



**FLIPPING THE CLASSROOM FOR ENGAGED LEARNING:  
A CRITICAL ANALYSIS**

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## ABSTRACT

This study sought to critically analyse how the classroom may be flipped for engaged learning. The current situation at schools implies that learners are disengaged due to the way in which they are taught. It was discovered during data generation that teachers still use the standardized method for teaching and learning. Learners do not find class activities stimulating, thus they deviate from engaging with these lessons. Consequently, lesson preparations are based on the expectations of the teachers rather than the needs of the learners, who are often marginalised, as they are not included in decision-making processes. The current school policy emphasises Information Community Technology (ICT) in teaching and learning, however, this is not fulfilled in all schools due to various circumstances outlined in the study.

It is imperative for schools to acknowledge the level of interest amongst learners when it comes to technology. Recent advancements in technology creates a wide range of opportunities for teachers and learners to benefit from when incorporating technology in some form within the classroom and to make teaching and learning more effective. The concept of the flipped classroom allows schools the platform for teachers and learners to transform current teaching and learning approaches. The main emphasis is on engaged learning within the learning context.

Critical Theory (CT) was used as the theoretical framework anchoring this study and Participatory Action Research (PAR) was adopted as the methodology for generating data. Employing CT in this study helped to view the following objectives in a critical stance:

- To explore the current situation in respect of flipping the classroom for engaged learning.
- To examine the need of flipping the classroom for engaged learning.
- To explore how we can flip the classroom for engaged learning.
- To understand hindrances/ impence/ barriers/ threats to successfully flipping the classroom for engaged learning.

Employing CT in this study helped to disregard an authoritative standpoint of viewing and addressing issues within the school context. The generated data was interpreted and analysed through the use of Critical Discourse Analysis (CDA) which successively made it possible for data to be interpreted in different levels (textual, social and discursive). The conversational methods of generating data empowered participants to express their views and opinions through dialogue.

Findings from objectives indicated that schools are still using the traditional approach for teaching and learning. In contrast, student and teacher participants specified there is a need to employ the flipped classroom to encourage engagement in the learning environment. However, findings also showed the numerous challenges to implement the flipped approach. Data generated confirmed the existence of challenges in implementing the flipped classroom for engaged learning. These include: the digital divide, affordability, lack of supervision, lack of a foundation of computer skills and support from various stakeholders. To circumvent the mentioned challenges, the study proposed strategies within the school level and beyond the school level. At school level they include involvement of the SMT, a positive learning environment and effective learner participation. Strategies beyond the school level include forming a partnership between the school and community, donations from local businesses and increased professional development programmes for teachers.

In short, this study revealed that equal contribution, communication, teamwork and partnerships amongst all relevant stakeholders at dissimilar levels may benefit for the successful implementation of flipping the classroom for engaged learning.

## DECLARATION

I, Sivashnee Paragoo [209514003], declare that:

1. The research reported in this thesis, except where otherwise intended, is my original research.
2. This thesis has not been submitted for any other degree or examination at any other university.
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**Sivashnee Paragoo (Student Number: 209514003)**

Signed: \_\_\_\_\_

Date: 31 March 2021

## **LIST OF KEY CONCEPTS**

Engaged learning

Flipped classroom

Traditional classroom

Critical analysis of flipped

Classroom

Liberate

Empower

Digital Divide

Oppressed groups

## DEDICATION

*For my daughter,*

*Britney Skye*

*"Extremists have shown what frightens them most:*

*A girl with a book"*

- Malala Yousafzai

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## LIST OF ABBREVIATIONS AND ACRONYMS

BYOD	Bring Your Own Device
CAPS	Curriculum Assessment Policy Statement
CAT	Computer Applications Technology
CDA	Critical Discourse Analysis
CRT	Critical Race Theory
CT	Critical Theory
DBE	Department of Basic Education
DoE	Department of Education
HoD	Head of Department
HEI	Higher Education Institution
ICT	Information Communication Technology
IEB	Independent Examination Board
IT	Information Technology
KZN	KwaZulu Natal
LMS	Learning Management System
LO	Life Orientation
NS	Natural Science
PAR	Participatory Action Research
RCL	Representative Council of Learners
SA	South Africa
SGB	School Governing Body
SMT	School Management Team
SWOT	Strengths, Weaknesses, Opportunities and Threats
UKZN	University of KwaZulu Natal

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# **CHAPTER ONE**

## **THE OVERVIEW OF FLIPPING THE CLASSROOM FOR ENGAGED LEARNING**

### **1.1 INTRODUCTION**

South African schools are under pressure to revolutionise their teaching and learning while supporting an increasingly diverse learner cohort's transition from basic to higher education. This mandate calls for the implementation of critical and reflexive pedagogical approaches in the classroom. The demand is to move to digital learning as the world is driven towards the change of implementing technology in our daily lives. There is emphasis in using technology to enhance teaching and learning. Technological tools have a high potential for supporting engaged learning by using resourceful and creative methods when associated with learning objectives. A flipped classroom is an alternative pedagogical approach that focuses on student-centred learning that reverses the traditional classroom-teaching context. This pedagogical approach has recently gained much attention and has become more widely adopted in schools globally. The flipped classroom approach allows learners to be exposed to content outside of the classroom so that learners can engage with such content in an intrinsic and more profound basis within the classroom. In this pedagogical approach, learners are stimulated in the learning context by instructional strategies employed by the teacher. Teachers are facilitators assisting learners with support and guidance during the learning process. As much as teachers play an important role in engaged learning, teaching resources arguably assist in reinforcing engaged learning.

The move to enhancing engaged learning through the use of the flipped classroom not only stresses learning as central but also allows for a teaching approach that stimulates engaged learning. While the former places emphasis on self-motivated learning, the latter includes teachers preparing instructional activities aimed for self-exploration. When learners and teachers are engaged, they are able to excel in their work environment since success is achieved.

Engaged learning in the learning process intensifies learners' concentration and encourages them to apply high-level critical thinking skills (Harris, 2019). As a result, active learners become open-minded and are able to make logical decisions.

In South Africa, there is a huge disparity between public and private schooling. In 2019, the Department of Basic Education (DBE) grade 12 pass rate was 81.3% (SABC News, 2020). In contrast, Independent Examination Board (IEB) class of 2019 pass rate was 98.82% (Mabuza, 2020). While the former, which refers to the public sector of education in South Africa achieved well over 80%, the latter which is the private sector achieved close to 100%. To differentiate between the two sectors, the cost of private education is much higher than public education. The standard of education is the same for both sectors, however, IEB schools use a private agency to offer more support in terms of the Curriculum Assessment Policy Statement (CAPS) curriculum. This is additional support which is determined by increased fees. IEB schools may consist of more resources and facilities for both teachers and learners. Conversely, not all learners are provided with additional support since education sectors are separated. The question of 'equal education for all' can be brought up in this regard. Society driven by technology in terms of its advancements for teaching and learning. It is anticipated that the new era of learning, through the fourth industrial revolution, is through using a flipped classroom approach. However, the question persists: 'Will the execution of the flipped classroom approach steer towards the direction of the success or downfall of engaged learning?' This study critically analyses the effectiveness of such an approach in a South African schooling context for engaged learning. This study argues that successful learning can only occur when there is engagement in a learning context.

In Chapter one, an outline of the current situation of engagement in South African schools is argued in the background of the study. This is preceded by a description of the problem statement, a discussion of the rationale and the theoretical framework which underpins this study. Succeeding is an explanation of the methodology, the research design, the research approach, the research context and the data generation methods to be employed. The ethical considerations are discussed and describes the steps followed for data generation. Finally, the limitations that influenced the study are discussed.

## 1.2 BACKGROUND

Prior to 1994, apartheid in South Africa enforced racial segregation and discrimination on previously disadvantaged South Africans (South African History Online, 2019). Numerous laws had been passed for the implementation of apartheid. Apartheid had impacted every aspect of society, including the implementation of Bantu education for marginalised black South African people (Houserman, 2016). Subsequent to 1994, apartheid was abolished which resulted in education reform and democracy. Houserman (2016, p. 2) maintains that before democracy, only “public higher education institutions were recognized by the government”. Such schools only accommodated ‘superior’ learners whom were whites only. Currently, such schools in democracy are referred to as ‘model C’ schools (Christie & McKinney, 2017). These schools are no longer reserved for white people only. Schools throughout South Africa have welcomed a philosophy of equality. Even though this may be true, discrimination in the education system still exists today.

The aftermath of apartheid emotionally and psychologically scarred the people of South Africa by robbing them of quality education for all. The relevance of comparing the current situation of schooling to apartheid is due to the similarities of both education systems. Education throughout the apartheid regime was very much authoritarian and standardised. Currently, the traditional teaching and learning approach can be compared to this, as it does not permit a voice to learners. Schools are still divided in terms of private and public education. However, private schooling does not mean that these schools are reserved only to a certain race group. It all depends on the affordability of the parents that enrol their children into these schools. Moreover, class size is also a determining factor between private and public education. Harrington (2019, p. 3) maintains that “the ratio of scholars to teachers is 33 to one in [public] schools, while private schools generally have one teacher for every 17.5 scholars.” Hence, this is an advantage for learners in private schools. Furthermore, concerning pass rates between private and public schools, the latter sets a low criterion for passing. For example, the pass rate for these schools is 30 per cent in at least three learning areas and 40 per cent in another three learning areas. In contrast, private

schools aim for 50 per cent in at least four learning areas and three other learning areas at 40 per cent (IEB, 2019). Clearly, the benchmark is set high for private schools. In addition, these schools are furnished with adequate resources for teaching and learning due to the exorbitant amount of school fees that is expected. Socio-economic status is a determining factor that separates public from private education. The division of private and public schooling dates back to our history of apartheid and the effects of it is still prevalent today. It is argued that these negative effects can still be observed in the different classroom contexts in the ways in which learners learn or are engaged.

### **1.2.1 Engaged learning**

In a classroom where there is a continuous variation of teaching and learning strategies, learners are deeply engaged and challenged (Zohud, 2015). Resilient Educator (2020, p. 10) maintains that “it is best for teachers to use a combination of approaches to ensure that all student needs are met”. Hence, teachers in these classrooms are able to observe the advantages of using such strategies to enable their learners to be in control of their own learning. In the South African schooling context, there is a vital need for such a classroom. However, the reality is that in many schools, teachers do not design instructional activities that encourage collaborative, participatory learning engagements that construct creative and imaginative spaces for critical dialogue so that the learners’ voices are heard (Cherrington, 2017; Brussow & Wilkinson, 2010). According to Gollub, Bertenthal, Labov and Curtis (2012, p. 136) “Many instructional materials are not designed to help students conditionalize their knowledge”. Therefore, teachers need to create instructional material to help learners comprehend knowledge from textbooks. This study critically argues that a failure to do so would result in disengagement and discord in the teaching and learning process.

### **1.2.2 The flipped classroom approach**

The flipped classroom is an active learner approach aimed at reversing the traditional notion of teaching and learning by having learners' complete instructional content at home and work on problem-solving and discussion during class time (Yildirim & Kiray, 2016). Additionally, the flipped classroom may be referred to as an innovative pedagogy that is capable of assisting learners to do many tasks such as comprehending a topic, giving relevant examples and using their cognitive thinking abilities to expand their understanding (Lo, 2017). Therefore, the fundamental notion of employing the flipped classroom approach is for learners to study content in advance. Hence, the duration of class time is dedicated for engagement of activities pertaining to content acquired. Moreover, the flipped classroom approach suggests that learners should involve themselves with content out of the classroom context, for example, at home, and then use the in-class time for discussion and activities (Lee & Martin, 2020). In saying so, the classroom would be used for full on engagement. According to Brame (2013, p. 1) learners "gain first exposure to new material outside of class, and then use class time to do the harder work of assimilating that knowledge". Thus, class time is used to collaborate with peers on what was learnt. This will then indicate engaged learning amongst learners. Ding, Li and Chen (2019, p. 1) also maintain that the flipped classroom is "good for their team working skills" as it allows for collaboration. The flipped classroom pedagogy allows learners "to embrace taking risks and making mistakes in the endeavour of acquiring experience in collaboration and expertise in content" (Gomez-Lanier, 2018, p. 1). This exercise leads to learners engaging and comprehending instructional activities.

### **1.2.3 Critical analysis**

With reference to the public and private sector of schooling, both are not of equal status with regards to the calibre of learners admitted and the school ethos (Nzuza, 2015). There are numerous factors that hinder the equal transmission of learning. For example, the digital divide can be one aspect that differentiates public from private schooling. Low, Starr and Levitan (2020, p. 2) assert that "private schools can assume

parents are able to afford high speed internet and laptops or iPads, they can move forward quickly and efficiently with implementing remote learning options". Unfortunately, this cannot be applied to public schools due to parents differing social status (Low, Starr & Levitan, 2020). As a result, learners' backgrounds determine which schooling sector they fall under. By categorising schools, this immediately groups schools in terms of 'dominant' and 'oppressed' (Smith, 2013). This grouping stems from the calculated instructional strategies that divide learners according to resources available to them and other physical factors like class size. Isaacs (2020, p. 8) articulates, "The more money parents can afford, the better the education students receive". This is an indication of inequality in education and goes back to oppression in the South African education system. According to School Guide (2018, p. 2) facilities and resources in public schools "can differ immensely subject to the effectiveness of the way it is managed and the general wealth of the school area". Hence, learners who come from rural areas may be disadvantaged if they attend government schools rural communities.

#### **1.2.4 Problem statement**

The problem statement founds the context of the study, recognises the gap in the present literature, in addition to affirming the focus of the study (Creswell & Creswell, 2018). It is concerning that in the current situation in traditional classrooms, learners remain disengaged in acquiring knowledge in the process of learning. Schreiber and Yu (2016, p. 14) upholds, "Learner engagement has not been widely explored in South African education". Lack of engaged learning within the learning environment can remain primarily due to learners' learning styles not being accommodated for, ineffective instructional strategies used, content that is not meaningful and a lack of resources. Consequently, learners may seem uninterested in the learning content given by means of black and white worksheets, textbooks or copious amounts of notes on the chalkboard. Prieto (2016, p. 3) maintains, "To create a good academic foundation, the teacher must exhibit different forms of learning styles to the students to create awareness and a good academic foundation". As a result, is the main reason

why the researcher chose to critically analyse flipping the classroom for engaged learning.

As a result of the research problem addressed, the study poses the following main research question: *How can we flip the classroom for engaged learning?*

From the above research question, the following secondary questions emerge for this study:

1. What is the current situation of flipping the classroom?
2. Why should we flip the classroom for engaged learning?
3. How can we flip the classroom for engaged learning?
4. What barriers are encountered while flipping the classroom for engaged learning?

The objectives derived from and directed toward achieving the purpose of the study are:

1. To explore the current situation in respect of flipping the classroom for engaged learning.
2. To examine the need of flipping the classroom for engaged learning.
3. To explore how we can flip the classroom for engaged learning.
4. To understand hindrances/ impedence/ barriers/ threats to successfully flipping the classroom for engaged learning.

### **1.2.5 Rationale for the study**

The purpose of this study was to critically analyse how the classroom can be flipped for engaged learning. It is understood that the introduction of teaching and learning resources in the classroom had gained popularity especially since society had become reliant on technology in assisting predominantly the younger generation with daily tasks. An example of using technology to teach and learn is through the flipped classroom. For example, learning a new topic can be homebased by means of

observing videos or listening to podcasts. The discussion of the topic is then mediated at school with other learners and the teacher acting as a facilitator (Ray, 2014).

According to Costley (2014, p. 2), “Technology is used by children and adults on a daily basis by way of web surfing, texting, social networking, interactive games.” Accordingly, learners are viewed as digital natives since they remain subjected to technology from an early age in their lives.

Technology used in the classroom has tremendous benefits on teaching and learning, therefore especially with the move to work and study online, there is a high demand or a great emphasis on technology being utilised in schools (Lederman, 2020). As a result, the DoE in South Africa had included e-Learning in the White Paper policy on e-Education. Furthermore, the White Paper on e-Education (2004, p. 16) maintained that “ICTs [Information Communication Technologies] can accommodate differences in learning styles and remove barriers to learning by providing expanded opportunities and individualized learning [capabilities]”. Hence, the importance of schools that are equipped with high-end technological resources to benefit teaching, learning and administrative capacity in schools are stressed intensely in the policy. However, not all schools can afford to purchase these ‘high-end technological resources’ since some schools are declared ‘non-fee paying’ schools. Does this mean that financially disadvantaged schools will not benefit from teaching and learning? Therefore, given the financial difficulties experienced by most South African schools, the key objective of the study was to analyse the current situation of using the flipped approach for successful engaged learning in one high school in Kwa-Zulu Natal. This study argued that teaching is meaningless if learners are not actively engaged in the lesson or activity.

The reason for choosing to investigate the flipped classroom within the field of Educational Psychology is because it is involved with the study of learning processes. Bransford, Brown and Cocking (2016, p. 63) define the study of learning processes as when “the learner compares the new knowledge with his or her existing knowledge

base". With this in mind, there is a gap concerning what is taught and what is learnt. Hence, the content to be imparted is different from the content that learners assimilate. Nevertheless, the learning process can be successful if learners are engaged in the learning context.

A personal rationale for the proposed study is that I am a Computer Applications Technology (CAT) teacher as well as a Life Orientation (LO) teacher. I am thus exposed to two different learning contexts. I am able to teach learners in a traditional classroom as well as learners in an ICT lab whereby they have technology readily available. I strongly feel that the ICT lab allows a teacher to teach learners using a variety of methods such as adapting class lessons to cater for different learning styles.

### **1.2.6 Theoretical Framework**

In view of the fact that this study falls under the critical paradigm, Critical Theory (CT) was used as the theoretical framework. Grant and Osanloo (2014, p. 12) define a theoretical framework as "a grounding base, for the literature review, and most importantly, the methods and analysis". Therefore, the theoretical framework is necessary towards supporting the research and findings of the study. It is the backbone that underpins research in a study. Crossman (2019, p. 209) defines CT as "oriented toward[s] critiquing and changing society as a whole". Hence, the idea of the study is to critically analyse whether flipped learning contributes to engaged learning. In saying this, the study therefore fitted into to the CT paradigm.

According to Crossman (2019, p. 2) CT "emerged out of the Marxist tradition and was developed by a group of sociologists at the University of Frankfurt in Germany who referred to themselves as The Frankfurt School". Thus CT denoted "a school of academic thought which challenges dominant ways of explaining and exploring organizational phenomenon" (Harney, 2014, p. 2). The members of the Frankfurt School included Max Horkheimer, Erich Fromm, Theodor Adorno, Jurgen Habermas, Walter Benjamin and Herbert Marcuse (Garlitz & Kogler, 2015). These critical theorists

concentrated on how power and supremacy and the status quo worked. Thus the main intention of CT was to elucidate and transform the situations that exist which dominate the powerless (Marcano, 2018). In support of Marcano's (2018) perspective, Asghar (2013, p. 3123) advocates that "critical theory challenges the status quo and strives for a balanced and democratic society." Hence, it is then clear that CT maintains its approach and is based on the conclusion that power amongst certain groups is an issue and all groups should be liberated (Fuchs, 2017).

This study aimed at liberating those whom lack access to basic resources for learning with the hope to bridge the gap of the digital divide. The role of the researcher in using CT, aimed to pose as an investigator that endeavoured to use his/ her efforts by means of a construct of social critique (Fleming, 2012). The association between the researched and the researcher is made to bring about liberation and equality within the research process. Employing CT in this study helped to eradicate an influential and dominant way of observing and tackling issues. The methods of data generation used in CT allowed participants to articulate their beliefs and opinions by means of open dialogue.

### **1.3 RESEARCH DESIGN AND METHODOLOGY**

The research design of the study specified the overall plan to conduct the research and what the results were aimed at. In contrast, the research methodology emphasised the general principles and procedures for data generation (Boru, 2018; McGregor & Murnane, 2010). Participatory Action Research (PAR) was selected to derive steps for the research process of critically analysing the classroom for engaged learning. PAR promotes emancipation of powerless and marginalised groups (Datta, Khyang, Khyang, Kheyang, Khyang & Chapola, 2015). Furthermore, the researched was protected from exploitation in the research process as both the researcher and the researched were considered to be equivalent in PAR. Thus the emphasis was based on collaborative and mutual associations among the researched and the researcher.

PAR was chosen over action research was due to PAR having 'strong emancipatory intentions' to involve participants in the study as co-researchers (Todd, 2016). Moreover, it has been proven from many studies that PAR is a prevailing approach for engaging with oppressed groups in an attempt to enhancing their own circumstances within society, which is what this study intends to achieve (MacDonald, 2012). PAR was used for thorough reflection and action from both researchers and participants to reduce any form of oppression that may be discovered during the course of the study.

### **1.3.1 Research paradigm**

For new knowledge to be generated concerning critically analysing flipping the classroom for engaged learning, a belief system needed to be incorporated to guide the process of the study. According to Kivunja and Kuyini (2017, p. 419), "A paradigm is a set of assumptions, concepts, values, and practices that constitutes a way of viewing reality". Humans create reality by learning from others and reflecting on their understanding. Hence, knowledge is created from intrinsic as well as extrinsic factors. Knowledge in this study was created by personal experiences and reflection of participants in flipping the classroom for engaged learning. Since the study involved a critical analysis, the critical paradigm was used as the worldview of the study.

This study is regarded as critical since it attempts to challenge other paradigms, explicitly the interpretivist and the post-positivist paradigm, whereas it remains critical of the imbalances that currently subsists in the social world (Creswell, 2014). The critical paradigm aimed to combine theory and practice to seek positive change (Ferreira, 2018). Moreover, CT seeks to exert positive change rather than only focusing on power structures (Thompson, 2017). According to Ferreira (2018, p. 9) "the aim of critical theory is critique and emancipation." Hence, the main goal of this study was to deconstruct the inequalities that currently exist in education and determine how the flipped classroom approach can aid in engaged learning. Thomas (2017, p. 2) declares that CT "creates a platform for integration by understanding the current practices and phenomena in a technology classroom to develop strategies that

could be implemented in other classrooms to create an integrative learning environment”. This applies to this study in terms of using the flipped classroom approach to create an integrative classroom.

Nel (2018, p. 7) maintains that the intention of the critical paradigm “was to facilitate the empowerment of world views that have yet to find equality in shared environments in society”. Consequently, the critical paradigm may bring about liberation of groups that are disadvantaged to transform society to be fair and equal (Bertram & Christiansen, 2014). Disadvantaged groups that were identified in this study are those schools that fail to use appropriate resources to implement flipped classrooms. Since this study fitted under emancipating powerless groups (the learners, teachers or certain schools), the critical paradigm within the post-positivism methodology was used as the belief system to inform the study. Additionally, the critical paradigm also directed the study to analyse the effectiveness of the flipped classroom approach within one school that used technology for teaching and learning.

### **1.3.2 Research approach**

The study was grounded on adopting a qualitative approach as it was concerned about the views, opinions as well as emotions of participants of flipping the classroom for engaged learning. Hancock , Windridge and Ockleford (2007, p. 5) define qualitative research as it “attempts to broaden and/or deepen our understanding of how things came to be the way they are in our social world”. In addition to being thorough, subjective, exploratory and unrestricted in nature, qualitative research is piloted upon studying participants in their natural surroundings (Falconer & Mackay, 1999; Creswell & Creswell, 2018). The natural setting referred to in the study is that of the school context. Bearing in mind the context of this study, qualitative research ensured that the research yielded rich, detailed and in-depth data as it helped to generate open-ended answers from participants.

Since the study explored a critical analysis of the flipped classroom for engaged learning, qualitative research approach was considered suitable to use for the study.

Furthermore, qualitative research has been selected over quantitative research since in quantitative studies; participants are constrained with concerns that their opinions are not expressed. Also, participants in quantitative studies are limited to numerical data (Bertram & Christiansen, 2014). Consequently, quantitative approaches lack in yielding data from participants themselves which can be considered as 'information-rich data'. Quantitative data can generate numerical data and tell you what is happening, but it cannot justify reasons for what is happening. There is also a detachment in the relationship between the researcher and participants since there is minimum interaction or engagement (Daniel, 2016). Thus using quantitative research in this study would not prove to be beneficial as this study implements PAR as the research design. PAR stresses on the equal status between the participants and the researcher. After evaluating the characteristics of both qualitative and quantitative characteristics in research, the qualitative research approach appeared to be more realistic to use in this study. The study intended to generate data by interacting closely with participants to share their feelings, opinions, and experiences; and interpret the meanings of their actions with regards to critically analysing flipping the classroom for engaged learning (Rahman, 2017).

### **1.3.3 Research design**

For the study to take place, a plan was needed to outline the selection of participants, research context, and methods of data generation to respond to the key research questions of the study. For Kemmis and McTaggart (2005, p. 277) PAR "offers an opportunity to create forums in which people can join one another as co-participants in the struggle to remake the practices in which they interact". From the definition above, PAR thus creates a collaborative method of learning for which people try to change the situation in which they interrelate amongst a collective society and raise critical awareness among individuals from all backgrounds (Balakrishnan, 2016). As a result, knowledge was generated by participants' shared efforts within the research process together with the researcher. By participants contributing towards the study, it demonstrated an awareness of their current situation so that they can be emancipated from the shackles of oppression. Morrell (2015, p. 6) argues,

“participants become researchers about their daily lives in hopes of developing realistic solutions for dealing with the problems that they believe need to be addressed”. Accordingly, when participants undertake a dynamic role within the research process, they retain the possibility to apply action for change since they are the affected individuals. It also gave the participants in the study an opportunity to act as researchers themselves.

The idea of a flipped classroom sparked a sense of curiosity to the researcher since it may allow for engaged learning. Does this mean that the traditional classroom does not support engaged learning? PAR may assist the researcher to understand how learners interact in the classroom whilst using the flipped method. From looking at the various stages of the research, one has to have a proper plan in place to execute the research approach.

PAR was broken down into various stages and included the researcher together with the co-researchers to critically analyse the flipped classroom for engaged learning. First, research teams were recruited in terms of handing out invitations for potential participants to participate in the study. Second, relationships were built with participants. It was important to have a level of understanding between the researcher and co-researchers. Each member of the team was given a descriptive role for their contribution towards the study. Third, critical awareness was developed since participants needed to be informed about the details of the study before the research could commence. Fourth, issues were identified so that the problem of the situation could be resolved. Fifth, a research design was created so that the research team could decide on ways of generating data. Sixth, the research team conducted research by performing fieldwork. Seventh, a specific method of analysis Critical Discourse Analysis (CDA) had to be determined to analyse data that was generated. Eighth, the research team developed a written report based on findings and conclusions and thereby linked it to solutions. Ninth, the research team reflected and checked if the goal was achieved. The stages of PAR are further detailed in section 4.4.2 of the study.

Throughout the various stages of research, the researcher had to arrange times for meetings to take place and also lend support to ensure decision-making was based on the research team and not an individual entity. In addition, training, support and supervision by the researcher needed to be done to ensure that team members were knowledgeable on the values of the research design informing the study.

By incorporating the above steps within the research design of the study, a plan was thus put into action pertaining to the answering the research question of the study. Furthermore, by using PAR as the research design of this study, teachers learnt about their learners, their co-workers, themselves and could determine ways to regularly progress in their pedagogy.

#### **1.3.4 Research area**

The research area under this study is engaged learning. Banna, Lin, Stewart and Fialkowski (2015, p. 250) define engaged learning as “instructor facilitated and [learner-focused], which increasingly incorporates technology to facilitate the knowledge construction process”. An alternative perspective to the above definition is that engaged learning does not necessarily mean that engagement is only possible through using technology. For learning to be successful and meaningful, learners have to be engaged in the task that is given by teachers. Jirout, Vitiello and Zumbrunn (2018, p. 244) posits that learners “also display curiosity, a desire to know more and positive emotional responses to learning and school”. This therefore implies that tasks do not only have to be given by teachers since learners can find tasks to do on their own to enhance their understanding. This can be achieved when learners find content interesting for self-motivation. Learners learn best when they are doing things for themselves. Reese (2011, p. 11) deduces “learning by doing means learning from experiences resulting directly from one’s own actions.” This implies that it is through trial and error that engaged learning is encouraged. Although it can be frustrating to learn on one’s own, learning can be achieved when learners are able to learn from

their mistakes and the discovered process is remembered. There are various factors that affect engaged learning.

Classroom design, flexibility and furnishings can influence teacher performance and learner activities (Kimball Learning, 2006). This allows for more improved collaboration and exploration of learners. Mihai (2016, p. 1) asserts that “teachers need to identify the individual learning needs of students.” Teachers assume a significant responsibility regarding the facilitation of the engaged learning since they need to be a form of support when using the flipped classroom approach as learners are engaging in content on their own. Learners will not be able to fully comprehend such content without discussion from the teacher. Consequently, the flipped classroom not only keeps learners engaged but also keeps the teachers busy in creating appropriate activities to keep learners engaged. An engaged classroom should be one that is always filled with activity and learning.

### **1.3.5 The participants**

For data generation to occur, participants are important subjects in the research process. Moreover, it is through the participants from which data generation can be reflected upon. In saying so, participants in PAR are of equal status to that of the researcher. The selection of participants is thus a significant factor in the research. Participants used in this study include teachers, parents and learners. The team that conducted this research project were instituted as follows: the researcher (myself), six grade 11 CAT learners who participated in the flipped classroom lesson, two teachers who facilitated the flipped classroom approach in NS and CAT, and two parents who supervised their children learning content at home. In support of the above selection of participants, the purposive participant selection procedure enabled flexibility for the researcher to intentionally select those participants who are suitable for satisfying the purpose of the study which required the selection of a diverse group of individuals pertaining to the CAT subject (Palinkas, Horwitz, Green, Wisdom, Duan, & Hoagwood,

2015). Moreover, purposive participant selection allows flexibility for the researchers to select data generation methods suitable for the aim of the study (Creswell, 2014).

The participants involved in the study were individuals that shared a common interest. Such individuals were those that were involved in the use of technology for engaged learning. Their shared interests contributed to the outcome of the study as well as address the challenges of achieving engaged learning. Bertram and Christiansen (2014, p. 93) contend that “in the critical research paradigm, the gap amidst the researched and the researcher is made as small as possible”. Participants are seen as progressive in taking entitlement within the research process. Wa-Mbaleka, Zubkov, Saban and Rosario (2019, p. 1) assert that “the closer the researcher gets to his/her participants, the richer and more authentic the data he/ she gets”. Therefore, the researcher ought to form a close relationship with the researched.

