chat box. Asynchronous communication is where participants contribute

at different times from different locations. For instant, students used the discussion board to provide input to a given writing prompt and also respond to their classmate's posts.

Collaboration- alludes to interactions and discussions with other teachers and students.

Improve teacher's practice means teacher's conscious effort to better their teaching practices and to increase student performance.

Improve student's learning- refers to students improvement in learning and technology skills.

Mentor- mentorship speaks of instructor's significant time acclimating students to the rhythms, routines, and expectations of an online course.

Reflection- refers to the degree of depth and the extent of teacher's conscious thinking about their practice.

Structure means conscious guide or framework that teachers adopted in integrating online technology into their practice. They chose to follow this rather than a more random way of doing things.

Time – limited amount of period for this study.

4.3   Results

First Research Question

Teachers Perceptions Question: How do teachers describe their perceptions about online learning?

English (2006) believed that the teacher research is a way in which teachers can get inside information regarding their educational field. Hargreaves (2001) observed that the purpose of professional growth is change in individual knowledge, understanding, behaviours, skills, in values and beliefs. To examine participant's perception about online learning I decided to use initial questionnaires first to understand each participant current views about online learning before they

integrate online learning. When participants were each asked their perceptions of online learning one theme that emerged from the data was very positive (good). These themes agrees with Hargreaves views in that new knowledge led teachers to gain more understanding about their behaviour towards online technology.

How teachers do describes their perceptions about online learning?

Positive

In order to analyse this question, I compared the initial questionnaires data collected at the first meeting with the final open ended questionnaires data administered at the end. The reason for this comparison was to establish whether there were any changes on the part of the participant's regarding their perceptions about online learning. In the initial questionnaires administered, the following are participant's responses. When participants were asked in question 4.2 of the initial questionnaires which of the learning environment will they prefer as teachers? Data showed that 6 out of 20 preferred face to face learning environment than online learning and blended learning while 8 out of 20 supported blended learning environment and 6 out of 20 ticked fully online learning environments. These results showed that participants have mixed view about face to face and online learning environment but 8 out of the 20 participants thinks a mixture of online and face to face learning may be the most effective way for teachers to integrate online technology into their practice.

When participants were asked do they prefer online technology to face to face? Data showed that 9 out of the 20 participants said yes, they will prefer online technology to face to face while 10 said no they preferred face to face to online learning. This result clearly showed that some teachers are sceptical about online learning. But when participants were asked what is their perception about online learning? the initial questionnaires data revealed that 10 out of the 20 participants thinks that online learning technology is good while 9 thinks that online learning technology is not a good idea

for teachers practice. Only 1participant was unsure whether it is a good idea or not. The one participant that was unsure means that half of the participants have negative perception about online learning technology use in teachers practice. These results demonstrate that some of the respondents do not believe that online learning is a good idea.

Analysing this data further I discovered the age group of people who do not hold positive view about online learning are within the age range of 40 years and above while those within the age range of 20 years to 35 years have positive views about online learning. Comparing this initial data position of participant's from their final open ended questionnaires responses. Data showed that after the adoption of online learning technology into their teaching practice many of the participant's perception changed from negative to positive. In fact, 18 out of the 20 participants regardless of their age range later viewed online learning as a positive tool for teacher's development. One of the participants wrote that online learning is a positive tool for the 21st century teachers practice.

Another participant wrote that online learning tool should be encouraged and supported by management of higher institutions. Another participant wrote that you can only know a thing better when you use it. Therefore, schools should introduce online learning to teachers in higher education and encourage them to adopt such technology into their practice, especially those who are worried that it adoption to their practice may affect their scholarship.

During the interview most of the participants stated that they can recommend the use of online learning to others. Others said that the use of online learning technology has been a 'positive experience'. One of the interviewee said I am satisfied using online learning technology to teach. Kate said that "online learning is such a good idea for effective learning". Miss Becky said that "online learning is a good development I think it is a positive tool for education" (see appendix 11). Tony said

"online learning is positive and good". From this data results is clear that most teachers are ready and willing to try something new which agrees with Kurmar (2011) observation that teachers are willing to adopt new technology if they are asked to do so but are reluctant to integrate such technology without management support.

Second Research Question

Online technology impact on teacher's practice

Improve teacher's practice

When participants were each asked what impact the use of online technology has on their practice. Three themes emerged from the data. (a) Improve teacher practice, (b) flexibility and (c) collaboration. These themes agrees with Coutts, Dawson, Boyer and Ferdig (2007) observation that teachers who utilised online learning technology effectively enhanced their practice and pattern their teaching and learning in such a way that reflected their learning in their own class. The data revealed that as teachers adopted online technology into their teaching practices their knowledge about online teaching changes. Data also showed that as the teachers' knowledge changed so did their teaching practices changed.

In the initial questionnaires administered in section three of question 3.1- whether online technologies have positive impact on teachers practice? (See appendix 3). From the participants responses the result showed that 85% of respondents think that online technology has positive effect on their practice while 10% are not sure but 5% thinks online technology does not have positive effect on their practice. This result means that participants believed that online technology has positive effect on their practice. Question 2.2 of section two whether online technology encourages effective teaching and learning? The result revealed that 80% of the respondents think that online technology encourages effective teaching and learning while 20% of respondents think that online technology does not

encourage effective teaching and learning. This result reveals that participants in this study believed that online technology encourages effective teaching and learning. In the second open ended questionnaires administered, the following are the responses drawn from participants about the impact of online learning to their practice. One of the participants wrote online leaning is a modern way to get connected. Another participant wrote I enjoyed my time when using online learning features to teach my students. Another respondent stated using online learning technology helped me control my learning environment and personalised my teaching. Another participant wrote that the nature of teaching is a never ending process of change which online is part of that change.

During my interview with Mrs Kate she stated that "I want better ways to teach my students. … I just want them to be effective and successful" (see appendix 12). Mr Peter said "his students told him they have learnt a lot using online technology" (see appendix 14). Three of the six participants expressed how using online technology and implementing (PASTOR) model helped them monitor, improve and tailor their teaching practice; this they hoped would lead to visible progress to their practice. Mr Peter said "using online technology has improved my practice… especially in my writing, I am extremely careful with my post, before posting I will have to read and read" (see appendix 14). Mr Jude said "I am surprised the way students are engaging with my post" (see appendix 13).

Mr Anthony said that "online technology has helped me to monitor the way I engage with students some time I lead the discussion and some time I let them lead the discussion" (see appendix 10). Mr Tony stated that "I was concern about the language students might use while posting this helped me to always read and read students post" (see appendix 9). Miss Becky said "using online technology has helped me participate in group discussion (see appendix 11)". Mr Jude stated that "using online technology helped me control my learning environment "(see appendix 13).

From my observation teachers had more than their intuition to rely on to teach. The PASTOR model helped them to structure their lessons in a methodological form. The teachers in this study embraced the complexities of teaching and learning by their commitment towards improving their individual teaching practice using online technology. Schmoker (1999) reported that data and results can be a powerful force for generating an intrinsic desire to improve. During my pilot study I used Facebook group page to teach my students especially the constant checking and writing of lessons and communicating with them. I realised I was making progress in my technological skills as well as improving in my practice and accomplished what I intended to do and see.

Flexibility

The second theme that emerged is online flexibility. Bonk and Zhang (2006) believed that online flexibility empowers learner's autonomy and such autonomy encourages learning. In support of flexibility Bonk and Zhang divided online flexibility into two; firstly, synchronous flexibility in teaching. This means that teaching and learning take place in a conversational manner where learners and instructors communicate directly through chat or any other form in the same time and same place. Secondly, the asynchronous flexibility in teaching refers to lessons taking place in different time in the same space where users of online can receive information and contribute at their own convenient time with little or no pressure to respond to information immediately without reflecting or digesting the information.

During this study most of the respondents think that online technology is flexible and thus gave them the opportunity to engage with other users at their own convenient. In the interview section many of the respondents said online learning is flexible and effective. In fact four of the respondents believed that online technology has made their teaching a little bit easier as they can post and make comments anytime. Mr Anthony said "I like online technology because is flexible and convenient to use during school and after school with my learners". Another respondent Miss Becky commented that "It's features and its flexibility makes it a good idea for learning" (see appendix 13). Mr Tony stated that

online technology "asynchronous communication makes learning and teaching easy" (see appendix 9). From the data analysed in the open ended section of the initial questionnaires eleven (11) of the respondents wrote 'flexibility as one of the three things they liked about online technology'. In the initial questionnaires, question 3.3 of section three whether online technology allows users to read and post at any time? (See appendix 3). Many of the respondents think that online technology is convenient which means flexible. Participant's responses revealed that 85% of respondents ticked high that online technology allowed them to read and post at any time while 10% were not sure but 5% ticked no which means that online technology does not allow them read and post conveniently.

These results demonstrated the acceptance of respondents about the flexibility nature of online technology. During the interviews 1 of the respondent averred that I feel comfortable posting my ideas on online platform. Another participant believed the spelling check features of online technology has reduced her spelling errors. Another participant stated that she found it easier to write on her blog. In the final open ended questionnaires most of the participants believed that the ease at which they can communicate and leave information any time they remembered or adjust their lessons plan was quite beneficial to them which is reveals the flexibility nature of online technology.

This result clearly showed that teachers think that online technology is convenient for learning. The flexibility result in this study agrees with Sharpe et al (2006) study that the mix nature of technology application enhanced practitioner knowledge. Er et al (2009) observed that asynchronous and synchronous nature of online learning technology provided support to teacher and students engagement.

Collaboration

Another theme that emerged from the data collected was collaboration. Garrison and Anderson (2003) study observed that online learning enhanced teacher and student's collaboration. Andreas et al (2010) study revealed that online learning increases students, teacher and content interaction. During my interview one participant said I enjoyed my time when using online learning technology features to learn and interact with my students. Two of the participants also believed online learning technology helped them to interact and meet students' needs and interest. Another said using online technology has helped him participate in group discussion. One respondent stated that using online technology has helped he discuss lesson topics and assignments with his students.

In the third section of the initial questionnaires question 2.4 of section two, does online technology help students collaborate with other students during learning? The results showed that 65% of respondent's ticked yes while 35% ticked no that online technology does not help student's collaboration. The result clearly revealed that teachers still believe that online technology encourages student's collaboration. Question 2.5 does online technology help students to interact with content? The results showed that 60% of respondent's ticked yes that means 12 out of 20 participants thinks that online technology help students to interact with content while 40% ticked no meaning that online technology does not allow students interaction with content. From the data analysed in the open ended section of the initial questionnaires, the result revealed that five (5) of the respondents wrote 'collaboration and engagement as what they liked about online technology.

In the final open ended questionnaires many of the participants thinks that online learning technology enhanced collaboration between teachers and students. One of the participants wrote that online technology provided her the opportunity to move beyond the walls of the classroom and engage with her learners. Another participant said online learning has helped him to understand the level of his student's engagement during learning as I was able to know those students who interact regularly and

write constructively. During my observation I discovered that not all the students engaged effectively with their teachers. Student's interaction was short lived because learners centred more on their own work than interacting with others to enhance meaningful learning. I also observed that students demonstrated low level of cognitive engagement in their post as most students could only discuss in a small sentence or comment on their fellow students posts. Although some data showed high level of affection, commitment and support for the use of the online technology but their attitudes and engagement was low.

However, in my pilot study, data result showed that student's online technology engagement was high. For instance, most of the participants collaborated well as they engaged and interacted freely and openly during online lessons. This happened often that one participant will post another participant will repost and other participants will respond. In some post students may agree while some may disagree. For example, a student posted in her wall that business means anything that get someone busy. This post generated lots of argument among the participants. Some agreed while others disagreed which created lot of interest and exchange of ideas. From my observation I can say that the less cognitive engagement witnessed by some of the teachers could be as a result of teacher factor because in my pilot study most of my students said that the most significant factor was the fact that they find the online learning interesting and funning. They said that my enthusiasm to teaching and my sense of humour helped them engage effectively.

These results agrees with Er et al (2009) study that observed that online technology as a tool encourages asynchronous and synchronous learning and collaborations. Bonk and Zhang (2006) earlier work agrees that asynchronous communication supports learning and allow student to reflect, interact and collaborate. Mazer et al (2007) study revealed how the use of online learning technology helped students to contact their classmates about questions regarding their class work, assignments, examination information and collaboration with group.

Baker (1999) study observed that online technology connects students with other students which invariably create a learning community which is an important feature for student education. Attwell and Hughes (2010) study cited that the fact that people are organising around some particular area of knowledge and activity gives them a sense of joint enterprise and identity. They further noted that for a community of practice to function it need to generate and appropriate a shared repertoire of ideas, commitments and memories. It also needs to develop various resources such as tools, documents, routines, vocabulary and symbols that in some way carry the accumulated knowledge of the community. In other words it involves ways of doing and approaching things that are shared to some significant extent among members. I believe the integration of online learning technology into teachers practice created community of practice where students and teachers were communicating, sharing posts and making comments.

Although, Jean Lave and Etienne Wenger tried to link communities of practice in social relationships of participants which create situations of co-participation as William F. Hanks puts it in his introduction to his book "Rather than asking what kind of cognitive processes and conceptual structures are involved they asked what kinds of social engagements provide the proper context for learning to take place" (Lava and Wenger 1991, p.14). It is not so much that learners acquire structures or models to understand the world but they participate in frameworks that have structure. Learning involves participation in a community of practice and that participation refers not only to local events of engagement in certain activities with certain people but to a more encompassing process of being active participants in the practices of social communities and constructing identities in relation to these communities (Wenger 1999). From my findings, community of practice and collaboration can be seen as an essential part of online learning technology.

Another part of collaboration that emerged during this study was the collaboration between research participants, critical friends and I. I noted throughout this study my observation on collaboration and several informal collaboration that happened between participants and I. For example, in one of the meeting held, some teachers briefly gathered to plan and discuss how they can make their lessons more interesting and needed advise which I shared my idea and experience to them. In another occasion some teachers briefly discussed and shared their instructional teaching materials to other participants. By collaborating with one another during this study participants were able to learn from one another. This study provided participants and I the environment for collaboration and engagement. Participants and I actively exchanged ideas and co-constructed knowledge within the context of the online learning community. We were able to discuss each stage in the research process and created knowledge (Reushle and McDonald 2004). Collaboration appeared to be a healthy part of online learning and this study.

Third Research Question

Online technology impact on student's engagement in learning

Improve student's engagement in learning

When participants were each asked about the impact online technology have on their student's engagement in learning. One theme that emerged from the data was student's improvement and technological skills improvement. In support of this theme of data that emerged Er et al (2009) averred that online learning experience provide advance educational opportunities for learning needs of students. From the initial and second open ended questionnaires responses received from participants, most of the participants agreed that online learning improved their students learning and technological skills. Some of the participants who believed the use of online technology have improved their students learning made comments like they have learnt a lot. Other participants stated that some students have started creating online groups using different social networking sites.

While one of the teachers commented that he has seen some students who are quiet in class comment and engage regularly. Another participant wrote that online learning has helped his students to improve their typing skills, writing, researching and planning their answers before posting which they sometime read other students post before commenting which they view online as a positive step for teachers.