Since this is a PAR study, the researcher had to remain neutral in the data generation process. The researcher acted as a participant observer at the school so participants did not feel powerless in the data generation process. According to Crossman (2019, p. 1) a participant observer “is when a sociologist becomes a part of the group they are studying in order to collect data and understand a social problem”. Hence, researchers cannot isolate themselves in the research context, but allow themselves to become involved in the lives of those that are researched to gain a better understanding of how social influences affect different individuals and groups. The researcher in this study blended into the school context so that participants were seen as equal to the researcher.

### **1.3.6 Data generation methods**

Data generation methods for PAR was associated to that of qualitative methods of data generation. McGregor and Murnane (2010, p. 2) maintain data generation methods “refers to the technical procedures applied to conduct research”. As a result, these were the means to which data was generated. Generated data needs to be

analysed and this is what makes each study unique. During data generation, the meetings were held within the school context and located in the same neighbourhood in which most participants resided. This ensured that participants were comfortable as they were familiar with their surroundings. Furthermore, during these meetings the participants engaged in discourse pertaining the issues which they had experienced within their own contexts.

A platform open for discussion was created for participants to speak cooperatively about their experiences. In addition, participants were not targeted as the researcher and participants mutually conversed and were capable of sharing their perceptions on flipping the classroom for engaged learning. The use of probes and prompts guided discourse and allowed for contribution from participants. Creating the open platform not only strengthened the relationship among the researched and the researcher but it similarly allowed for new construction of knowledge grounded on various perceptions. The methods that are used for data generation in critically analysing the flipped classroom for engaged learning are participant observation, focus group discussion and conversational interviewing.

#### ***1.3.6.1 Participant observation***

Mack, Woodsong, Macqueen, Guest and Namey (2011, p. 14) dispute “participant observation is useful for gaining an understanding of the physical, social, cultural, and economic contexts in which study participants live”. This research method was used broadly in qualitative studies to give researchers a chance to discover the research problem in the research context. Qaddo (2019, p. 8) maintains, “the role of the researcher tends to be passive, as the researcher will not intentionally interact with the target population with the intention of specifically acquiring or otherwise shaping the behaviors of the group”. However, this may work with a group that is outspoken. The researcher will need to be more involved in a group that is less outspoken. Spradley (2016, p. 57) puts forward that as a participant observer, “you will learn to use yourself as a research instrument”. As a result, researchers have to be introspective when using participant observation to understand new situations. With this in mind,

participant observation enables the researcher to provide detailed descriptions based on the experiences of the researched (Jorgensen, 2020). According to Aivalli (2015, p. 5), “Data acquired by means of participant observation serve as a check against participants’ subjective reporting of what they believe and do”. Thus data generation from participant observation can be beneficial for attaining an understanding of the contexts in which participants live. Furthermore, it helps to broaden the understanding of the researcher in conjunction with using other data methods.

Since this was a PAR study, not only were observations made, but the researcher also engaged in activities with the participants. This allowed the researcher to generate rich data for the study. When using participant observation for data generation in critically analysing flipping the classroom for engaged learning, the researcher sat in on class lessons and recorded observations made in a journal (Appendix G). Creswell (2014, p. 239) upholds that field notes during participant observation allows for “the researcher to record notes on the behaviour and activities of individuals at the research site”. Additionally, field notes provide researchers an opportunity to reflect on what they may observe and seem as important during the data generation process. The researcher also played two roles in the classroom: a teacher and an assistant to the teacher in the class. The second role played was that of a learner and sat with the learners when the teacher was presenting the lesson. This allowed the teacher and learner participants to feel comfortable in the classroom environment whilst the process of data generation took place.

The teacher gave learners new content in terms of multimedia to study and interpret on their own at home. Parents were required to make certain that such learning took place at home and had to encourage their children to prepare for the classroom lesson. The teacher facilitated discussion in the classroom and allowed time for consolidation through activities. The researcher observed this process whilst taking part with learners in the discussion. Whilst participating in the discussion/activities given by teachers, the researcher made reflective notes together with the research team.

### ***1.3.6.2 Focus group discussion***

Focus group discussion relates to this study since it is a PAR study. Nyumba, Wilson, Derrick and Mukherjee (2018, p. 20) delineate that focus group discussions are “frequently used as a qualitative approach to gain an in-depth understanding of social issues”. Similarly, Creswell (2014, p. 239) explains that focus group discussions “involve unstructured and generally open-ended questions that are few in number and intended [sic] to elicit views and opinions from the participants”. Hence, the basic focus of analysis is the collaboration that takes place in the group. Interaction amongst all members in the focus group is important since it guides communication and allows for various opinions at the same time. Furthermore, a focus group discussion asks participants for open-ended responses expressing opinions (Kokemuller, 2018). Participants become involved in the actual research and are not seen as subordinate in research. They are able to drive the conversation since researchers do not restrict the discussion according to a set of questions.

In the study, focus group discussion was used to obtain participants’ views and opinions about the results of using the flipped class approach to enhance engaged learning (Appendix M). Focus groups were conducted over two meetings that consisted of ± 60 minutes each. Participants of the focus group included the six learners to explore the effectiveness of the flipped class approach to enhance engaged learning.

### ***1.3.6.3 Conversational interviewing***

McGrath, Palmgren and Liljedahl (2019, p. 1002) maintain that interviews “afford researchers opportunities to explore, in an in-depth manner, matters that are unique to the experiences of the interviewees, allowing insights into how different phenomena of interest are experienced and perceived”. Thus interviews can be seen as an interpersonal encounter and not merely as a data collection meeting (Cohen, Manion & Morrison, 2018). Conversational interviewing was used when interviewing teachers and parents regarding their perspectives surrounding flipping the classroom for

engaged learning. This data generation method allowed for the researcher to generate qualitative, verbal data in a way of communicating freely to participants through engaging in specified topics. As researchers, discussion through communication is the simplest method to learn about participants (Gifford, 2012). Under conversational interviewing techniques, researchers are permitted to ask participants if they did not understand a question and provide prompts to elucidate the questions (Jamshed, 2014). By using conversational interviewing, participants may not feel subordinate to the researcher and it encourages a sense of openness amongst both the researcher and the participant. Conversational interviews were held on separate occasions with the teachers (Appendix K) and the parents (Appendix L) to investigate their thoughts and feelings about flipping the class for engaged learning.

### **1.3.7 Research context**

The research context was one high school located in Durban, Kwa-Zulu Natal. A pseudonym was used to protect the identity of the school. Creswell (2014, p. 138) maintains that “researchers use aliases or pseudonyms for individuals and places, to protect the identities of participants”. The school is referred to in the study as ‘Blossom High School’. Through government support, the school is fully resourced. Blossom High school has a well-equipped media centre that is available to all learners. The media centre is equipped with computers that are connected to the internet. Besides the media centre, the school has an ICT lab used to teach CAT and Information Technology (IT). It is networked and also has internet access.

The reason for the choice of the above school was due to the school being equipped with proper technological tools used for teaching and learning. Learners whom attended the school were also encouraged to use technology at home for learning. This school was purposefully chosen as the demographics show that learners from various backgrounds attend the school; ranging from learners from previously disadvantaged families to learners from middle-class backgrounds. This school was an ideal choice for the study as the flipped classroom approach could be used within

this diverse context with resources instead of going to a school that does not have the necessary tools required or where learners do not have tools to access at home.

### **1.3.8 Data analysis**

Critical Discourse Analysis (CDA) was used for analysis of data generated within the study since the study fitted under the critical paradigm. Elsharkawy (2017, p. 3) describes CDA as “a field that is concerned with studying and analysing written and spoken texts to reveal the discursive sources of power, dominance, inequality and bias”. Since the study intended on utilising PAR for data generation, CDA may assist the researcher to analyse both written and spoken manuscripts in critically analysing the classroom for engaged learning. The task of the researcher as the critical analyst was to uncover, as well as contest the dominant powers that surface whom bring about inequality in society. CDA further looks at how several groups may be misrepresented in numerous types of discourse (Sriwimon, 2017). According to Fairclough’s (1989, 1995) model, CDA is viewed as three-dimensional. The first dimension is textual analysis which includes what participants have said about flipping the classroom for engaged learning; the second is the processes which include how interaction is received, for example, by speaking, listening or observing. The third dimension includes the context, which has led the participants to hold the views that they may have concerning the use of the flipped class approach for engaged learning.

In conforming to the three dimensions of discourse, Fairclough maintained that each of the above dimensions requires distinct categories of analysis, such as “text analysis, discursive analysis and social analysis” (Janks, 1997, p. 329). Text analysis refers to looking for patterns to establish an opinion about discourses at work in society. Connected texts are also analysed to either sanction or prohibit the opinion. Discursive analysis refers to the construction of the text and the development of deducing the text. It is important to enquire about the place in addition to the time of the situational context since interpretation relies heavily on context (Janks, 1997, p. 329). These questions may then lead the researcher to interpret new texts for the transformation of societies and power relations. Shakir (2015, p. 2) maintains that “social analysis

deals with the relationship between the processes (production and interpretation) and the social conditioning”. Social analysis thus explores the concealed factors in a social relationship system and the unseen consequence which they may have. Accordingly, this critical study focused on achieving justice for powerless groups. For example, not all schools were fortunate to own computer centres. Some schools that have computer centres with necessary hardware and software may or may not utilize it using the flipped classroom approach.

The above transpires when teachers are not ICT trained and are placed in an ICT class to teach. In this sense, the teacher may be forced to teach a subject which he/she is unfamiliar with and learners, as a result, are disadvantaged. All the participants’ responses were recorded using a digital recorder device to ensure that they could be transcribed. The transcriptions were essential for the researcher to categorise the responses by presenting, analysing and interpreting the data in line with the objectives of the study. Moreover, analysing data using Fairclough’s three dimensions of discourse helped in developing the researcher’s perception from the participants’ standpoints. CDA was used to make meaning of the generated data and to help recognize dominance and imbalances which are portrayed by discourse (Mullet, 2018).

#### **1.4 VALUE OF THE STUDY**

The findings of this study were intended to contribute to the current and further research data on flipping the classroom for engaged learning. It is anticipated that this study would help various stakeholders of schools to understand how operative teaching and learning can transpire. This understanding may come through once learners are involved in the progression of learning. Learners are arguably able to acquire understanding whilst being engaged in self-exploratory learning. Engaged learning encourages active learning where learners are explorers and do not rely on the teacher as content providers or the ‘fountain of knowledge’.

All stakeholders within the school would benefit from the study since it involved getting learners to be engaged in and out of the classroom for effective learning. To begin with, learners would benefit by having their lessons tailored according to their learning styles. Teachers would benefit by having their learners engaged and by simply guiding them to achieve required goals. Similarly, parents would reap the benefits of taking pleasure in their children being active and independent explorers by not depending on their teachers for content. Congruently, the school would benefit by improving students' results and producing learners that are independent hard workers.

Notwithstanding the fact that since I am a CAT teacher, the findings in this study would also help me to determine the manner in which learners can be involved in the classroom for effective teaching and learning. Furthermore, by using PAR in this study, I would be capable to deliberate on my own instruction styles by customising my teaching methods to include all learners.

Mubuuke and Leibowitz (2013, p. 32) advocate for PAR in saying that "PAR results in both knowledge generation and immediate action, gives stakeholders authority to direct the research process, promotes team work and collaboration". Thus, data generation and analysis is a joint effort of the research team in terms of achieving the objectives of the study. In short, the study aids teachers, parents and the learners by suggesting various methods of improving engaged learning. The study also hopes to bridge the gap of the digital divide in most schools.

## 1.5 ETHICAL CONSIDERATIONS

Section 9(3) of the Bill of Rights asserts that individuals may not be victimised since each person's constitutional rights ought to be respected (Constitution of the Republic of South Africa, 1996). Through the research development, the rights of teachers, parents and learners were safeguarded and were not sacrificed. This study was ethically cleared by the University of KwaZulu Natal (UKZN) (Appendix B). Permission was granted by the KZN Department of Education to conduct research based on the selected school (Appendix A). Gatekeeper's permission was obtained from the school (Appendix C) that was used as the research context. In addition, potential participants were provided with a letter of informed consent (Appendix D) to partake in the study. This letter described details of the study, as well as gave the potential participants the choice of participating or removing themselves from the research at any point in the research. The participants were cognizant that if at any particular stage of the research they desired to withdraw they were free to do so.

Furthermore, since learners were minors (15 year old's) in the research, assent letters (Appendix E) were given to learners for their parents to sign to acknowledge that their children will be participating in the study for research purposes. It is important to note that confidentiality and anonymity was, in addition, guaranteed as pseudonyms were used to protect the identities of participants.

For the intention of concealing the participants' identities, learners were denoted in the study as Sandiso, Lifa, Olwethu, Karabo, Sinenhlanhla and Lucia. For teachers, the pseudonyms Mrs Moodley and Miss Khumalo were used respectively. The pseudonyms Mrs Dlamini and Mrs Ndlovu were used correspondingly to refer to parents.

## 1.6 LIMITATIONS OF THE STUDY

Moura (2017, p. 4) define limitations of the study as “any aspect that hinders a study and its findings”. Limitations are the restrictions which will eventually influence the attainment of data within the study. As the study was implemented, the researcher came across many hurdles during data generation. Not all schools and learners had access to basic technology to utilise for teaching and learning. As a result, it was difficult to give participants activities for data generation in a flipped classroom if they did not have proper internet access in or out of school. Therefore, findings cannot be generalised to include all schools since diverse schools function differently under different situations.

In pursuing to solve the above limitation, the researcher attempted to implement the ‘in-class flip’ approach, however, this was problematic due to the large class sizes in the chosen school. In-class flipped classroom are used for schools that do not have ample resources or cases in which learners do not have ample resources at home to access content to learn at home. The in-class flipped classroom is discussed in Chapter three of the study.

Another limitation is that participants and parents of participants did not want to partake in the study. Teachers that were also needed to participate in the study did not want to waste time in the study since they felt that valuable teaching and learning time would be wasted or they simply did not have the time to partake in the study. In the beginning, participants also felt uncomfortable with the researcher in the class and some did want to pull out of the study.

In addition to time being wasted, more time was needed to set up a flipped classroom. Accordingly, time for data generation was possibly not in line with the proposed time for data generation due to unavoidable circumstances. For example, teacher’s schedules were tight due to extra-curricular undertakings. The above are more or less some of the hindrances that the researcher faced during data generation.

## **1.7 OUTLINE OF THE STUDY**

In Chapter one, the introduction and background to the study have been provided explaining engaged learning whilst using the flipped classroom, the research problem of the study, as well as anticipated limitations.

Chapter two encompasses the theoretical framework of this study.

Chapter three details the literature review based on recent studies of flipping the classroom for engaged learning.

Chapter four specifies the design and methodology of this study.

Chapter five entails a presentation, analysis and interpretation of data related to flipping the classroom for engaged learning.

Chapter six portrays the findings, aspects of further research and the conclusions of the study.

Chapter seven reminds the reader of the initial problem of the study and responds to each of the key research questions. Moreover, proposed strategies are discussed in flipping the classroom for engaged learning. Contributions of the study with regards to theory, methodology and practice are also discussed.

## **1.8 CHAPTER SUMMARY**

To summarise, this chapter highlighted the background to the study and further detailed a need for the use of a flipped classroom pedagogy for engaged learning. The research problem also unfolded and presented the key sub-questions for the study, together with the objectives derived and the aim of the study. The rationale presented the purpose of the study since engaged learning is linked to the learning process under Educational Psychology. This chapter also indicated the theoretical framework as the foundation on which the issues of this study is established. The research design and methodology were described briefly. Lastly, the value of the study was indicated together with the ethical considerations of the study. The next chapter discusses the theoretical framework that underpins the study.

## **CHAPTER TWO**

### **THEORETICAL FRAMEWORK FOR CRITICALLY ANALYSING THE FLIPPED CLASSROOM FOR ENGAGED LEARNING**

#### **2.1 INTRODUCTION**

This study sought to critically analyse the flipped classroom for engaged learning. This chapter examines the theoretical framework that relates to the study, accompanied by the primary purpose of justifying why the desired theoretical framework was used. This was accomplished by considering the core notions of the theoretical framework. The operational concepts of the theoretical framework are enlightened and defined so that they are understood as crucial aspects on which this study was positioned. The theoretical framework is justified in sub-headings relating to its origin, basic assumptions and dimensions thereof. In addition, Chapter two reviews related literature to confer the theoretical framework of CT in terms of the relationship between the researcher and the researched, the role of the researcher, the criticism of CT, as well as relevance and applicability of CT within the study. The arguments for utilising CT are put forward concurrently with deliberations of why and how it fits within the objectives of the study. Consequently, the discussion of this chapter elucidates the relevance of the preferred theoretical framework in the study.

#### **2.2 OPERATIONAL CONCEPTS**

##### **2.2.1 Flipped classroom**

Arnold-Garza (2014, p. 7) define the flipped classroom as two significant factors which may be “moving the lecture outside of class, usually delivered through some electronic means, and moving the practical application assignments, formerly homework, into the classroom”. The former relates to an instructional strategy whereby content is delivered online through electronic means; the latter relates to activities done in the classroom whereby facilitators guide discussion to assist learners.

Several scholars have maintained that the number of teachers implementing the flipped approach to enhance engaged learning are increasing (Lo & Hew, 2017; Lo & Hew, 2018; Smallhorn, 2017; Talley & Scherer, 2013). As a result, this relates to the flipped classroom approach being functional for engaged learning within the context that was studied. According to scholars, the flipped classroom predominantly incorporates shifting traditional learning and teaching to enhance both the learning and teaching process (Cabi, 2018; Cronhjort, Filipsson & Weurlander, 2018; Lo & Hew, 2017; Schmidt, 2016; Talbert, 2018). It can be asserted that the flipped classroom approach makes use of innovative technology combined with active learning techniques to make teaching and learning a pleasurable practise. In addition, class time is increased for use of discussion since learners are able to absorb new content at home. For example, watching pre-recorded video lessons that are recorded by teachers themselves. With this in mind, the flipped classroom approach allows learners to become responsible to acquire knowledge on their own. For this reason, elaboration and discussion of lessons are done in the classroom whereby the teachers facilitate and guide learners towards reaching an understanding of what knowledge should have been gained.

Steen-Utheim and Foldnes (2018, p. 307) maintain that “the results [of the flipped classroom] indicate that the affective dimension of student engagement is particularly prominent when students reflect upon learning in the flipped classroom”. The flipped classroom approach can be argued to be the best approach for engaged learning since using technology in the classroom allows for learners to be more involved; as a result, they are active in the classroom.

Teaching with integrating technology in or out of the classroom context can develop learning by ensuring educational objectives are fulfilled for all learning styles (Boorang, Fard, Sharahi & Khodabandelou, 2018). By implementing the flipped classroom approach, learners can access resources online. Such resources prepare learners prior to class discussion so learners go into classes prepared provided they internalise content on their own. In other words, using the flipped approach for engaged learning can only be achieved if learners are active in the process of learning and are not

distracted amongst the entertainment aspect of flipped learning. Active learners engage in instructional tasks that they find challenging and motivating. Accordingly, teachers have to create instructional tasks that are challenging for learners to be motivated to learn.

### **2.2.2 Engaged learning**

Engaged learning is constructed in philosophies surrounded by active learning, whereby learners are responsible for individual learning that comes by intrinsically (Goss & Sonnemann, 2017). Learners do not rely on teachers as content providers, rather they see teachers as facilitators within the learning process. Learners take the onus on themselves to investigate and discover the curriculum on their own. Wideasani (2012, p.6) outline that “engaged [learners] do more than attend or perform academically; they also put forth effort, persist [and] self-regulate their behaviour toward goals”. Therefore, engaged learners are those that are always on task and go beyond the task that they are given. Furthermore, engaged learners are self-exploratory and are motivated in achieving their desired goals.

Engaging learners within the classroom require teachers to be well prepared and cater to all learners regardless of learning styles. This can be difficult to achieve if class sizes are large. Gagne’s nine step instructional model can assist teachers to support learners within or out of the classroom context. Khadjooi, Rostami and Ishaq (2011, p. 116) maintain “Gagne's nine-step model is an excellent way to ensure an effective and systematic learning program as it gives structure to the lesson plans”. Each step directs teachers in structuring their lessons to prepare learners for engagement.

Below is Gagne's instructional model (Figure 2.1) which aims towards ensuring mastery of learning outcomes:

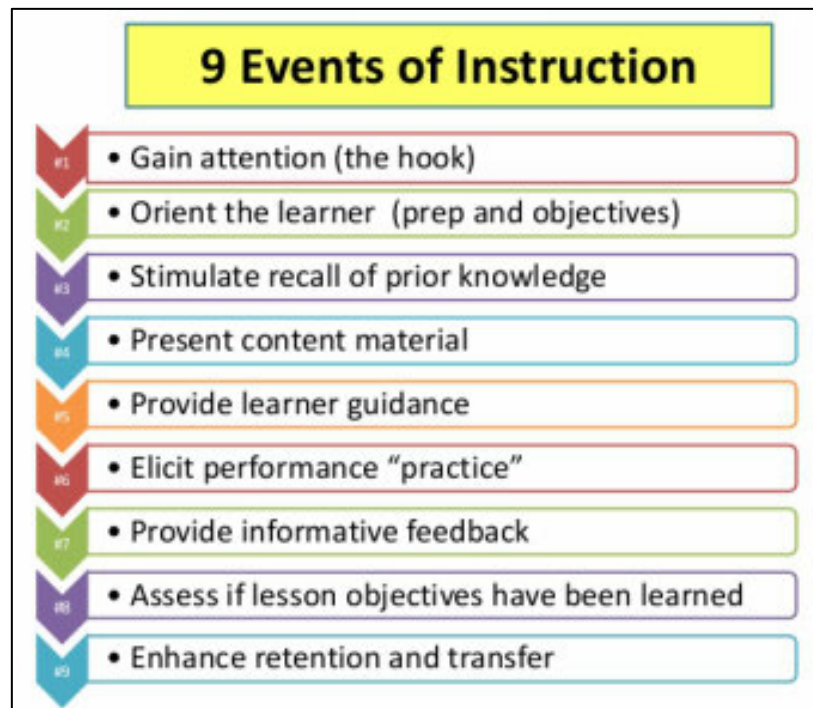


Figure 2.1: Gagne's nine events of instruction <sup>1</sup>

The above model should be implemented in the teaching and learning context by the teacher. Each step of the model is explained below: First, to gain learners' attention, teachers play a vital role in stimulating learners by providing them with challenging tasks. In addition, learners should be motivated to learn. For example, this can be achieved by using thought-provoking questions to stimulate learners. Second, before the lesson can take place, teachers should inform learners about objectives. This initiates anticipation and helps to encourage the learner. It also cognitively prepares learners to systematize their thoughts surrounding the lesson topic. Third, stimulate recall of prior knowledge. Teachers should check learners' prior knowledge and help them to link prior knowledge with new knowledge. For example, teachers can ask learners about their understanding around the content. Fourth, content should be presented using an assortment of media. In this way, learners of different learning styles are accommodated for. Moreover, a variety of instructional approaches can be used to stimulate understanding such as questioning, discussion and explanation.

<sup>1</sup> Image adapted from: <https://lindsaysnow.weebly.com/weekly-journal-entries/archives/11-2015/4>

Fifth, proper guidance needs to be given by the teacher regarding how to go about achieving the task, for example, by assisting learners with a case study to relate current knowledge to a real-life situation.

Sixth, develop tests into teaching is a good approach to enhance the learning process. This can be done by giving learners practice tests to ensure knowledge gain. Seventh, teachers should look at the results of such tests to provide feedback to learners based on their performance. Reinforcement of concepts assist learners in understanding content from discussions taken place between the teacher and learners. Feedback from teachers reassures learners that knowledge is understood. Eighth, assess if lesson objectives have been learned. Formal tests should be given to test learners' knowledge as well as for teachers to evaluate knowledge gained by learners. Tests given as informal assessments help both the teacher and the learners. Learners test knowledge gained and teachers test the amount of knowledge gained by learners. Ninth, constant repetition and revision needs to be done to ensure content is learned and reinforced so that it can be remembered. For example, this can be achieved by teachers giving learners spot-tests to go back to what was learned during previous lessons. This stimulates recall of knowledge.

Gagne's nine step instructional model is useful in assisting learners for engaged learning either in or out of the classroom. The model can also be implemented by using the flipped classroom. This can be done by teachers posting videos to assist learners in assimilating new content. Also, links to media such as other videos, images, graphs or podcasts can additionally assist learners to gain understanding.

### **2.2.3 Critical analysis**

To critically analyse flipping the classroom for engaged learning, one has to go back to the means of which learners are taught. The standardisation of knowledge transfer also needs to be questioned. By referring to the background of the study (section 1.2), South African education is still troubled by the effects of apartheid. Furthermore, power dynamics still exist in the education system, thus, many people are disadvantaged. Learners are considered to be powerless since they are not given the opportunity to explore learning area content syllabus themselves. Precisely, this is due to the teacher being the content provider. In a traditional classroom, teachers stand in front of learners as the one whom holds all the power, whilst learners sit and wait patiently to internalise what the teacher imparts. Hence, class time is utilised for explanation and discussion of new content. Teachers teach and thereafter give learners class tests or homework based on what was taught in class. Such tests or homework restrict learners from only learning what they were taught by the teacher. This technique therefore does not liberate learners to go beyond the curriculum. It views learners as oppressed due to the power dynamics that hangs over them consistently in the learning process. As much as it may only seem that learners are powerless, teachers themselves are also oppressed in the South African education system.

Post-apartheid South African education arguably perpetuates the apartheid system prior to democracy. CAPS are allocated for every learning area as a guideline to what should be taught in the classroom. A work schedule within the policy specifies what should be taught in each term during the year. Teachers are therefore restricted to teaching according to the work schedule so they can finish content syllabus. If the syllabus is not completed, then learners are disadvantaged. Moreover, teachers are overloaded with content; as a result, the curriculum has to be accelerated (Nkosi, 2018). Consequently, teachers are under pressure to complete the transferral of content instead of ensuring that learners comprehend what is taught. Therefore, the education system oppresses both the teacher and the learner.

## 2.3 THEORETICAL FRAMEWORK

Adom, Agyem, and Hussein (2018, p. 438) define a theoretical framework as “a blueprint that is often ‘borrowed’ by the researcher to build his/her own house or research inquiry”. Thus, the theoretical framework is a guided path that grounds the foundation of the study in terms of its credibility. The theoretical framework associates the researcher to current information that exists (Ocholla & Le Roux, 2011). Ocholla and Le Roux (2011, p. 1) maintain the theoretical framework “serves as the lens that a researcher uses to examine a particular aspect of his or her subject field”. Bearing this in mind, the theoretical framework helps the researcher to analyse the flipped classroom for engaged learning through a critical lens. Chis, Moldovan, Murphy, Pathak and Muntean (2018, p. 235) suggest that “the flipped classroom pedagogy draws on various learning theories”. Nevertheless, in this study, CT is used as the learning theory for the underpinning of the study.

### 2.3.1 Critical Theory

Crossman (2019, p. 1) maintain CT is “oriented toward critiquing and changing society as a whole”. The idea of incorporating CT into the study is for the sole purpose of critically analysing whether flipped learning contributes to engaged learning. For this reason, the study fits into to CT paradigm. According to Cohen, Manion and Morrison (2018, p. 80) CT “is explicitly prescriptive and normative, entailing a view of what behaviour in a social democracy should entail”. Thus, the main aim of CT is to comprehend a society that is based on democracy and equality for all individuals. Asghar (2013, p. 3123) puts forward that CT “challenges the status quo and strives for a balanced and democratic society”. From this assertion, it becomes clear that by using CT as the foundation of the study, it would help to liberate the subordinate group which are the teachers and learners. Crossman (2019, p. 1) insists “critical theories aim to dig beneath the surface of social life [to] uncover the assumptions that keep us from understanding of how the world works”. Consequently, CT maintains its

approach is based on the conclusion that power among certain groups is an issue and all groups should be liberated (Fuchs, 2014).

CT provides the descriptive foundation for societal review pointed at diminishing power in addition to promoting liberation. It can be agreed that CT will help the researcher to bridge the gap that is paramount in engaged learning. The gap relates to the digital divide, as well as support that is given to teachers and learners within the teaching and learning context. The expectation is that learners should be engaged in the classroom. However, this brings us to question what kind of support is given to learners in and out of the classroom. Learning can take place anywhere, although engagement has to be evident.

### **2.3.1.1**      *Origin*

The origin of CT is related with the Frankfurt Institute for Social Research, which originated in 1923 (Mocnik, 2016). Affiliates of the institute are largely represented as the Frankfurt School. Those that attended the institute consisted of a group of scholars who were synonymous with the establishment of CT. The Frankfurt scholars consisted of the work of Theodor W. Adorno, Max Horkheimer, Herbert Marcuse and Erich Fromm (Cole, 2019). These scholars were interested in liberating humans of enslavement, manipulation and to construct the world in which we exist to appease the needs of people in society.

Bohman (2016, p. 5) explains the origin of CT as it “designates several generations of German philosophers and social theorists in the Western European Marxist tradition known as the Frankfurt school”. CT was first developed by the Frankfurt School (Higgs & Smith, 2007). CT influences human action in order to exceed the circumstances that hinder citizens and their social being, hence thought ought to respond to new problems that may arise for liberation (Bronner, 2017). The scholars of the Frankfurt school maintained that the only way which they could fix problems in society was by introducing the CT. In agreeing with the Frankfurt scholars, a theory can be critical to the degree in which it pursues individual liberation from factors that subjugate them (Bohman, 2016; Horkheimer, 1982; Harvey, 2012).

### **2.3.1.2**      *Basic assumptions*

#### **2.3.1.2.1**    **The oppressed need to be empowered**

It is assumed that empowerment transpires when one takes control of their own life. Luttrell, Cavalieri and Almeida (2018, p. 192) agree that “empowerment as a multi-dimensional social process helps people gain control over their own lives”. For the oppressed to free themselves from the shackles of power enforced by others, they need to be liberated. As a result, that can only be achieved when they find or are given the freedom to do so. CT promises emancipation for the oppressed. Steinberg and Kincheloe (2010, p. 77) affirm CT is “concerned with transforming relations of power which are oppressive and which lead to the oppression of people”. Thus, empowerment is done to ensure societal transformation since this is the main goal of CT. In this study, the lens through which the researcher looks through is to empower learners for engaged learning in and out of the classroom.

In the traditional and standardised view of education, the teacher is the content provider as it is assumed that they are the ones that know everything. It is therefore understood as the teacher whom embraces power and learners remain as the oppressed since teachers are limiting the significant abilities of learners. How are learners to be active if they are suppressed in the classroom? Learners are not told that they can explore other than what is taught to them by their teachers. In this sense, it is seen that teachers are dominant and disperse knowledge while learners are subordinate and wait for new knowledge. Freire (1970) identifies this as the ‘banking model of education’ since it can be compared to adding capital into a depository. This can be viewed as a result of an overbearing society. The education system in South Africa can be assumed to be the fault of such a society.

Money is the driving force of power in our society which determines the privileged and the unprivileged. Unfortunately, this is how our society functions. Economic status determines which category of schooling we fall under. Privatised education goes to parents of learners who can afford this type of schooling since there are no shortages

of resources and extra curricula activities are given prominence. Public school education is similar to private education taking into regard other factors which may be different. Such factors may be affordability, curriculum, extra curricula activities, and religious and gender preferences (Koetser, 2017). There is no appropriate school between public and private.

Each type of schooling has its advantages and disadvantages that a parent would have to think about before enrolling their child. Nonetheless, those that do not 'qualify' for private education are seen as the powerless since economic status is the issue. Beside learners, teachers are also oppressed by the overloaded school curriculum and minimal time frame given to complete content and assessments. It is the education system that gives teachers the power to control the manner in which learners are taught and the content that they should be taught.

Oppression may come in various forms. Examples of forms of oppression that may be analysed are distributive, procedural, retributive and cultural imperialism. Maiese (2013, p. 1) maintains, "distributive justice is concerned with the fair allocation of resources among members [in the] community." Hence, there remains no equal distribution of teaching and learning resources between private and public schools. Moreover, the standard of living amongst people entirely depends on the socioeconomic status of people. Therefore, not all people have a fair share in society. While some learners may be able to access flipped content at home, others cannot. For teachers, distributive injustice can be seen when teachers are expected to employ the flipped class approach without having any skills of using technology as an instructional tool. This also negatively affects the learners since teachers may be unable to effectively implement the flipped class approach, as a result, learners may not be engaged in learning.

Redmond (2016, p. 36) asserts that procedural injustice "refers to perceived unfairness with respect to the procedures used to determine outcome distributions". Fairness is not constant in various circumstances. It is evident that those with power

are treated with more dignity and respect than others. For example, teachers in public schools have to make do with resources that they already have since capital in schools are limited. However, they may be told to employ a variety of approaches for engaged learning. While teachers may be oppressed by procedural injustice, they may also exert retributive injustice to learners.

Maiese (2013, p. 4) maintains “retributive injustice is concerned with the behaviour and attitudes of people”. While teachers may suffer this injustice by the South African education system to abide by the specified curriculum, teachers themselves exert this injustice amongst learners within the classroom. Oppression is an ongoing cycle; consequently, the oppressed seem to conform to oppressive behaviour. Cultural imperialism can be described as an element of domination in which the oppressed accepts dominance as a norm (Sparks, 2012). Learners accept teachers as the content providers and restrict themselves from questioning and going beyond what they are taught. Questioning is important for the oppressed to be emancipated in a society that is driven by power.

#### **2.3.1.2.2 Questioning is important to achieve emancipation**

The researcher had to critique the manner in which learners learn and in which they are taught. Questioning challenges oppression, domination and subordination with the aim of liberating the oppressed (Aliakbari & Faraji, 2011). If learners are to remain subservient in class, they will not expand their understanding. As a result, engagement will be unsuccessful. In support of CT, Mason (2016, p. 52) maintains that CT “offers an activist positioning to the study through its emphasis on disassembling oppressive circumstances and the pursuit of social justice and liberation”. Thus, it is assumed that by implementing the flipped approach, learners will stand capable of expressing their thoughts and views through the questions that teachers ask them in the classroom (Hall, 2016; House, 2017). Asking questions thus liberates learners from accepting everything as true. Fui, Khin and Ying (2011, p. 124) articulate that “critical theory provides the descriptive and normative bases for social inquiry aimed at decreasing

domination and increasing freedom”. Hence, learners should be critical thinkers. This is impossible if learners are not asked questions by teachers. Critical thinking allows learners to challenge assumptions and inequalities that exist. Teachers should accordingly urge learners to challenge and question current views.

#### **2.3.1.2.3 Critique of exploitation and domination**

The main purpose of CT is to challenge domination. Henceforth, critical theorists aim to help conquer the social constructs through which people are oppressed (Pahnke, 2020). When employing the flipped approach for engaged learning, teachers need to teach learners skills of how to become critical thinkers. This can be done by providing opportunities for inquiry within the learning context. Certain social groups like private schools are privileged over public schools and, although the reasons for this privilege varies, the oppression replicates itself when the subordinate conforms to domination, thereby accepting it as natural (Barker-Ruchti, 2012). Therefore, it is agreed that CT gives the oppressed an opportunity to emancipate themselves by using their voice to challenge domination. Fuchs (2014, p. 7) further supports that “critical theory wants to show that a good life for all is possible and that domination and exploitation alienate humans from achieving such a society”. To diminish oppression, CT aims to produce knowledge for liberal ways of viewing humankind.

#### **2.3.1.2.4 Strives for democracy to improve society**

South Africa has come a long way with a history of oppression. The freedom brought about by democracy which began to emancipate the powerless. It gave people a voice and an opportunity to voice their opinion. CT motivates for democracy in our society. According to Aliakbari and Faraji (2011, p. 78) the main goal of CT “is to emancipate and educate all people regardless of their gender, class, race”. In doing so, this provides equality for all in society and not just certain groups. Knowledge gives people power to aspire for liberation. By employing the flipped classroom by means of a

pedagogy for engaged learning, learners are given an opportunity to expand their horizons on their own with assistance from the teacher.

Botman (2016, p. 49) claims that “pedagogy is of major interest for Freire by which he seeks to change the structure of an oppressive society”. CT thus strives to improve democracy by liberating all people. In other words, democracy should be understood as a plea for the alternative of the privileged that at present embraces influence (Grollios, 2017). Power dynamics include those that have an influence on learners such as the teachers since teachers themselves are influenced by the standardised education introduced prior to democracy. Other power dynamics may be the education system that specifies the curriculum to restrict learners from exploration.

As much as scholars may assert that our country has transitioned from apartheid and is now a democratic one, the researcher differs. If this was accurate, one would not need to speak about liberation for the oppressed today. It may seem that South Africa is a liberated country due to the parliament elected in 1994, however, inequalities amongst people still exist (Gumede, 2019; Roets, 2015; Mattes, 2002). From these inequalities, our country still suffers from a past that has not fully repaired itself. As a result, our past affects even the standard of our education in which inequalities exist. These inequalities affect engaged learning in the classroom.

### 2.3.1.3 *Dimensions of critical theory*

Mason (2016, p.56) asserts that CT “takes an activist stance in its aim to illuminate restrictive and alienating conditions, and promote resistance and struggle to rectify oppressive conditions”. As a result, CT offers the oppressed critical thinking skills as a way to counter such oppressive circumstances. CT is governed by scholars: Karl Marx, Max Horkheimer, Theodor W. Adorno and Herbert Marcuse. These scholars narrowed CT into dimensions that are specific for empowerment in each aspect such as epistemology, ontology and praxeology (Fuchs, 2015). CT entails three dimensions that are specific for empowerment as seen below (Figure 2.2):

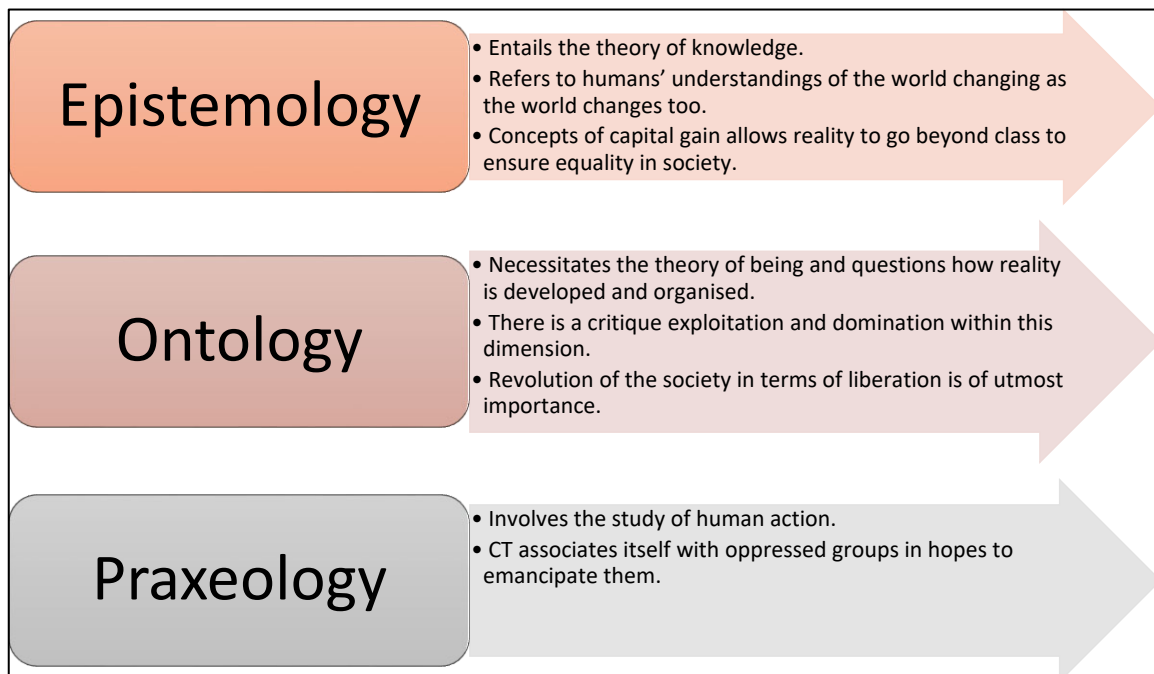


Figure 2.2: *Dimensions of Critical Theory*

The above dimensions allow CT to align itself in discovering suitable approaches to empower powerless groups in the study. Epistemology entails the theory of knowledge. In addition, it “defines what amounts as acceptable ways of knowing, and affecting the relationships between the researcher and the communities who are researched” (Cohen, Manion & Morrison, 2018, p. 82). Terrenas (2015, p. 2) assert that “epistemology is supported by the claims of a neutral, non-normative, and value-free production of knowledge”. Moreover, the epistemology dimension also concerns

individuals considerations of the world changing as the world changes too. In addition, notions of capital expansion permits realism to go further than class to ensure fairness in society (Venter, 2017). The second dimension, ontology can be understood as “a discussion about the types of entities that compose the social world and the type of being that distinguishes social reality from other types of realities” (Renault, 2016, p. 17). Hence, revolution of the society in terms of liberation is of utmost importance within the ontology dimension. Cohen, Manion and Morrison (2018, p. 82) further support that “politics and interests shape multiple beliefs and values, as these beliefs and values are socially constructed, privileging some views of reality and under-representing others”. Consequently, in dominant societies, domination results from stereotypes that presents reality in a false way. Therefore, it can be understood that ontology allows the researcher to understand relations that exist and how such relations are similar or different. Thus, it is easy to identify social structures that differentiate people in society.

The last dimension, praxeology, strives for liberation in society after evaluating disparities. It involves the study of human action (Fuchs, 2015; Coghlan & Brydon-Miller, 2014).It can be assumed that praxeology places emphasis on change for the better after determining differences that exist and dissimilarities in relations. An example of this change can be seen through flipping the classroom for engaged learning, whereby this approach seeks to redress the imbalances that are seen in a traditional classroom between the teacher and learners.

CT associates itself with oppressed groups in the hope to emancipate them. Ferreira (2018, p. 1) supports that CT “sets out to critique repressive social practices and institutions in today’s world and advance emancipation by supporting ideas and practices that meet the universalist principles of justice”. Fuchs (2015, p. 4) further maintains “its philosophy is a reflection of realities, potentials, and limits of struggles”. The above dimensions allow CT to align itself in finding suitable strategies to empower powerless groups. I support the above dimensions in recognising that CT puts forward the dimension of epistemology which describes existence of capitalism which differentiates class in society such as public and private schools. This therefore segregates the dominant and the subordinate groups from each other.

#### **2.3.1.4      *Critical theory and epistemology***

Tweed (2019, p. 2) defines epistemology as “the study of philosophical problems underlying theories of knowledge”. Hence, CT exists as a theory of knowledge that pursues liberation amongst the powerless. It gives people a platform that is expressive for collective investigation meant to diminish dominance and increase emancipation (Cheok, Wei Ying & Wong, 2014). Epistemology falls under as one of the dimensions of CT. Bohman (2016, p. 1) differs by arguing that “epistemology is simply the study or theory of knowledge as such. CT, by contrast, is a methodological approach to the study and criticism of society and culture, especially on the basis of literature and other arts”. To relate both terms, CT uses epistemology to study the social world. Fuchs (2015, p. 2) elaborates “concepts that describe the existence of capitalism are dialectical because they go beyond the reality of class societies and point toward a transcendental reality beyond class”. From a Marxist point of view, classes are not identified in society to bring about equality amongst all people. From this, it is understood that classes in society signify differences amongst people that denote inequality amongst certain groups.

Such categorisations arise from earnings which places people here on in classes described as upper class, middle class and working class. This means that classes in society are identified to bring about inequality since it places people in groups of social status. As a result, class perpetuates inequality. This can be applied to viewing public and private schools separately. From this, it can be deduced that instructional strategies used for engagement differs due to class. Marxism differs in that it is maintained that class is not identified as people are all one.

### **2.3.1.5**      *Critical theory and academic fields*

#### **2.3.1.5.1**      **Marxism**

Marxism is propositioned by Karl Marx as an economic system which does not identify society existing in classes. In reference to Marxism, the government influences all resources to ensure fairness amongst people in society (Obo & Coker, 2014). Theories such as Marxism have inspired debates over the methods, nature and goals of CT (Ferreira, 2018). Liberation from oppression is a goal of CT. Capitalism thus means that wealth should be equally disseminated across the whole society (Devetak, George & Weber, 2012). Postone (2005, p.69) maintains that “Marx’s critical theory of capitalism is centrally concerned with the imperatives and constraints that underlie the structural changes of the modern world.” As a result, all people would live among equal status and none would be marginalised due to deprivation. Accordingly, it is imperative to determine that CT endeavours to offer a functional social theory for the current time due to its theoretical assumptions (Kerner, 2018). Historical revolutions of society point to the prominence of Marx’s critical analysis of capitalism (Paolucci, 2011).

To summarise, it is said that Marxism is an idealistic theory since it assumes that all entities either wealthy or deprived choose to work and will do so to get what they need. Marxism does not believe in corrupt behaviour for people to achieve their needs and goals. In contrast, Woods (2013, p. 1) denotes, “Capitalism contains within itself the seeds of its own destruction”. Accordingly, it can be said that capitalism has resulted in overproduction and high levels of debt. Thus the youth are the ones suffering from unemployment as no support is given from the government (Woods, 2013). I agree with Woods (2013) since South Africa has a history of separation due to race. Research indicates that racism still exists today although many laws against racism have come into effect worldwide and nationwide (Gaskill, 2005; Ballman, 2011; Madia, 2018; Gill, Baker & Thomas, 2018; Africa News Agency, 2018).

### 2.3.1.5.2 Postmodernism

Postmodernism holds that meanings are socially constructed (James, 2009). Elaati (2016, p. 1) maintains that postmodernism “came into existence to the modern period combined with industrialisation, market-oriented capitalist economies, new social classes, [and] democracy”. As a result, postmodernism offers a voice to the imbalance of the current society that is segregated concerning those with power and without it. For this reason, postmodernism accepts the segregation of society due to its past since that it the only way of existence. Sheeba (2017, p. 184) puts forwards the main characteristics of postmodernism:

- Ambiguity is a common practice in postmodern literature;
- Truth is considered as a matter of perspective and not universal;
- Globalization and multiculturalism; and,
- Society is moulded by media.

The above characteristics all point towards a society that is vastly segregated from a “structural-functional” standpoint and controlled by a capitalist economy (Sheeba, 2017). Moreover, Farhangpour and Abdolsalami (2016, p. 4) maintain, “Postmodernism has no explicit and indicated direction and is moving everywhere”. This further reiterates that postmodernism can be seen in all facets of life and is now rapidly changing due to technology.

Mease (2016, p. 1) asserts, “Postmodern approaches are indicated by a prominence on ruptures, disjunctions, tensions, instabilities, and other inconsistencies as a part of everyday organizational life”. As a result, postmodernism resists dominant, oppressive cultures, and wants power shifted to groups of people struggling for power in their own lives (Bertens, 2019). Such dominant and oppressive cultures stem from the history of South Africa, which revolves around apartheid. Apartheid had initiated segregation in society which, as a result, gave certain groups power. Today, power is given to teachers whom stand in front of learners, which restricts them from going beyond what

is supposed to be taught. Moreover, the standardisation of teaching is oppressive since learners are seated in rows instead of groups which should allow collaboration amongst learners. Such standardised learning is referred to as passive learning. Thus, the school context cannot be postmodern if such imbalance still exists. In contrast, the flipped classroom may allow for such collaboration for engaged learning instead of passive learning.

#### **2.3.1.5.3 Communication**

The manner in which communication occurs in today's world has reformed from the past. It has become digitised by using smart phones that are constantly connected to the internet. Fuchs (2015, p. 23) relates in saying that “[CT] of communication offers a vital set of new insights on how communication operates in the age of information, digital media and social media”. In addition, communication regarding digital technology assists towards achieving a transformative society that links all people regardless of differences. Smartphones has since allowed us to become united, although it distances us from face to face interaction.

The flipped classroom perpetuates distance from face to face interaction since it requires teachers to pre-record lessons which learners watch out of the school context. As much as the flipped classroom approach may assist in engaging learners, there is also a fear that people may be too engrossed in the digital world and detach from the real world (Drago, 2015).

#### **2.3.1.5.4 Education**

CT in education relates to enquiring about the educational system and how it can best offer education to all people regardless of differences (Frank, 2018). CT therefore analyses how best education can be delivered for success. For instance, this can be addressed by flipping the classroom for engaged learning. Hence, all learning styles would be catered for by using multimedia to teach and learn.

CT in education proposes opportunities for disadvantaged members of society. For example, in the public sector of schooling, funding is provided for schools to purchase resources for learners, such as stationary and school uniform. However, it does not necessarily indicate that these schools would be of equal status to private sector schooling. Such funding that is given to under-resourced schools will not be sufficient to purchase resources, for example, computers and other learning and teaching resources. CT is important for education reform to overcome the hindrances of the social world (Kellner, 1990). For such challenges to be addressed, education needs to be critical.

Critical education promotes a space where people can deliberate openly and implement the approaches in search of consensus (Fleming, 2012). Education is the driving force in society for empowerment and liberation; therefore, it would be wrong for certain individuals to have an advantage over others. CT aims for the education system to be globalized for society to be successful as a whole.

#### **2.3.1.6      *Critical theory and reality***

Kawulich (2012, p. 8) uphold that “post-positivists concur that reality does exist but maintain that it can be known only imperfectly because of the researcher’s human restrictions”. Accordingly, critical theorists embrace that there is an existing reality identified by means of naive realism. It is the researcher’s responsibility within the study is to regulate this reality through employing the flipped approach for engaged learning. For this reason, CT aims to understand the physical world. Such material objects may divulge power amongst groups in society.

### **2.3.1.7**      *Critical theory and truth*

Truth releases the oppressed from oppression. Once this is done, liberation from oppression may supersede. Mocnik (2016, p. 10) upholds that “critical theory allows for the existence of multiple truths and establishing relations among strangers”. Hence, CT does not search for the truth but, rather, tries to open up the future and locate potentialities for improvement in the present. This can be related to the use of smartphones in society. Relations are formed amongst strangers in using social media. Social media connects people from around the world regardless of differences and their background. The flipped class approach links the physical class in a virtual manner in the hopes of engaged learning whilst using various instructional approaches online.

### **2.3.1.8**      *Critical theory and power*

Seiler (2008, p. 1) advocates “critical theory teaches that knowledge is power. This means that understanding the ways one is oppressed enables one to take action”. Accordingly, CT does not only criticise social life but also attempts to emphasise on understanding empowerment of entities or groups. Such entities referred to in the study are teachers and learners. Teachers are bound by the specified curriculum and learners have to conform to the manner in which content is transferred. Critical theorists endeavour to uncover the hindrances that restrain entities to make their own decisions (Steinberg & Kincheloe, 2010). By doing this, freedom from power can be achieved. Consequently, making one’s own decisions results in entities being liberated.

### **2.3.1.9**      *Contemporary views on critical theory*

CT offers admirable tools that not only can show us our world and ourselves beyond innovative and valuable lenses but also can support our capacity to think rationally and artistically (Tyson, 2006). This type of thinking that CT empowers one with allows one to view the world using a critical lens, therefore merely not accepting everything as truth. CT can be appreciated today in many feminist theories (Cole, 2019; Crossman, 2018). Such feminist theories include gender, critical race theory and queer theory.

Turner and Maschi (2015, p.152) elucidate feminism “stresses that gender must be considered when examining the effects of oppression and domination in our society”. This ensures professional and educational prospects for women that are equivalent to those for men. Other forms of CT are associated toward colonialism, sexism and racism. Traditional gender roles give men the liberty of superiority as opposed to women. Such roles marginalise women from decision-making positions and give men the upper hand and power to make such decisions (Tyson, 2006).

In today’s modern society, women are argued to be equal to men in the household or at work. This is due to the anti-discriminatory laws that govern equality (Tyson, 2006). Section 9 of the Bill of Rights (2017, p. 5) outlines, “Everyone is equal before the law and has the right to equal protection of the law”. Accordingly, this alludes towards access and distribution that is of equal status amongst women and men, as well as respecting them equally.

Delgado, Stefancic and Harris (2012, p. 1) define Critical Race Theory (CRT) as “a movement of scholars interested in studying and transforming the relationship among race and power”. CRT contends that disregarding racial difference sustains and propagates the status quo with its intensely established inequalities to racial subgroups. While CRT may be categorised, queer theory under feminist theories refers to sexual identity of women that is uncategorised (Gedro & Mizzi, 2014). Queer theory includes those that do not conform to the gender roles defined by society. As a

result, such entities may be shunned by society. For this reason, CT seeks to empower such individuals whom seek to advocate for feminism.

## **2.4 THE ROLE OF THE RESEARCHER**

Abend (2008, p. 174) articulates that “theories are formulated to explain, predict, and understand phenomena and, in many cases, to challenge and extend existing knowledge”. Thus, theories allow researchers to look through various lenses for analysing or critiquing various issues to administer their inquiry after the data generation process.

Creswell and Creswell (2018, p. 322) state that “the role of the researcher as the main data collection instrument entails the identification of personal values, assumptions and biases at the outset of the study”. Researchers in the critical paradigm discover individual actions within relationships of subordination and power that personify the domain in which we live (Markula & Silk, 2011). Accordingly, Barker-Ruchti (2012) and Karnieli-Miller, Strier and Pessach (2009, p. 280) maintain that “the researcher is the philosopher of the study, the data collector, analyzer of the participants’ stories, and publisher”. As a result, the above is not possible if there are no participants. Participants are the key sources of data. Sutton and Austin (2015, p. 227) imply that “the role of the researcher in qualitative research is to attempt to access the feelings and thoughts of participants”. To do so, the researcher plays an insider role to participate with participants. The researcher should ask questions in a conversational style using probes and prompts in an effort to gain such feelings in addition to thoughts from participants.

A personal journal should be kept by researchers to document field notes and researchers own thoughts and feelings through the whole process of data generation (Aluwihare-Samaranayake, 2012). Sutton and Austin (2015, p. 226) maintain “field notes allow the researcher to comment upon impressions, environmental contexts, behaviours, and nonverbal cues that may not be adequately [obtained] through the audio-recording”. This will also help the researcher to record data that may not necessarily be available during conversations or observation.

## **2.5 RELATIONSHIP BETWEEN THE RESEARCHER AND THE RESEARCHED**

Kawulich (2012, p. 12) outlines that “the relationship between the researcher and the researched is not based on a power hierarchy as it may be in the interpretative paradigm, but involves a transformation and emancipation of both participant and researcher”. Although the differences between the researcher and the researched are apparent, an attempt has to be made to bring about equality within the research process. Aluwihare-Samaranayake (2012, p. 72) indicates that “in qualitative research the relationship between the researcher and the participant is shaped by the researcher’s personal characteristics such as race, class, age, and gender”. It can be asserted that the familiarity between the researcher and the researched will, in time, be amenable and sincere by means of continuous contact. However, when investigating information about subtle matters in participant’s lives, it requires the authority of the researcher’s standpoint (Raheim, Magnussen, Sekse, Lunde, Jacobsen & Blystad, 2016). For this reason, insights of the researcher and the researched in the study may accordingly not always be in cohesion. During the greater part of the duration of data generation, the researchers possess expert knowledge within the research topic since they are the principal researchers. Thus, they may seem ‘superior’ to the researched and this may result in the researched being vulnerable as co-researchers. This may result in the researched being resistant in the data generation process.

Karnieli-Miller, Strier and Pessach (2009, p. 279) defend that “the unique contribution of participants and researchers to a project makes them both inseparable parts of the final creation”. Therefore, researchers and co-researchers both contribute and reflect in constructing meaning and liberation. For this reason, neither participants nor researchers can work in isolation; instead, they need to work in collaboration with each other.

## 2.6 CRITICISM OF CRITICAL THEORY

Given the long history of CT and its relevance in society, CT has been subjected to a wide variety of criticism. CT is characterised as being anti-scientific for posing philosophical questions about the nature of types of knowledge (Liccione, 2018). As a result, CT is related rightly with individuals who decline the description of sociology in natural scientific expressions by reference to its capability to evaluate societal truths and its ability to develop common by-laws of social life. Cohen, Manion and Morrison (2018, p. 83) implies that CT “should be examined and perhaps tested empirically” since CT “claims to be empowering; [hence it] is a testable proposition”. However, it is claimed that the testing of this theory is a major task (Cohen, Manion & Morrison, 2018).

Venter (2017, p. 1) explains, “Marx always maintained that the Communist International did not instigate any working class action. Instead, the workers supposedly acted on their own initiative”. As a result, the mass of the working class has been favourably incorporated into the international capitalist system. Critiquing CT for excessive rationalism can be expressed by:

The early Frankfurt School and Habermas viewed rationality as a historical process whose unity was taken as a precondition for social criticism, later critical philosophies, influenced mainly by post-modernity, privileged a rather more fragmented notion of rationality manifested by social institutions (Corradetti, 2008, p. 2).

Accordingly, from this perspective, all efforts to clarify societal life in terms of outstanding storylines are deceptive all the more so in the modest form intended by CT.

## 2.7 RELEVANCE AND APPLICABILITY

CT designates a philosophy that focuses on being critical of the dominant interpretation of society (Thompson, 2017). As a result, the main aim of CT is to avoid favouring the beliefs that might cater only for the dominant group. CT differs from other theoretical approaches since it pursues praxis as the predominant objective which combines theory and action (Stuart, 2020). Furthermore, CT is applicable to this study since it permits the researcher to question the education system and how it can improve regardless of any barriers or limitations in education. Additionally, it gives one an understanding of the different critical viewpoints of the deprived members in the society. Therefore, CT may promote an idea that education is the key tool to social transformation (Chakraborty, Chakraborty, Dahiya & Timajo, 2018).

Kapur (2019, p. 1) asserts, "Through the acquisition of education, individuals are able [to] develop the competencies and proficiency that is required to acquire empowerment opportunities". Thus, education plays an enormous role in eradicating poverty. ICTs are a new and innovative way of upgrading the learning environment for engaged learning. Chakraborty et al. (2018, p. 2) uphold that "the use of ICT brings about a powerful learning environment which transforms the teaching and learning process to allow students to deal with knowledge in an active, self-directed and constructive way". In addition to ICT in education, the flipped classroom can be identified as one of the methods by which ICT can be used in the classroom.

Since this study requires critically analysing the flipped classroom for engaged learning, CT is regarded relevant towards effecting change. Nel (2018, p. 1) defend CT as "it explains what is wrong with the current social reality and provides both clear norms for criticism and achievable practical goals for social transformation". Therefore, CT can be applied to achieve a culture that is founded on fairness for all stakeholders within the context of the school to analyse the flipped classroom approach in addition to its effectiveness for engaged learning. CT is relevant and applicable to the study as it will be able to "incorporate an emancipatory agenda applicable to one of the most unequal societies in the world" (Callaghan, 2016, p. 60). The South African context

can be related to the latter due to its strong history of apartheid and inequality. The previous paragraph indicated the need for ICT in education, however, as a result of the country's history, some learners may encounter issues with regards to access to technology. Learners that attend non-fee paying schools or schools with lower fee structures may have a problem accessing technological devices to keep up with ICT in education. In addition, teachers in this context, may struggle to create content that stimulates learners through the use of the flipped classroom. The lack of resources in schools may hinder teachers to adapt their lessons for flipping the classroom for engaged learning (Hyndman, 2018). The philosophy around CT in education ensures that every learner gets a good education, accordingly, lack of access can hinder equal education for all. Moreover, CT similarly identifies that learners enter the school premises with dissimilar social backgrounds and centres on how to help every learner accomplish their potential (Wexler, 2016; Nel, 2018).

The foremost mission of critical research is social critique, in which the constricting circumstances of the status quo are evident (Myers, 2009; Mahmoud, Jerneck, Kronsell & Steen, 2018). Coverdale (2015, p.14) puts forward, "To develop a CT of education, a multicultural and democratic reconstruction of education needs to be constructed to meet the challenges of a technologically driven society". Hence, education would need to be reformed for all learners to have access to equal education. Since PAR is used as the research methodology, participants are given a voice to shed light on oppression. CT may also be used in the hopes to bridge the gap of most schools not having technological tools to utilize for teaching and learning as stated in Chapter one.