I believe teachers who use virtual learning environment to teach write what they think while students say what they think which in turn encourages freedom thought and ultimately improve confidence, technological skills and learning. During my interview with Tony, he said that "online teaching is different because it provides teachers and students the opportunity to reflect and answer questions based on their own experiences" (see appendix 9). Kate said that the use of online technology makes her students feel free to air their views unlike in the classroom environment where they may feel shy to ask questions. Although, during my observations I noted two of the research participants occasionally expressed their worries about seeing concrete constructive engagement in their student's posts. Some teachers expressed concern on the way students were posting their comments which I noted in my teacher reflective diary. They said some students just post comments without engaging constructively another participant expressed worry about the short sentences students used to write.

Another participant observed that some students don't engage with content material posted rather they just post what they feel like posting. They believed that with concrete constructive engagement in student's posts it will help learners to measure their performance and reflect before posting. However, data showed that most of the teachers were happy with student's posts and comments as they were enthusiastic about the future of online learning. During my pilot study data also showed that online learning can improve students learning and technological skills. Below are some of the examples of posts made by my students.

Fig: 4.2 online students post and engagement in learning example 1
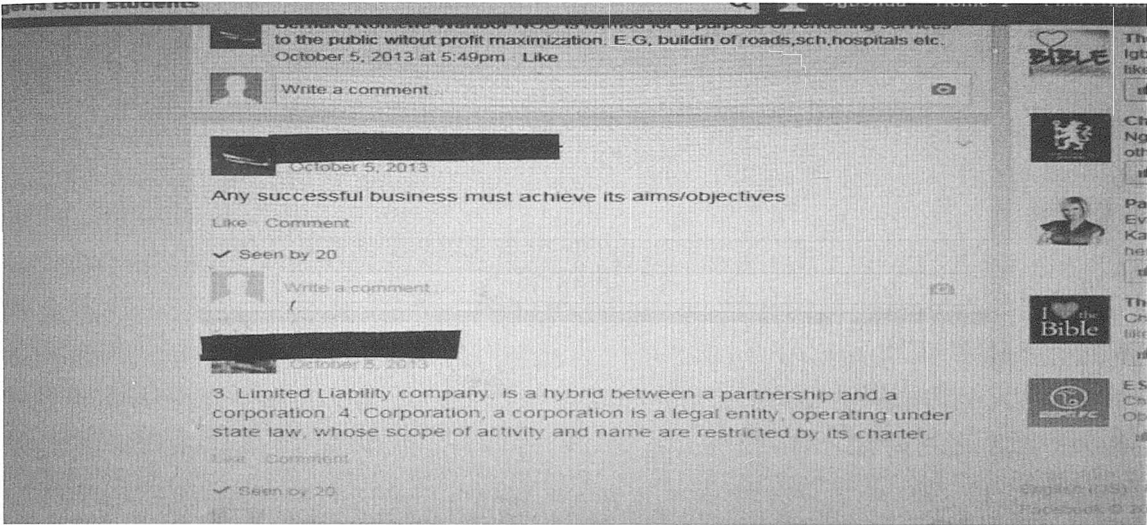
This picture shows how students were engaging and responding to my questions.

Fig: 4.3 online students post and engagement in learning example 2
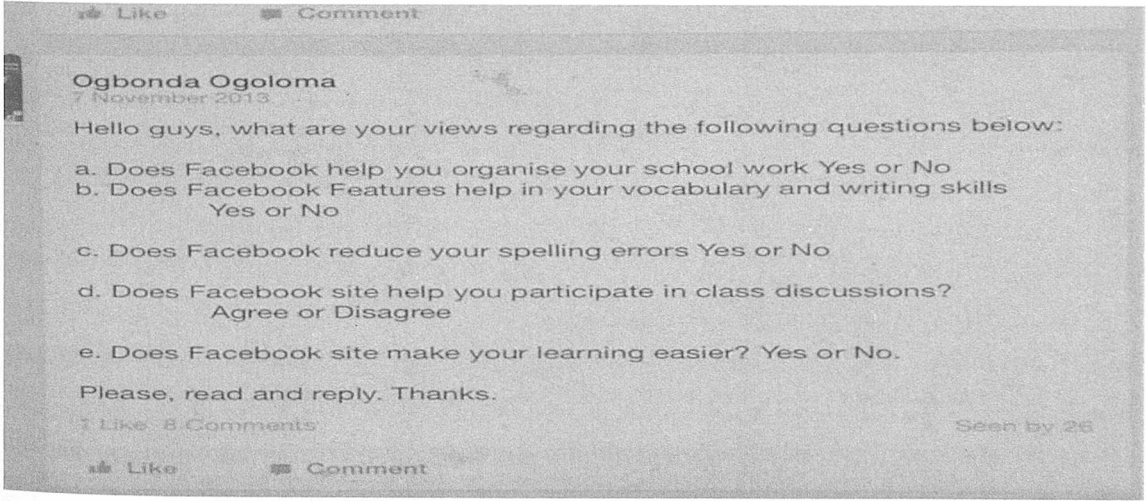
Fig: 4.4 Chart discussions with participants

The red colours represent my comments while the blue colour represents the two participant's responses.

Me- does Facebook features enhance your writing and vocabulary skills?

John- Yes, very wel though the use of words that are not accepted in English is now taken over proceedn. E.g d for the, hs for either his or has

Me- do you think the use of this word is good for learning?

John- no

Me "Then, do you think teachers should use Facebook to teach?"

John- Yes

Me- thanks

John- you are welcome.

Chart discussion with Favour

Me- Hello Favour

Favour- Hi

Me- Do you think teachers should use online tool to teach?

Favour- Yes, education is important, so teachers should use it

Me- Favour, what do you think about the impact of online technology tool like Facebook to your learning?

Favour- is being a positive experience for me and my technology skills has improved.

Me- thanks a lot

From the examples and charts highlighted above it is clear that online learning have positive impact on the research participants. In the mid-part of the Facebook lessons, student's interacted and collaborated effectively with each other. This happened often such that one participant will post another participant will comment on the post. In another situation some students may agree to comments posted while some may disagree. For example a student posted in her wall that business means anything that get someone busy. This post generated lots of argument among the participants such that some agreed while others disagreed. Below is the example of the post that generated lots of discussions.

Fig: 4.5 online students post and engagement in learning example 3
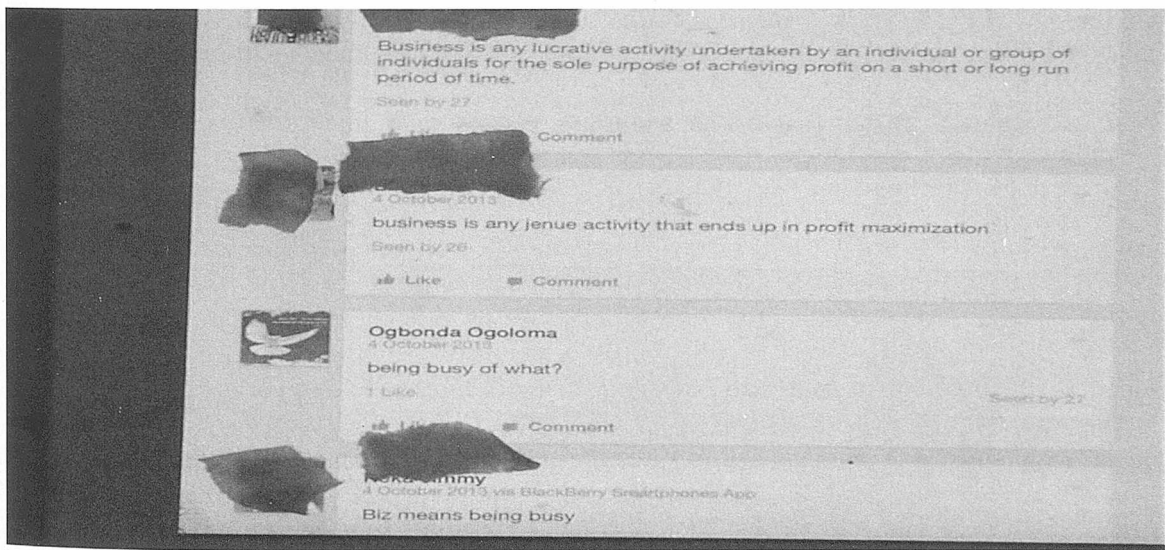
In another example one participant posted in her wall that Facebook has improved her technological skills and tying skills. Another participant posted that indeed I can recommend the use of Facebook to other students. All these comments and post, agrees with Suraya et al (2011) work. Suraya cited that teachers and students who use online technology generated rich content, post their work and download files easily with less concern for privacy. This finding also agrees with Suraya view that sharing content and information online goes a long way to make users feel comfortable and see

themselves as publishers of materials people read, comment and engage which in turn improve their learning.

Fourth Research Question

How can teachers reduce online learning attrition/dropout rate of students?

Mentorship

During my interview I asked all the six participants how teachers can reduce online learning attrition/dropout rate of students. From the interview comments, participants agreed that mentorship is important. Four of the participants mentioned mentorship as a key issue for effective strategy in reducing attrition. One of the participant stated that a good mentor will douse tension and encourage participation. Mr Jude said that "mentorship is necessary to help students technically" (see appendix 13). Mr Peter said that "Mentors facilitate learning and discussions" (see appendix 14). While Miss Becky said "mentorship will help answer questions and clarify issues that learners may found difficult" (see appendix 11).

Data from the second open ended questionnaires showed that most of the participants believed that mentorship is an effective strategy to reducing student's online attrition. One of the participants wrote, from my experience online teachers need to maintain good relationship with their students as this will help them identify those students who are not posting or engaging and provide additional support to them. Another participant wrote that mentorship can go a long way to minimise fears and worries students may have before using online technology. One participant wrote that mentorship build confidence in the mind of learners. All these data agrees with the study conducted by Boles et al (2010) that noted the importance of mentorships for effective online learning. During their study with the University of Illinois in the US they discovered mentorship as effective strategy to retaining online students as well as reducing online attrition.

Fifth Research Question

How do teachers describe the adoption of PASTOR model into their practice?

When participants were each asked their perceptions about my PASTOR model? Two themes emerged from the data, Reflection and Structure. These themes agree with Hargreaves (2001) views that new knowledge lead teachers to gain more understanding about their behaviour and their teaching practice.

Reflection

Reflection emerged as being very important theme in this study. All six participants that participated during interview believed that reflection is essential part of teaching and learning. Participants stated that deliberate reflection supported changes in their teaching practice such as planning, focusing and reviewing students work. One of the teacher said that reflection helped her to identify what worked well and what did not work well in her lessons. I am always thinking about what I taught during my lessons she added. Mr Jude said that "Reflection has helped my planning. . . . Instead of giving homework at the end of class I give it at the beginning of lesson and discuss it throughout the lesson" (see appendix 13).

Miss Becky said "I think about student's engagement and student's interaction on individual basis. I also think about how to improve the group engagement" (see appendix 11). Mr Peter said "I think about each topic and best method to adopt in order to deliver effective teaching" (see appendix 14). Mr Tony averred that "the continuous reflection helped me to know which area in my delivery I should improve or develop" (see appendix 9). Mr Anthony stated that "reflection made me look proactive than reactive to my students because I was able to review what I did in the previous lesson and discuss what I intend to do next" (see appendix 10).

In the second open ended questionnaires most of the participants wrote that the PASTOR model is a good teaching model because it helped them develop their teaching style and examining their learning. One of the participants wrote that the adoption of PASTOR model made him more reflective. Another participant wrote I was amazed how PASTOR's model structured my teaching and helped me plan my lessons. Another participant noted that the PASTOR model was indeed a reflective measure that improved his practice that encourages him to adopt into his classroom teaching. Boud (1994) observed that learning is always rooted in prior experience and that any attempt to promote new learning must in some way take account of that experience. Koshy (2010) highlighted the importance of reflexivity in teacher's research as it help to show the practitioner social identity and background. Koshy also argued that researchers need to reflect on the impact of being a practitioner researcher and recognising the influence this may have on the research and state any potential bias that can influence the study.

Meyer (2012) averred that reflection and analysis is when individual teachers make a personal commitment to systematically collect data on their work they are embarking on a process that foster continuous growth. When the six teachers were asked about the online experience the six participants agreed that the reflective aspect of the PASTOR model helped them to provide effective learning for their students and improve their practice. Meyer further underpins that the reflective practitioner seeks new ideas to evaluate, reflects and improve their practice. Sagor (2002) believed that one of the main purposes of teacher research is to build the teacher to become reflective. From this result showed, reflection is essential in teacher's improvement and online development.

Structure

During my interview data revealed that participants believed that my PASTOR model provided them with a systematic structure to organise their lessons. Six of the teachers interviewed responded that PASTOR model helped them to plan and structure their lessons as well as become good organisers. The model encouraged them to think about their teaching practices more regularly and more closely.

Mr Peter said "The PASTOR model has helped me to be more logical and structured in my teaching" (see appendix 14). Mrs Kate stated "This model is truly the first time I came across a clearly defined structure for online teaching" (see appendix 12). Miss Becky added that "the structure of this model has improved my teaching practice especially with the use of online technology" (see appendix 11). In the open ended questionnaires analysed, most participants wrote that PASTOR model is truly the first model they have adopted into their teaching practice as it provided them step by step process of structuring their online learning. One of the participants wrote I think the PASTOR model challenged me to think about my teaching practice all the time. Data showed that participants were assessing and reviewing their teaching practices in a more logical and systematic manner. During my observation I saw that most teachers were able to follow the step by step process of the PASTOR model carefully and consciously with little need for additional support.

Additional theme that emerged includes;

Time

All six participants mentioned time as being a restraining factor in the study. They believed if more time was given like two academic sessions they would be able to review more students work, engage them constructively and compare their performance. Mr Jude said "I like the PASTOR model but I have less time to explore it and improve student's skills" (see appendix 13). Mr Anthony stated that "Time, time, less time, not enough time" (see appendix 10). Mr Tony said "With too many teaching activity I think the challenge was to find the time and the drive to go back and double-check my work" (see appendix 9). Cochran-Smith and Lytle (1993) advocated for more time to be given if teachers were to undergo research activities. They observed that "Teaching is a profession in which it is extraordinarily difficult to find enough time to collect data and it is almost impossible to find time to reflect, reread, or share with colleagues" (p. 91).

On several occasions time was the biggest concern teachers had about my PASTOR model. They believed each of the step need careful analysis and evaluation to provide best practice especially in the area of differentiating teaching styles. For instance, when participants were asked about the challenges they faced in using PASTOR model for their teaching delivery. They agreed that time was the main reason why they were not as fast as they would like to be because the PASTOR model provided continuous reflection which requires more time in reflecting and reviewing their practice. Three of the teachers were more specific about the need for more time to address the steps involved in the PASTOR model. Mrs Kate said "The data itself, reading all the posts, comments, you know all that's takes time" (see appendix 12). Miss Becky said "I wish more time is given to us" (see appendix 11). Mr Peter said "in some cases, during this study I was often trying to catch up with some of the post made by students" (see appendix 14).