## **2.8 SYNTHESIS**

This chapter highlighted how CT can be used to critically analyse flipping the classroom for engaged learning. The justification for using CT as the theoretical framework was indicated. In this case, the focus was on the origin, basic assumptions, dimensions of CT, the role of the researcher and the relationship between the researcher and the researched. Moreover, CT was defined in terms of operational concepts in the context of the study. Criticisms of the theory were also outlined. The next chapter describes the literature review informing the study.

## **CHAPTER THREE**

### **REVIEW OF LITERATURE FOR INFORMING A FLIPPED CLASSROOM APPROACH FOR ENGAGED LEARNING**

#### **3.1 INTRODUCTION**

This chapter aimed towards highlighting the fundamental investigation done in schools that used the flipped classroom approach for engaged learning. The review of literature assisted in interpreting the point to which the flipped classroom approach influenced learners' involvement for engaged learning. Teaching and learning in today's digital age has become seemingly simulated by technological integration for engagement. Learners are curious about new technology that is used for entertainment as well as for educational purposes. It is assumed that implementation of the flipped classroom approach may allow learners to take responsibility of their own learning since they are required to learn content ahead of the lesson. Such content is delivered and accessed through technological means. This chapter discusses the literature review that enlightened the study.

#### **3.2 RELATED LITERATURE**

##### **3.2.1 Responsibility of stakeholders within the school**

Warsi (2018, p. 1) maintains that a "stakeholder refers to one who is associated with the wellbeing and success of a school and its students". Many stakeholders play a role in ensuring such teaching and learning is successful. Roundy (2016, p. 1) advocates "each stakeholder in the education system is essential to the success of educational goals". Thus professionals, School Management Team (SMT), School Governing Body (SGB), teachers, parents and learners assume significant positions as stakeholders of the school in structuring and developing the school (Mohapi & Netshitangani, 2018).

Professionals whom may assist schools are psychologists and social workers. Such stakeholders are able to identify and assist learners with problems relating to education which may be emotional, social and behavioural challenges (Munnik & Smith, 2019). These professional entities are needed in the school context since teachers and the SMT do not have the capacity to diagnose issues that a learner may have.

The SMT makes up the leadership structure of the school. As a group, the SMT includes the principal, the deputy principal(s) and the Heads of Department (HoD). Molefe (2013, p. 14) maintains that the SMT is “responsible for daily management of activities in the school”. Thus the SMT is responsible in ensuring quality of learning and teaching within the context of the school. In certain instances where the SMT cannot execute decisions by themselves, the SMT works with the SGB to enhance the attributes of learning and teaching. SGBs were introduced in schools in 1996 through the South African Schools Act No. 84 (Davies-Laubscher, 2018). The SGB assists developing a realistic budget for the school (Mohapi & Netshitangani, 2018). Teachers are required for the transferral of content to learners. This is done through the designing, planning and implementation of the curriculum. Teachers are responsible for teaching and assessing learners. Teachers act as agents that influence change since it is through them that learners understand content. However, in some circumstances, this cannot be achieved without the assistance of parents in the teaching and learning process.

Lunawat (2020, p. 10) upholds, “Parents participate in the learning process by sharing their experiences which leads to boost teachers’ perception[s] and job satisfaction which leads to achieving high productivity”. Parents monitor the manner in which the school is run; for example, ensuring that the school code of conducted is followed by all learners. Nash, Cruickshank, Flittner, Mainsbridge, Pill and Elmer (2020, p. 8) uphold, “parents as well as guardians are in a unique position whereby they observe their child’s behaviour in a natural ‘home’ context, and can therefore assist the learning process and facilitate change”. As a result, parents have a significant responsibility and play an important role towards the success and failure of their child’s schooling

career. Learner behavioural issues that are dealt in school also require the parent to be present before disciplinary decisions are taken. On the other hand, without the learner, the entire education system would not exist. Learners are the primary reason for the development of the curriculum. Hence, the failure or success of the education system is centrally informed by means of the association of all stakeholders and the roles that they play in ensuring engaged learning in the classroom.

### **3.2.2 Significance of engaged learning**

Banna, Lin, Stewart and Fialkowski (2015, p. 250) define engaged learning as “learning that is instructor facilitated and student focused”. For learning to be successful, learners have to be engaged. Jirout, Vitiello and Zumbrunn (2018, p. 245) argues that “[learners] also display curiosity, a desire to know more and positive emotional responses to learning and school”. This can be achieved when learners find content interesting to be self-motivated. Hung, Tan and Koh (2006, p. 30) maintains “engaged learning is grounded on recent notions of active learning where learners take responsibility for their own learning”. It can be argued that learners learn best when they do things for themselves. Reese (2011, p. 11) states “learning by doing means learning from experiences resulting directly from one’s own actions”. It is trial and error learning that encourages engaged learning. Although it can be frustrating to learn on one’s own, learning can be achieved when learners are able to learn from their mistakes and the discovered process can be recollected.

Although learner engagement is imperative for success, fixating learners’ attention to class lessons has become a challenge. This is due to the distraction of technology and the endless services that offer simplicity and entertainment to people. Technological tools are thriving and in turn distracting learners from their schoolwork, which leads to additional disengagement (Barnwell, 2016). Other factors of learner disengagement may include lack of interest in school or the subject area and behavioural issues comprising of social withdrawal (The State of Victoria, 2018). The former indicates that it would immediately have a negative effect on transferral of

knowledge, the latter points to shifting the mental space of the learner to distract learning and to perpetuate disengagement.

### 3.2.3 The role of the teacher and learner in engaged learning

Aydin and Demiror (2016, p. 34) assert that “teachers can be suspicious if students are watching the videos or not and may find interaction during the individual learning processes inadequate”. This may increase doubts from the teachers concerning whether learners acquired new knowledge on their own. It may seem pointless for the teacher since he/she might have to teach the lesson in class and resort back to the traditional approach if learners are falling behind. Teachers have to play the role of the facilitator and also create instructional content for learners such as videos.

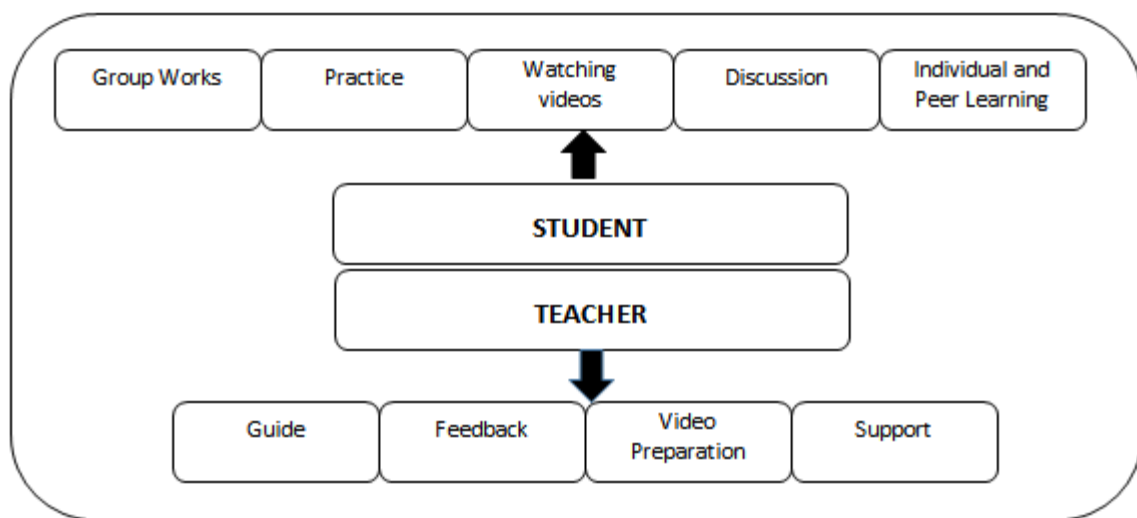


Figure 3.1: Teacher and learner relationship in a flipped classroom model<sup>2</sup>

The above illustration depicts the roles of the teacher and the learner when employing the flipped classroom approach. Facilitators may possibly create videos of themselves teaching a specific lesson and may also add links to other content/ websites for learners to explore for understanding. Kelly (2020, p. 1) expresses, “facilitating

<sup>2</sup> Image adapted from:  
[https://www.researchgate.net/publication/312056149\\_Flipped\\_Classroom\\_with\\_Problem\\_Based\\_Activities\\_Exploring\\_Self-regulated\\_Learning\\_in\\_a\\_Programming\\_Language\\_Course](https://www.researchgate.net/publication/312056149_Flipped_Classroom_with_Problem_Based_Activities_Exploring_Self-regulated_Learning_in_a_Programming_Language_Course)

learning encompasses teaching learners to think critically and understand how the learning process works". To add to Kelly (2020), continuous support, supervision in addition to feedback has to be given to learners. These responsibilities portray the pastoral role that teachers have to model in the teaching and learning context. Hence, the facilitator needs to show compassion and consideration to parents and learners whilst remembering that the main focus is the learner and not the curriculum (Defazio, 2018). In contrast to the flipped classroom, in the traditional classroom, teachers focus more on completing the curriculum rather than knowing whether learners are able to retrieve the knowledge taught (Lee & Martin, 2020). Monahan (2015, p. 6) proposes, "rather than covering content, we use carefully selected content to help students develop the skills". This would then help learners to understand what is taught instead of simply regurgitating what was taught.

Learners have to play the role of an explorer and an active learner and should not rely on the teacher as the content provider. This will only be possible if learners are actively engaged throughout the lesson. This can be done by individual or peer learning in addition to the instructional tools that reinforce the lesson. Learners are provided with content such as pre-recorded videos to study in contexts other than the classroom. As a result, class-time is used to ask teachers questions and engage in discussion amongst peers. It is the responsibility of learners to read through the content and formulate questions about the lesson topic by using the instructional resources such as videos at home (Cakiroglu & Ozturk, 2017). Accordingly, learning does not only take place in the school context (Sanders, 2018). Learners enthusiastically investigate and formulate discoveries based on the subject content. Sanders (2018, p. 3) supports that "learning through doing is the most effective way to learn". This goes back to the importance of engaged learning.

### **3.2.4 Factors that affect engaged learning**

#### **3.2.4.1 *Classroom management***

Classroom management can be challenging when learners are uninterested in seeing the teacher speaking in front of them. Learners become bored easily when teachers speak in a monotone without using any exciting resources to captivate the learners' attention. Similarly, it is helpful to engage learners in the classroom by linking prior knowledge to new knowledge to help them build on what they already know (Olsen, 2008). Walters and Frei (2007, p. 7) claim that "it can be difficult for teachers to receive effective training [for] the right strategies that will allow them more instructional time and less management of behavioural troubles". Consequently, to achieve actively engaged learners in the classroom, teachers need to proceed by ensuring that they are properly equipped for the lesson. Learners ought to study instructional content prior to attending the class so they are able to get more clarity from the teacher. Intrinsic motivation allows learners to be accountable for their own learning. For this to occur, teachers have to create a learning environment that stimulates learning. Classroom management includes the organization of students, space, time, and materials so that the teacher can then allow the students to learn the intended content (Williams, 2018). All of the above aspects have to be taken into consideration for effective engaged learning to take place. From this, it is clear that the teacher is also responsible for learners to be engaged and it is not only the learners' responsibility.

Above and beyond, teachers have to establish an atmosphere that accommodates all learners and their learning styles. Laurier (2008, p. 1) defines learning styles as "different methods of learning or understanding new information". All people are unique, moreover, such uniqueness includes the manner in which they internalize new knowledge and the pace at which they do so. Consequently, teachers need to be wary of the differences in the educational setting of the classroom and determine instructional methods to accommodate all learners.

### **3.2.4.2**      *Classroom design*

Classroom design, flexibility and furnishings can influence teacher performance and learner activities (Kimball Learning, 2006). This allows for more improved collaboration and exploration of learners. Mihai (2016, p. 2) asserts that “teachers need to identify the individual learning needs of students, [ensuring] they all use the class time engaged with the learning process”. This is another reason why teachers should not deviate from their jobs in the classroom. Furthermore, the flipped classroom not only keeps learners engaged but also keeps the teachers busy in creating appropriate activities to keep learners engaged. An engaged classroom should be one that is always filled with activity and learning.

### **3.2.4.3**      *Classroom environment*

The classroom environment plays a significant role regarding how learners take in knowledge. If the environment is not stimulating for learners, then teaching and learning would be regarded as futile. Learners are engrossed in the lesson when they are shown learning content on the data projector and seem enthusiastic about completing their class activities using their computers. In a traditional classroom, a learner may seem engaged by simply just looking at the teacher, however, when the teacher asks them questions and probes them to check for understanding, it is evident that most learners are not able to recall what was taught in the lesson. This shows that these learners were not engaged in the lesson. Lesson preparation should be properly structured to ensure that learners are also active in the learning process.

#### 3.2.4.4 *Lesson plans*

Jones (2018, p. 1) defines a lesson plan as “a step-by-step guide that provides a structure for learning”. Moreover, the planning of a lesson is usually done before a lesson. It is imperative since it supports the teacher to sustain an accepted teaching arrangement in addition to not letting the class diverge from the lesson taught (Milkova, 2016). Designing a lesson plan is a time-consuming task for teachers; hence, it requires a great deal of effort. Nevertheless, lesson plans help teachers to manage their time and resources efficiently (Horton, 2019). If teachers go into a class unprepared, then this will affect the learning ethos of the class. As a result, learners can be disengaged due to unprepared teachers.

Specifying learning outcomes for the lesson assists teachers to determine teaching and learning methods to use in the lesson. Such activities will help define whether the teacher has achieved in teaching all outcomes and if the learner has attained such knowledge. However, lesson outcomes limit teachers since it does not give teachers provision to go beyond. Most of the time, teachers find themselves constrained to completing the curriculum as per the CAPS.

Nasari and Heidari (2014, p. 4) maintain “the planning process permits teachers to evaluate their own knowledge of the content to be taught”. This therefore allows teachers to be engaged in the lesson as they too have actively studied content before disseminating it amongst learners. Moreover, planning ahead allows teachers the opportunity to consider the types of tasks and resources necessary, as well as the teaching methods that are appropriate to employ for these lessons.

### 3.2.4.5 *Teacher-learner relationship*

Collaboration is of utmost importance for effective learner engagement (Maison, 2017). The teacher should create a classroom environment by which learners can cooperate with each other to deliberate on instructional activities. Teachers should also remain approachable so learners may feel a sense of support (Wood, 2017). When an entrusting relationship exists amongst learners and teachers, learners are willing to engage in the lesson.

Since teachers are referred to as facilitators in the engaged classroom, they need to constantly provide guidance to learners so learning can be achieved. Facilitators should endeavour to help learners to work independently. This can be achieved when there are positive relationship dynamics between the teacher and learners. From this, positive social behaviour in the classroom can be gained. When learners feel that they are cared for, they are likely to engage in what the teacher tells them to do. Accordingly, this improves engagement.

Talan and Gulsecen (2019, p. 32) express, “When [learners] come to the classroom, they will have more time to allocate to [classroom] activities and will participate in the teaching-learning process more effectively”. This can be seen as an advantage since it allows for a better relationship amongst teachers and learners as teachers will be able to comprehend how much learners have learnt and what aspects need to be reiterated. Moreover, teachers are able to assess how effective their instructional content is and learners will be able to assess how much they have learnt.

### 3.2.5 Pointers to check for engaged learning

Engagement is a vital part of learning. If learners are not engaged in the learning process, teaching would be considered as impractical (Olsen, 2008). It is the responsibility of the teacher to help motivate learners to become engaged within the classroom. However, it can be difficult to interpret learner engagement as learners may seem engaged but may dwell away from the classroom mentally (Goodman, 2016). Teachers may interpret learners who are well mannered as engaged. The State of Victoria (2018) suggest various indicators that can be used for screening disengagement. It can be difficult to identify when a learner is engaged. Firstly, learners contribute among various capacities of the school including social, extracurricular and academic activities. Secondly, learners are drawn to be incorporated in the school and have a sense of belonging within the school. Lastly, learners assume responsibility of their knowledge constructs (The State of Victoria, 2018). The above three types of engagement can assist teachers to check the level of engagement of learners. An alternate way of identifying engagement is by using the eight indicators of engaged learning. Bouska (2018, p. 1) points out the eight indicators of engaged learning:

Vision of engaged learning entails evoking what learners look like being engaged within the classroom. Tasks for engaged learning ensures that activities created for learners must be realistic and challenging for learners to be motivated. Assessment of engaged learning checks learners' current knowledge and what they can do by seeing their performance on activities. Instructional models and strategies for engaged learning ensures that learners should work in collaboration with their peers for sharing of knowledge. Learners should be encouraged to participate in the lesson and be active learners. The learning context of engaged learning makes certain that all learning styles should be accommodated for successful engaged learning. Grouping for engaged learning reiterates that cooperative learning is very important in engaged learning since learners working with peers encourages learner centred learning. Such groups should be 'heterogeneous' which would guarantee improved opportunities for learning. Teacher roles for engaged learning is shifted from a content provider to a facilitator. The teacher should be the one that encourages discussion to direct learners

in the correct path of learning. Student roles for engaged learning allows learners to become 'explorers' and allow them to aim to find out for themselves instead of waiting for the teacher to tell them what to do.

Bouska's (2018) indicators as presented above, allow us to see whether the learners participating within the learning environment are engaged. Weimer (2016, p. 3) argues, "We believe if we can just get students talking in class, they'll be engaged". This suggests that when learners speak up in class, they learn to communicate their ideas and also get feedback from the class as a whole. This adds to their knowledge base and thus expands their understanding. As much as class participation is important for the learner, it is as equally important for the teacher (Shore, 2003). Learner participation depicts the level of understanding of content by which learners were engaged with. This can be suggestive for teachers to determine self-evaluation for facilitation of instructional activities.

### **3.2.6 Authenticity of engaged learning**

The essential point of engaged learning is to transform learning experiences to become authentic (Hung, Tan & Koh, 2006). Wornyo, Klu and Motlhaka (2018, p. 56) define authentic learning as "learning by solving real-world problems". This can be achieved when learners are able to discover knowledge for themselves. By saying this, learners are not restricted to the textbook but go beyond the curriculum to gain understanding and broaden their knowledge base. Learners that are authentically engaged are learners who take responsibility for their own learning, maintain and can relate knowledge gained in other circumstances (Pinel, 2017). Teachers have to create authentic lessons for authentic learning to transpire.

Authentic teachers are regarded as amicable, passionate, focused and knowledgeable (Johnson & LaBelle, 2017). For learners to be engaged, teachers have to understand learners and be capable of choosing suitable instructional activities to accommodate all learners (Pinel, 2017). As much as learners may seem engaged

physically, they may not be engaged mentally. It can be difficult to measure learners mental engagement within the classroom. Schlechty's levels of engagement can provide teachers with specified levels to check to see whether learners are engaged in the learning process as seen below:

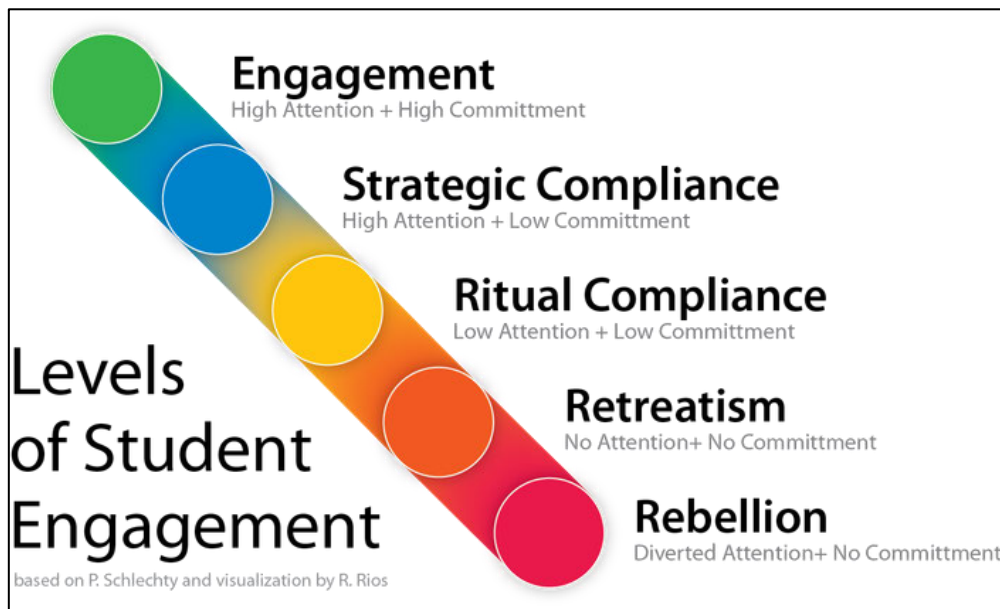


Figure 3.2: Schlechty's levels of engagement <sup>3</sup>

Schlechty's levels of engagement can be used to check whether learners are engaged in the learning context. In the first level of engagement, the learner is able to retain, synthesize and apply what is presented, resulting in high levels of learning. Digamon and Cinches (2017, p. 6) put forward that "[t]he first level is the highest level of student engagement [since] students see that the activity is personally meaningful, and have the will to persist and learn in the face of difficulty". Thus learners may seem committed to accomplishing the given task.

The second level indicates that the learner may learn at high levels, but is only concerned in appraisal (Johnston, Beaudoin, Jones & Waggett, 2015). As a result, the extrinsic outcomes that learners may gain keep learners engaged. If there is no incentive coming from the teacher, learners will abandon the task. The third level stipulates the learner learns at low levels and does not maintain/ transfer learning

<sup>3</sup> Image adapted from: <https://www.smores.com/16q41-engagement>

(Digamon & Cinches, 2017). They are only concerned about preventing a negative consequence. The learner will stick to the task to avoid being reprimanded by the teacher.

The fourth level shows that the learner does not contribute to the activity and hence, barely learns anything. Francis (2014, p. 2) agrees that “[learners] are disengaged from assigned work and make no attempt to comply, but are not disruptive to the learning of others”. Learners are mentally not present in the lesson due to distraction; hence, they deviate from what is taught. The fifth level demonstrates that the learner is disengaged. He/she chooses to engage in other activities beside what is given. Schlechty (2011, p. 5) agrees in saying that “the [learner] overtly refuses to comply with the requirements of the task”. Hence, this occurs when learners rebel against the given task. The above five levels of engagement can assist teachers in assessing the occurrence or lack of learner engagement in the teaching and learning context.

### **3.2.7 Self-regulated learning**

Boekaerts and Niemivirta (2000, p. 418) define self-regulated learning as “[learners’] self-generated thoughts which are systematically orientated toward attainment of their goals”. This thus permits learners to be dynamic contributors toward their individual knowledge constructs. When learners are self-regulated at learning, they are focused at achieving the goals that they set out. Self-regulated, however, does not imply that learners do not need teachers.

Hung, Tan and Koh (2006, p. 34) explain “self-regulation also involves a social aspect that includes interactions with peers and teachers who facilitate and design learners’ tasks by co-regulating learning”. As a result, learning is guided by external factors in allocating support to the learner. Such factors may be the teacher, motivation, intellectual ability and attention spans (Wile, 2017). It is suggested that the teacher should be present to facilitate such learning. This will, in turn help the learner to become self-regulated to accomplish the task. Teachers ought to motivate learners to achieve the given tasks.

As much as motivation may come extrinsically from teachers, learners need to be intrinsically motivated to accomplish given tasks. Such motivation may come in when learners see the reason for learning. Intellectual ability can be determined by teachers. This may help teachers to adapt lessons to cater for learners that have a weak intellect. Although intellectual ability negatively affects learning, if learners do not pay attention in class, there would be no knowledge gained. Thus, teachers would then have to incorporate innovative methods to grasp the learners' attention.

### **3.2.8 Problem-based learning**

For engaged learning to be a success, tasks need to be challenging. Looking back on Bouska's (2018) indicators of engaged learning, 'Tasks for engaged learning' is described as the second indicator. It thereby ensures that activities created for learners must be realistic and challenging for learners to be motivated. Agnello (2011, p. 10) defines problem-based learning as "open-ended and inquiry-based problems that guide student learning through discovery-based learning and authentic applications". Learners have to be interested in the task to be adequately engaged. Problem-based learning gives learners the chance to beyond the subject content to solve a problem. As a result, it encourages learners to explore until they form an understanding to assimilate a task.

Chis, Moldovan, Murphy, Pathak and Muntean. (2018, p. 232) relate the problem-based learning and flipped classroom in saying that "combined FC-PBL [Flipped classroom- Problem-based learning] makes use of learning technologies and supports authentic learning". Hence, problem-based learning uses tasks that stimulate a more authentic learning by incorporating collaboration with peers to solve a problem. The flipped approach ensures that learners watch or read instructional material out of the class so class-time can be extended for expanded opportunities. Nevertheless, there are steps to follow for problem-based learning. Such steps for problem-based learning can be described as:

First, in defining the problem. Second, in understanding the problem in a problem statement. Third, in identifying solutions. Fourth, in guiding individual and group

research. Fifth, research material is distributed amongst the group to finalise suggested solutions. Sixth, in presenting proposed solutions against the problem (Albion, 2015, p. 4).

The facilitator assists learners in understanding the steps above and thereby helps to guide learners in unfolding the task. Probing learners is fundamental in helping them to achieve a desired outcome. It is the responsibility of learners to follow the steps to fathom the given task. During this point, learners are engaged in the learning process.

### **3.2.9 Passive to actively engaged learner**

Passive methods of learning such as listening and reading skills though active methods of learning, encompass collaboration with fellow learners to enhance the learning process (Rodriguez, 2018). Passive learning clearly fits into the traditional form of teaching and learning whereby learners are taught content from the teacher and accepts that information as the only reasoning. In contrast, active learning would accordingly fit into the flipped learning approach where learners assume a more hands-on or participatory role in the learning process and engage in dialogue by questioning what is taught to them.

While active learning may seem as the one that is of more advantage, not all teachers practise it in the classroom. This is due to the heavy workload it puts on the teacher since it requires more dedication (Svinicki, 2006). It also demands more from the learner to be driving the discussion in the classroom.

The demands of being more active in the classroom places pressure on a learner regardless of the personality of the learner. Hence, learners may shy away which can result in disengagement of learning. It is then up to teachers to motivate learners to be involved in the development of learning. Watanabe-Crockett (2019, p. 1) argues that “[learners] will more likely become agents of their own learning when provided a learning environment that takes into account different learning styles and provides opportunities toward the mastery of new skills or subject matter”. Therefore, teachers

need to foster an open environment that is comfortable for learners to be able to express themselves. For example, teachers can talk with learners in a group to allow them to open up their voices. Morgado (2010, p. 4) elaborates that “teachers who can enable students to open up and talk about various issues and challenges can then identify social-emotional or learning needs”. In turn, identifying the challenges that learners may encounter can advise teachers of a suitable method to integrate in the teaching process to enhance engaged learning.

### **3.2.10 The flipped classroom in relation to engaged learning**

Bergmann and Sams (2012, p. 12) describe the flipped classroom approach by means of “that which is traditionally done in class is now done at home, and that which is traditionally done as homework is now completed in class”. The traditional class is inverted by learners whom explore for themselves with the help of the teacher whom facilitates rather than forces knowledge upon the learner. Similarly, the idea is for learners to do readings ahead of the teacher so class time can be utilised for discussion. Keengwe and Onchwari (2016, p. 17) maintain that “the notion of a flipped classroom draws on such concepts as active learning [and] student engagement”. An advantage of the flipped classroom approach is that it encourages efficiency of time usage (Rivera, 2016). This is due to the flipped classroom approach allowing learners to watch videos of class lectures at home so class discussion is increased. By doing this, learners have more control of their own learning. Furthermore, it allows them to go beyond the curriculum in any place without being restricted to the classroom setting. Szparagowski (2014, p. 2) claims “an effective flipped classroom is one that is used for in-class activities, discussions, problems, and group projects”. This reiterates the definition of Bergmann and Sams of which was previously done in class is now done at home and what was previously done at home is now done in class with the addition of the teacher being present.

The flipped classroom has gained popularity within Higher Education Institutions (HEI) (Karabulut-Ilgu, Cherrez & Jähren, 2018). This might be due to HEIs being able to afford networked internet access as well as ICT labs (Arfstrom, 2013). As an

advantage, this allows tertiary students to engage with online content during their free time at the institution if internet access is not available at home. Benefits and challenges of the flipped classroom were highlighted in the study of Karabulut-Ilgu, Cherrez and Jahren (2018, p. 404) as, “flexibility, improvement in interaction and student engagement. Challenges included increased workload, student resistance, technical issues and decreased interest”. As much as the flipped class approach provides numerous benefits, it can also result in numerous downfalls if not implemented in a desired manner. All stakeholders involved within the course of action for learning and teaching have to play an active role.

Implementing technology within the classroom requires a lot of training for teachers and necessitates learners having such technological resources at home. Hamdan, McKnight and Arfstrom (2013, p. 14) agree in saying that “administrators need to encourage teachers as they struggle to master the new model”. Assistance from the school level is vital for engaged learning to be a success. Moreover, the DoE should support teachers that need guidance and hold workshops for ICT training. Schools, in addition, need to have ample resources and funds to maintain such resources since computer hardware and software needs to be updated all the time to keep up with current technological trends. Herreid, Schiller, Herreid and Wright (2014, p. 76) question the flipped classroom in articulating, “How [can we] get the students to watch and learn from these sources?” In a traditional classroom setting, the lesson is taught in the class and learners are given homework for expanded opportunities for the topic that was discussed. Hence, learners are forced to listen to the teacher. With regards to the flipped classroom, it may be very difficult to monitor learners. Thus, instructional content has to be stimulating for learners to be engaged.

While there are some learners that do their homework, there are some that procrastinate and do not end up doing the homework they were given. As a result, this sets the teacher back as it does not reflect whether learners are on par with each other. In a flipped classroom, a video may be given to learners to watch at home to learn a new topic. If learners do not watch the video, it delays the learning process since the teacher would have planned to discuss what learners had watched.