4.4   Critical Friends

Throughout this study I met regularly with my critical friends at each stage of this study before moving to the next phase. I also engaged regularly with my critical friends and my supervisors to review my research strategy. During our meetings they made comments and observations that helped me reflect critically on my practice and the research process. Some of the comments made by my critical friends and supervisors include the need for me to reveal my methodology and do more of reading. In my research diary, I noted how I was progressing and my colleague's views during our meetings shows that I was adapting and improving my research skills as the research progresses. The responses from my critical friends also shows that I am updating and reviewing all their feedbacks as expected. Another suggestion they made was the need for me to be more reflective and observant to how participants learn, teach and what they have learnt about the research process. This understanding improved my reflective skills and helped me to priorities my activities. Below are some of the comments made during my meetings with my critical friends.

On the 17th of October 2016, I had a meeting with my critical friends where I was advised to state the reason why I chose Facebook instead of other social network sites for my pilot study and why I decided to use VLE in the main study. They also advised me to be more specific than being generic in my discussion about my methodology and design. Secondly, they suggested the need for me to summarise online learning in terms of the value that online learning brings to teacher's practice and it pros and cons. These comments were very helpful as it provided me the background knowledge and justification for this study. They also advised me not to worry about whether my study is new or not that I can always find a new type of focus like different topics, cohorts and methods. During the meeting they asked me to clarify my methodology and my research design before our next meeting. After the meeting I was able to review my work again in the light of their comments before the next meeting.

On the 14th of August 2017 another meeting was held. The following were their comments, some said things like "this is OK for now but you need to refer to my previous notes to improve". Another friend said "overall this is ok. Another critical friend said I should clarify the aim of my study. This must be a continuous, critical and self–evaluative thread with participants. All of these comments and feedbacks helped me to become more critical about my work and reflective of the entire research process.

New Knowledge and New Practices

This study empowers practitioners to investigate their practice. Just as Pollard (2010) observed that the contribution of research done by teachers are multidimensional; politically it is a powerful teachers empowerment tool, that practically places teachers in best position for finding out the most appropriate teaching techniques in their practice and professionally help them grow as reflective practitioners controlling their learning. In this study participants regularly aligned their instructional lessons to what students need to learn. This alignment came as a result of the online learning medium

and a direct result of what was learnt during the research process. The 20 participants saw the power of their new knowledge about online technology and student learning and acted on that new knowledge. Saphier and Gower (1997) stated that when teachers believe that there is no real knowledge base on teaching then it is easy to cruise on intuition. In this study teachers had more than their intuition on which to rely on. The teachers in this study embraced the complexities of teaching and learning by their commitment to work towards improving their individual teaching practices using online technology. Their new understandings led them to want to measure the effects of their efforts and the impact their effort is having on their students learning. Schmoker (1999) reported that data and results can be a powerful force for generating an intrinsic desire to improve. Based on student's attitude to learning and engagement during lessons, teachers were able to synthesise their new knowledge and their prior knowledge about their student's and apply this new learning to new teaching practices.

Implication

From the data revealed in the initial questionnaires, some of the research participants who were initially worried and sceptical of online learning integration to their practice changed their perceptions about online learning because as their practice changed their teaching improved. They developed a methodological structure in handling their teachings and students learning. This changes made by some of the teachers can be linked to their participation in research. Following, the teaching improvement made by participants and I during this study I can say that online learning is essential for teachers development. If teachers fail to adopt or integrate online technology into their practice the implication could result to student not been effective in technology usage and engaging in other online activities. I believe for teachers to be effective they must try something new which online teaching may be that new thing they could try in their practice.

4.5   Research Reflection

Meyer (2012) study supported the process of critical reflection on theory and practice. Meyer observed that unexamined common sense is a notoriously unreliable guide to action. Boud and Walker (1998) stated that reflection must not be limited to issues outlined by the teacher within the teacher's 'comfort zone'. From this postulation, I ensured during this study I and all participants reflected on the activities taking place throughout the study process (Brookfield 1995). Evidence gathered from participants supported the importance of critical reflection. I wrote from the stand point of participant's views and my views referencing them and then returning to the participants for review. I continuously reflected on my own practice and show how participants are integrating the virtual learning environment into their practice as well as reveal how they are adopting my PASTOR model to their practice. From their actions and opinions during the course of this study, I concluded that teachers should adopt new technology into their practice as it benefits cannot be under stated or over looked.

At the final stage of this research, no additional data were collected but it did require my reflection on and learning from the data already obtained during the period of the online lessons. I viewed this stage as central to this research study particularly as it assisted me to make sense of the emerging data and to revise plans and designs. I learnt through what Whitehead described as living standard of judgment. He stated that one should look back to see where one has come from and look forward to where one may be going to (Whitehead 2004, p.6). This form of judgement has helped me to develop my ability to think at a deeper level and be more critical as well as making effective judgement before taking any action. I learnt more about the participants and myself than I ever thought possible.

Most of the participants surprised me by participating actively and engaging learners in a more dynamic and effective way. I remembered one of the participants commented that he love the research topic while another participant commented that this study has improved my practice. Some of the

participants also said that the use of PASTOR model was a new learning curve for them and the process of constantly checking; writing lessons online, communicating with students and posting comments were a big learning process. Throughout this study participants actions, determination and willingness to participate in this study made me to understand that this project is meaningful and relevant in today's education. They made sacrifices despite their tight class timetable and students demands, yet they engaged and completed the questionnaires and attended interviews which showed their dedication to use online technology to teach and improve their skills. However, this was not the case with a selected number who did not participate effectively.

During this study, I often fell into the trap of allowing time restrictions to dictate this project activity. This happened in the early part of the study but was mitigated in the later part of the research after I had discussion with participants and my critical friends. I decided to give sufficient time for the participants to learn and use the tool effectively. I found that this change of approach gave them time to do more independently and spend more time reflecting on what they are teaching and learning. I also found out that not all the participants believed that the online technology has improved their practice. However, many of them agreed that online learning technology has improved their teaching practice compared to face to face. One of the participants commented that she has created her own blog "I have my own blog."

In course of this study, some participants noted that some learners did not submit their post on time as expected that the lackadaisical attitude of those learners caused problems that led to procrastination of some learning activities. They also expressed worries that some participants often waited until the last minute or deadline before commenting or submitting their work. Just as Fill et al (2006) advised teachers to be flexible and willing to adopt changes while trying to improve their practice. These teachers decided to give more time to participants to post their comments. This decision was made in order for them to avoid using mechanical or rigid time limit for posting and submission. Prior to the

change students were posting lessons fortnightly but changed to weekly post in order to encourage their students to effectively participate and engage in the online lessons. In each stages of this study I ensured I record what I did and learnt in order to understand the entire research process and review my practice. During each stage I engaged critically with online technology literatures, books and journals. From a personal perspective the use of Facebook group page to teach during the pilot study was an improvement to my practice and my professional development. The constant checking and writing of lessons online and communicating with others was itself a development and advancement of my profession. I believe that all the comments made during interviews, observations, questionnaires responses and research diary kept during this study has helped me and all the research participants to develop our practice and evaluate all our actions throughout the study.

Summary

In this chapter I was able to analyse, interpret data and show the results of this study. I was also able to highlight the themes that emerged, how new knowledge and practice was developed. I reviewed my interaction with my critical friends as well as explain how I conducted my research reflection. The next chapter is the final section of this study that contains the research findings, contributions, limitations and recommendations.

Chapter Five

Research Findings, Contributions, Limitations and Recommendation

5.0   Introduction

This chapter discussed the final stage of this research which includes: the research contributions, recommendations for further study, limitations, summary and conclusion.

5.1   Findings and Implication

The adoption of case study in this study helped in the description and contextualisation of my findings and understanding of participant's perceptions about online learning. I believe case study is a means by which practitioners can actively engage in combining their practice of teaching and contextualise their research. These two components cover the art and science of teaching and learning. This was evident when analysing common themes data in the research questions. Data in this research revealed that as changes occurred on (a) online perception (b) teaching practices (c) knowledge about reducing student's online learning attrition/dropout there were improvement in teachers practice which ultimately influenced the underlying practice of the teacher.

Diagram below shows how the momentum of improvement in one area affected improvement within the other three areas studied.
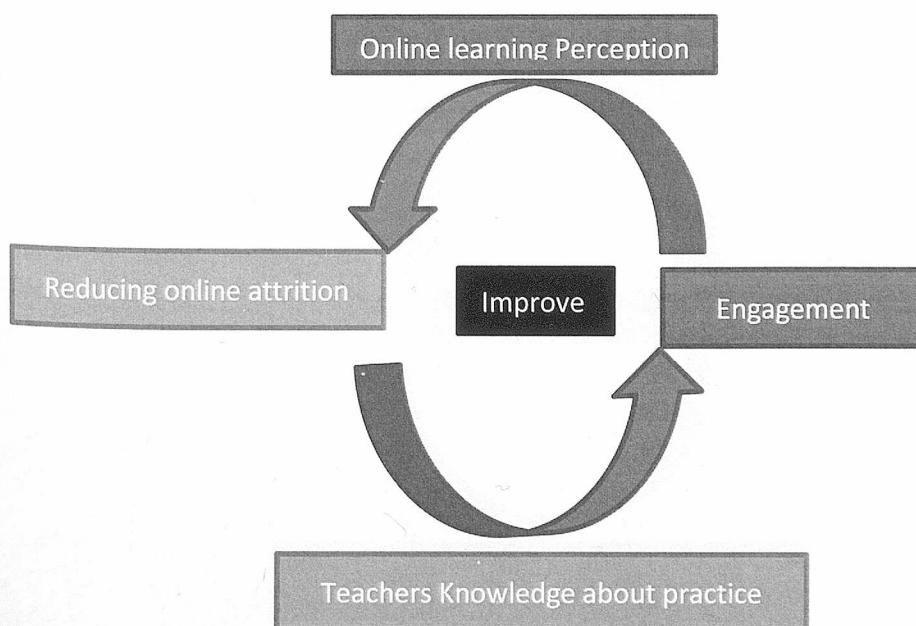
Fig. 5.1 shows how the momentum of improvement in one area affected improvement within the other three areas studied.

From the data analysed in this study each area played a part in improving the teacher's perceptions, practice and students engagement. As teacher's engagement improved so did teacher's perceptions about their knowledge improved and their practice improves so as their retention strategy to mentor learners improved. These improvements occur as a result of their participation in this study.

Online Learning Perception

From the data obtained during the analysis phase, most of the participants agreed that they can recommend the use of online learning to others. Some said that the use of online technology for class lessons have been a 'positive experience'. Others stated that by taking apart in this study their initial scepticism and worries about online learning technology have being eliminated. In fact, most of the research participants made lots of positive comments online learning technology. Some of the comments made by the research participants included "this has really contributed greatly to my personal development". Another person said "it has enhanced the level of my understanding." All these views agree with Kurmar's (2011) study that revealed that 77% of teachers believed that online technology enhance their learning. The diagram below shows how participant's perception changed as a result of their usage of online learning technology to teach.
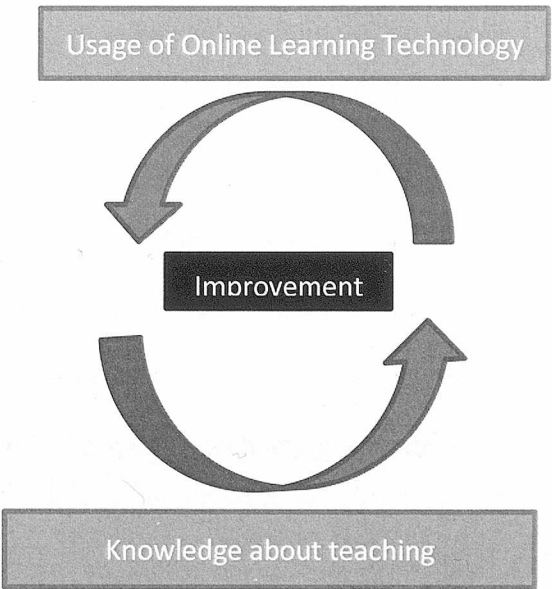
Fig 5.2 Illustrate changes as a result of usage of online learning technology

The data and findings in this study showed that if teachers integrate online technology into their practice it will enhance their technological skills and in turn help them communicate effectively in a language that their students will understand which ultimately will improve their practice.

Implication

The perception that online learning technology is not a tool for academic purposes could not be true in this study as data showed that most of the participants perceived that online learning is a positive tool for teacher's development. From the data analysed I believe it is necessary for teachers in higher education that are still worried about online learning adoption into their practice to change their perception because students today are seen as digital natives who think, communicate and learn differently than their parents or their previous generations. I believe now is the time for educators to change their philosophical position and embrace new technology into their practice because teaching students of the 21st century requires flexibility and adaptability. Just as Wehril (2009) argued that educators must realise that the emergence of this new technologies are not simply new tools but supporting tools for learning and teaching. By implication it means teachers should explore this unknown terrain.

From my personal experience and interactions with my colleagues before the start of this study, their initial perceptions of online technology were negative. In fact, many of them felt uncomfortable to adopt online learning technology into their practice. I believe their worries could be the fear of trying something new but they fail to realise that net generation student's use internet daily and will continue to do so. With current complexities and advancement of technology it is clear that if online learning goes away something new will replace it being just as popular among net generation (Honor 2009). Therefore, teachers should integrate new technology into their practice and become digital natives by

speaking the same digital language with their students which in turn may improve their technological skills. Current research and studies have shown that students want their teachers to integrate online technology into their practice (Mason and Rennie 2008; Horizon Report 2014; Davies et al 2017). I believe the time is now for educators like me to combine subject matter with online learning so as to ensure students are receiving better education that will prepare them for the real world (Honor 2009).

Impact of Online learning on Teachers and Students Learning and Engagement

Collaboration and engagement were part of the important attributes revealed in this study. Data from the study showed that online learning helped teachers and students to interact and engage in learning. Research participants believed that the usefulness of online learning for teaching and learning was evidently supported by student's participation during lessons. Their use of online features such as bulletin boards, instant messaging, email, group chat, post videos and pictures enhanced learning and knowledge. Bloom (1956) taxonomy of educational objectives was important in drawing conclusion to this study. Bloom observed that for effective learning to take place different learning outcomes has to be achieved such as cognitive, affective and psychomotor.

Cognitive learning according to Bloom comprises the acquisition and use of knowledge and demonstration of knowledge recall and intellectual skills, comprehending information, organising ideas, analysing and synthesising data, applying knowledge, choosing among alternatives in problem solving and evaluating ideas or actions. Affective learning as emotions, attitudes, and values such as enjoying, respecting and supporting. Psychomotor learning meaning physical skills such as art, dance and vocational areas like construction or motor vehicle engineering. Meyer et al (2010) cited that Bloom taxonomy is appropriate for practitioner who involve in study that seek to improve their practice and understand practitioners views.