### 3.2.10.1 *The flipped classroom model*

The originators of the flipped classroom model were Jonathan Bergmann and Aaron Sams who were secondary school teachers that used videoed lessons in 2006 (Arnold-Garza, 2014). The flipped classroom model has two important elements: shifting homework into the classroom by means of discussion and questioning and shifting the lesson outside of class, usually by electronic means (Educause Learning Initiative, 2012). Bergmann and Sams (cited in Cabi, 2018, p. 1) define the flipped classroom model as “a new pedagogical model where the instructor shares predetermined digital resources with students through a platform outside the classroom”. Thus, the flipped pedagogy incorporates technology as a means of communication between the learner and the classroom context. Flipped Learning in Adelaide (2018, p. 5) illustrates the flipped framework using the diagram below:

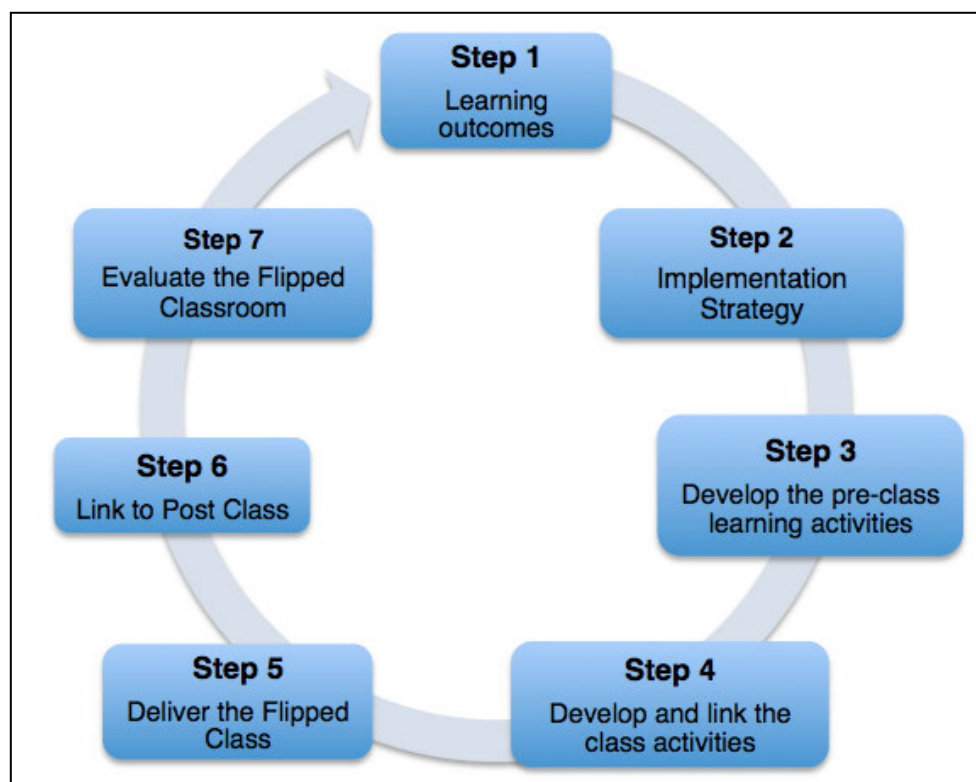


Figure 3.3: 7 Steps to Flipping with a Framework <sup>4</sup>

From the diagram above, the framework transforms learner and teacher interaction within the learning context. In the classroom, learners are engaged in collaboration

<sup>4</sup> Image adapted from: <https://www.adelaide.edu.au/flipped-classroom/about/>

and consolidation whilst outside the classroom learners are engaged using various resources to access instructional content from a learning platform. The instructional presentation used by teachers includes narrated presentations in video casts that may also integrate other multimedia content. The classroom activities are integrated with several engagement methods (Arnold-Garza, 2014).

Subramaniam and Muniandy (2016, p. 4668) articulates that “the flipped classroom approach has three attributes”. Primarily, the lessons are organized by the facilitator who has to plan for learners to be involved in the lesson. Next, instructional activities have to be challenging enough for them to link the activity with content that they learnt at home. Finally, learners are urged to watch instructional videos or read instructional content at home and attend class for discussion and consolidation. It can be assumed that these three attributes contribute to the successful implementation flipping the classroom for engaged learning since lessons have to be challenging for learners to engage with it out of the school context.

### **3.2.10.2      *The four pillars of flipped learning***

For the effectiveness of the flipped classroom pedagogy to be increased, the four pillars of flipped learning can be used to highlight implementing the flipped classroom approach (Brown, 2016; Bergmann, Sams, Daniels, Bennett, Marshall & Arfstrom, 2014). Firstly, a flexible environment may denote learning spaces being shifted from classroom to home. Learners use this to their advantage as their comfort zones to reflect on lessons. Content is present by using different methods. Secondly, a learning culture includes extended class time and allows for discussion and consolidation. Learners are given the opportunity to be active by exploring on their own instead of relying on the teacher to teach them new content. Thirdly, intentional content such as multimedia is created for learners based on different topics of the curriculum. Such content should be accessible to all learners. Lastly, the professional teacher facilitates the lesson by providing feedback. Teachers continually observes learners to make sure they are active in the class and are able to comprehend content given (Bergmann, Sams, Daniels, Bennett, Marshall & Arfstrom, 2014, p. 1). The above are key

components that allow flipped learning to take place. Without any one of the above pillars, the idea of flipping would collapse.

### **3.2.10.3      *In-class flipped classroom and Bring Your Own Device Policy (BYOD)***

Technology in most schools is not easily accessible due to funding. Beside the school lacking resources, some learners lack access to technology out of school which perpetuates the digital divide that's exist in society. The in-class flipped classroom may be used for schools that do not have ample resources or cases in which learners do not have ample resources at home to access content to learn at home.

Gonzalez (2014, p. 1) notes, "instead of having students view the content at home, that video becomes a station in class that small groups rotate through". The above method can be used in schools where teachers want to flip the classroom but do not necessary have the technological tools to do so. Similarly, one of the main reasons why teachers choose not to implement flipped learning is due to learners having limited technology at hand (Bergmann, 2016). Making videos for flipped learning is not necessary since teachers can give learners other activities besides watching a video. Talbert (2017, p.4) supports this in saying that "it's possible to have a highly effective flipped learning environment without any video whatsoever". Hence, flipping the classroom can be done with or without the use of technology, though it just needs a lot of dedication from teachers to create useful activities.

It has been said that another method to bridge the gap of ICT in schools for flipped learning is through implementing a Bring Your Own Device Policy (BYOD) in schools (Adhikari, Mathrani & Scogings, 2016). Some schools, regardless of being resourced or under-resourced have a BYOD policy. This requires learners to use their own smartphones or other devices for learning during class time (Hackler, 2015, BYOD for Learning, 2017). Opponents of BYOD idea claim that there is inequality and digital divide issues due to the cost factor (Kumar, 2014; BYOD for Learning, 2017). Parents or guardians of most learners cannot afford such devices; hence, the digital divide constructs and strengthens socio-economic inequalities amongst people. Another

disadvantage is that such technological devices can become a distraction in the classroom (Wainwright, 2012).

It has also been said that learners who have smart devices have 24/7 access to the entertainment domain (Pankow, 2014). This is an enormous opening for disengagement of learning. Furthermore, amongst the learning capabilities that technological devices offer, it can also offer entertainment applications that hinder teaching and learning. Such applications include social networks and games.

Despite the few disadvantages of BYOD, the advantages that BYOD offers outweigh the disadvantages. For instance, learners will be more systematised with compiling all their notes in one place by using the notepad application to take notes. Learners are able to access endless resources at their fingertips. Learning can take place out of the class context by means of using the flipped classroom pedagogy to watch lessons at home and use class time for extended learning. For learners whom have access, schools can consider funding for devices or even lease devices for special cases (Wainwright, 2012). It is important for every school to have their own BYOD policy to ensure that it is implemented appropriately for engaged learning.

#### **3.2.10.4      *The pros of the flipped classroom***

The flipped classroom pedagogy is rapidly gaining popularity in schools. What is a flipped classroom (2018, p. 2) concurs that “1 in 5 teachers are considering flipping their classrooms”. As a result, the number of members on the flipped network is drastically increasing (Flipped Learning Network, 2014). The instructional content that teachers create allows learners to watch these before attending class lessons, thus extending time spent in class for consolidation and discussion which engages learners in active learning (Stone, 2012). Accordingly, learners can utilise lesson materials at their own pace. They can assimilate instructional material at their own pace, for them to be able to understand and take in knowledge effectively. Learners are able to access the material in the comfort of their home when they assimilate new knowledge or access such content when they need to study for a test or an exam. If learners have

any problems with instructional content, they are able ask specific questions in the classroom about such problems. In contrast, within the traditional classroom, learners are constrained since teachers have deadlines to complete content syllabus, it may be difficult for teachers to work at a pace that caters for all learners. Moreover, learners are forced to catch up with other learners, if not; they are left behind and do not end up understanding specific concepts.

Bringing homework into class time allows teachers to comprehend where learners may be struggling. This allows for more one-on-one interaction between the teacher and learners. In addition, there is extra time for comprehensive exercises and discussion that can be done within the classroom. According to research, 71 per cent of teachers who employed the flipped pedagogy observed enhanced results, and 80 per cent conveyed better outlooks from learners (Flipped Learning Network, 2014). As a result, it is argued that this pedagogy accommodates all learning styles, depending on how instructional content is created.

### ***3.2.10.5 The cons of the flipped classroom***

Although there are many supporters of using the flipped classroom approach, there are also many differing perceptions that have been conveyed in recent literature. Learners learning styles may differ; consequently, they may demand face-to-face instruction rather than pre-recorded lessons (Warnish & Meyer, 2013). Learners with the verbal learning style may not instantaneously value the practical part of the flipped model, rather they might feel the need for the teacher to teach them and be dictating in front of them.

Although some learners welcome the flipped model, their access to resources might not always support rapid delivery of pre-recorded lessons (Ramirez Hernandez, Hinojosa & Rodriguez, 2014). Not everyone can meet the expense of a computer and internet access. Accordingly, this poses a barrier to introduce the flipped classroom for engaged learning.

Another barrier to introduce this approach is the huge workload it places on the teacher. A successful flipped classroom requires careful planning incorporating interactive activities (Schmidt, 2016). Recording lessons requires time and effort on the school, and elements done in class and out of the class need to be sensibly combined for learners to comprehend the flipped approach as well as be encouraged for a lesson (Educause Learning Initiative, 2012). Hence, initiating the flipped classroom for engaged learning can indicate added effort and may necessitate new expertise from the teacher.

Research regarding accessibility of using the flipped classroom pedagogy has yet to be taken in to account. The flipped class approach does not make any provision for learners who have special needs or learning disabilities. For instance, what about learners who are visually impaired and cannot watch a video? Talbert (2018, p. 1) expresses that “it’s not at all clear whether flipped learning is effective with, or even appropriate for, students with learning disabilities like ADHD”. Thus, it is clearly seen that the flipped classroom approach did not make any provision for learners in totality.

#### **3.2.10.6      *The role of the teacher in a flipped classroom***

The flipped classroom establishes a change of role for teachers, whom surrender their position of power in the classroom in support of a more co-operative and combined involvement of learners. The flipped classroom approach can only be successful if both the teacher and learners participate simultaneously. Using the flipped classroom does not mean that teachers are left to be free since they do not have to teach, teachers are there to facilitate learning and spend more time individually interacting with learners (Rivera, 2016).

According to Hamdam, McKnight, McKnight and Arfstrom (2013, p. 6), “The responsibility of the teacher is to determine when and how to shift direct instruction from the group to the individual learning space”. As a result, the teacher is a very important component in flipping the classroom for engaged learning. It may seem that

teachers are replaced by technology; however, they assume a vital part in the learning process to assimilate content from videos of tasks given online. Chilingaryan and Zvereva (2017, p. 1504) describe the role of the teacher as “the helm of the ship to his disciples, and he starts to play a role of the navigator, setting the direction of the ship with the help of the compass”. By changing the role of teachers, learners are responsible for learning on their own which then motivates them to be engaged in the task.

### **3.2.10.7      *The role of the learners in a flipped classroom***

The flipped classroom approach gives learners motivation to explore in addition to being liable for their own learning (Santikarn & Wichadee, 2018). Class lessons are led by learners, and discussion and consolidation amongst learners become dynamic and practical. Learners can no longer be seated soundlessly through an in-class lesson, since the teacher is no longer referred to as the ‘content provider’, and are instead there to facilitate and help learners in class through problem solving and applied knowledge (Santikarn & Wichadee, 2018). Learners learn by doing and help themselves to master content. The change of role of learners results from being passive participants to active participants that are non-reliant on teachers (Zekil & Guneylill, 2014). Thus, learners become independent learners in and out of the classroom.

Learners are accountable for reading or watching instructional content before the class time, thus, attending class prepared for the lesson. Placing such responsibility upon the learner gives them a duty to direct their own learning (University of Toronto, 2019). The flipped classroom allows learners retrieval for revising instructional material and extra time to review content in addition to maintaining diversity in learning (University of Toronto, 2019). As a result, learners are able to assimilate knowledge at their own pace.

### 3.2.10.8 Discussion of flipped Bloom's taxonomy

A webcast of co-founders, Jon Bergmann and Aaron Sams, show how the Bloom's taxonomy hierarchical model of learning is inverted:

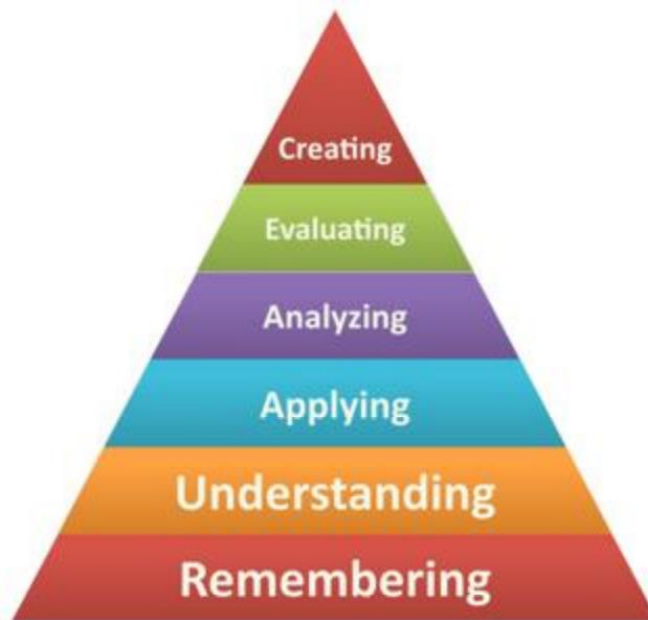


Figure 3.4: Blooms taxonomy revised<sup>5</sup>

Blooms taxonomy (Figure 3.4) shows how learning first occurs by remembering what is taught and this is reinforced by understanding and applying within the classroom. Thereafter, learners then try to put what they have learnt together and link to prior knowledge by analysing. Afterwards, evaluation allows learners to make judgements and form their own opinions. Lastly, learners are able to do their work by using the knowledge they have gained. These activities are given by teachers to do in the classroom or as homework activities.

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<sup>5</sup> Image adapted from: <http://webcasts.astd.org>



Figure 3.5: Flipped Blooms taxonomy <sup>6</sup>

The above diagram (Figure 3.5) shows how traditional learning can be flipped from learning taking place on learners own account in remembering and understanding what they have learnt on their own and thereby applying, analysing in making sense of the knowledge learnt, evaluating by making their own opinions and creating takes place within the classroom with guidance of the facilitator. Teachers give learners the task of them studying content before it is taught and discussed in the class.

### 3.2.11 Critical analysis of the flipped classroom

The highly esteemed founders of the flipped learning approach (Bergmann & Sams, 2012) maintain just as all teaching approaches has its advantages and disadvantages, so too is the flipped class approach. In Taylor's (2015) study, it has been found that it is not possible to determine if a learner participated in a flipped class until they attend a class lesson. In saying so, this is a setback for teachers since they would have to spend time in class teaching the lesson instead of learners performing instructional activities or participating in the lesson.

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<sup>6</sup> Image adapted from: <http://webcasts.astd.org>

As much as the flipped approach may prove to engage learners, it may not work for everyone. It is the responsibility of learners to do work ahead of class time. Thus, this can be achieved only when learners are motivated to do so. Undeniably, learners could exploit the implementation of a flipped classroom by using time out of the school context for purposes not related to studying (Acedo, 2019; Taylor, 2015). It is easy to be distracted whilst connected to the internet. The main distractions are social networks that learners and everyone else use for leisure and entertainment purposes. Lo (2017, p. 2) argues that “only a few studies (e.g. Gundlach et al., 2015) reported that students in [a] traditional classroom performed significantly better than the students in its flipped counterpart”. This can be assumed that it is due to the freedom that learners may have whilst studying in contexts other than the classroom which results in learner disengagement in other learning contexts other than the classroom.

While some argue for the flipped classroom approach in education reform, others may say that it is just a means by which tedious lessons can be watched in settings other than in class (November & Mull, 2012). Furthermore, access is also an issue in the implementation of a flipped class. Most learners may not be able to access lesson videos online to watch ahead of the class due to access of internet technology (Crampton, 2019; Acedo, 2019). This in turn disadvantages these learners; furthermore, the flipped classroom would not be successful in its implementation. To suggest, the in-class flipped approach could be used if teachers provide learners with a flash drive to watch videos on their computer or simply allow learners to assimilate content in the class via a space allocated for learners to access such content during class time. While this may help, it still alienates such learners as they are treated differently from others.

### **3.2.12 Findings of previous studies on the use of the flipped classroom approach**

The evolution of modern technology has a fundamental impact on education concerning the flipped classroom approach. The significant impact of technology has led to insightful transformations within teaching and learning methodologies in the classroom (Cevikbas & Argun, 2017). Digital natives have different attributes when compared to digital immigrants. Yang, Huang and Kinshuk (2016, p. 1047) assert that “students [whom had] grown up with digital technology and Internet are called digital natives or net generation. All others, who grew up without so much immersion with digital technologies are called digital immigrants”. Therefore, it may be challenging to gain attention and curiosity of the learners today to teaching and learning by means of using traditional teaching approaches. Some strong points of employing the flipped classroom approach include:

Efficient use of class time (Cole, 2009), more active learning opportunities for students (Gannod, Berg & Helmick, 2008), increased one-to-one interaction between student and teacher (Lage, Platt & Treglia, 2000), student responsibility for learning (Overmyer, 2012), and addressing multiple learning styles (Flipped classroom offers,” 2011; Gallagher, 2009; Gannod, et al., 2008) (Arnold-Garza, 2014, p. 8).

Each of the above strengths indicate that employing the flipped classroom pedagogy as an alternate method to the standard method of learning has been gradually drawing interest from various teachers and researchers. Smallhorn (2017, p. 44) claims, “studies also report higher student attendance rates and greater student engagement in the flipped classroom”. This may be due to the flipped approach accommodating all learners within the lesson; hence, learners may be interested in the lesson. In saying this, learners that are not accommodated within the classroom face abundant challenges in understanding and applying content. White, Naidu, Yuriev, Short, McLaughlin and Larson (2017, p. 10) assert that “learning outcomes that increasingly address higher levels within Bloom’s cognitive domain require students to develop skills and attitudes needed to solve problems, predict outcomes, and deal with novel clinical scenarios”. Consequently, the flipped approach allows teachers to adapt lessons to include all learners.

In a study by White et al. (2017), it was found that the advantage of using the flipped approach is that there is better learner interaction with instructional content since they engage with these on their own. Hence, learners are able to pace themselves when learning. Giannakos, Krogstie and Chrisochoides (2014) study concluded that flipped learning offers learners the benefit of learning in a more distinguished means rather than in a standard way of textbook and chalkboard learning. More opportunities are given to learners by providing them with a much more of a transformative way of learning.

The flipped classroom approach is a fairly new approach in SA (section 5.3), thus it is only applied in institutions that already have resources or those that have learners whom hail from privileged backgrounds. The study of Gerassi (2016) took place in a private school in SA. Gerassi's study investigated the experiences of teachers from the shift of the traditional approach to the flipped approach. Viviers (2019), Van Wyk (2019) and Daniel (2016) all entailed studies conducted South African HEIs. Viviers (2019) study examined the flipped classroom approach to teaching in a creative development setting. Van Wyk (2019) study explored student teachers' reflections on the usefulness of a flipped class design in a teaching methodology course. Daniel's (2016) study investigated how the flipped classroom approach could add to an active and open learning setting. In contrast, this study focuses on flipping a government school for engaged learning. Moreover, learners that attend the school stem from different backgrounds which are mostly disadvantaged.

### **3.2.13 Teachers perceptions toward a flipped classroom for engaged learning**

Imparting content by means of using the flipped approach requires a lot of time and dedication from the teacher for effective implementation of the approach. Many teachers are uncomfortable with the thought of creating video lessons or do not have the time to do so because of their busy lifestyles (Hunley, 2016). While teachers may be forced to create such content, there is a worry of learners having access to the internet to engage in learning out of the classroom to access instructional content.

The digital divide disadvantages most learners whom lack access to basic resources out of the school context. It is exceedingly difficult for teachers to assist with this regard other than simply applying for sponsorships for the school. To bridge the digital divide out of the classroom, teachers can provide content on a storage device (as discussed in section 3.2.11) to make sure that every learner has access to the content irrespective of whether the student has the resources or not (Hunley, 2016). Teachers can do as much to ensure that learners have access to engage in learning, however, it is up to the learners to explore for themselves.

A concern for teachers may be for learners not engaging in watching the videos or going through instructional content. As a result, learners attend class unprepared and impede the planning of the lesson and the teacher (Rivera, 2016). It is important for learners to be on par with each other to collaborate in the class in discussion. Learners who attend class unprepared may hinder the learning process and render engaged learning ineffective.

### **3.2.14 Learners perceptions toward a flipped classroom for engaged learning**

Phillips and Trainor (2014, p. 519) maintain that “flipping the classroom has become an increasingly popular approach to meeting the learning needs of [millennial learners]”. The term ‘millennial learners’ is used to suggest that such learners are native to technology when it was predominant (Phillips & Trainor, 2014). As a result, learners of the technological generation prefer engagement in learning that takes place using technology.

The flipped classroom method gives learners freedom for independent learning. Correspondingly, learners are not restricted in subject syllabus. Nevertheless, they have control over their learning. It is impossible for all learners to have the same learning style and take in knowledge at the same pace, therefore, the flipped classroom approach gives learners a chance to watch or read instructional content repetitively if they are battling with specific topics. Thus, it allows learners time to assimilate new content (Herron, 2013).

### **3.2.15 Factors that affect the flipped classroom for engaged learning**

The regard of the flipped learning method may be accredited to its reported successes in bringing about improved engaged learning (Lee, Park & Davis, 2018). Flipped learning has been constructed and employed to more efficiently engage learners in important learning activities, and at the same time requires learner engagement for the intended outcomes to be attained (Lee, Park & Davis, 2018). Although the success rate of the flipped approach may be high, teachers and learners still stumble upon challenges.

### **3.2.15.1**      *Challenges experienced by teachers*

Employing the flipped classroom approach for engaged learning can be overwhelming for facilitators since they are required to plan instructional activities (video, notes, podcasts, and problem solving activities) to cater for all learning styles well in advance. This takes up a lot of time. Moreover, it can also be expensive since it requires a lot of data if facilitators were to upload videos or instructional content that is large in size. Schools have to maintain a budget for maintaining the flipped approach. Software has to be used to create a learning and teaching platform online. While some are paid software, Google Classroom is an example of a free application intended to help learners and teachers interconnect, collaborate, organize and manage assignments (Bell, 2015). Phillips and Trainor (2014, p. 521) claim, “screen-capture software can be used to create the digital lectures, which can be accompanied by digital presentations”. As much as the way in which computers has made the lives of teachers so much easier, a lack of skill of the use of computer integration for engaged learning leads to a lack of self-confidence in their effort to incorporate computers into their classroom instruction.

For teachers to be able to use such software in the learning context, they will have to familiarize themselves with it first. It is necessary for teachers to be adequately trained to transform a classroom into one that allows the involvement of learners that necessitates additional preparation as well as creativeness (Subramaniam & Muniandy, 2016). Whilst some teachers may grasp the use of technology instantly, others may need to be trained to implement the flipped classroom for engaged learning. Such training workshops need to be established from the DoE.

Subramaniam and Muniandy (2016, p. 4669) put forward, “flipped classroom teachers need to accept that the in-class time will be somewhat noisy and disorganized”. Traditional classrooms are rather organised as teachers have a set lesson with a set topic to teach for every lesson. In contrast, the flipped class allows learners to explore and go beyond the topic. In-class time using the flipped approach would accommodate group work and discussion which can encourage a class that can become disruptive.

As much as the flipped classroom may or may not encourage engaged learning, facilitators have to deal with other factors to incorporate the flipped approach.

Teachers need to determine the level of access to instructional content that learners have. What is a flipped classroom (2018, p. 2) argues that “video plays a major role in the majority of flipped classrooms, and as such, schools must consider the platform used to record and stream video content to their students”. Thus, if learners lack such resources to adequately access such content, teachers face the consequence of restricting the opportunities in implementing the flipped class approach. In addition to disadvantaging learners, since teachers are referred to as facilitators in the flipped classroom, they should be mobile in the classroom and help facilitate discussion in the classroom instead of teaching content. Accordingly, in time, teachers risk losing their capability to teach in front of a class owing to their teaching time being replaced by videos and other instructional content (Thair & Oliver, 2016).

Beside the access to resources, teachers face the challenge of learners not doing any school work out of the classroom. It is undeniably a fact that technology has become a distraction in our lives. Consequently, learners can't be trusted to do work at home ahead of a lesson. There are endless distractions at their fingertips whilst being alone in their rooms unsupervised (Maxwell, 2018). Therefore, it may not be feasible to rely on learners to watch instructional content at home without being preoccupied.

### **3.2.15.2      *Challenges experienced by learners***

Learners of the current generation want a sense of understanding with teachers and want for their teachers to be able to recognise them as individuals and not just as one of the learners in the class (Taylor & Parsons, 2011). If teachers understand every learner, they will be able to help all learners to be engaged and succeed. Taylor and Parsons (2011, p. 8) defend, “Students want their teachers to establish learning environments that build interdependent relationships and that promote and create a strong culture of learning”. Accordingly, instructional activities need to be challenging for learners to be motivated and be on task during the lesson. If not, learners will lack

motivation in carrying out the task and thus will contribute to a barrier to learning. Lessons that lack individualisation can also be challenging for learners.

University of Toronto (2019, p. 1) advocates that “[t]he self-paced nature of flipped classrooms, especially the component carried out outside of the traditional classroom, also poses a potential disadvantage for students who cannot work that way”. Consequently, the learner may fall behind the rest of the learners if they internalise content at a pace that is much slower than the rest of the learners. This is seen as a disadvantage to the learner since there is no supervision in teaching the content.

There is also a likelihood of all learners not having equal access to technological resources for engaged learning (University of Toronto, 2019). Thus, not all learners may be engaged in the learning process if teachers only give learners instructional activities via an online platform. The flipped class approach requires learners to have access to a computing device at home as well as the internet. Nevertheless, it cannot be assumed that this is the case for all learners, besides it is imperative to not construct an impediment for those learners that cannot afford such resources. The in-class flip method (section 3.2.10.3) can be used in such circumstances whereby learners have limited access to technological resources to access instructional content. Learning content can also be given as hard copies and exposing learners to multimedia content can be done in class. By doing this, learners will not be disadvantaged in gaining access to the lesson content.

For learners to be engaged, learners need to collaborate with peers face-to-face. The flipped classroom approach can limit such interaction when learners are away from the classroom setting. Although interaction can take place in an online classroom, virtual interaction cannot sufficiently match the physical involvement of a face-to-face learning ambiance. Gluckstern (2017, p. 2) concurs in face-to-face learning: “you are able to engage in natural, spontaneous conversations with classmates that can enrich the learning experience”. Accordingly, physical interaction allows for a more authentic learning experience.

### **3.3 SYNTHESIS**

This chapter highlighted the literature review of flipping the classroom for engaged learning. Various components of the flipped class approach were discussed in accordance to implementing the flipped model for engaged learning. For example, the four pillars of the flipped classroom explain key components that allow flipped learning to take place (Bergmann, 2014). Moreover, the advantages and disadvantages of the flipped classroom approach in relation to engaged learning were discussed. For teachers to see that learners are engaged in learning, the eight indicators for engaged learning can be used by teachers to evaluate elements of engagement (Bouska, 2018). Factors that affect engaged learning were also emphasized within this chapter. There were noticeable gaps in literature that did not reveal how schools that lack resources can employ the flipped classroom approach for engaged learning. The flipped approach was mainly tested in private schools and in HEI's. Chapter four explains how data will be generated in the study.

## **CHAPTER FOUR**

### **METHODOLOGY AND DATA GENERATION FOR CRITICALLY ANALYSING THE FLIPPED CLASSROOM FOR ENGAGED LEARNING**

#### **4.1 INTRODUCTION**

The preceding chapter presented a literature review of the study. This chapter illustrates the methodology applied for data generation to achieve the purpose of critically analysing the flipped classroom for engaged learning. Accordingly, PAR is deliberated as a methodology by paying attention to the principles and features underlying it. This chapter further highlights the purpose behind the choice of PAR as a methodology for generating data as well as how PAR will be used to generate such data. Moreover, this chapter illustrates the stages of using PAR for data generation and the responsibilities of the principal researcher and the co-researchers thereof. Similarly, data generation techniques and their relevance pertaining to the study are discussed. Data analysis using CDA is concisely discussed as it will be utilised comprehensively in the next chapter.

#### **4.2 METHODOLOGY**

##### **4.2.1 The significance of using PAR in the study**

Participatory Action Research (PAR) emphasises participation and action as continuous in action research. Rauch (2014, p.8) defends that “the object of action research is that, there should be no research without action, no action without research”. Hence, PAR involves a much more practical form of research that seeks to provide a change for liberation amongst the oppressed. PAR strives towards comprehending the world through attempting to transform it by liberating the oppressed (Chevalier & Buckles, 2013). Since this study involved critically analysing the flipped classroom for engaged learning, it required to change the status quo of the oppressed and to instil a sense of ownership to all involved, therefore PAR was

deemed appropriate as the research methodology. Other research approaches are seldom comprehensive in terms of giving participants the freedom to be co-researchers and regularly fail to yield change in the study context (Lake & Wendland, 2018). Instead of other research methodologies, PAR was chosen specifically since it permitted the researcher to cooperate alongside participants on an equal level.