Implication

As stated in this section, data from this study revealed that online learning encourages interaction between learners, content and teachers. However, some work in this study showed that some individuals focused more on their own work than interacting with others to enhance productive and meaningful learning. During the study, some students demonstrated low level of cognitive engagement as some students could only discuss what is in the post of their fellow students or analyse data. Although most students showed high level of affection commitment and support for the use of online learning environment to learn but only few student's attitudes and engagement were relatively low. The psychomotor learning could not be ascertain as most students only reply to posts and these did not allow for knowing how language or any other symbolic form was communicated.

But Wenger (1998) study revealed that it can be difficult to ascertain knowing how language or any other symbolic form is communicated. During my pilot study, through tacit knowledge I was able to know and understand how students communicated. Avis et al (2010) observed that tacit knowledge may only be transferred by means of observation or by the learner becoming immersed in the social practices. In this way tacit knowledge is gained by becoming a member of a community of practice (Wenger 1998). As a teacher in the school where this study was conducted, my experiences and knowledge about the school is itself a tacit knowledge as well as member of a community. Therefore, I agree with Bloom that taxonomy is a guide for teaching practitioners in developing critical thinking and learning activities.

Reducing Students Online Attrition/Dropout

During this study most of the respondents argued that effective online mentorship enhanced student retention. For example, during the interview four of the respondents believed that mentorship is needed. They stated how some learners were finding it difficult to submit their post. They also cited how mentorship support and encouragement helped students to participate and engaged effectively. The following are some of the observation I noted during the online lessons. Some teachers adopted different teaching styles to engage students. For instance, some teachers provided support to some learners using charts, graphs and tables to illustrate their ideas and explain some concepts and topics to their learners while others provided scaffolding support to their students.

Participants who use scaffolding thinks that scaffolding provided improvement to their learners such that as learners develop higher level of understanding the earlier scaffolding that was provided were no longer necessary and new ones were put in place to move the learner beyond the newly acquired stage of understanding. With this approach they were able to ensure learners learning is closely monitored and supported. As teachers use online technology to engage with their students their knowledge about their teaching and learning process increased as well as their mentorship abilities. From my observation, I discovered that most of the students who participated in this study think that online lesson is good and should be integrated into their lessons. From this stand point, I believe that mentorship is a positive factor to consider for students support and students dropout rate from online learning. This finding agrees with Bole et al (2010) study that took place in University of Illinois at Springfield (UIS). The study found out that about 93% per cent of online completion rate was as a result of effective mentorship strategy that enhanced students retention and reduction of online attrition/dropout.

Implication

If the issue of online attrition/dropout are not handled effectively by teachers and management of higher education online learning benefits may be eroded. Bawa (2016) believed that the high rate of attrition is as a result of poor understanding of online learners or learner's newness of use of online technology. She noted that for some learners, online technology may sometimes be a complete new platform for them as such may affect their attitude and motivation towards learning. She argued that if learners feel uncomfortable with self-learning style and constructing knowledge out of their own initiatives they may view the online environment as intimidating. Also if learners are not familiar with the online educational delivery system they are more apt to be frustrated and quit the program.

From the data revealed in this study, mentorship was an effective strategy adopted by teachers as it helped them to minimise the rate of online course dropout. Data also shows that when teachers began to support students and mentor them students were motivated and interested to continue with the online learning which reduced attrition rate. They believed without their mentorship guidance some of the students would have dropout of the study. One of the teachers noted how her students told her that without her mentorship support during the time of they would have discontinued with the study. Most of the participants and I believe the mentorship provided could be the reason why this study is successful.

PASTOR Model

The PASTOR model adopted during this study was appropriate because of the ease it offers to participants and I during this research process. The model is structurally defined and has a step by step approach for teacher to follow with cyclical format. The cyclical nature of the model allowed teachers to reflect and review their practice continuously. Each phase in the research is not prescribed by the cycle itself but by reflection and leaning. The finding in this study agrees with McNiff (1993)

warming that research cycles may not conform to the rigidity of its linear sequences but advice researchers to give allowance to emerging variables that could come up during investigation. Since, this research anchors on understanding teacher's perception of online learning and examining of teacher's description of my PASTOR model. During the course of this study, adoption of this model practically was challenging as the cycles overlapped in some phases and some teachers did not follow the linear sequence postulated. For example, some participants and I had to revise and review our actions and plans going back and front while conducting the research. This reflection often happened during and after the last lessons which became a continuous learning and experience in this study.

Implication

The PASTOR model should not be adopted in a face value or in a linear sequence because as data emerged during the study the need to reflect and review teaching styles became important as such new knowledge emerged which led to some teachers changing their teaching styles to reflect the new knowledge in order to meet the needs of their learners and ultimately enhance their students learning which in turn improved their practice.

5.2   Research Contributions

The practical contributions of this study cannot be under stated. As a researcher and a senior lecturer in the college were this study was conducted, the findings of this research have optimistically opened the door of possibilities for me and the research participants to adopt online technology into our teaching practice. This study has helped participants to review their practice as they integrate online technology into their teaching practice. In this study participants improved and changed their teaching practice because of what they learnt about their practice and student learning. Teachers were able to regularly align their online material to what students needed to learn in lessons. This alignment was a direct result of what was learnt after their adoption of PASTOR model. The teachers in this study saw the impact of their new knowledge about student learning and acted on that new knowledge. By this, they were able to provide targeted instruction to students who may have learning difficulties. The

structural format of the model also enabled teachers to use different teaching styles to teach and communicate with their students. With the adoption of PASTOR model participants were able to methodically structure, implement and analyse their teaching and learning process. The model with it defined structure guided participants systematically to reflect in such a way that enhanced their reflective skills. This research is important to teachers and educational leaders because this study describes the perceptions of teachers about online learning and the impact of online learning in teachers practice. This study also empowered teachers to understand the implications of their practice and students engagement in learning. It also offered mentorship strategy that teachers need to adopt to reduce online attrition. Just as Kennedy et al (2009) study observed that the effective way for teachers to integrate online learning technology into their practice is for researcher to develop a model.

Therefore, the development of PASTOR model in this study helped teachers to embrace online technology in such a way that participants could not anticipate considering their initial opposition to new technology. For teachers in the school to accept online technology into their practice and adopt my PASTOR model in itself is a huge contribution to the participant's development and practice. I believe that this study help bridge the gap between users and non-users of new technology. The adoption of online technology by non-users in my school initially who are sceptical about online learning technology is a practical step in bridging the gap between non users and users of online in higher education. The adoption of my PASTOR model provided guidance to teachers who will want to integrate online technology into their practice. The results of this research will give educators and administrators a road map of how to integrate online learning into teachers practice and develop mentorship strategy to reduce online attrition/dropout. This study is important because of its contribution to the existing literature of online learning and the creation of new knowledge through the implementation PASTOR model.

5.3   Limitations

This case study is limited to teachers in one private college in London. Twenty two (22) participants started but only 20 were involved to the end while six (6) participants were available during interview. The six participants that were available during the interview section were not randomly selected but were those participants who made themselves available for interview. Therefore, it will be difficult for me to generalise the findings of this study because of the limited non-random sample used in a single school. Secondly, all participants in this study acknowledged time as being a constraining factor. The lack of time discouraged some of the participants who originally submitted their filled questionnaires but not available for interview as they requested for long time at least two academic sessions.

5.4   Recommendations

There are specific areas from this study that requires further study. First and foremost, the area for further study should be on how online learning can enhance teachers and student's cognitive engagement in learning because students demonstrated low level of cognitive engagement during the study. Most students could only discuss what is in the VLE and commented on their fellow student's posts while others wait for their fellow students to post first before posting. Although some showed high level of affection commitment and support for the use of the online technology but their cognitive engagement were low. Secondly, since this study is conducted in one school with small numbers of participants effort should be made to expand the numbers of teacher's participation using random sampling rather than selective sample where participants were selectively chosen. Future study is needed to examine how mentorship can help reduce student's online attrition/dropout by comparing two institutions. Thirdly, longitudinal studies will be needed to investigate the long-term impact of online learning in teacher's practice using different research methodology like action research to intervene in the research process. Finally, given the small number of participants from which data were collected this case study yielded limited data which cannot be generalised.

Conclusion

Teachers must become actively involved in initiating new way of improving their practice. This study of twenty (20) participants provided evidence that online learning is one way in which teachers can develop their teaching and learning practices. From the data revealed in this study, teachers who use online technology for educational purposes can improve their technological skills, subject matter and their teaching practice. The effect of online learning was clearly expressed by the participants. Most of the teachers made lots of positive comments and remarks. Some of the comments made by the research participants includes words like "this has really contributed greatly to my personal development". Another participant stated that it has enhanced the level of my understanding. From all these comments and feedbacks received from the research participants that expressed happiness to integrate online technology into their practice. I believe that integrating online technology into teachers practice is an innovative way to teacher's scholarship because teachers will be able to stay relevant and up to date to the changes in our society.

In course of this study, collaboration was one of the important attributes highlighted. Data showed that teachers were interacting with their students and content effectively. During the interview section, one participant said that I enjoyed my time when using VLE to teach. He believed that VLE enhanced his interaction and collaboration with his students. Another participant observed that online learning technology helped her engage with students and meet student's needs. Another respondent wrote using online technology helped me to discuss lessons, topics and assignments with learners. In my observation section, I discovered students were free to post their comments and debate with their fellow students openly and politely. Also, I noted how some teachers adopted student led approach after changing from teachers led approach. The student led approach helped them focus on students experience and construction of knowledge as well as build students' confidence and making the online lessons more enjoyable.

Although, not all learners preferred that approach as some learners preferred to be taught by their teacher while others saw teacher approach as boring. This complexity made some teachers to identify each student need and proffer solutions to them in order to ensure that all student's benefit during lessons. They also ensure that the teacher led approach they adopted was kept as short as possible. This understanding helped them to adopt both teacher led and student's centred method into order to achieve inclusive learning. As a result of this mixture of both methods their online lessons were more interesting and exciting to their learners. In fact, students that were perceived to be introvert became vocal and engaging as a result of their change in style. All these results revealed why I think online learning should be used by higher education teachers in the UK. This study also provided evidence that showed reflection as a key element of teacher practice and development. I believe critical reflective thinking can be a vehicle that can help teachers progress from a level where they are largely guided by intuition to a level where their actions can be guided by reflection. The PASTOR model encouraged teachers to be more reflective in their teachings.

Schon (1991) described reflective teachers as teachers that stand in control of knowledge rather than being subsequent to it and achieving self-knowledge. Participants believed that the adoption of my PASTOR model was an effective strategy for controlling their knowledge and acquiring new knowledge. Other research participants stated that the adoption of PASTOR model provided them with a structured and methodological step in reviewing their practice. They observed that teachers can use my PASTOR model to uncover and explain questions regarding their practice. The model can also support teachers to study relevant literature essential to their practice and then implement a strategy that is suitable for their learners need. In the area of teacher's impact, this study empowered teachers to adopt online technology. The results of this study can help guide teachers in future decisions about their teaching practice and student online retention strategy. Through teachers research educators can begin to shift the paradigm of routine instructional customs to more innovative instructional practices that are grounded in practitioner research. My PASTOR model can provide a vehicle that broadens the arena in which educators learn and succeed.

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Appendix 1

Consent Form for Teachers

Dear Participant,

I am one of the lecturers in the College. I am planning to conduct a research study on understanding online learning from practitioner's perspectives. The aim is to understand teacher's perspective about online learning and recommend best practice strategy for online learning. I am planning to use questionnaires, teacher's reflective diary, observation and interviews for data collection. You have a choice on whether to participate in this study or not. You also have a right to withdraw at any time you want to. However, I hope, you will participate in this study and help me make this study a successful one. Your views and ideas are very important for this research.

Please be assured that your responses would be kept in full confidence. Your identity will not be revealed at any time.

If you wish to participate in this study, please fill in and sign below. Please keep one copy with you.

Thank you and good luck

Ogbonda Ogoloma

Lecturer,

I, Mr/Mrs/Ms ....hereby gives my consent to

participate in the interview aspects of the above study.

Signature of the participant

Date:

Appendix 2

Ethical Guidelines

The following is a copy of my ethical guidelines to participants in this study. The aim of these guidelines is to assure participants that they are protected during and after the study. Also, this guidelines highlights how I intent to conduct this study with participants. The following are the ethical guidance for this study.

1   Seek approval from the ethical committee of London Metropolitan University

2   Secure approval from London Bridge Business Academy head of School

3   Inform participants about procedures in place that ensure their safety. Such as the respect for their privacy and property rights of others and the need not to use derogatory comments, including remarks designed to undermine the dignity and self-esteem of others.

4   Unwanted and unwarranted references to any individual base on their age, gender, race or ethnic origin, religion, disability, sexual orientation are not allowed.

5   Posting of offensive images or literature, persistent and inappropriate behaviour, are not allowed.

6   Inform participants that anyone who posts to the online lessons takes full responsibility for the content of their message. Their teacher reserves the right to remove postings or ban participants that may, in their judgment, break the general rules but hope that this does not happen.

7   Inform participants that access to their data is controlled stored in a locked filing cabinet in my home, office and that their audio recordings will be stored in an encrypted folder on a hard drive on my personal computer.

8   Any use of transcripts, recordings, and other research materials in the future research and publications, will depend on their approval and their confidentiality and anonymity shall be maintained.

Appendix 3

Initial Questionnaire

The purpose of this questionnaire is to learn about the teachers perceptions about online technology, impact to their teaching and students engagement in learning. Please, tick where appropriate.

Section One

1.0 Participants background

1.1 What is your gender? Male/Female

1.2 What is your age?

1.3 What is your teaching status? Full-time/Part-time

Section Two

Aim at understanding participant's perception on online learning technology usage.

2.1   What is your perception about online learning?

Very good

Good

Not a good idea

Not sure

2.2   What do you think about online learning for learning? Please tick the most important factor for you.

Easy to navigate and download files

Easy to post comments and user friendly ☐

Easy for learning ☐

2.3   Does online learning encourage effective teaching and learning?

Yes ☐   No ☐

2.4   Does online learning help students collaborate with other students during learning?

Yes ☐   No ☐

2.5   Does online learning help students to interact with content?

Yes ☐   No ☐

2.6   How often do you use online technology to teach?

Never ☐

Once a year ☐

Monthly ☐

Several times per week ☐

Daily ☐

2.7   Which online technology do you use most for teaching?

Virtual learning environments (VLEs) ☐

Social media ☐

MOOCs ☐

Blogs ☐

Others ☐

2.8   **How do you use online technology? (Please thick where appropriate)**

Stay in touch with friends   ☐

Share photos, music, videos, or other works   ☐

Find out more about people (you may or may not have met)   ☐

Plan or invite people to events   ☐

For educational activities   ☐

Others   ☐

2.9   **Does online technology help organise your work?**

Yes   ☐   No   ☐

2.10   **Does online technology help you share information with your students**

easily?   Yes   ☐   No   ☐

2.11   **Does online learning allow teachers to treat all students equally?**

Yes   ☐   No   ☐

2.11   **Does online technology allow students to engage in group work?**

Yes   ☐   No   ☐

Section Three

Aim at determining the impact of online technology on teacher's practice and student's engagement in learning.

3.1   Does online learning have positive impact on your practice?

Yes   ☐

Not sure   ☐

No   ☐

3.2   How would you rate online learning as learning environment?

High   ☐

Average   ☐

Low   ☐

3.3   Does online learning allow you to read and post at any time that is convenient to you?

Yes ☐   Not sure ☐   No ☐

3.4   Does online technology features help in your vocabulary and writing and reduce spelling errors?

Yes ☐   Not ☐   ☐

3.5   Does the use of online technology enhance students learning?

Yes ☐   Not sure ☐   No ☐

3.6   Does online technology help you make decision about your learning?

Yes ☐   Not sure ☐   No ☐

3.7   Does online learning allow you take control of your teaching and learning?

Yes ☐   Not sure ☐   No ☐

3.8   Does online learning allow you to play important role in students learning?

Yes ☐   Not sure ☐   No ☐

3.9   Does online technology allow you to learn on your own?

Yes ☐   Not sure ☐   No ☐

3.10   Does online learning allow you to participate, teach and learn at places convenient to you?

Yes ☐   Not sure ☐   No ☐

3.11   Does online learning allow you to think before you post comments?

Yes ☐   Not sure ☐   No ☐

Section Four

Aim at understanding the most effective learning environment for teachers of online technology.

4.1   Is online technology environment very effective than face to face learning environment and blended learning environment for learning?

Yes ☐   Not sure ☐   No ☐

4.2   Which of the learning environment do you prefer as a teacher?

Face to Face   ☐

Blended (Mix)   ☐

Fully online   ☐

4.2.1   Please explain why you prefer one learner environment than others?

4.3   Do you prefer online technology to face to face?

                    Yes ☐   No ☐

4.4   Does online technology help you seek support more than face to face?

                    Yes ☐   No ☐

4.5   Is online technology more excited than face to face?

                    Yes ☐   No ☐

4.6   Do you think online technology provide the same opportunity for learners to participate like in Face to face?

                    Yes ☐   No ☐

4.7   Would you recommend online technology for learning to others?

                    Yes ☐   No ☐

4.8   What are the three things you like about online technology?

A   -- 156

B   --

C   --- ----------------------------

Section Five

5.0   Any other information (please write below).

Appendix 4

Final Questionnaires

The purpose of this second questionnaire is to understand teacher's final perspectives about online technology.

Section One

1.0 Participants background

1.1 What is your gender? Male/Female

1.2 What is your age?

1.3 What is your teaching status? Full-time/Part-time

Below is the open ended five questions asked during the second questionnaire.

1   How do you describe your perceptions about online learning environment?

----

2   What impact does the use of online technology has on your practice

----

----

3   What impact does online learning has on student's engagement in learning?

----

4   What strategy do you think can reduce online learning attrition/dropout rate of students?

----

5   How do you describe the adoption of PASTOR Model into your practice?

Thanks completing this questionnaire.

From:

Ogbonda Ogoloma

Appendix 5

Observation Schedule Used

Participant Observed: _____   Date_____

Observable:

Teacher and student's online interaction and posts

Teacher role

Teacher's knowledge

Teachers practice

Attitudes

Reflective Diary Page Sample

Wednesday, 7 September 2016.

On this day I introduce my PASTOR model to all participants and explained each steps and how they can effective adopt it into their practice. After the introduction, I "watched three participants asking other participant's questions about virtual learning environment, at first they looked worried but after their discussions with other participants their facial expression changed and they became interested about the project. I spent 10 minutes observing them and during this time they asked several questions and the answers provided by other participants showed a good understanding on the part of other participants about online learning and this project."

"Later, 6 participants told me today that their students asked questions about online learning that they could not answer properly so I tried to explain to them how online can be integrated into their practice and I suggested they read more of online learning technologies but from their body language I concluded that they were expecting something more direct. But I believe that I could not provide a direct answer at that time."

"Later in the meeting, I met 10 teachers who sound very motivated and interested to integrate online learning into their practice, but they are worried and afraid that they do not have any online strategy that can help them deliver effective online lessons to their students."

"Two teachers were concerned about the possibility that their students may reject the idea of online learning for lessons as many of them may prefer the traditional face to face learning than online."

"From today meeting, I had a good indication of the complexity of this work. Each participant has different view and concern about online and the path which this study will go; however, at the end of the meeting many of the teachers were keen and interested to try something new. I have to reflect upon the number of participants, their comments and worries in light to the time available for this

study and to provide the necessary support they may need. This is the question for today: Is 20 teachers the right number for this study?"

Appendix 7

Reflective Diary Page Sample

Final Meeting Discussion held on Wednesday the 11th of January 2017

I asked all participants: ...... Please could you comment about your experience so far?

One Participant said: "Well, it is not a simple question so I cannot give you a simple answer, however, I have improve my practice and I have tried something new.

Another participant said my own way of assessment my practice is improving after I started to use PASTOR model.

Another participant said "Well, I underestimated this study in the first place but from the experience and use of online learning I have positive view about online learning now.

Another participant said, I think we do not have enough time to review all that is needed to reflect upon, however, I believe what I have learnt about my teaching practice and this research had blustered some of my previous concepts.

Two participants said to me that "they will be honest with me. I have really pushed them against the wall to try something they never intended to adopt into their practice."

Many of the participants said that the results of the positive statements made by most of the participants are a testament to the impact of this study to their teaching practice.

Finally, one participant said I think that I can still use online learning technologies such as Facebook, Blogs without having to use my school virtual learning environment. What I am trying to say is that so far I learned that we need to be innovative and try new things that we may not be familiar with.

Another participant said it is amazing how much I learned about my teaching practice with the adoption of the PASTOR model. I will not forget this experience.

Appendix 8

Interview Questions

The purpose of this interview is a follow up of the questionnaire administered to the research participants and to ascertain the perception and attitude of participants about online technology in teachers practice. The following interview questions will help me develop a better understanding of practitioner views about online teaching technologies. The following are the semi structured interview questions asked.

1   What is your perception about online learning environment?

2   What situations have influenced your perceptions about online technology?

3   Does online learning enhance your teaching practice?

4   What do you like about online learning technology?

5   What impact does online learning has on student's engagement in learning?

6   What have you learnt so far using online to study?

7   How can you differentiate between traditional Face to Face teachings from online teaching?

8   How can teachers reduce online learning attrition/dropout rate of students?

9   What do you think about the integration of online learning technology into your lessons?

10   What have you learnt best so far?

11   What have you learnt least?

12   How do teachers describe the adoption of PASTOR model into your practice?

13   Any advice or suggestion you can give?

14   Can you recommend online technology to others?

Observation:

First Interview with Mr Tony

Me- Hello Mr Tony, You are welcome to this interview

Mr Tony – Thank you

Me- Hope you are fine and ready for this interview

Mr Tony- of course, I am ready

Me- That is fine

Mr Tony- You are welcome

First Question

Me- What is your perception about online learning environment?

Mr Tony- Positive and good

Second Question

Me- What situations have influenced your perceptions about online technology?

Mr Tony- Changes in the way students learn and use technology

Third Question

Me- Does online learning enhance your teaching practice?

Mr Tony- Yes, of course

Fourth Question

Me- What do you like about online learning technology?

Mr Tony- The flexibility of use and collaboration in between teacher, students and content during learning. Especially, the asynchronous communication that makes learning and teaching easy.

Fifth Question

Me- What impact does online learning has on student's engagement in learning?

Mr Tony- Online learning technology affects students positively, especially their writing kills and technology development.

Sixth Question

Me- What have you learnt so far using online to study?

Mr Tony- I will say that I have learnt a lot of things. Today, I can use online technology to teach and ask my students questions on class events or other organised events in school or outside the school.

Seventh Question

Me- How can you differentiate between traditional Face to Face teachings from online teaching?

Mr Tony- He laughed!! You mean traditional teaching which is face to face?

Me- Yes

Mr Tony- in face to face teaching, I come to class and then explains what I want students to know and do and then give assignments. But the online teaching is different because it provides the opportunity for students to reflect and answer questions based on their own experience. I was able to use student led during online lessons and use teacher led in class. I believe teacher who use online to teach plan effectively while students collaborate freely.

Me- What do you mean by student collaborate freely?

Mr Tony- The online learning environment allows students to collaborate and feel free to write.

Eight Question

Me- How can teachers reduce online learning attrition/dropout rate of students?

Mr Tony- good mentorship can reduce attrition rate, through mentorship teachers can douse the tension and encourage participation.

Ninth Question

Me- What do you think about the integration of online learning technology into your lessons?

MR Tony- It has been good

Me- What do you mean good?

Mr Tony- Online learning has being a good avenue for teaching and learning. For example, when you post your comments or video on the school porter, other students view them and may learn and understand. Therefore their learning may improve. But in Face to face class lessons, students may choose not to talk or say anything. They may also choose to listen or hear what the teacher is saying but may not get involved but in online, students write and research, plan their answers before posting and sometime may read others post before commenting. Therefore, the use of online for teaching is positive.

Me- You mean positive?

Mr Tony- Yes positive

Tenth Question

Me- What have you learnt best so far?

Mr Tony- I have learnt a lot. For example, I have learnt to make friends, able to communicate my views to my students. The use of online page has helped me to participate more in discussion and improve my practice.

Eleventh Question

Me- What have you learnt least?

Mr Tony- He exclaimed; eh ehm!! You mean least?

Me- Yes

Mr Tony- I am also worried about indecent write up and post.

Twelfth Question

Me- How do you describe the adoption of PASTOR Model into your practice?

Mr Tony- In fact it has helped my planning and reflection skills and provides structure to my practice.

Thirteenth Question

Me- Any advice or suggestion you can give?

Mr Tony-Online teaching is good but I believe teachers need to be very, very careful.

Me- What do you mean by careful?

Mr Tony- At least teachers should set the ground rules for users to avoid indecent posting. I was concern about the language students might use while posting, this helped me to always read and read students post.

Mr Tony- One major issue in this study is time, there is no time, I think we need more time.

Fourteenth Question

Me- Can you recommend online technology to others?

Mr Tony- Yes. In fact I would recommend online learning to be integrated into school curriculum.

Me- We have come to the end of our interview, I want to thank you for attending, hope you enjoy your day.

Mr Tony- My pleasure

Me- Once again thank you.

Second Interview with Mr Anthony

Me- Hello Mr Anthony, You are welcome to this interview

Mr Anthony – Thanks

Me- Hope you are fine and ready for this interview

Mr Anthony- I am ready

Me- Ok

Mr Anthony- What do you have for me

First Question

Me- What is your perception about online learning environment?

Mr Anthony- Positive

Second Question

Me- What situations have influenced your perceptions about online technology?

Mr Anthony- Most institutions in the UK are looking towards online learning technology opportunity

Third Question

Me- Does online learning enhance your teaching practice?

Mr Anthony- I can say yes

Fourth Question

Me- What do you like about online learning technology?

Mr Anthony- It flexible and support students collaboration. Online technology is good

Fifth Question

Me- What impact does online learning has on student's engagement in learning?

Mr Anthony- Online learning technology affects students positively; online technology has practical help students who are shy in class to engage with their teachers via online.

Sixth Question

Me- What have you learnt so far using online to study?

Mr Anthony- Online technology has helped me plan my teachings

Seventh Question

Me- How can you differentiate between traditional Face to Face teachings from online teaching?

Mr Anthony- Face to face teaching involves class room lessons while online teaching involves the use of internet to teach.

Eight Question

Me- How can teachers reduce online learning attrition/dropout rate of students?

Mr Anthony- Don't know

Ninth question

Me- What do you think about the integration of online learning technology into your lessons?

Mr Anthony- The use of online made me to reflect and be proactive than reactive to my students. I was able to review what I did in the previous lessons and discuss what I intend to do next.

Tenth Question

Me- What have you learnt best so far?

Mr Anthony- I have learnt a lot. My technology skill and students technological skills have improved and can understand the way some students post.

Eleventh Question

Me- What have you learnt least?

Mr Anthony- Not sure

Twelfth Question

Me- How do you describe the adoption of PASTOR Model into your practice?

Mr Anthony-The PASTOR model has helped me to structure my lessons, plan and reflect my practice methodologically.

Thirteenth Question

Me- Any advice or suggestion you can give?

Mr Anthony- Time, time, less time, not enough time.

Fourteenth Question

Me- Can you recommend online technology to others?

Mr Anthony- Yes.

Me- We have come to the end of our interview, I want to thank you for attending, hope you enjoy your day.

Mr Anthony- You are welcome

Me- Once again thank you.

Third Interview with Miss Becky

Me- Hello Miss Becky, You are welcome to this interview

Miss Becky – Thank you

Me- Hope you are fine

Miss Becky- Of course, are we not colleagues

Me- Thank you

Miss Becky- You are welcome

First Question

Me- First question, what is your perception about online learning environment?

Miss Becky- Good development, I think is positive for education

Me- What do you mean by positive

Miss Becky- online learning is a good platform for flexible learning

Me- Is that what you mean by positive

Miss Becky- Yes

Second Question

Me- What situations have influenced your perceptions about online technology?

Miss Becky- During my days in University, I spent most of my time using my school blackboard to engage and interact with other students. I did online leadership course.

Third Question

Me- Does online learning enhance your teaching practice?

Miss Becky- Yes,

Fourth Question

Me- What do you like about online learning technology?

Miss Becky- It flexible use makes it a good idea for learning

Fifth Question

Me- What impact does online learning has on student's engagement in learning?

Miss Becky- Online learning technology has improved my students learning and my practice positively, using online technology has helped my students participate freely.

Sixth Question

Me- What have you learnt so far using online to study?

Miss Becky- Online technology has helped me to collaborate with my students with content. I think about the students' engagement and interaction on an individual basis, I also think about how to improve the group engagement.

Seventh Question

Me- How can you differentiate between traditional Face to Face teachings from online teaching?

Miss Becky- Face to face is a conventional way of teaching while online is a model way of teaching and learning?

Eight Question

Me- How can teachers reduce online learning attrition/dropout rate of students?

Miss Becky, some students may be new to online learning, therefore, they may require mentors, mentors will help answer questions and clarify issues that learners may found difficult.

Ninth question

Me- What do you think about the integration of online learning technology into your lessons?

Miss Becky- Very positive,

Tenth Question

Me- What have you learnt best so far?

Miss Becky- Online learning has helped me to improve on my technology skills; ability to spend more time to read and re- read students posts and offer feedbacks.

Eleventh Question

Me- What have you learnt least?

Miss Becky- Worried the way some students write and engage with other learners.

Twelfth Question

Me- How do you describe the adoption of PASTOR Model into your practice?

Miss Becky- The structure of the model has improved my teaching practice especially with the use of online technology".

Thirteenth Question

Me- Any advice or suggestion you can give?

Miss Becky- I wish more time is given to us.

Fourteenth Question

Me- Can you recommend online technology to others?

Miss Becky- Yes.

Me- I have come to the end of our interview, I want to thank you for attending, hope you enjoy your day.

Miss Becky- Of course

Me- Once again thank you.

Fourth Interview with Mrs Kate

Me- Hello Mrs Kate, how are you?

Mrs Kate – I am fine

Me- Hope you are sitting well?

Mrs Kate- Yes, I am

Me- Hope you are ready for this interview

Mrs Kate- of course, I am ready

Me- That is fine

Mrs Kate- You are welcome

First Question

Me- What is your perception about online learning environment?