PAR allows participants to research their own circumstances to bring about social change (Kemmis, 2007). Participants are able to challenge and critique the status quo. Kemmis (2007, p. 4) maintains, "The notion of 'critique' in critical theory means exploring 'existing conditions' to find how particular perspectives may be unjust or inhumane". Moreover, critiquing the current situation may assist participants to find the notions of society, and what causes society to render such imbalances in society. Participants in the study included teachers, parents and learners. These participants acted as co-researchers with the principal researcher in the data generation and analysis. By using learners as participants, learners were able to identify a need for change according to the oppression that they may face. Morales (2016, p. 158) points out:

PAR is an attribute of action research that the problem is defined by the people who believe and feel that the problem is really a problem in the local setting and the solution to the problem is within the same setting without intention of generalizing its results.

Thus, PAR is relevant in this study, as it will provide youth with prospects to study societal problems in which influences the way in which they live and then establish solutions to correct such hindrances (Camarota & Fine, 2008). PAR can be used as an innovative approach to suit the learner participants of the study for emancipation of marginalisation that may exist in the study context. PAR is substantial in this study since the study included entities of dissimilar statuses such as the teachers, parents and learners. Similarly, PAR is a methodology that is acknowledged for empowering passive entities whilst it endeavours to strip the power from those whom are dominant and are regarded as authoritative within the school context so that all entities are on an equal level.

Since this study was about critically analysing the flipped classroom for engaged learning, the youth were the ones that were seen of utter importance as it is them who should be engaged in the learning process. Nevertheless, the study allowed for youth-adult partnership in the research since it involved the researcher, parents, teachers and learners.

#### **4.2.2 The history of PAR**

According to Kim (2016, p. 40), “PAR was developed mainly from two historical traditions: the northern tradition and the southern tradition”. The former is related to Kurt Lewin whom established the term ‘action research’ while the latter is related to Paulo Freire who focused more on oppressed groups in society (Kim, 2016). MacDonald (2012, p. 37) supports, “Lewin embodied the philosophy that people would be more motivated about their work if they were involved in the decision-making about how the workplace was run”. Consequently, the notion of Lewin (1946) supports the need to include participants as co-researchers and not label them as the ‘researched’ so that they feel included and not used. Kurt Lewin had announced the dialect ‘action research’ as an approach to reviewing society whilst endeavouring to inform changes, and accentuating the significance of client-orientated efforts by deciphering certain issues faced in society (Gillis & Jackson, 2002). This can only be done when the researcher blends themselves into the research context so others can view the researcher as the same by means of themselves.

Paulo Freire may also be considered as the primary person who originated action research as he disputed societal relations in standardised education that were grounded on authority (MacDonald, 2012). An educational methodology was designed by Freire to allow the powerless to view the world through a critical lens (Charles & Ward, 2007). As a result, oppressed individuals have to be liberated for change to take place.

### **4.2.3 The relation of PAR and critical theory**

CT is used as the theory that underpins the research design of PAR within the study. Mackay (2016, p. 1) explains the relation of CT and PAR in saying “for critical participatory action research to bring about social change, it needs to reject the premise of objectivity whereby the researcher is viewed as a distant observer”. Consequently, the researcher has to be actively involved within the research process and work with participants on a continuous basis. The relationship amongst both the researcher and the participants has to be one that is of equal status.

Studies that are critical, participatory and action-oriented primarily involves those that have the right to engage within the research process by placing such learners, teachers and parents as appropriate participants in the research process (Morrell, 2015). Critical PAR aims to redress imbalances of those that were regarded as ‘the researched’ and thus empowers them to act as dependents within the research (Kemmis, McTaggart & Nixon, 2014).

### **4.2.4 Characteristics of PAR**

Action is constant and always includes working with people as a team (Mash, 2014). Hence, PAR is defined by an action whereby the research team (principal researcher and co-researchers) initiates the research to approach a concern within a specific context (Animating Democracy, n.d.). Moreover, since participants should be referred to as co-researchers, this therefore may address issues of influence and domination to create a working environment that is democratic. Mubuke (2013, p. 1) adds that benefits of PAR are seen as “empowering and actively engaging participants in initiating changes in training”. As a result, participants are consumed in the research process and are able to work in collaboration amongst other participants and the principal researcher. Mash (2014, p. 1) argues, “PAR believes that people can change their reality and create new knowledge through engaging both consciously and systematically with the steps of the learning cycle”.

The diagram below depicts the processes involved when assimilating content from one person to another, thereby collaborating with others.

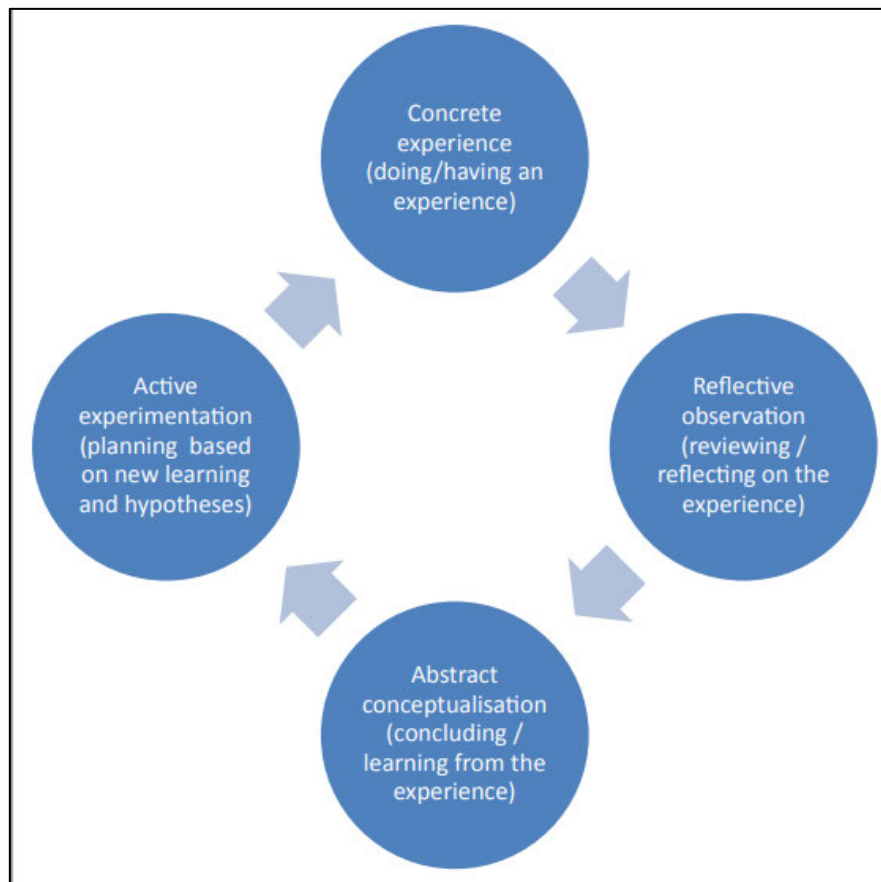


Figure 4.1: Action Reflection Learning cycle <sup>7</sup>

In the cycle above, participants are involved in a process of perceiving and reflecting on their personal involvement. By participants collaborating in a group, participants will improve and develop knowledge and skills. As a result, this will help them gain individual progress and empowerment in the study context (Welby-Solomon, 2015). Allen (2016, p. 8) asserts, “In action research the focus is action to improve a situation, and the research is the conscious effort, as part of the process, to develop public knowledge that adds to theories of action that inform similar collaborative processes”. This reiterates the action reflection learning cycle as individuals acquire knowledge from adapting their existing knowledge in their involvement with others. Hence, learning cannot occur in isolation since it is a joint process. Consequently, in PAR, the researcher is more effective when working in collaboration with a group to share

<sup>7</sup> Image adapted from: <http://www.scielo.org.za/pdf/phcfm/v6n1/22.pdf>

common interests and differing perspectives to bring about change for the benefit of society (Allen, 2016).

#### **4.2.5 Challenges of conducting PAR**

As much as PAR assists to reflect change, there are also challenges of using PAR. It is difficult to recruit participants when they are uninterested. If participants are interested, they expect incentives to participate. As a result, funding may be an issue if the researcher is unable to afford such incentives. Nevertheless, participants should be rewarded for their commitment and participation (Goodall & Barnard, 2015) since their time is used for data generation.

Participants need to be motivated in the research process. As much as they may be involved as 'co-researchers' in the study, they may lose interest if the research is not engaging and does not allocate roles to them. This is mostly seen in youth participants whereby their motivation and excitement can disintegrate swiftly (Goodall & Barnard, 2015). Youth participants may hesitate to partake in the research. Such hesitance may result from distrust between the researcher and fellow participants (Kim, 2016). Trust is built over time. Trust cannot be established within a limited period. A relationship has to be formed for trust to be established. Youth may also choose to drop out of the study since they may lack the responsibility trait. Accordingly, the research group has to change and relationships have to be built all over again with new participants. This in turn may hinder trust amongst the new group of participants due to the researcher having limited time within the research context.

### 4.3 DATA GENERATION IN PAR

Given (2008, p. 192) affirms, “Data generation refers to the theory and methods used by researchers to create data from a sampled data source in a qualitative study”. Such sources of data consist of participants that will contribute to the study. For example, in this study, participants include teachers, learners and parents. Qualitative data was generated in the study using conversational interviews, focus groups discussions and participant observation. Qualitative research generates non-numerical data and pursues to construe meaning and comprehend social life (Crossman, 2019). As a result, descriptive data was generated as opposed to statistical data. Data generation took place in various phases to ensure integrity of the research in critically analysing the flipped the classroom for engaged learning.

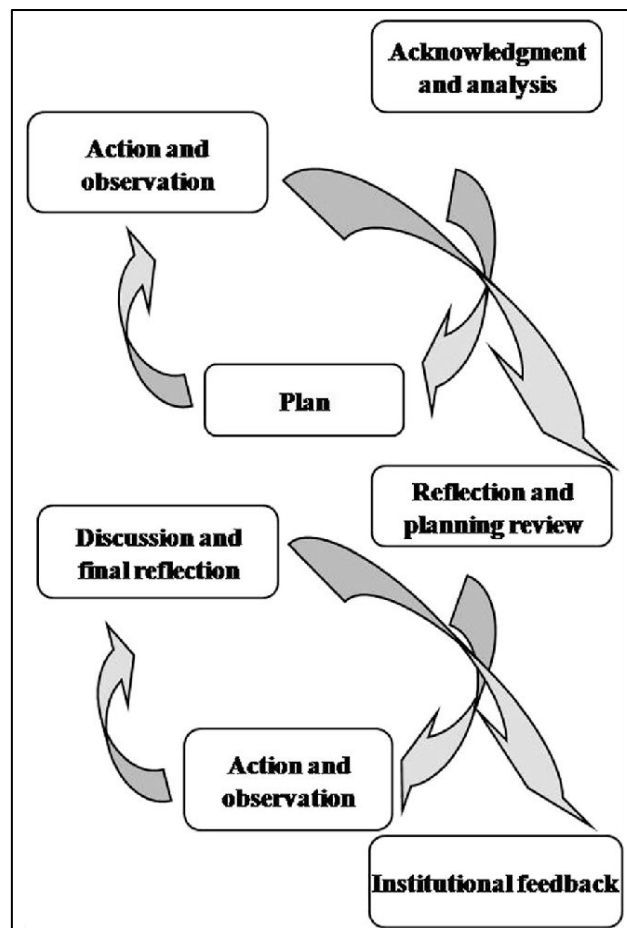


Figure 4.2: Stages of Participatory Action Research <sup>8</sup>

The main aim of PAR is to elucidate specific problems in society, in this case, in flipping the classroom for engaged learning. The diagram above (Figure 4.2) depicts a spiral

<sup>8</sup> Image adapted from (Moreno-Poyato et al, 2017)

process through a series of steps in a spiral of self-reflective circles (Moreno-Poyato, Delgado-Hito, Suarez-Perez, Leyva-Moral, Acena-Dominguez et al., 2017). Phases of data generation in the study are detailed as follows:

*Phase 1: Planning a change-* The co-researchers met on the 5th of November 2019. The focal intention of the initial meeting was to introduce the study, communicate and brainstorm ideas, discuss and strategize in coherence with the PAR data generation methods. The latter was further discussed with co-researchers.

*Phase 2: Acting and observing the process of change-* The principal researcher supervised activities together with the teachers (co-researchers). Instructional activities were discussed between the principal researcher and the teachers to complete with learners since teachers initially did not understand how to implement the flipped approach in their classrooms Teachers gave learners instructional content by electronic means (video link, audio clip) and a hard copy of notes. Parents were required to make sure that learning took place and to encourage learners to prepare for the school lesson. The following lesson entailed learners reflecting on the content that was given to them during the previous lesson. Teachers facilitated discussion and gave learners a platform to speak and discuss with their fellow peers. Time was also allocated for consolidation. The researcher observed this process, made reflective notes and conducted focus group dialogues alongside the learners. The principal researcher assumed the role of a participant observer and was inclined to blend into the school context by conducting regular visits. Co-researchers were seen as equal to the researcher in the data generation process since the researcher also took part in the discussion.

*Phase 3: Reflecting on the process and its consequences-* In addition to participant observation, conversational interviews and focus groups were used as data generation methods. Learner co-researchers participated in focus group discussions over two sessions. Conversational interviews took place over separate occasions with teachers and parents. The entire research team was involved during this phase.

*Phase 4: Re-planning-* The tool used to generate data was a digital voice recorder. Within the first meeting of the data generation process, the researcher indicated the use of the voice recorder and sought permission to use it. Meetings were then set up

to engage privately with each participant. During this phase, the research team had to transcribe data.

*Phase 5: Acting and observing again-* The principal researcher and co-researchers were involved in the interpretation of data. For example, transcripts of voice recordings and manipulation of text in reflective notes were used for data interpretation.

*Phase 6: Reflecting again-* Recommendations as well as conclusions that resulted from the data analysis of the study was presented in terms of written text and illustrated diagrams. This phase required the whole research team to be involved to implement social change. Thorough reflection was done by the team centred on the means by which the research was completed and the outcomes thereof.

### **4.3.1 Data generation instruments**

#### ***4.3.1.1 Conversational interviewing schedule***

It is assumed that a conversation merely necessitates engagement in dialogue. From this, one begins to form a level of understanding from what was grasped (Johnson, 2015). Although teachers employ instructional strategies to teach learners, such strategies do not always engage learners in the classroom. For learner engagement to be successful, teachers should pose higher order questioning in the classroom (Johnson, 2015; Remark & Ewing, 2015). Thus, this allows learners to develop critical thinking skills. In addition, it expands the minds of learners to think beyond what is taught to them. Learners are therefore able to use the knowledge gained and apply it in real life.

Given (2008, p. 194) says, “Conversational interviewing is an approach to generate verbal data through talking about specified topics with research participants in an informal way”. Hence, conversational interviewing was used to generate data as a data generation instrument.

Conversational interviewing eliminates any inequality amongst the researcher and the participants since it allows both parties to engage in dialogue. Moreover, it creates a sense of acceptance from participants since they will not feel pressurised as they will be engaging in a simple conversation with the researcher. Understandably, before engaging in an interview, the researcher has to form a relationship with participants to maintain a sense of acceptance and to disregard any dissimilarity that may exist. To add, this type of interview is unstructured or informal and does not have any set questions. Questions are generated promptly whilst the interview is ongoing (Jamshed, 2014). Since PAR refer to participants as co-researchers, this was achieved as the sense of likeness was constructed before data generation. Conrad and Schober (1999, p. 2) declare, "The approach is based on a view of communication that requires partners to converse about what is said until they are confident they adequately understand each other". This thereby encouraged a sense of confidence from participants since they were able to fathom the questions posed from the researcher's standpoint.

Furthermore, participants in PAR should be empowered and not feel subordinate in any way. Since this was a critical study, emancipation from domination was of utmost importance. Clearly traditional structured interviews go by oppression in which it makes participants feel used and powerless. Accordingly, conversational interviews allowed both the researcher and participants to engage in a manner that was more relaxed as opposed to the tense feeling of a structured interview.

Conversational interviewing consents the researcher to ask participants if they did not understand a question and provide impromptu opinions to highlight the significance of questions (Jamshed, 2014). It is assumed that this type of data generation instrument is intended to assure that participants fathom questions as intended (Conrad & Schober, 1999). Within the duration of the study, the researcher built a mutual relationship with participants and involved them in the study. By doing so, participants was in-turn involved and were given the role as co-researchers. Participants felt a sense of significance when they were referred to as co-researchers. The researcher blended into the research context and engaged in informal conversations to build a level of trust. An advantage of having conversations was that more open responses

from participants were achieved (Smalley, 2018). This enriched the data that was generated.

#### **4.3.1.2**      *Focus groups discussion schedule*

It is stated that engaging participants in a group discussion usually affects the answers from participants in contrast to engaging in a one-to-one conversation (Smithson, 2000). This is due to members of the group influencing each other's beliefs and opinions. While this may seem as a disadvantage, the advantage is that it forces all participants to have their say since there is peer support in the same view and differing views. It also brings about equality amongst all since the researcher participates in the discussion. The reason why focus groups were selected as one of the data generation instruments was due to it being conducted in a controlled setting. Focus groups permit the researcher the opportunity towards being involved in discussion beside participants to develop trustworthiness of findings when researchers commence analysis of data generated (Redman-MacLaren, Mills & Tommbe, 2014). Focus group discussions were used to attain participants' views and opinions about the results of using the flipped classroom approach to enhance engaged learning.

Flynn, Albrecht and Scott (2008, p. 1) maintain, "The key aspect of focus groups is the interaction between participants as a way of collecting qualitative data that would not emerge using other methods". Direct communication is enhanced amidst the researcher and the participants since focus group encourages discussion amongst all members within the group. Participants either agree or disagree with the views and opinions of other participants. As a result, this encourages discussion amongst participants. However, focus group discussions might provoke participants to deviate from expressing their honest views since other participants may influence each other's views. Writing (2019, p. 4) highlights a disadvantage of using focus groups in saying that "the [participants] may not express their honest and personal opinions about the topic at hand. They may be hesitant to express their thoughts". Participants may also hesitate to partake in the focus group due to anonymity (Strout, DiFazio & Vessey,

2017). Unlike confidentiality in face-to-face interviews, focus groups encourage discussion in a group.

Scholars who deliberated about the topic of focus groups defend that the difference between a focus group discussion and an individual interview is unlikely since the data generated is treated the same between the two (Smithson, 2000). This should not be so since both methods are ideally different. In defence, Heary and Hennessy (2012, p. 60) affirm that “focus group interviews are regarded as useful for gathering information on emotions, experiences and feelings”. Analysis of focus group discussions should include the emotions of participants beside the responses. Nonetheless, focus groups are useful in generating data sensitive in nature. Whereas some may assert that a broader set of data materializes from the group collaboration (Clough & Nutbrown, 2002; Heary & Hennessy, 2012), others assert a further comprehensive interpretation of the concerns explored will in turn be discovered using focus groups (Breen, 2006; Rabiee, 2004).

#### **4.3.1.3      *Participant observation schedule***

It is asserted that participant observation in PAR allows the researcher to interact with participants while gathering data (Jorgensen, 2015; Kawulich, 2005; Thompson, 2018). Accordingly, the researcher acts as a participant in the context observed. In participant observation, the researcher has to blend within the research context to identify with the participant. In other words, the researcher attempts to study the context as an outsider blending in as an insider in the research context (Readings, 2005). In saying so, the researcher has to participate in the activity that is planned for data generation. While this may improve the association concerning the researcher and the participants, it can be said that when the researcher participates in the activity, the behaviour of those observed is changed to unnatural (Ferguson, 2018). This can be agreed upon since participants are aware that there is somebody either known or unknown watching them or making field notes. This in turn is a limitation of using participant observation for data generation in PAR. To turn this into an advantage, the more time the researcher spends with participants in the research context, the more

time the researcher has with participants, close ties can be established. In turn, this will allow the researcher to push deeper and probe for a better understanding (Thompson, 2018). It is understood that casual interactions made with participants are similarly imperative elements of the data generation method and ought to be documented in the field notes.

### 4.3.2 Participant profiling

Statistic Solutions (2017, p. 1) maintains, “A qualitative researcher must ensure they can access their participants and that the participants have experience with the phenomenon under study”. Therefore, since the participants in the study were of a small number, CAT learner participants were chosen purposively.

Participant profiling is important to ensure that research is a success so that data generation produces the desirable results. Participation of all relevant stakeholders within the research has been maintained, especially amongst powerless groups (sub-section 1.3.1). When referring to and analysing data, pseudonyms were used to ensure that identities of participants were protected so that participants felt comfortable whilst communicating their views and opinions of flipping the classroom for engaged learning. The participants who were chosen to partake and contribute to the study are shown in the tables 4.1, 4.2 and 4.3.

Table 4.1: Learner participant profiling

<b>LEARNER PARTICIPANTS</b>				
<b>Name</b>	<b>Grade</b>	<b>Gender</b>	<b>Description-Subject</b>	<b>Documentary evidence</b>
Lifa	11	Male	CAT	Audio file for focus group/ transcripts/ observation notes
Karabo	11	Female	CAT	
Sandiso	11	Male	CAT	
Olwethu	11	Male	CAT	
Sinenhlanhla	11	Female	CAT	
Lucia	11	Female	CAT	

Learner participants that were involved were CAT learners. They had a technological background and were knowledgeable and skilled in the technology field. They enjoyed learning using the flipped classroom approach since they were familiar with using computers in the classroom as opposed to the traditional approach of learning. Moreover, they preferred learning using the flipped classroom approach.

Table 4.2: Teacher participant profiling

<b>TEACHER PARTICIPANTS</b>					
<b>Name</b>	<b>Gender</b>	<b>Subject</b>	<b>Experience</b>	<b>Contribution</b>	<b>Documentary evidence</b>
Mrs Moodley	Female	CAT	10 years as CAT teacher.	Able to relate to challenges and successes of learners within the classroom when learning with technology. Has knowledge about technology-enabled learning within and out of the classroom.	Audio file for conversational interviews/ transcripts/ observation notes
Miss Khumalo	Female	NS	7 years as Life Science and NS teacher	Able to relate to challenges and successes of learners within the classroom when using the traditional method. Has some knowledge about technology-enabled learning within the classroom.	

Like the learner participants, teacher participants were skilled about the phenomenon of technology in the classroom. However, of the two teacher participants selected, one was a NS teacher. The reason why an NS teacher was selected is to observe whether an unskilled ICT teacher would be able to implement the flipped classroom approach as this approach can be implemented in all subjects. Besides, there is only one ICT teacher at the school.

Table 4.3: Parent participant profiling

<b>PARENT PARTICIPANTS</b>						
<b>Name</b>	<b>Gender</b>	<b>Child</b>	<b>Education level</b>	<b>Employed</b>	<b>Contribution</b>	<b>Documentary evidence</b>
Mrs Ndlovu	Female	Lifa	Matric	Yes	Able to monitor the learning development process at home. The only breadwinner in the household.	Audio file for conversational interviews/ transcripts
Mrs Dlamini	Female	Sandiso	Less than matric	No	Able to monitor the learning development process at home- Collects a social grant from the government.	

Parents selected were amongst two of the learner participants. They were selected as per their availability to participate in the research. The reason why they were selected

is due to them being important stakeholders within the school structure. Their responsibility within the research process was to monitor their child during the process of them learning using the flipped classroom approach.

### **4.3.3 Data generation procedures**

Data generation was achieved using three methods. These were participant observation, focus group discussions and conversational interviews (section 4.3.1). Since the main purpose of the study was to critically analyse the flipped classroom for engaged learning, an open platform was created by using PAR which viewed participants as co-researchers and also allowed them to open up about their uncertainties, expectations and experiences. Co-researchers considered that the three data generation methods would be suitable since it would allow for openness and a voice that would result in transformation for their community. Creswell and Creswell (2018, p.55) approve by maintaining that “data in PAR studies is generated using several methods at once”. Accordingly, the selected methods were used since they all are well known in qualitative studies as well as the sphere of PAR studies. Taking into consideration the fact that not all learners have basic access to technology such as a device or the internet in the comfort of their home, the researcher had given the teacher electronic resources on a storage device. Such electronic resources were an audio file, a video file and a web link to access a website for more information on the lesson content. Furthermore, a hardcopy of the notes was given to learners. The electronic resources were transferred and stored on learners’ phones.

The following instruments illustrated below (figure 4.3) were used to generate rich data.

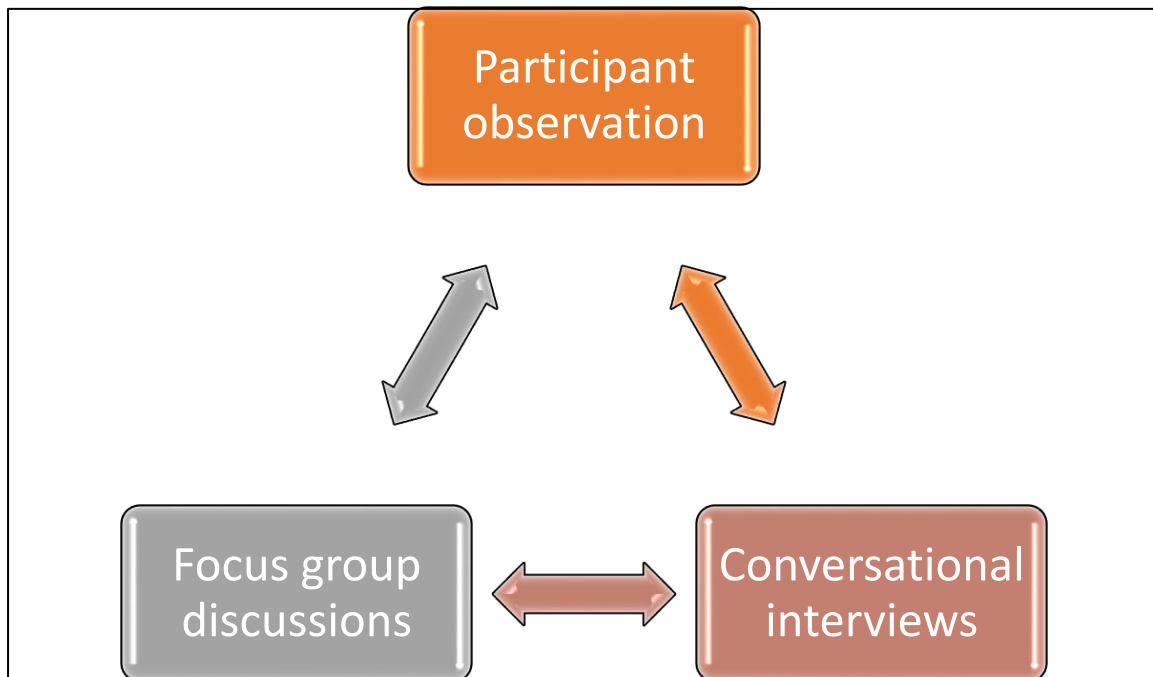


Figure 4.3: Research instruments

Data generation took place over approximately 60 days toward the end of the year 2019. Participant observation was ongoing during the data generation process. Participants of the focus group included six learners to enquire about the effectiveness of the flipped class approach to enhance engaged learning. The researcher bonded with participants by conducting regular visits to the school so that participants would not be overwhelmed when meeting for the focus group discussions. Participants were prepared before the focus group meeting. This was done by meeting with participants and informing them how data would be generated. Furthermore, consent forms were given to explain how data generation would occur. Focus groups were conducted in one session of roughly 60 minutes. Discussions were guided in terms of probes and prompts. Creswell and Creswell (2018, p. 304) enlighten that “probes are reminders to the researcher to ask for more information, or to ask for an explanation of ideas”. For the comfort of participants, data generation was accomplished by using a voice recorder and placing it in the centre of the group. Learners were made aware of the instrument that was used to document for data generation. Data was produced in terms of transcripts that included transcriptions from the focus group.

After participant observation and the focus group interview with learners were complete, parent and teacher conversations were done over four separate occasions. Two teachers and two parents participated to enquire about their thoughts and feelings about flipping the class for engaged learning.

Mubuuke (2013, p. 10) maintains, “The greatest advantage of PAR appears to be the engagement, collaboration, empowerment and active involvement”. I concur with Mubuuke since participants were outspoken during the data generation process. Learners, in the main, were outspoken about flipping the classroom for engaged learning. Furthermore, learners enjoyed learning by means of the flipped classroom approach. PAR allowed co-researchers a platform to voice their concerns and views; likewise, it allowed the researcher to understand the views of participants. An initial meeting was set up to discuss literature around the flipped classroom for engaged learning. This was important to inform co-researchers about the researched topic. Data generation was guided in terms of the following key questions as shown below:

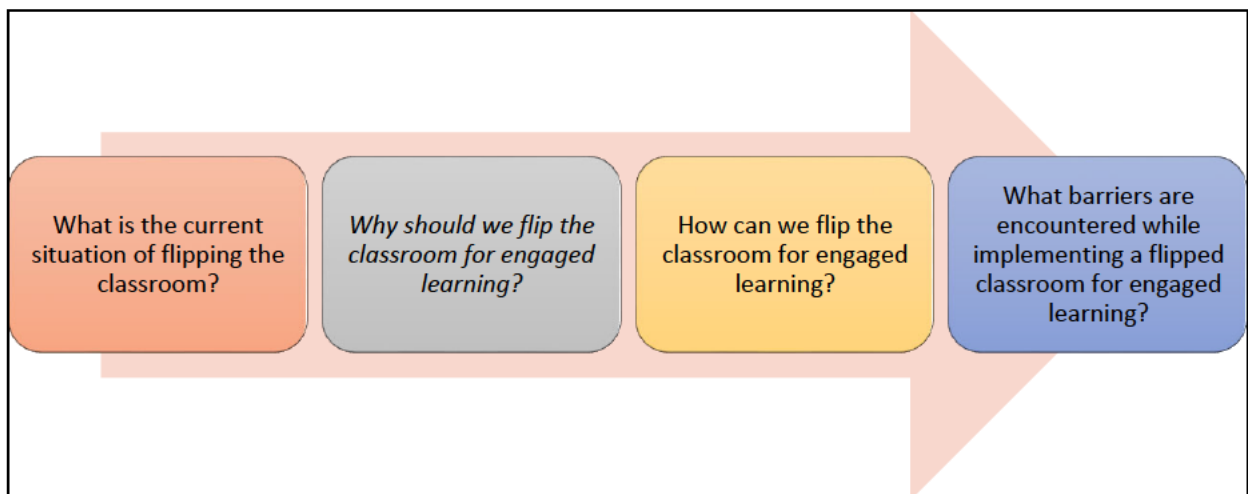


Figure 4.4: Key research questions

The above key questions (Figure 4.4) guided data generation in attaining rich data throughout the research process. The first question was designed to generate data to assess if flipped learning was taking place. It also examined whether the flipped classroom approach was working or not. The second question was constructed to generate data for how stakeholders of the school can flip the classroom for engaged learning. The third question aimed to generate data to determine limitations

encountered while flipping the classroom for engaged learning. Collective patterns of data were identified and clustered into the objectives of the study. Issues emerged under each objective that revolved around flipping the classroom for engaged learning.

### **4.3.3 Ethical considerations**

An important factor to note before data was generated was permission from participants (Cohen, Manion & Morrison, 2007). Voluntary informed consent is an essential prerequisite intended for participation in research. Rose (n.d., p. 6) maintains that informed consent “is not merely a form that is signed but is a process, in which the subject has an understanding of the research and its risks”. Hence, researchers need to respect individual autonomy by allowing participants to sign an informed consent to read about the study, how they will participate and know that they are not obliged to participate. Participants were told that their identities would be anonymised. To ensure that data generation was done in an ethical manner and is trustworthy, various factors had to be considered which was explained in Chapter one, section 1.5 of the study.

### **4.3.4 Trustworthiness**

Trustworthiness within research is defined by LaBanca (2010, p.2) as “demonstration that the evidence for the results reported is sound and when the argument made based on the results is strong”. Since the study was qualitative in nature, it had to be trustworthy. Trustworthiness comprises of four elements: transferability, credibility, confirmability and dependability (DeVault, 2017).

Transferability shows that findings can be applicable to similar phenomena (Cohen & Crabtree, 2006). A technique to ensure transferability is thick description. Thick description can be described as when the qualitative researcher provides a detailed strong description of their encounters and experiences throughout the progression of data generation to consent other scholars to make the transferability judgements themselves (Olivia, 2017). This was done by describing the actual setup of the

classroom for flipped learning and the discussions that took place within the classroom after learners studied content or did school activities at home.

To address the above four components of trustworthiness, triangulation and member checks were used to address credibility in participants. Guion, Diehl and McDonald (2011, p. 2) define triangulation as “a method to check and establish validity in studies by analysing a research question from multiple perspectives and to arrive at consistency across data sources or approaches”. Hence, triangulation assists by asking similar questions for inquiry to a diverse set of participants. In addition, triangulation generates data by using dissimilar methods from dissimilar sources to generate data from such research questions (DeVault, 2017). Other participants that could have been used in the study should have been the SMT to enquire whether applying the flipped classroom approach steered towards engaged learning.

Member checks allow participants to review the data generated by the researcher to make sure that the researcher’s interpretation is correct (DeVault, 2017). This was done in the data generation process by the researcher consolidating with participants in terms of the understanding that was reached about activities within the flipped classroom.

Cohen and Crabtree (2006, p. 1) define confirmability as “the extent to which the findings of a study are shaped by the respondents and not researcher bias, motivation, or interest”. To ensure confirmability in the study, an audit trail can be done to ensure that the study is confirmable. These are records kept from the beginning of the study to trace information and make sure it is correct (Carcary, 2009). This was done by transcribing interviews and keeping the actual audio records as confirmable proof. Researchers have to interpret what participants are saying as the truth and not edit their experiences as what researchers feel is right.

Dependability denotes towards the uniformity and stability of the discoveries made during the data generation process (Korstjens & Moser, 2018). If results are not accurate, the study ought not to be repeated by other researchers. Inquiry audit can

be used as a technique to make sure that the study is dependable. De Langen (2009, p. 72) defines inquiry audit as a “means of data and relevant supporting documents being scrutinized by an external reviewer”. This was done by giving a peer my findings to moderate as well as an editor to check for spelling and grammar mistakes.

## **4.4 PAR IN THE CONTEXT OF FLIPPING THE CLASSROOM FOR ENGAGED LEARNING**

### **4.4.1 Relevance of Participatory Action Research in flipping the classroom for engaged learning**

MacDonald (2012, p. 36) maintains that “PAR involves a cyclic process of research, reflection, and action”. PAR is used to derive data from learner participants. PAR allows learners to express themselves in the fight for education justice (Warren & Marciano, 2018). Cammarota and Fine (2008, p. 3) maintain, “PAR provides young people with opportunities to study social problems affecting their lives and then determine actions to rectify these problems”. This type of PAR will allow transformational resistance amongst the youth of the study and will thus allow the learners to attend to issues of inequality and pursue actions for social change (Cammarota & Fine, 2008). Thus, for action to be taken and for change to be made, various stages in PAR have to be taken into consideration.

Powers and Allaman (2012, p. 1) insist that “PAR specifically employs a youth development lens to the process of PAR to ensure that young people have a direct role in shaping policies that impact them”. Since the study is about flipping the classroom for engaged learning, it involves youth. As a result, using PAR in the study will empower youth to challenge the status quo of learning and find loopholes where they can to consider change.

Through becoming co-researchers, youth acquire new knowledge about current social situations. In turn, learners will be able to work with the principal researcher and other adult participants (teachers and parents) to outline issues and acquire knowledge

about flipping the classroom for engaged learning through a cooperative research process. Consequently, conducting qualitative research and critical analysis will assist learners to formulate their own opinions about engaged learning (Powers & Allaman, 2012). Sequentially, from the principal researcher and other adult participants, youth participants acquire skills that can be used to empower and develop leadership roles (Warren & Marciano, 2018). Learners are thus motivated because PAR gives them the power to voice their concerns and advocate for change. Nevertheless, since this study used PAR as the methodology, the principal researcher mandated the youth to achieve various outcomes of the study.

#### **4.4.2 Phases/ stages in PAR during data generation**

Since PAR focuses on qualitative attributes of a person's opinion, such is shown with no influence from the principal researcher (MacDonald, 2012). Data generation in PAR takes place on a basis that is relaxed for participants and the researcher. This is to ensure equality amongst both parties. Mubuuke (2013, p. 3) argues that “action in PAR signifies that the research process is geared towards generating activities that lead to change within a context”. Hence, by working towards such activities, the acclaimed need in society will be ultimately attended to.

According to Watters, Comeau and Restall (2010, p. 12) PAR is broken down into stages as described below:

##### **1. Recruit PAR team**

Invitations to participate in the study were put up on the school notice boards as well as given to learners in their respective classes. From this, relevant participants were recruited and were also given the opportunity to recruit others whom experienced and faced similar circumstances. Watters, Comeau and Restall (2010, p. 13) indicate that “within this stage it may be helpful for the team to decide on how decisions will be made or how conflicts will be resolved”. Thus, specific roles were assigned to each participant within the research team.

## 2. Build relationships

Trust informs the foundation of all relationships. The researcher was not seen as the dominant one in the study context. If so, it would be seen as the researcher having all the power and participants as the ones that are subordinate. Participants were referred to as 'co-researchers' and not as 'participants' (Datta, Khyang, Prue Khyang, Prue Kheyang, Ching Khyang & Chapola, 2015). The researcher appeared over numerous visits consequently, thus relationships were built on a strong foundation. The research team was introduced to each other during the initial meeting. Traditions for the research team were established to build a sense of community. For example, every team meeting began with a new icebreaker and ended by imparting reflections of the day (Youth Activism Project, 2018).

## 3. Develop critical awareness

Participants needed to be informed of the study before the research could commence. Hence, it was imperative to cultivate a consciousness by which societal concerns generally occurred due to historical, social, environmental and economic motives that favour certain classes over the other (Youth Activism Project, 2018). This was not related to the doing of any individual person. An interpretation of thoughts which is associated to oppression and discrimination needed to be linked to such community issues. Prior to initiating the research, the principal researcher had discussed the title and phenomenon of the study in addition to issues related to the study to allow participants to be critically aware.

## 4. Identify issues

The problem of the situation had to be defined in order for it to be resolved. Shared discussion and interaction amongst the research team had to be made for the problem to be identified; accordingly, problem identification could not be accomplished in isolation (MacDonald, 2012). People with lived experiences should be the one's choosing the issue. The research team consisted of the principal researcher and participants who were regarded as co-researchers. Macdonald (2012, p. 38) upholds, "Individuals in a community or organization actively participate in collaboration with the

professional researcher throughout the entire research process". As a result, participants in PAR play an active role of engagement in the pursuit for gathering data to influence imminent action. In the study, learners and teachers were the ones who investigated the issue since they were the individuals within the study whom needed to be empowered.

## 5. Create research design

During this stage, the research team determined methods of data generation. Each method needed to be analysed according to strengths and weaknesses. Data generation methods included those that allowed for equality between both the researcher and the participants. The research team decided on selecting the best methods to generate data towards answering the key sub-questions of the study. Methods decided upon were conversational interviewing, focus groups and participant observation. Such research methods remain as rich sources of data generation and assisted the researcher to derive qualitative data for the research (Sutton, 2015).

## 6. Conduct research

An imperative approach employed in various PAR projects is by means of utilising a reflective journal (Morrel, 2015). A research journal was used to record observations made by the principal researcher. Whilst teachers were busy with facilitating learners, or giving them activities, the researcher was observing this process and made reflective notes. Data generation was pursued by involving the whole research team. Participants' emotional state and opinions were revealed without manipulation or influence from the researcher. This was done through the use of probes and prompts whilst using conversational interviews and focus groups.

## 7. Analyse data

Participants played an active role in data analysis together with the researcher since both parties formed the research team. Computer application programs such as Microsoft Word were used to transcribe data generated from voice recordings. The

research team had to discover similarities found by data generation methods and categorise data by grouping them under each objective of the study.

#### 8. Advocate for change

This stage is the key stage of PAR (Watters, Comeau & Restall, 2010). Conclusions from the research had to be taken in to consideration to implement social change. The team developed a written report based on findings and conclusions and thereby linked it to solutions. The report included a textual summary and specific quotations taken from interview transcripts. A PowerPoint presentation was created to view a summary of solutions to advocate for change.

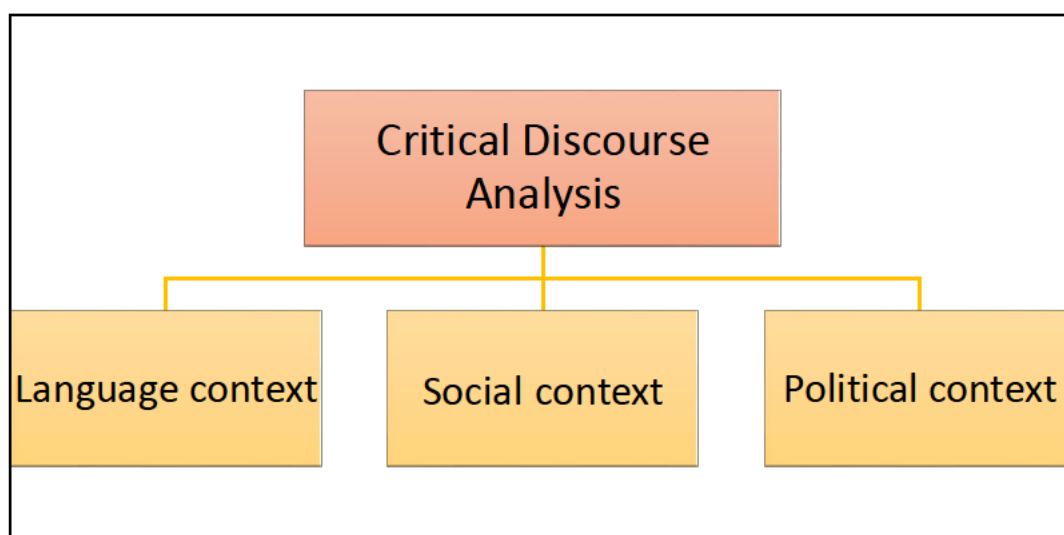
#### 9. Reflect and repeat

Reflection of the project was done to check whether the goal was achieved or not. This stage required the whole research team to be involved. Each stage of the project had to be evaluated to make sure that there was a desired outcome, if not; specific stages would need to be revisited to ensure that the goal of the research will be achieved. This was done in line with ethical considerations discussed in section 4.3.3 of the study.

### **4.5 CRITICAL DISCOURSE ANALYSIS**

It is assumed that PAR involves a demanding enquiry in the data generation process, therefore, it provides a thorough analysis whilst using CDA (Caraballo, Lozenski, Lyiscott & Morrell, 2017). Furthermore, it is understood that data analysis in CT may assist to connect social issues to social change. In saying this, the process of connecting theory to data analysis specifies how CT concepts relate to the data thus propose recommendations for action (Winkle-Wagner, Lee-Johnson & Gaskew, 2018). Mullet (2018, p. 116) delineates CDA as “a qualitative analytical approach for critically describing, interpreting, and explaining the ways in which discourses construct, maintain, and legitimize social inequalities”. Therefore, it can be argued that

CDA is appropriate to analyse data generated in the study since the study fits in the critical paradigm and employs CT as the foundation. Data generated in the study was derived from the identified instruments as explained in section 4.3.1 of the study. A voice recorder was used for conversational interviews and focus groups. A reflective journal was used to record field notes and used for participant observation. Winkle-Wagner, Lee-Johnson and Gaskew (2018, p. 120) put forward that “critical qualitative research signifies a diverse set of divergent projects that arguably are unified in a commitment to expose and critique the forms of inequality and discrimination that operate in daily life”. Thus, CDA proved to be beneficial in the analysis of the study since it helped to uncover inequalities that existed. It is understood that CDA entails three important connections (Regmi, 2017):



*Figure 4.5: Connections of Critical Discourse Analysis*

The above diagram (Figure 4.5) illustrates how the language context, social context and political context are linked in CDA. Arguably, the function of CDA is to discover the connection between language, society, politics and opinions. Furthermore, its purpose is to reveal the concealed and apparent social along with political standards and morals (Fatin, Jabar & Yunus, 2017). It is a reality that the main source through which data is generated is through language (Regmi, 2017). Consequently, CDA focuses on how power and social relations are created through spoken and written texts. Such spoken texts to analyse in the study are the conversational interviews and

the focus groups. It is found that certain scholars are saying that CDA pays more attention to negative uses of discourses rather than positive discourse (Breeze, 2013; Haque, 2008; Nonhoff, 2017). I agree with this statement since this is due to picking out all of the forces of oppression in analysis. CDA is used in critical studies. Studies that are critical entail forces of oppression and inequality. Hence, in justification, the researcher has to use CDA to interpret all the negative notions that were generated from participants.

For Ulinuha, Udasmoro and Wijaya (2013, p. 262) CDA “focuses on discursive conditions, components, and consequences of power abuse by dominant groups”. Hence, the main objective of focusing on these aspects is to determine how marginalised groups are ideologically shaped by sources of power. In previous chapters of the study (chapter one and chapter two), it was revealed who the powerless groups are and why they are referred to as powerless in the South African education system. Elsharkawy (2017, p. 10) argues that CDA “is the linguistic form of social interaction that is either embedded in social context of situation or that it interprets the social system that constitutes the culture of institutions or society as a whole”. Thus CDA boasts three dimensions (Figure 4.6) for discourse by Fairclough (1989, 1995) for data analysis as explained in sub-section 1.3.8 of the study:

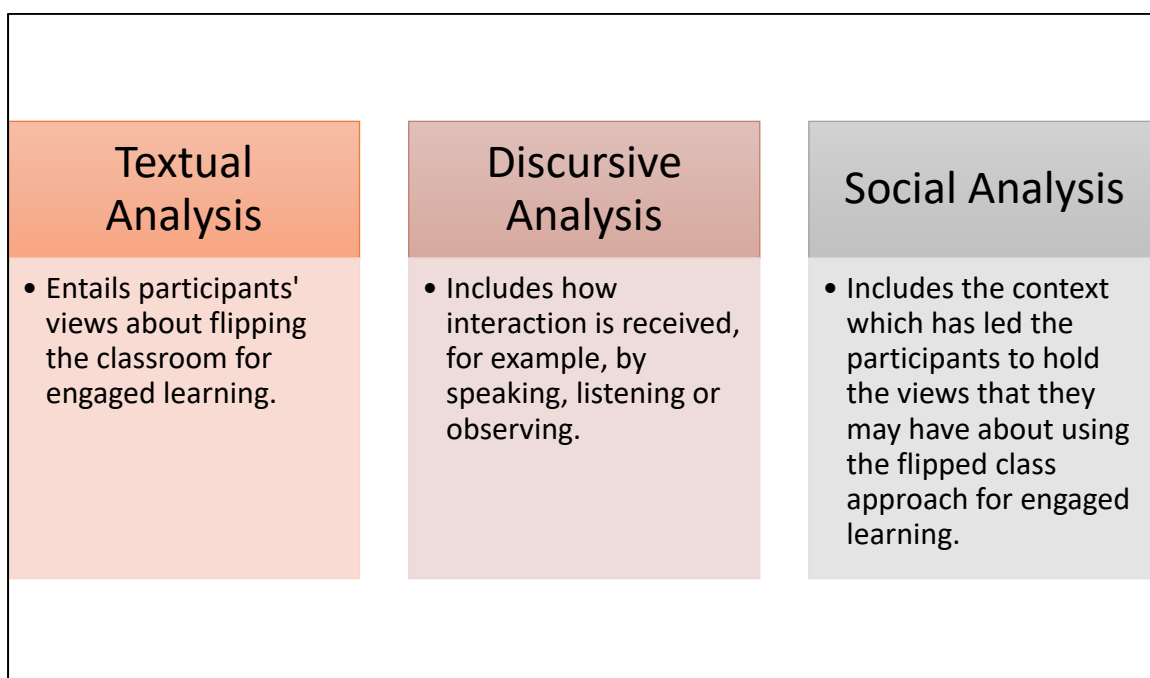


Figure 4.6: Three-dimensional framework of CDA

Fairclough established a three-tiered framework by which analysis can be examined on three levels: language texts, discourse practice and discursive events (Dremel, 2014). Data is presented, analysed and interpreted according to the three levels in chapter five of the study.

#### **4.5.1 Textual level**

Fairclough and Fairclough (2015, p. 1) maintain that text can be understood as “written texts– texts in the most obvious and commonplace sense – but also ‘multimodal’ texts which combine written language and other ‘semiotic modalities’, as well as texts in which the language is spoken, not written”. Hence, textual analysis encompasses an analysis of both spoken and written text, which then needs to be transcribed to derive the deeper understanding (Farrelly, 2019). In this study, the spoken text was recorded by means of a voice recorder and then transcribed. Transcription helps researchers to process data into information. Furthermore, it helps researchers to read, analyse and interpret information with ease (Tiwari, Kesipeddi & Jagda, 2018).

#### **4.5.2 Discursive level**

Discursive analysis of text can be described as a discursive practice which places emphasis on interpretation of texts by the participants (Farrelly, 2019). At this level, the main focus is on interpretation of texts. Sanbir and Kanwal (2018, p. 91) describe this as “a product of an interface between the properties of the text and the interpretative resources and practices which the interpreter brings to bear upon the text”. Hence, it is important to note how powerful language is and how it can be interpreted by means of different texts. Unvar and Rahimi (2013, p. 15) maintain that discursive analysis “provides a deep understanding of the language used in a context in all many aspects like processing grammar and understanding language”. It also helps the researcher gain a deeper understanding and relate the text to the participants’ emotions.

### **4.5.2 Social level**

Myende (2014, p. 1) maintains that social analysis focuses “on discourses as a social practice emphasising how knowledge is perceived by those who receive it”. The last level of analysis is concerned with the intertextual components and attempts to consider the comprehensive, societal currents that are affecting the text studied (Elsharkawy, 2017). Therefore, the last level of Fairclough’s framework is concerned with the relationship between interaction and social context. PAR is assumed relevant when using CDA to analyse data in the study since it allows the oppressed to critically analyse their own situation and transform themselves and the elements that restrain them (Schensul & Berg, 2004). The result of the study therefore brings about transformation in the connection amongst the powerless and those with power to disregard inequalities stemming from structural differences, rather than repeating them.

## **4.6 SYNTHESIS**

Chapter four pointed out the methodology used in the study as well as the justification as to why it was used. Data generation instruments such as conversational interviews, focus groups and participant observation were discussed to ascertain how data generation took place. The relevance of PAR has been rationalised to the title of the study. Furthermore, stages of PAR were explained in relation to how data was generated. The chapter presented the strategies and actions that would then be established for implementation of data generation. CDA was also described with its connections in the use of the study. The subsequent chapter deliberates on the findings in the study.

## **CHAPTER FIVE**

### **DATA PRESENTATION, ANALYSIS, AND INTERPRETATION FOR FLIPPING THE CLASSROOM FOR ENGAGED LEARNING**

#### **5.1 INTRODUCTION**

The purpose of the study was to critically analyse how the classroom can be flipped for engaged learning. This chapter focuses on how the data generated was presented, analysed and interpreted, in accordance with the objectives of the study. Firstly, it determines the current situation of flipping the classroom for engaged learning. Secondly, it examines the need for flipping the classroom for engaged learning. Lastly, it identifies the hindrances for the successful implementation of the flipped classroom for engaged learning.

In this chapter, data is presented in terms of conversations with participants as well as notes taken from participant observation. Data generation with learners took place in a focus group over four forums. Towards the end of data generation, the researcher set out to converse with two teachers separately, one an ICT teacher and one an NS teacher. The researcher had also conversed separately with two parents after the flipped lesson was completed.

The analysis of data was completed through CDA (section 4.5). Data was generated under each objective of the study, and analysed based on CDAs three levels such as textual, social practice and as discursive practice (section 4.5). During the analysis of data, the lens through which the researcher looked through is to empower learners for engaged learning in and out of the classroom. Moreover, the chapter focused on how crucial features of CR emerged during the course of the study. When presenting data, extracts from the data generated will be italicised and/ or indented.

## 5.2 THE CURRENT SITUATION IN RESPECT OF FLIPPING THE CLASSROOM FOR ENGAGED LEARNING

Four issues emerged of the current situation of flipping the classroom for engaged learning during the analysis of data.

### 5.2.1 Teachers' inability to effectively engage learners in the classroom

Engaged learning goes beyond memorisation of facts (VanDeWeghe, 2009). It is simple to regurgitate knowledge; however, an understanding of that knowledge is not achievable with regurgitation. VanDeWeghe (2009, p. 8) states, "the most engaging learning involves sufficient challenge at the right level of skill". For learners to be engaged, instructional activities have to be set at the right level for it to challenge and motivate learners. Furthermore, activities should not be monotonous, but rather incorporate various teaching and learning resources which should allow for exploration. Predictably, during data generation, participants confirmed what was explored in chapter three of the study (section 3.2.10.6).

Mrs Moodley uttered, *"When we give learners tedious tasks, we find that most of them come to class not understanding anything or basically copying the answers from a fellow class mate"*.

#### ***Textual analysis of discourse***

This is an indication of the lack of engagement amongst most learners in the classroom as lessons are tedious and monotonous, hence it does not challenge learners. Miss Khumalo said, *"Most of the time, it is always the teacher that has to deliver the content and the students have to sit and listen... learners were more responsive in reciprocating what was learnt through watching the videos in their own time"*. The

former indicates regurgitation of knowledge and latter indicates engagement amongst learners when a new teaching method and additional learning resources were used.

### ***Discursive analysis of discourse***

From what Miss Khumalo and Mrs Moodley said, it can be understood that implementing the flipped classroom for engaged learning gives learners a sense of responsibility to go through the variety of content given to them in different platforms. More flexibility is given as they can internalise content in any context beside the school and at their own pace.

### ***Social analysis of discourse***

The context under study showed that learners were not challenged in the classroom. The approach through which teaching was delivered was standardised for all learners. The idea of the study was to achieve engaged learning through flipping the classroom. It is assumed that the flipped classroom may give learners a feeling of responsibility to take charge of their own learning by allowing them to explore a variety of resources out of the classroom.

Another limitation discovered was due to class sizes. Mrs Moodley stressed, *“I, as an ICT teacher, would love to implement this approach but our class sizes are maximum 48. It would be difficult to flip classes of this size”*.

### ***Textual analysis of discourse***

The utterance *“...our class sizes are maximum 48...”* signifies that classes are overcrowded. Teachers are reluctant to implement the flipped classroom for engaged learning since it would be *“difficult to flip classes of this size”*. Hence, teachers rather opt for the traditional teaching approach due to large class sizes.

### ***Discursive analysis of discourse***

Besides being a resourced school, the flipped approach is more suitable for smaller groups since it allows for discussion during class time (section 5.3.2). Moreover, teachers have to personalise lessons for learners based on their learning styles. This is a lot of work for teachers.

### ***Social analysis of discourse***

It can be assumed that class sizes in most schools cater for the traditional classroom setting. Interestingly, this may be one of the reasons why teaching approaches are more teacher-centred. Thus, regardless of teachers being oppressed, teachers conform to their oppression since it is seen as a norm in the South African education system.

From this section, it can be construed from Blossom High School that teachers cannot effectively engage learners in the classroom since they refuse to change their teaching methods to accommodate learners. This may be so for the reason that class sizes are full capacity. Hence, teachers struggled to give learners individualized attention. During data generation, it was observed that teachers maintained the traditional “sit down and listen” approach whilst they were the ones with more authority in the classroom. Miss Khumalo admitted that using the flipped classroom improved learner engagement as it allowed learners to explore instead of feeling restricted or limited in their learning.

#### **5.2.2 Stimulating the learning process**

For learners to be fully engaged in an activity, the activity needs to be stimulating. Sandiso uttered, *“If we are reading a story or something, we would like to see some pictures, if not then we will get bored and we will move on to another book. Sometimes our English teacher brings the projector to the class and the lesson is more interesting”*.

### ***Textual analysis of discourse***

The learner is stating that he does not find learning interesting if he does not see elements that excite him. The utterance *“...we would like to see...”* establishes that learners would like to see a change in the manner by which instruction is delivered.

The phrase ending “...*the lesson is more interesting*” shows that the learner finds the lesson stimulating when the projector is used as an additional resource.

### ***Discursive analysis of discourse***

It is apparent that the learner recognises the difference between learning that is stimulating and learning that is standardised. According to Sandiso, stimulated learning proves to be significant for engaged learning. In the phrase “*we would like to see...*” the learner is articulating his opinion on how they would like to learn.

### ***Social analysis of discourse***

CT in education encourages questioning about how our educational system can best offer education to all people. In the same phrase, the use of the pronoun ‘we’ demonstrates acknowledgement by the learner on the need to work together with other learners rather than individually. It shows that the views of the learner about the way in which they are taught can be relatable to others as well. In agreement with Sandiso, if lessons are monotonous then learners simply would not be engaged. Learners have to be stimulated by means of grasping their attention through accommodating their learning styles.

Technology integration in the classroom adds to engaged learning since learners find the lesson pleasurable and stimulating rather than using the traditional textbook. Furthermore, it has been established that boredom within the classroom adds to the high rate of truancy. Sandiso mentioned, “*The other cause of why learners bunk is because of the traditional way of learning*”. Lifa agreed in saying, “*They think that the way in which we are taught is annoying, a waste of time and boring. So when we engage ourselves more in a fun way then they will be engaged in the classroom*”.

### ***Textual analysis of discourse***

The utterance “...*the way in which we are taught is annoying, a waste of time...*” reveals that Lifa does not see a need for attending classes. His attitude resembles negativity towards the traditional method of learning. In the phrase “...*when we engage ourselves more in a fun way...*” the point Sandiso and Lifa raised is that if learners are

not stimulated in the class, they do not see the need to attend class. As a result, this has a high impact on the absentee rate in school.

### ***Discursive analysis of discourse***

Whilst conversing with both participants, they laughed when they mentioned the reason why they bunked. This indicated that the way in which they are taught and the way in which they learn is similar to a joke. It is, however, astonishing that these participants do not realise the impact of her attitude on their education.

### ***Social analysis of discourse***

CT in education revolves around questioning how the educational system can offer equal education for all. The utterances above reflect that the delivery of education is not the same for all. If this was the case then there would be no occurrences of truancy at school. Flipping the classroom for engaged learning allows teachers to teach using an assortment of resources, usually referred to as multimedia online. This allows for all learning styles to be catered for. However, this is not done in class. Regardless of using the flipped classroom approach, teachers are not customising their teaching for individual learning using the traditional teaching approach. Teachers need to be aware of the various learning styles so learners are accommodated in the classroom.

Karabo articulated, *“Some like listening to music, some like watching videos and some like reading notes so it does help us to be more active if our learning styles are accommodated. I have this thing that I use...well it is for Vodacom users. It is a website and gives you resources like past year papers and other multimedia for the learning areas that you select”*.

### ***Textual analysis of discourse***

In the phrase, *“Some like....some like...”* Karabo is stating that each learner learns differently. She is recognising the need for them to receive attention in the way in which they receive knowledge. Her words point to the need of individual attention in the classroom.

### ***Discursive analysis of discourse***

The phrase “*I have this thing that I use...*” means that if learners do not get any joy in the classroom in the manner in which content is delivered, they teach themselves by searching for content on the internet”. This is evidence that some learners with access to resources take the onus upon themselves to engage in learning. However, those without access are the ones that are left behind and thus conform to the digital divide of society. Accordingly, equality can never be a reality.

### ***Social analysis of discourse***

Karabo’s statement, “*Some like listening to music, some like...*” can be interpreted that these learners do not learn in the same manner. Moreover, it also recognises the role “some” can play in education. Digital learners today are involved in using the internet to find answers for themselves since it is simple to do so. Thus, it can be assumed that technology gives learners a platform for exploration, which can allow them to go beyond the boundaries of the classroom. It can also be interpreted as a cry for help for each learner to be deserving of equal attention within the classroom.

It can be deduced from this section that learners engage themselves in the learning context only when they find content interesting and when a variety of resources are used to teach and learn. Moreover, a variety of learning styles in the classroom needs to be considered so that all learners can benefit from the lesson and learn something.

### **5.2.3 Lack of knowledge and skills**

Employment of the flipped classroom approach may assist schools in addition to the learners to be well acquainted with using technology for teaching and learning. While this may be the case in some schools, there are learners who come from disadvantaged backgrounds and who cannot afford such technology for the successful implementation of the flipped classroom approach. Hence, the flipped classroom is fairly new since a handful of schools are using this approach, whereas it may appear new for most schools (Daniel, 2016).