Mrs Kate- Is such a good idea for effective learning

Second Question

Me- What situations have influenced your perceptions about online technology?

Mrs Kate- The rise of online learning enrolment by students

Third Question

Me- Does online learning enhance your teaching practice?

Mrs Kate- Yes, of course but not all the students get involve during online learning.

Me- How do mean

Mrs Kate- Most students use abbreviation and some do not write or explain their thoughts in details

Fourth Question

Me- What do you like about online learning technology?

Mrs Kate- I like the spelling check features of online technology especially Facebook which help to reduce spelling errors.

Fifth Question

Me- What impact does online learning has on student's engagement in learning?

Mrs Kate- Positively, I have been thinking of better ways to teach my students, improve their learning, spelling and attention because I just want them to be effective and successful. I am glad at the end some students told me they have learnt a lot using online technology".

Sixth Question

Me- What have you learnt so far using online to study?

Mrs Kate- Since, the inception of this online learning study my teaching and learning have enhanced. For example, my communication skills, writing skills and posting have improved. Now, my views can be seen and held by others.

Seventh Question

Me- How can you differentiate between traditional Face to Face teachings from online teaching?

Mrs Kate- Well! Well!! There are clear differences

Me- how?

Mrs Kate- The traditional style of teaching which the face to face one is where the lecturer explains, tell and give instructions to students. In this kind of teaching students are seen as recipients who are only passive or receiver of teacher's instructions which makes the teaching process a one way

communication process but the online teaching is a two ways approach style, the teachers writes out the lessons both the students and the teacher participate, reflects and post comments. With the use of VLE, students feel free to air their views while in the classroom face to face teaching, some students are shy to ask questions.

Me- what do you mean by students feel free?

Mrs Kate- For instance, in class lessons face to face, some students are dominate discussions while others are not but seen as passive because they feel inferior or not as intelligent like others. But the use of online takes away that. In the Virtual learning environment, you stand to be corrected and you do not have worried if you are corrected but in a class setting you may feel rejected or sorry for yourself.

Eight Question

Me- How can teachers reduce online learning attrition/dropout rate of students?

Mrs Kate- No comment

Ninth question

Me- What do you think about the integration of online learning technology into your lessons?

Mrs Kate- Generally, online learning is a new phenomenon that is a modern trend for growing generation to 'hook up'

Me- What do you mean hook up?

Mrs Kate- Meet friends and collaborate

Me- What about learning?

Mrs Kate- Online technology especially, VLE help students to ask questions, discuss topics, assignments and share ideas.

Me- So you liked it use for your lessons

Mrs Kate- Yes

Me- would you use it often?

Mrs Kate- Yes, at least 60% weekly, I would recommend it to others because it has been useful to me.

Tenth Question

Me- What have you learnt best so far?

Mrs Kate- eh ehmm! The use of online technology has helped me a lot especially, in the area of communication, planning, structuring my lessons and my practice. In fact it has improved my student's technology skills and my communication skills of which I can readily recommend it to others.

Me- What do you mean by readily?

Mrs Kate- laughed! Yes I mean now.

Me- Readily to whom

Mrs Kate- To my friends, work colleagues and students too

Eleventh Question

Me- What have you learnt least?

Mrs Kate- Waooh! I believe whatever that has positives also have negatives. Some students complain that they encounter difficulty while trying to log in some times which is a challenge.

Twelfth Question

Me- How do you describe the adoption of PASTOR Model into your practice?

Mrs Kate-The PASTOR model is truly the first time I came across a clearly defined structure for online teaching. The reflection aspect of the PASTOR model is very helpful to as I review my teaching plan.

Thirteenth Question

Me- Any advice or suggestion you can give?

Mrs Kate- Users should be careful on what they write or post using the online learning sites. I believe teachers should be encouraged to integrate online learning because technology has changed the way we access information and students think and reason.

Fourteenth Question

Me- Can you recommend online technology to others?

Mrs Kate- Just as I have said earlier, yes, I can recommend it to others.

Me- We have come to the end of our interview, I want to thank you for attending, hope you enjoy your day.

Mrs Kate- Yes, I enjoyed the online learning section and this interview

Me- Would you be available if I want to inquire further on this matter?

Mrs Kate- Yes of course

Me- Once again thank you

Fifth Interview with Mr Jude

Me- Hello Mr Jude, you are welcome to this interview

Mr Jude – Thank you

Me- Hope you are fine and ready for this interview

Mr Jude- Yes

Me- That is fine

Mr Jude- You are welcome

First Question

Me- What is your perception about online learning environment?

Mr Jude- Very good

Second Question

Me- What situations have influenced your perceptions about online technology?

Mr Jude- I can say that today, many students are interested with online learning so we teachers have to adapt to this changes

Third Question

Me- Does online learning enhance your teaching practice?

Mr Jude- Very well, online technology helps me write effectively, I can check my spelling, read and re-read post before commenting, plan my teaching, organise my lessons in a well-structured format.

Fourth Question

Me- What do you like about online learning technology?

Mr Jude- it is flexible and encourages student's collaboration and improves teacher and students engagement in learning.

Fifth Question

Me- What impact does online learning has on student's engagement in learning?

Mr Jude- Online learning technology has affected my students positively; in fact, some of my students have started joining online learning groups.

Sixth Question

Me- What have you learnt so far using online to study?

Mr Jude- It has been useful for me because it help me to collaborate with my student online. It has also, helped me communicate effectively, especially in spelling because I am not very good with spelling but the spelling check has helped me to improve my spellings.

Seventh Question

Me- How can you differentiate between traditional Face to Face teachings from online teaching?

Mr Jude – I think face to face is more preferable than online learning?

Me- Why

Mr Jude-Face to face enhances learning while online learning in a way does not, because in face to face learning, interaction is mutual and warming but the online learning is different.

Eight Question

Me- How can teachers reduce online learning attrition/dropout rate of students?

Mr Jude- Honestly, I think mentorship is important to reducing online attrition because learners may need technical support, I think mentors are necessary to support students technically and academically as well.

Ninth question

Me- What do you think about the integration of online learning technology into your lessons?

Mr Jude- I think it is good but students can easily get distracted if clear procedures is not established. However, from my experience, I can say that I am surprise the way students are engaging with my post.

Tenth Question

Me- What have you learnt best so far?

Mr Jude- I think it has helped me improve my spellings, collaboration with students, flexibility in teaching and structuring my lesson plan. For example, during lesson I used only online method to teach but the responses were not coming often so I decided to use blended approach that is the use of online and face to face which led to a considerably result then I adapt my teaching style.

Eleventh Question

Me- What have you learnt least?

Mr Jude – What I don't like is the fear of losing all my post when anything goes wrong with the site.

Me- Do you have any security or privacy problem?

Mr Jude- Not necessary because I am careful on what I post

Me- Would you advise teacher(s) to use online technology to teach?

Mr Jude-50/50 (fifty/ fifty)

Me- What do you mean by 50/50

Mr Jude- Depends on the teacher choice

Me-Why

Mr Jude- I don't understand and know how it works very well.

Twelfth Question

Me- How do you describe the adoption of PASTOR Model into your practice?

Mr Jude- The model improved my teaching practice and students learning as well as encourages deliberate reflection.

Thirteenth Question

Me- Any advice or suggestion you can give?

Mr Jude–I like Pastor Model but has less time to explore it and improve student's technology skills. I think online learning is a great idea but I don't think it should be imposed on teachers. Secondly, online looks boring to me and sometime time wasting.

Fourteenth Question

Me- Can you recommend online technology to others?

Mr Jude- Yes but depend on the teacher

Me- What do you mean by depend on the teacher

Mr Jude- I think online learning should not be imposed on teacher but teacher should be encouraged to use it to improve their practice and student engagement and collaboration.

Me- Thank you for your time today.

Mr Jude- Thank you for having me

Me- Once again thank you.

Sixth Interview with Mr Peter

Me- Hello Mr Peter, how are you?

Mr Peter – Fine

Me- Hope you are ready for this interview?

Mr Peter - Yes

Me- That is fine

Mr Peter – Bring it on, I am equal to the task

First Question

Me- What is your perception about online learning environment?

Mr Peter- Good

Second Question

Me- What situations have influenced your perceptions about online technology?

Mr Peter- Technology is the norm today and their application cannot be disregarded

Third Question

Me- Does online learning enhance your teaching practice?

Mr Peter- Yes, it is flexible, convenient, allow students to post and engage constructively.

Fourth Question

Me- What do you like about online learning technology?

Mr Peter- The flexibility nature, checking of spelling and convenient associated with it.

Fifth Question

Me- What impact does online learning has on student's engagement in learning?

Mr Peter- Online learning technology is good, for students the convenient nature allows students to communicate their ideas to their teachers.

Sixth Question

Me- What have you learnt so far using online to study?

Mr Peter- To communicate with my students in a language they understand. Checking posts, comments and given feedbacks are indeed a big lesson for me.

Seventh Question

Me- How can you differentiate between traditional Face to Face teachings from online teaching?

Mr Peter- Online teaching and learning is good but traditional face to face is also needed. For example, the use of online with face to face learning environment helped me to reach out to some students who were finding it difficult to engage and post comments online so I use both methods to ensure some difficult topics and terminologies were thought in class in order to give clarity. Therefore, I think both methods are good

Eight Question

Me- How can teachers reduce online learning attrition/dropout rate of students?

Mr Peter- emm, I think retention strategy is important to achieve high online completion rate but if there is some kinds of support as in form of mentorship that will help reduce and minimise learner's fears. I think mentors facilitate learning and discussions.

Ninth Question

Me- What do you think about the integration of online learning technology into your lessons?

Mr Peter- Good

Tenth Question

.Me- What have you learnt best so far?

Mr Peter- a lot, especially in the area of planning and reflecting

Eleventh Question

Me- What have you learnt least?

Mr Peter- He exclaimed; nothing

Twelfth Question

Me- How do you describe the adoption of PASTOR Model into your practice?

Mr Peter- The model has improved my learning and reflection skills. In fact, PASTOR model has helped me to be more logical and structured in my teaching delivery process.

Thirteenth Question

Me- Any advice or suggestion you can give?

Mr Peter- One major issue is time, there is no time, I think we need more time. In some cases I was often trying to catch up with some of the post made by students. But I believe schools; teachers should take advantage of online learning.

Fourteenth Question

Me- Can you recommend online technology to others?

Mr Peter- Yes.

Me- Thank you for your time?

Mr Peter- you are welcome

Me- See you.

Appendix 15

## Picture of Sample of the Virtual Learning Environment (VLE) Used.

Latest Student

SID	Email	Group Student

Latest Courses

| Name	Type diploma	Link	Publish By
Unit 1 - Y/506/1910	Business Administration Level 3	Communicate in a business environment .pdf	By Bukky Bukky
Unit 2 - T/506/2952	Business Administration Level 3	Manage personal and professional development .pdf	By Bukky Bukky
Unit 3 - R/506/1940	Business Administration Level 3	Principles of business communication and information .pdf	By Bukky Bukky
Unit4 - Y/506/1941	Business Administration Level 3	Principles of administration .pdf	By Bukky Bukky
Unit 5 - D/506/1942	Business Administration Level 3	Principles of business .pdf	By Bukky Bukky
unit 1	Business Administration Level 3	unit 1.pptx	By Bukky Bukky

Appendix 16

Picture of me introducing the Research to Main Study Participants
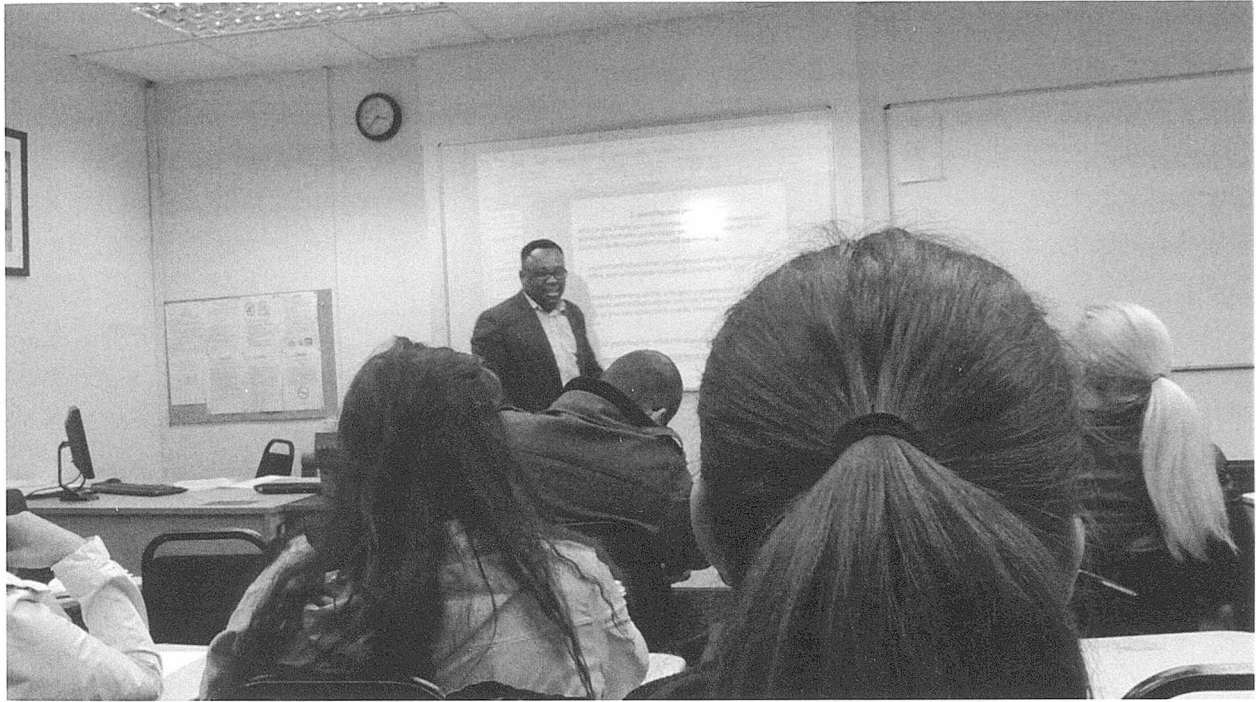
Appendix 17

Picture of me Teaching Students
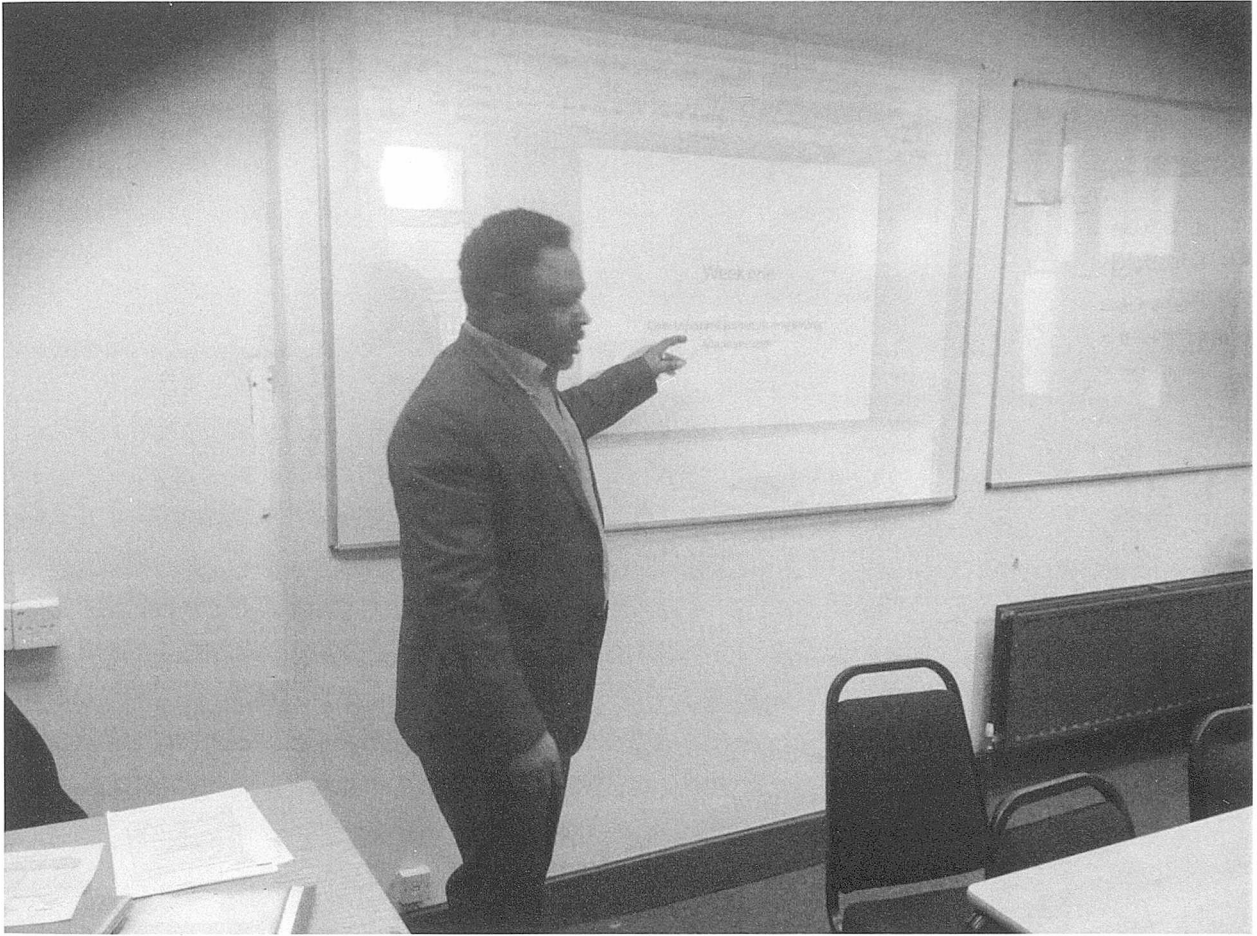
Picture of Students use of Short Sentence
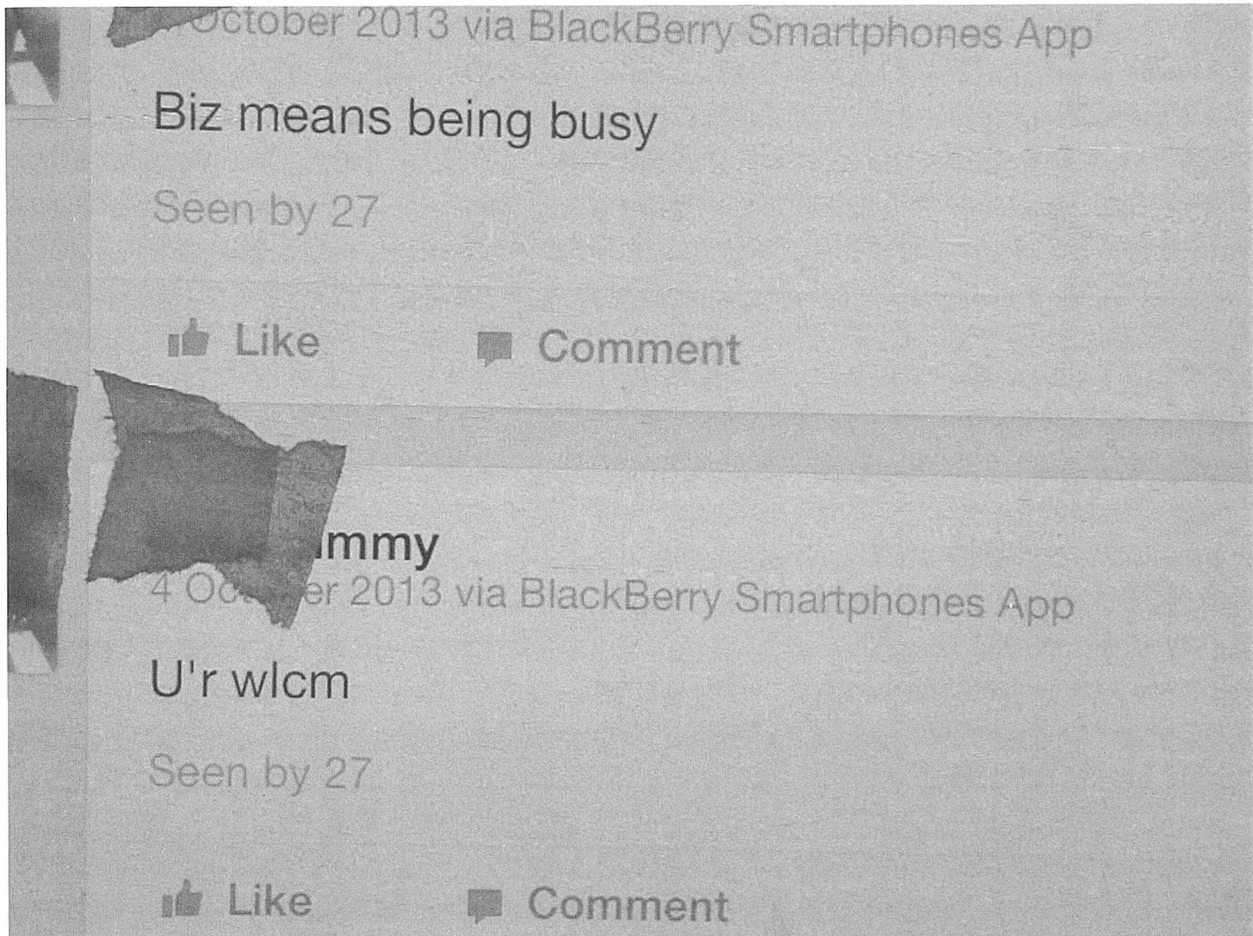
This picture shows how students were responding to questions using short sentences

Appendix 19

Picture of Students Spelling Errors

Business is any lucrative activity undertaken by an individual or group of individuals for the sole purpose of achieving profit on a short or long run period of time.

Seen by 27

Comment

4 October 2013

business is any jenue activity that ends up in profit maximization

Seen by 26

Like   Comment

Ogbonda Ogoloma
4 October 2013

being busy of what?

1 Like

Seen by 27

Comment

Nkea Jimmy
4 October 2013 via BlackBerry Smartphones App

Biz means being busy

Appendix 20

Paper presentations conducted and Seminars and conferences attended during the time of this study

On the 20th of January 2014, I attended seminar on interpretative research by Anne Broderick from De Montfort University at London Metropolitan University Main Campus, North London. During the seminal I was able to ask questions regarding my methodology and research design. The speaker spoke extensively on research methodology which gave me deeper insight about my research methodology.

On the18th March 2015, I attended another seminal conducted by Dr Brian Dive- The missing leadership link organised by Faculty of business and Law, London Metropolitan University, Moorgate Campus.

On the 16th May 2015- I did presentation on social networking sites the new challenges confronting the 21st higher education teacher at London Bridge Business Academy, London. (See appendix 21). During the presentation questions were asked and answers given but most of the participants suggested I should integrate qualitative approach to my work as it will give deeper insights to the phenomenon, which I noted in my research diary.

On the 1st of July 2015 I attended Westminster higher education Forum (competition and regulation in higher education – new models of delivery, new providers and changing structures. At Royal Over-seas League, Over-Seas House, Park Lane, London.

On the 6th of July 2016, I attended Westminster higher education Forum (Priorities for part-time and mature students: outreach, retention and tackling barriers. At Royal Over-seas League, Over-Seas House, Park Lane, London.

On the 24th September 2016, I did another presentation on advantages and disadvantages of online learning in higher education at London Bridge Business Academy, London. (See appendix 22).

Paper Presentation

Social networking sites the new challenges confronting the 21st higher education teacher

Paper Presented at London Bridge Business academy

By

Ogbonda Ogoloma

London Metropolitan University

Date: 16th May 2015

Quick Overview

Background

Research setting

Why the study

Research Significance

Literature Review

Methodology

Findings

Conclusion

References

Background

Today, there is increased call for teachers to integrate new technology into their practice and harness it benefits (Prensky, 2010). There is increased call for teachers to integrate online technology into their practice and harness it benefits (Prensky, 2010; UCISA TEL survey report 2014). Reflecting on my career over the years, my teaching has been of conventional style where teaching and learning takes place in the classroom face to face format.

Why this Study

In recent time, there are changes happening within the educational system, since the emergence of social networking sites, most universities, colleges and secondary schools across the world use or own one or two social networking site account (Horizon Report 2014).

Secondly, reviewing literatures, there seems to be very little research studies that investigate higher education teacher's use of social networking sites (Facebook) to deliver their lessons in Nigeria and in the UK (Mason and Rennie, 2008; Prensky, 2010), which is one of the main reasons for this study.

Thirdly, reflecting on my practice over the years, one can argue that not all my students participate in class lessons or submit their assessment as at when due which gave me lots of concern and rise for this study.

Research Significance

This study is important because it focused on teacher's development and student's engagement in learning.

As technology advances, the pressure for teachers to embrace technology into practice has continued to increase and becoming popular day by day (Hayes 2010).

Another research significant is the changing role of teacher practice, a shift in teacher's pedagogy from teacher's orientation to learner's orientation of learning that focuses on the needs, interests and aspirations of learners.

Literature Review

Since the emergence of social networking sites, social networking sites have attracted millions of users around the world to adopt in different means, particularly in their daily practice life (Allen and Seaman 2014). Suraya et al (2011) cited that teachers and students who use social networking sites can generate content and can be creative to post content in different sites like ITunes, MySpace, Facebook and YouTube etc. Suraya believed that social networking sites can help students post their works and download files easily with less concern for privacy. Boyd and Ellison (2007) described social networking sites as "web based services that allow individuals to construct a public or semi-public profile within a bounded system, articulate a list of other users with whom they share a connection, and view and traverse their list of connections and those made by others within the system. The nature and nomenclature of these connections may vary from site to site." Boyd & Ellison definition of social networking sites will be vital in this study. However, social networking sites can be describe as web 2.0 that permits users to chat, interact and communicate their thoughts, feelings online.

Advantages of Social Networking Sites

Orey (2003) argued that social networking sites support blended learning that the mixture of face to face and online technology improve learner's knowledge and teacher practice.

Hemmi et al (2009) study observed that social networking sites improve engagement among teacher, students and content allowing active participate.

Er et al. (2009) observed that social networking sites support asynchronous and synchronous communication.

Supporters of online learning believed that the social networking sites lessons aid student centred learning (Bonk and Zhang 2006; Skylar 2009).

Lorenzo and Ittelson (2005) study cited that social networking sites encourage personalised learning.

Challenges

Martin (2007) observed that any use of social networking sites into teachers practice is a means of commoditising education, de-professionalising educator and commercialising universities while the educator is replace by content.

Ybarra et al. (2007) highlighted the issue of salience of safety. Ybarra observed that social networking sites carries potential risk, some users exhibits inappropriate behaviours, download images, disclose personal information and often time display aggressive behaviour to other users.

Hew (2011) argued that Facebook has no real academic or education related activities as such students do not see them as academic tools and therefore should be kept away from academics.

Methodology

The common feature of teacher research is that it has a variety of research models (Pring 2004). Like functionalist, radical structuralist, critical and radical humanist (Burrell and Morgan, 1979). But in this paper presentation I will limit myself to positivism model and interpretivism model.

Positivism model – Is the oldest school of thought and therefore the most refined paradigm.

The main characteristics of positivism are assumptions are that the world is ordered and that it can be studied objectively. The observed is independent from the observed, facts needs to be measured quantitatively and categories drawn before study (Oates, 2006: p.283).

Ontologically- the researcher is assumed as being objective and detached from the objects of research this owes much to the thinking behind scientific research.

Epistemologically- at the heart of the positivist assumption is the belief that it is possible to collect objective data, which represents the real world.

Methodological assumptions of positivism rest on reductionism, repeatability and refutation of the main techniques of the positivist paradigm (Oates 2006: p. 285).

Positivism model does not fit into this study because this study will take place in a social context and I am going to be involved not detached. Secondly knowledge generation will be based on the subjectivity of the participants and I. Thirdly, the issue of particularity or uniqueness of my situation will be highlighted, therefore the assumptions of repeatability and reduction will be out of place.

Interpretive model assumes that observer interacts with subject being observed and reality cannot be studied without social actor's involvement – these include both the subjects and the researcher (Orlikowski and Baroudi 1991; Walsham 1995). The focus of interpretative is to understand what is happening within a social context.

Ontologically - the researcher is assumed as being subjective and not detached from the objects of research this owes much to the thinking behind social research.

Epistemologically- interpretivist assumption is the belief that it is possible to collect subjective data that represents a social context.

Methodological assumptions of interpretivist model are based on particularity or uniqueness of a social context.

The interpretive model assumptions ontologically, epistemologically and methodologically, fits into the study, since the study will be conducted in a social settings and data collection will be subjective, particular, unique to the social context, this position stand in contrast with positivism model.

My philosophical position is that I see reality as subjective and not objective. Subjective in that I will interpret reality based on my experience and relationship with the expected research participants. I believe that new knowledge can be created (Whitehead, 1989).

Qualitative vs. Quantitative data

Qualitative data helps to illuminate human feelings and provide rich insights into actions and their consequences.

While quantitative data can be measured and represent by numbers (Pettigrew et al., 1992) but not suitable to describe feelings and social context.

Instruments used
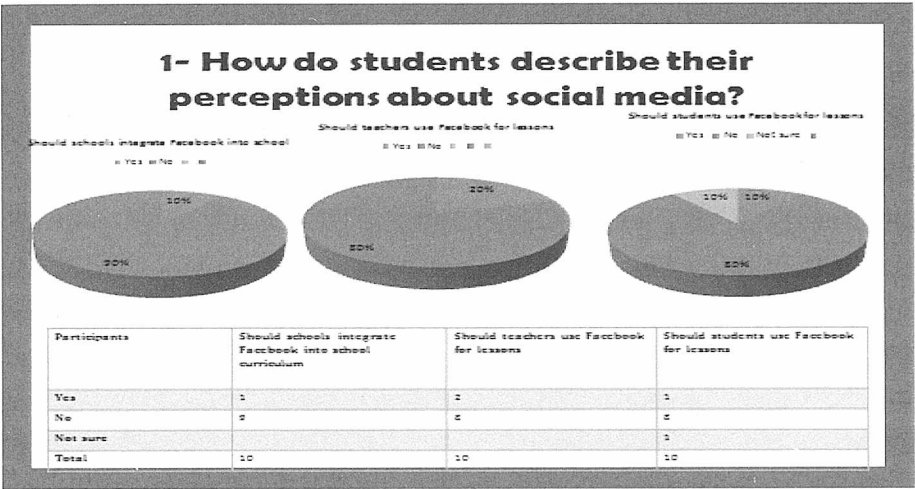
Questionnaire method was used- Questionnaire has the capacity to allow the researcher the opportunity to use both short questions and open ended questions which will need responses. To measure participants perception, learning impact and attitude towards integrating social networking sites.
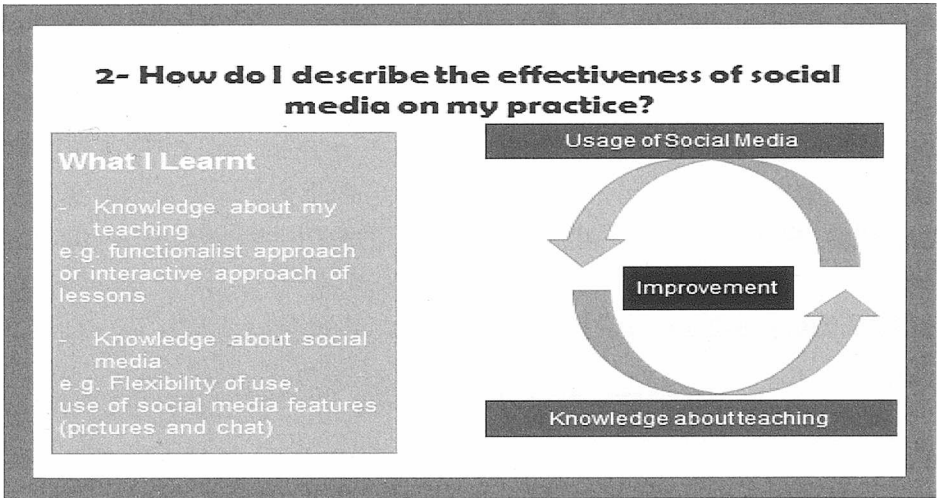
Data Analysis

Research question

How do students describe their perceptions about social media?

Responses from students

1- How do students describe their perceptions about social media?

Participants	Should schools integrate Facebook into school curriculum	Should teachers use Facebook for lessons	Should students use Facebook for lessons
Yes	1	2	1
No	9	8	8
Not sure			1
Total	10	10	10

What I learnt

2- How do I describe the effectiveness of social media on my practice?

What I Learnt

- Knowledge about my teaching
e.g. functionalist approach or interactive approach of lessons

- Knowledge about social media
e.g. Flexibility of use, use of social media features (pictures and chat)

Usage of Social Media
Improvement
Knowledge about teaching

Research Results and Recommendation

Not all Net generation want to use social networking sites for learning.

The results showed that participants thinks that a mixture of social networking sites and face to face learning may be the most effective way to integrate online technology into teachers practice.

Participants think that social networking sites are new development to education and view its integration as positive.

Recommendation

Creating a Group Page

Make your group page a closed group to students to void unnecessarily exposure to risk and danger.

Teacher should utilise all the features of social networking sites to gain meaningful learning.

Use professional account instead of individual account.

Maintain professional relationship with students during the use.

Contributions

The practical contribution of this study explains how leaders of education can introduce social media to their school.

The study showed how teachers can adopt social networking sites to their practice.

The use of social networking sites to explore my practice, practically improves my technological skills, my living judgement about my values and practice.

It also explains how teachers can use reflective practice to improve their practice.

This study result showed how students improved their technological skills using Facebook.

The study will also contribute to the existing literature on teacher's pedagogy and social networking sites.

Thank You

Paper Presentation

Advantages and Disadvantages of Online Learning in Higher Education

Paper Presented at London Bridge Business academy

By

Ogbonda Ogoloma

London Metropolitan University

Date: 24th September 2016

Overview

Background

Literature Review

Online Learning and it implication

Types of Online Learning

Advantages and Challenges of Online learning

Conclusion

References

Background

Today, online activities are increasingly becoming a common trend in higher education particularly in most universities, private colleges and vocational centres in the UK (Mason and Rennie, 2008; Horizon Report 2014). There is increased call for teachers to integrate online technology into their practice and harness it benefits (Prensky, 2010; UCISA TEL survey report 2014). But many teachers are still unclear about how this new technology fits with their practice, and whether it use can practically enhance the learning interaction with students as opposed to simply posting materials online (Skylar 2009).

Why this Study

In recent time, there are changes happening within the educational system, since the emergence of online learning, most universities, colleges and secondary schools across the world use or own one or two social networking site account(s) (Horizon Report 2014).

Secondly, reviewing literatures, there seems to be very little research studies that investigate higher education teacher's use of in the UK (Mason and Rennie, 2008; Prensky, 2010).

Thirdly, reflecting on my practice over the years, one can argue that not all my students participate in class lessons or submit their assessment as at when due which gave me lots of concern and rise for this study.

Literature Review

Over the years, teachers practice has evolved from one form to another especially teachers pedagogy (Hayes 2010: p. 3). Some scholars have described pedagogy as the activities of educators that impact knowledge (Smith 2009). While other described pedagogy as the profession of teaching aim at

improving the quality of teaching (Hayes 2010). In this study pedagogy can be describe as the teacher use of different techniques and technology to impact knowledge.

Online Learning

Since the 1990s there has been considerable growth in the adoption of technology in the world (Valkenbug and Peter 2009).

Some researchers thought that the use of online would be meaningless or superficial phenomenon and will fizzle out with time, while some thought spending time on a computer would constitute negative effect to user's real life, academics, friendships and relationships (Valkenbug and Peter 2009).

Over the years, these fears have gone away, in fact computer and online communication use has exponentially increased and widen in applications and globally accepted as a modern norm (Horizon Report 2014).

Online Learning- is when content and learning activities take place only on online platform with no face to face meetings. Er et al (2009) averred that online learning experience provide advanced educational opportunities for learning needs of teachers and students. Martin (2007) believes the online environment facilitates dialogue, discussions and community that is not limited with time and place. Despite the growing support and interest on online learning environment to face to face, some research has shown that if students are given opportunity to choose between face to face and online learning some students will prefer the face to face classroom learning because of the social and physical interactions (Maddux 2004). While Martin (2007) averred that online learning is a means of commoditising education, de-professionalising educator and commercialising universities while the educator is replace by content

Online education offers a way for UK higher education institutions to compete internationally without struggling to meet capacity (Guardian Report 2014).

The OECD report (2014) estimates the numbers of people with degrees will grow from around 129 million to 204 million by 2020 worldwide.

Latest figures from the Babson Survey Research Group (2015) suggest that 7.1 million higher education students in the US are taking at least one online course as part of their degree. The Babson researchers found that those believing online courses provided the same or better learning outcomes had grown to 74%.

UCISA TEL survey report (2014) revealed that technology enhances the quality of learning and teaching and meeting student expectations and improving access to learning for students off campus.

Hemmi et al (2009) study revealed that online technology improves teacher's practice and student's engagement in learning.

Ewan McIntosh (2008) provided a useful summary of online technology. Ewan averred that young people use online technology for learning: 57 per cent use the net for homework, saying it provides more information than books. 15 per cent use it for learning that is 'not school'. 40 per cent use it to stay in touch with friends, 9 per cent for entertainment such as YouTube.

Shih (2011) research on web 2.0 technology integration and peer assessment discovered that online technology had positive impact on writing course. Shih noted that it accessibility and unique features attracted students and eased their resistance to learning, making his study successful" (Shih 2011, p.839).

Golden, McCrone, Walker and Rudd (2006) study found that the majority of lecturers used online in their teaching practice. However this was most commonly to research, access and create teaching materials and prepare lesson plans. But technology was used less frequently to communicate with learners, track learners' progress and provide one-to-one attention. Golden, McCrone, Walker and

Rudd (2006) study found that lecturers felt technology help students in being more effective at researching and presenting work and reinforce learner's knowledge.

There are many ways online technology can be adopted into teachers practice but I will discuss three methods online technology can be adopted into teachers practice. Such as, Virtual Learning Environment (VLE), Social Networking Sites (SNS) and Massive open online courses (MOOCS).

Virtual Learning Environment (VLE)

A Virtual Learning Environment (VLE) is a system for delivering learning materials to students via the web. These systems include assessment, student tracking, collaboration and communication tools (Cook 2002).

Virtual learning environment are commonly used by institutions, it is more institutional in nature, it contains student's records, library systems, and content management (Martin 2007).

Some scholars believe that VLE is easy to use for both students and lecturers, that VLE offers flexible support for educators who do not need to be in a fixed time or place to support and communicate with students (Cook 2002).

While some research criticise VLE as a learning environment where academic issues are led by the teachers rather than the students, although in virtual learning environment students are meant to be the end users but in reality the teachers determine the success of the virtual learning environment (Martin 2007).

Social Networking Sites (SNS)

Since their emergence they have attracted millions of users around the world, many of whom have integrated them into different means, particularly in their daily practice (Valkenbug and Peter 2009; Horizon report 2014).

Boyd and Ellison (2007) described social networking sites as "web based services that allow individuals to construct a public or semi-public profile within a bounded system, articulate a list of other users with whom they share a connection, and view and traverse their list of connections and those made by others within the system. In my view, social networking sites can be describe as web 2.0 that permits users to chat, interact and communicate their thoughts, feelings and learning online.

Hemmi et al (2009) study observed that social networking sites help learners to express their feelings, involve and engage actively in learning. Lankshear and Knoebel (2004) argued that web 2.0 application should not be simply appropriated into classroom lessons as "young people resent having their cultural forms (mis) appropriated into schools".

Massively Open Online Courses (MOOCs)

There are several definitions of MOOCs from conceptual to technical as is a relatively new phenomenon sweeping across higher education (Liyanagunawardena, Adams, and Williams, 2013).

By definition, MOOCs take place online.

The New York Times columnist and Washing Post (2014) described MOOC as an educational "revolution and elite education for the masses.

But some scholars have viewed MOOC as a way for organisation to maximise the value of their branded pedagogical content and potentially shore up revenue Weigel (2014). Others claimed that MOOCs is a "disruptive revolution" and a harbinger of the end of residential colleges, while others have called MOOCs at best "mere marketing" or at worst an abject failure, singling out low completion rates Harvard Gazette Report (2015).

Before I discuss the different learning environments, it will be helpful to explain who net generation are.

Net Generation

Authors such as Oblinger and Oblinger (2005); Prensky (2010) described the term net generations as those young people who immersed themselves in a world with digital technologies and networks, they act differently from the past generations. Wehril (2009) believe that this young generation are not only change agents but are looking for teachers that will integrate technology into their lessons to improve their learning.

Some researchers have challenged this position, they described it as deficit approach that relegate the place of the teachers to that of the students which teachers have to change and learn new skills and approaches, which can be seen as a reversal to learning where students are providing guidance for their lecturers. However, I believe that emergent of new technologies are not simply new tools but important tools for teachers development. In this study, I will discuss three learning environment online learning can be adopted. Such as; Classroom environment, fully online (internet) environment and Blended format (mixture of classroom and online) learning environment
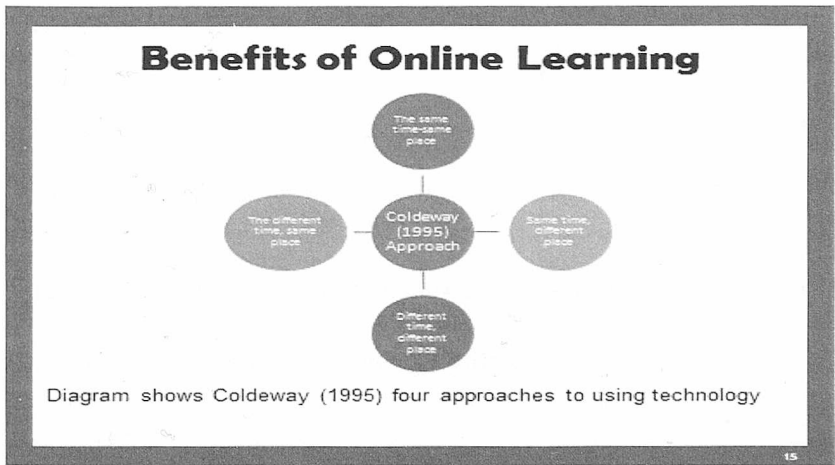
Benefits of Online Learning

Diagram shows Coldeway (1995) four approaches to using technology

Diagram shows Coldeway (1995) Four approaches to using technology

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The same time-same place approach means- that some learners can interact with others using any online medium. This approach can be classified as a synchronous communication (Bonk and Zhang, 2006.

Synchronous communication means that learning take place in a conversational manner where learners and instructors communicate directly through chat or any other means (Bonk and Zhang, 2006).

The different time, same place approach- means that participants interact in the same space but in different times they choose. This could be called asynchronous technology communication. The advantage of using this communication process is the flexibility potent. Learners can receive information and contribute at their own convenient with little or no pressure to respond immediately.

Same time, different place approach- means that instructor and learners interacting independently at the same time but not at the same geographical location.

Different time, different place approach- instructors and learners are separated, communicating at different time and different space. That is learning takes place outside a particular location and with no specific time.

Other Benefits includes;

Teachers-students' collaboration which means that instructors can interact and support learners by providing feedbacks to them like in face to face format.

Student –content interaction means learners can interact, comment, post and engage with learning materials via the online medium provided.

The student-student collaboration- it means that learners can share knowledge by themselves, stronger learners supporting the weaker learners without the instructor support. This approach enhances

collaborative learning style in terms of providing rich body of information and knowledge via learners themselves (Garrison and Anderson 2003).

Criticism of Online Learning

Martin (2007) observed that use of online into teachers practice is a means of commoditising education, de-professionalising educator and commercialising universities while the educator is replace by content.

Ybarra et al. (2007) highlighted the issue of salience of safety. Ybarra observed that online learning carries potential risk, some user's exhibits inappropriate behaviours, download images, disclose personal information and often time display aggressive behaviour to other users.

Hew (2011) argued that online has no real academic or education related activities as such students do not see them as academic tools and should be kept away from academics.

Conclusion

Despites the challenges highlighted by online learning critics, a clear understanding and application of online learning can help minimise the fear and worries.

I believe now is the time for educator to embrace new technologies and integrate new approach and in turn may meet the needs of the 21st century students. Just as Fill et al (2006) observed that pedagogically, appropriating technologies is part of the teacher obligation. With current complexities and advancement of technology, it is clear that if online technology goes away, "something new may replace it being just as popular among the 21st century" (Honor 2009). Therefore, I believe if technological tool like is not explored its potential may remain untapped.

Thank You