The current situation of using the flipped classroom approach for engaged learning is very minimal as described by the teachers of the school researched. Mrs Moodley said:

*“We don’t use the flipped approach. It is my first time using such an approach after you introduced me to it. Our teaching has always been standardised. We teach learners at school and we give them homework in terms of what was discussed in class”.*

Miss Khumalo expressed:

*“I have tried it once in my classroom. I use the traditional approach. I prepare lesson plans only for the classroom and not out of the classroom. Learners are given homework to do out of the classroom”.*

### ***Textual analysis of discourse***

Both teachers maintain that they do not use the flipped approach in the classes, but rather use the traditional approach. Mrs Moodley’s words refer to the traditional teaching style as the norm in their school by saying, *“Our teaching has always been standardised”*. The phrase, *“We don’t use...”* implies that many other teachers in other schools are implementing the same teaching strategy. For Miss Khumalo, the utterance *“I prepare lesson plans only for the classroom...”* implies that the traditional approach is currently used since teaching only takes place within the boundaries of the classroom. The phrase *“...are given homework to do out of the classroom”* suggests that homework is done in isolation by means of learners basing their understanding on what was done in class.

### ***Discursive analysis of discourse***

Miss Khumalo maintained that she tried employing the flipped approach once; this was due to the data generation process. This was also the justification for Mrs Moodley using the flipped approach. Furthermore, both teachers revealed that they had never heard about the flipped classroom approach. It is comprehensible since the school does not centre on exposing learners to technology due to lack of funds. In the phrase,

“...we give them homework in terms of what was discussed in class”, Mrs Moodley’s approach seems more like the banking model discussed in (sub-section 2.3.1.2).

### ***Social analysis of discourse***

Society perceives the traditional form of teaching and learning as standard since it is acceptable. Notwithstanding the fact that it has robbed learners of their voice and the need to explore. Moreover, teachers themselves lack the knowledge and skills of technology-enabled learning. Teachers first need to be empowered so that they can do the same to learners. Frequently, learners from disadvantaged backgrounds go to inadequately funded or under-resourced schools than their middle and upper-class counterparts (section 1.2). As a result, less funding can point to concerns like unavailability of technology or skilled teachers.

From what was observed in class during data generation, it was evident that learners studied content at home. Miss Khumalo mentioned:

*“I have noticed that the learners are more actively engaged in the learning process. I felt that when I did use this method in the classroom, learners were more responsive in reciprocating what was learnt through watching the videos in their own time. As I have mentioned previously, learners are yearning for new and creative techniques to spark an interest in the way that they receive and transfer knowledge”.*

### ***Textual analysis of discourse***

The phrase “I have noticed...” indicates that the teacher is voicing her opinions on the flipped approach. The expression “...the learners are more actively engaged...” demonstrates that Miss Khumalo sees reason for the flipped approach since learners were engaged. In the phrase, “...learners were more responsive in reciprocating...” Miss Khumalo acknowledged that engagement is enhanced when the flipped classroom approach was used.

### ***Discursive analysis of discourse***

The words, “I have noticed...” implies that Miss Khumalo acknowledges the effects of using a different approach other than the traditional approach. Thus, Miss Khumalo seemed very positive about the flipped approach. She was optimistic about the flipped approach since she maintained that “learners were more responsive” as they watched videos pertaining to the lesson topic out of the school context.

### ***Social analysis of discourse***

Miss Khumalo is conscious of the role that the attitudes of learners can play in the failure or success of the employment of the flipped classroom approach. When learners are active in the learning process, it gives the impression of engagement. Engaged learning requires participation from learners by means of collaboration with fellow learners to enhance the learning process as discussed in (section 3.2.9). Learning does not happen in isolation but when collaborating with others. Thus, collaborative learning becomes active learning.

Mrs Moodley added, *“I believe that for one to be engaged they have to find instruction interesting and challenging... learners were very happy when they were given so many resources instead of a traditional textbook”.*

### ***Textual analysis of discourse***

In the expression *“...for one to be engaged they have to find instruction interesting...”* the teacher recognises the need for instructional content that learners should find challenging (section 3.2.5). The statement, *“...learners were very happy when they were given so many resources...”* demonstrates the need and the effects of using a variety of teaching and learning resources.

### ***Discursive analysis of discourse***

The above statement reveals that Mrs Moodley is optimistic about the flipped classroom approach. It is evident that the teacher acknowledged the importance of varying learning resources since learners were ecstatic about it. The teacher was able to determine this by recognising that learners were engaged in the lesson.

### ***Social analysis of discourse***

By giving learners content to explore out of the classroom, they become curious and hungry for knowledge. Moreover, an assortment of resources stimulates the learning process. CT offers opportunities for the different perceptions of disadvantaged people of society. If instructional content is not challenging, learners are deprived of becoming critical thinkers.

Miss Khumalo expressed:

*“I felt that when I did use this method in the classroom, learners were more responsive in reciprocating what was learnt through watching the videos in their own time. As I have mentioned previously, learners are yearning for new and creative techniques to spark an interest in the way that they receive and transfer knowledge”.*

### ***Textual analysis of discourse***

Miss Khumalo's words point to positive results when the flipped classroom approach was implemented. The expression “...learners were more responsive in reciprocating...” showed that learners were engaged in the classroom. This resulted from discussion amongst learners in the classroom. The phrase “...learners are yearning for new and creative techniques...” implies that learners enjoy an assortment of teaching approaches.

### ***Discursive analysis of discourse***

The variation of teaching styles as opposed to the traditional approach revealed a positive response from learners. This reiterates the importance of accommodating all learners. A realisation exists in the above expressions of the significance of accommodating learners in the learning environment.

### ***Social analysis of discourse***

If teachers see the benefits of the variation of teaching styles, they should change the manner in which content is disseminated and the manner in which content is received. The good response of implementing such an approach may be stimulated by the high interest of technology of the current generation. Technology incorporated with daily tasks provokes interest amongst people, thereby allowing them to be engaged.

From this section, it can be presumed that teachers lack the necessary skills to implement a change in their current standardised teaching approach to effectively implement the flipped classroom for engaged learning. This is indicative that there is no support coming in to assist teachers. The white paper policy (section 1.2.5) emphasises the need to incorporate ICT in education for e-learning, however, not all schools are on par with this move. This sequentially not only deprives the teachers but the learners too.

#### **5.2.4 Instructional strategies and learner engagement**

Daniel (2016, p.14) describes the “role [of the teacher] in the flipped classroom as neither superficial nor limited as he/she is responsible for careful preparation/organisation of educational exercises, materials and environment”. The teacher is responsible for encouraging motivation amongst learners to carry out instructional activities. During the data generation process of participant observation, when the teacher used the flipped classroom approach for engaged learning, learners were active. Additionally, learners were able to answer questions posed by the teacher. What was also observed was that those learners whom were inactive during lessons were the ones who did not study instructional content at home.

With reference to learners that personated a dynamic and active role in the classroom, it was evident that learners studied before attending class. For example, the topic taught was ‘the role of the operating system’, learners were aware of the concepts of the boot sequence and user interface. Besides one passive learner, other learners

were interactive. In comparison to observing teaching by means of the traditional approach, the flipped approach was more interactive for both the teacher and learners.

The classroom management differed drastically between the flipped and the traditional classroom. Additionally, the main goal of the flipped classroom is not to keep learners inaudible, but rather for them to be engaged in the learning process by having a voice (Bergmann, 2014). Learners were seated in groups- this allowed them to easily interact with each other. For discipline purposes, learners were told to raise their hands if they had questions they needed to ask.

Throughout the flipped lesson, the teacher used whole-class discussion and questioning. This was so due to the teacher transitioning into the facilitator. In contrast, throughout the traditional lesson, the teacher used an explanatory pedagogical approach. Interaction by means of the traditional approach was viewed as minimal since it was centred on the teacher.

The traditional class incorporated the use of the blackboard and the textbook as key resources. The teacher made references to the textbook whilst teaching. Homework activities were also given from the textbook. The flipped classroom allowed the teacher to revisit content that learners studied out of the school context. The facilitator did not use any resources to teach in the class since resources were given to learners to study at home. Discussion and consolidation with the facilitator allowed the learners to assimilate and adapt their knowledge for better understanding.

It can be deduced that the flipped lesson on 'the role of the operating system' helped learners comprehend content with multiple resources. Hence, the instructional strategies used in the lesson proved to be beneficial for engaged learning. Multiple resources such as an audio clip, notes and a video link helped to expand learners' understanding about the topic. Moreover, learners maintained that they enjoyed learning by means of the flipped classroom.

### **5.2.5 Summary**

The issues outlined the current situation in respect of flipping the classroom for engaged learning as discussed by the participants. Sections 5.2.1 to 5.2.4 suggests the current situation in Blossom High School does not make provision for the flipped classroom approach since the norm followed for teaching and learning is considerably standardised. However, there is a desire for implementing the flipped approach for engaged learning. Participants strongly felt that the flipped approach helped for engaged learning in the classroom and enjoyed the lesson that used this approach.

## **5.3 THE NEED OF FLIPPING THE CLASSROOM FOR ENGAGED LEARNING**

The flipped classroom approach is a rather new-fangled approach in SA. Before choosing to implement such an approach, various factors have to be taken into consideration. These factors should include the views and status of all stakeholders within the school. Five issues emerged when analysing data under this objective.

### **5.3.1 Opinions of learners on flipping the classroom for engaged learning**

The flipped classroom approach allows every learner to learn at their own pace and be in possession of a variety of learning resources (Chowdury, 2017). In this regard, it can be assumed that the flipped classroom gives learners a sense of freedom and time to assimilate knowledge. Sandiso conveyed, *“I personally think that it is good to be introduced to a learning approach that accommodates the different learning styles”*.

#### ***Textual analysis of discourse***

The learner is stating his view of learning by means of different approaches in contrast to the traditional approach. The expression *“...it is good to be introduced to a learning approach...”* points to the acceptance of the flipped classroom approach. It is

important for teachers to vary teaching strategies since it is through these teaching strategies that different learning methods come about to enable teachers to develop the precise approach for specific groups.

### ***Discursive analysis of discourse***

The learner not only thinks about the way in which he learns but also acknowledges others in the phrase “...*accommodates the different learning styles*”. In this case, the flipped classroom proves significant since it allows for a variation of learning styles. This establishes a principal of equal distribution of how learning content is assimilated and taught.

### ***Social analysis of discourse***

Study skills can be taught by means of an assortment of techniques when using the flipped classroom approach for engaged learning. Since CT is concerned with unmasking the form of oppression to bring about the liberation of members in society, flipped learning allows learners to be based out of the school context and listen to teachers’ pre-recorded lessons in terms of a video or podcast. The formation of a platform for which participants are composed and awarded an opportunity to act cooperatively in obtaining solutions resonates well with CT.

Olwethu expressed:

*“Every time when they [teachers] are here, like in front of your face...sometimes you get uncomfortable and you want to do things fast to try to impress the teacher, but when you are settled, you look at those videos and they teach you more than being in the class with the teacher since we youngsters like watching videos so if we do that and use the internet and read the books then we can learn more”.*

### ***Textual analysis of discourse***

From the utterance “...*sometimes you get uncomfortable...*” this is an indication that the learner feels uneasy in the presence of the teacher in a traditional classroom since teachers are always in front of them. Teachers always make their presence known by taking centre stage in the classroom. The phrase “...*like in front of your face...*”

suggests the position that teachers hold since they appear as 'the dominant ones' in the classroom. The phrase "...when you are settled, you look at those videos..." suggests a change in attitude since the learner refers to the flipped classroom approach. Moreover, the utterance, "...we youngsters like watching videos..." demonstrates that the flipped approach can work since all learners like watching videos. The phrase "...if we do that and use the internet..." ascertains a potential alteration in attitude on condition that a few things are reformed in the learning process. Based on the above expressions, a change in the way things are done in the current teaching and learning approach might lead to a potential change if learners' needs are accommodated.

### ***Discursive analysis of discourse***

From this, one would get the impression that learners are powerless to effect change in the school, notwithstanding having nominated colleagues of the Representative Council of Learners (RCL) to represent their issues. When learners' voices are heard, it empowers them to take control of their education. Olwethu seems troubled when the teacher is in front of him since it shows how the teacher asserts dominance on them as learners.

### ***Social analysis of discourse***

The discourse above demonstrates the principal of power relations that exist within the classroom. Thus, this has a negative effect on how instructional content is received (sub-section 3.2.4.1). Nevertheless, this study succeeded to alter this status quo by allowing for a platform by which the two groups shared equal powers in decision-making and effecting transformation in the teaching and learning process.

The flipped classroom approach gives learners a sense of freedom while still allowing them to engage themselves through intriguing resources. Therefore, this approach can be seen as an instructional approach for empowerment. Lifa recommended, "*We should implement the flipped classroom in most of our subjects, like economics because the subjects that we do has limited information and we want to go beyond*".

### ***Textual analysis of discourse***

The phrase “*We should implement the...*” may refer to the teachers since teachers are the ones that can implement an approach for instruction. In the phrase “...*the subjects that we do...*” the ‘we’ may refer to the learners since he maintains “...*we want to go beyond*”. This indicates that learners are restricted by the school curriculum.

### ***Discursive analysis of discourse***

The utterance from Lifa shows that the word “we” is repeated twice. This is an indication that learning cannot take place in isolation and the participant concedes this. It is suggested that the “we” in his sentence includes both learners and the teacher. This study coheres appropriately with their situation and the ineffective instructional approaches implemented. The learner participants serve as those who experience the problems first hand since engaged learning is possible if learners are motivated.

### ***Social analysis of discourse***

Learners may feel restricted in the sense that they are limited to only memorizing what is given. If learners are memorizing, then there is no need to question, hence the traditional teaching and learning technique lacks critical developmental skills. In contrast, the flipped classroom approach gives learners a platform to express their opinions. Fui, Khin and Ying (2011, p. 124) articulate that CT “provides the descriptive and normative bases for social inquiry aimed at decreasing domination and increasing freedom”. Consequently, learners should be critical thinkers to break the cycle of oppression. Opportunities for inquiry within the learning context can challenge domination.

In the focus group, when the researcher asked if their teacher was doing a good job in implementing the flipped approach to enhance engaged learning, Sandiso uttered: *“You saw how we are in a traditional class. We don’t usually speak but now we are speaking and you can see the difference in us. We are talking and we are interacting which is a result that the flipped lesson was successful”*.

### ***Textual analysis of discourse***

The discussion above conveys another element to the concept of an engaged learning environment. The operative flipped classroom approach had enhanced the classroom in the research context. The phrase *“...now we are speaking and you can see the difference in us”* demonstrates the enthusiasm in Sandiso’s response. Sandiso specifies *“...we are interacting...”* which indicates that learning is happening through collaboration.

### ***Discursive analysis of discourse***

By means of interpreting the analysis through interaction, the researcher grasped the impression of excitement from Sandiso since he was able to voice his opinion and maintain why he enjoyed learning through the flipped classroom approach. Sandiso used his behaviour to differentiate between the traditional and flipped approach.

### ***Social analysis of discourse***

It is evident that power dynamics which may be the teachers and the overall education system are influenced by the standardised education which was introduced in the apartheid era. Education during the apartheid regime did not allow learners a voice. The phrase *“...now we are speaking...”* validated that learners’ voices are restricted when using the traditional approach. Nonetheless, the similar utterance illustrates a certain level of yearning to regain the power to develop the circumstances under which approach is used for teaching and learning. This is an indication that if schools are still using the traditional approach then apartheid education may be still be thriving at an extent that disadvantages learners.

From this section, it can be comprehended that learners are discontented from the standardised teaching and learning. During data generation, learners were yearning to be taught in a different manner that may be of interest to them. Moreover, learners acknowledge the freedom and responsibility that the flipped classroom approach gives them.

### **5.3.2 Teachers' interpretations of the flipped classroom approach**

Teachers should possess the basic expertise to implement the flipped approach for teaching and learning to be a success. Furthermore, teachers may be considered oppressed in the South African education system due to them lacking necessary skills to implement the flipped classroom approach. This type of oppression is linked to distributive injustice. Moreover, the oppression of the teacher shadows on the learners. This unfortunately affects the learners, as teachers may not be capable of effectively employing the flipped classroom approach.

Mrs Moodley shared that *“teachers have to have necessary skills to record a lesson by means of audio or video, download content and disseminate such multimedia. Not all teachers are daring enough to implement such an approach”*.

#### ***Textual analysis of discourse***

The phrase starting *“teachers have to have necessary skills...”* implies that it is a necessity for teachers to possess technological skills. Moreover, such skills need to be effectively embedded in their teaching approach. A potential change is reflected in the statement, *“Not all teachers are daring...”* denotes that some teachers lack confidence in using technology as a resource to improve the teaching and learning process. Based on these utterances, skills required for teachers to flip the classroom for engaged learning is an important prerequisite for implementing such an approach.

### ***Discursive analysis of discourse***

There is discourse from the above participant about the lack of confidence that teachers have about integrating technology in their instructional approach. A sense of fear and uncertainty was received from the participant when the topic was discussed. It is, however, surprising that the teacher did not bring up the sense of support in technology integration for teaching and learning.

### ***Social analysis of discourse***

From the teacher's response, it can be determined that teachers themselves are powerless since many of them lack knowledge and skills to design instructional lessons that require engagement. Nevertheless, if teachers lack education, then the quality of education delivered to learners becomes instantaneously poor. Teachers would not be able to empower learners if they themselves are not empowered with necessary skills. The phrase "*Not all teachers are daring...*" suggests that teachers lack the competency to modify their approach by frequently trusting that their current teaching strategies are functioning well. As a result, they are oblivious to the fact that they are disadvantaging learners since they fail to engage learners within the learning context.

Miss Khumalo expressed:

*"After recently discovering the new concept flipping the classroom, I realised that it could be an advantage to my learners since I personally feel that most learners will benefit tremendously. Every learner is unique and some learners will not prefer to learn using the traditional method. We live in a modern era and learners want new ways to learn".*

### ***Textual analysis of discourse***

The expression "*After recently discovering the new concept...*" signifies that the flipped approach was unknown prior to data generation. Additionally, the utterance "*...I personally feel that most learners will benefit tremendously*" denotes that the teacher is in agreement with flipping the classroom for engaged learning. The phrase starting

*“Every learner is unique...”* suggests that the way in which differentiation is recognised in terms of learners, teaching styles should also be differentiated according to such learning styles.

### ***Discursive analysis of discourse***

Miss Khumalo’s words pointed to positivity towards the flipped approach in the phrase *“I realised that it could be an advantage to my learners...”* The utterance *“Every learner is unique...”* points to a realisation in the participant’s opinion of the importance of instilling a user-friendly approach for all. The use of the pronoun “we” in the phrase *“We live in a modern era...”* indicates that the masses are demanding education reform in terms of instructional approaches. This calls for a formation of a platform for which everyone is included in an effort to affect change to focus on engaged learning.

### ***Social analysis of discourse***

The use of the word “We” in the phrase *“We live in a modern era and learners want new ways to learn”* establishes a realisation that finding strategies to heighten the teaching and learning process should relate to the current trends of how knowledge is transferred. Incorporating various teaching methods within and out of the classroom creates a sense of resourcefulness. Thus, learners may find learning by this means interesting. Talbert (2019, p. 2) posits, “Flipped learning seems to affect students on a psychological level, making them more engaged, more motivated, and better able to self-regulate”. The realisation calls for equality in education and the shared ownership of the issue in addition to elucidations to implement a learning environment for all. When these problems are evaded, learners and teachers become creative which leads to empowerment of both parties.

The flipped classroom may be difficult for large classes as well as the non-cooperation from learners and teachers. Miss Khumalo articulated:

*“Most teachers will find this approach challenging because they may not be equipped with the skills that are needed to implement this approach. I speak for myself in saying that I am not confident with teaching with technology; however, I would like to learn. The flipped approach may be an enjoyable one but it is also a lot of work for the teacher to gather and disseminate content”.*

### ***Textual analysis of discourse***

The expression “*Most teachers will find this approach challenging...*” indicates a challenge for ‘most’ teachers due to the incompetency of being able to use a variety of teaching approaches to engage learners. Moreover, the same phrase indicates that teachers “*...may not be equipped with the skills that are needed to implement this approach*”. The above relates to discourse about teachers lacking technological skills. Furthermore, it demonstrates a need for teachers to be empowered. The utterance “*I am not confident with teaching with technology; however I would like to learn*” demonstrates that teachers are forced to change their approach but not trained to execute the change.

### ***Discursive analysis of discourse***

Miss Khumalo’s opinion can be related to the previous stance of Mrs Moodley in which she had indicated that teachers shy away from changing their approach since they lack the essential skills. Moreover, the utterance “*...it is also a lot of work for the teacher...*” signifies another reason why teachers do not want to conform to change. Classes are overcrowded adds to stress upon the teacher, which results in the teacher refusing to differ teaching approaches for various learning styles. Consequently, learners are disadvantaged in the classroom.

### ***Social analysis of discourse***

The lack of skills and training is a barrier for teachers (sub-section 3.2.10.5). It is argued that many teachers lack basic skills for using technological tools to develop teaching methods, motivation and communication with learners (Elian & Hamaidi, 2018). Therefore, it can be complex for teachers to create tasks that are motivating and challenging for every learner. Although personalisation may be a strenuous task, it is achievable by means of support, hard work and dedication of the teacher. The move to technology incorporated with education poses immense challenges for teachers to reconsider their teaching approaches. There is a need to incorporate new technologies for engaged learning, however, teachers lack the skills to do so.

Mrs Moodley shared, *“I believe that for one to be engaged, they have to find instruction interesting and challenging. Learners were very happy when they were given so many resources instead of a traditional textbook”*.

### ***Textual analysis of discourse***

The use of the phrase *“...for one to be engaged, they have to find instruction interesting...”* indicates that the teacher acknowledges the importance of setting instructional materials that are challenging to encourage engaged learning. Moreover, the utterance *“Learners were very happy when they were given so many resources...”* denotes the importance of using a variety of teaching and learning sources in a lesson.

### ***Discursive analysis of discourse***

The teacher recognises that one of the indicators for engaged learning (section 3.2.5) is that tasks for engaged learning must be realistic and challenging for learners to be motivated. The utterance ending *“...given so many resources instead of a traditional textbook”* signified that the textbook, which is regarded as the traditional standard resource, is frowned upon as it restricts both teachers and learners from exploring beyond their horizons. Teaching with a textbook immediately limits the teacher in specifically teaching by the book. No room for inquiry amongst learners are developed, which indicates that learners are taught by the book therefore they learn by the book. This goes back to the banking model, which was discussed in sub-section 2.3.1.2.

### ***Social analysis of discourse***

Since the teacher becomes the facilitator in the classroom, it is their responsibility to create content that is thought-provoking. Thus, the flipped classroom can only be a success when teachers are enthusiastic for implementation. However, teachers at times are seen as oppressed since they are forced to conform to changes of teaching approaches. In section 2.3.1.2 of the study, different forms of oppression are discussed. To emancipate the oppressed, it is vital that individuals engage in evaluating the forces that contribute to oppression.

It is deduced that teachers under the study context agree that the flipped classroom enhances engaged learning. However, teachers may shy away from changing their approach to include ICT due to their lack of skills. Nonetheless, both teachers maintained that the implementation of the flipped classroom would indeed help learners to be engaged. Support is needed from various stakeholders to assist teachers. This is discussed in section 5.4.5 of the study.

### **5.3.3 Parents' views on flipping the classroom for engaged learning**

In contrast to the traditional teaching and learning approach, learners were actually active when using the flipped approach during data generation since they were engaged in their learning. While some parents may agree with the use of technology in their child's learning, some disagree for various reasons. Mrs Ndlovu emphasised, *"Our world is evolving and changing so I think our children should also do the same. The flipped approach seems exciting because it is something new. I just want my child to enjoy learning and I think they can through this new method"*.

#### ***Textual analysis of discourse***

The statement *"Our world is evolving and changing so I think our children should also do the same..."* demonstrates that the parent understands that the technological change is incorporated into education. The pronoun 'our' demonstrates that the parent is able to understand that technological change is global and has an impact in all facets of our lives. The utterance, *"The flipped approach seems exciting..."* shows acceptance from the parent of the flipped classroom approach for engaged learning.

#### ***Discursive analysis of discourse***

As a parent, Mrs Ndlovu seemed very excited about flipping the classroom for engaged learning. The positivity from the parent was perpetuated by responses from her child about the flipped lesson.

### ***Social analysis of discourse***

From the perspective of CT, the parent wants her child to be liberated through using the flipped approach. It is also suggested from the phrase “*I just want my child to enjoy learning...*” that the child enjoys learning through this approach. Thus, the child is engaged in learning and the parent is able to see the child as empowered through education.

Mrs Ndlovu explained that she saw a difference in her engaged child learning at home. When the researcher asked about her views regarding the role of the teacher whilst using the flipped approach, Mrs Ndlovu said, “*I think it is good because they are changing their methods. They [teachers] need to create interest for our children to be motivated*”.

### ***Textual analysis of discourse***

The phrase “*...it is good because they are changing their methods...*” suggests that parents notice that teachers’ methods do not change, since it is standardised. In this case, it indicates that teachers are not making an effort to accommodate learners in their teaching approach. The utterance “*They need to create interest for our children to be motivated*” indicates that parents notice how disengaged their children are. Moreover, if learners are disengaged, instructional content is not challenging learners (section 3.2.5).

### ***Discursive analysis of discourse***

It is evident that parents notice that ineffective teaching strategies result in disengagement and poor results. Mrs Ndlovu welcomes the flipped classroom approach for engaged learning since she noticed the level of engagement from her child.

### ***Social analysis of discourse***

The implication of ineffective teaching strategies have an effect on the way in which learners receive content. The current demand in education is active learning (section 3.2.9). Additionally this results in engaged learning. One of the dimensions of CT, praxeology (sub-section 2.3.1.3), places emphasis on change for the better after

determining differences that exist and dissimilarities in relations. In implementation of the flipped classroom approach for engaged learning, it seeks to redress the imbalances that are seen in a traditional classroom between the teacher and learners (section 3.2.3). The flipped approach allows learners to develop an open mind and improve their critical thinking skills rather than to conform and accept.

In contrast, Mrs Dlamini did not see a need for the flipped approach. Mrs Dlamini said, *“Children are doing fine with learning by the old fashioned style. The flipped method seems very expensive. As much as it may be fun, it won’t work for everyone because of the cost factor.”*

### ***Textual analysis of discourse***

The utterance, *“Children are doing fine with learning by the old fashioned style...”* denotes that Mrs Dlamini supports the traditional approach (section 2.2.3). While this approach may work for the verbal learning style, there is no differentiation to cater for the other six learning styles, which goes back to the problem statement of the study (section 1.2.4). The phrase, *“The flipped method seems very expensive”* shows that this parent cannot afford technological tools for her child. The phrase *“...it won’t work for everyone because of the cost factor”* further indicates affordability as a limitation (sub-section 3.2.15.2).

### ***Discursive analysis of discourse***

From conversing with Mrs Dlamini, the topic of affordability was received as a sensitive topic. The unaffordability is seemingly perpetuated by the social status of parents. A lack of money leads to lack of access. This further perpetuates the digital divide. As a result, while some learners may reap the benefits, others lag behind due to a lack of access. Affordability is one of the cons identified in (sub-section 3.2.10.5) of the study.

### ***Social analysis of discourse***

The flipped approach for engaged learning may not favour everyone since affordability is a limitation for its implementation. As a result, the flipped approach may favour groups that are able to afford technological resources. Critical theorists strive to enquire about how best the educational system can offer education to everyone. This

ensures that all learners are taught on an equal basis in terms of content and resources. Mrs Ndlovu realises that her child will be disadvantaged in the class if the flipped classroom approach is used. The BYOD policy discussed in (sub-section 3.2.10.3) can be used to bridge the gap of access in schools; however, the problem may still stand as parents not being able to afford such devices.

From this section, it is presumed that both parents have differing views. While Mrs Ndlovu welcomes the flipped classroom approach to provide a modified technological learning experience for her child, Mrs Dlamini was against it with due reason. Affordability was an obstacle as she worried that she would not be able to afford to buy her child technological devices needed to access instructional content. Hence, she maintained that the standardised teaching would suit her pockets. Affordability is discussed further in section 5.4.2.

#### **5.3.4 Deliberation on a SWOT analysis for flipping the classroom for engaged learning**

Participants deliberated on a SWOT analysis during the focus group discussions to check the feasibility of implementing the flipped classroom approach. To summarise, learner participants indicated that they found using the flipped approach for engaged learning stimulating as it accommodates all learning styles. This can be suggestive of strengths. Teacher participants pointed out that most of them lack knowledge, skills and training for using the flipped classroom approach (sub-section 3.2.15.1). Moreover, teachers cannot implement such an approach if resources are not accessible to all. This can be indicative as weaknesses. All participants described opportunities vastly as learning that is transformational and allows for engagement. Furthermore, teaching and learning using technology opens doors for innovation and opportunity since it allows learners to go beyond the structure of the subject syllabus. Threats identified were learners' lack of motivation for self-directed learning. As a result, this may be a huge setback for teachers if learners come to class unprepared. Additionally, the digital divide is a major threat for implementing the flipped classroom for engaged learning.

### **5.3.5 Summary**

The above issues in section 5.3.1 to 5.3.4 outlined the need for flipping the classroom for engaged learning. Teachers, parents and learners saw a need for the implementation of the approach since it exposes learners to a vast amount of resources and encourages responsibility upon learners. However, an issue of affordability was brought up by one of the parents since the flipped classroom approach emphasises on instructional content recorded by teachers in addition to learners researching on their own. Currently, learners are limited by learning with the traditional approach. Teachers saw a need for its implementation; however, the lack of ICT skills was a problem. Furthermore, it was identified that current classes are big in size and it would be difficult to implement such an approach.

## **5.4 HINDRANCES TO THE SUCCESSFUL IMPLEMENTATION OF FLIPPING THE CLASSROOM FOR ENGAGED LEARNING**

Regardless of the countless benefits of incorporating technology in teaching and learning, numerous disadvantages come along with the flipped approach. Five issues had emerged when presenting data under this objective.

### **5.4.1 The Digital Divide**

It is argued that challenges for the employment of the flipped classroom approach are mainly due to the digital divide. Bridging the New Digital Divide (2019, p. 9) asserts that “many historically disadvantaged South Africans still experience an overwhelming lack of access to basic services, skills, training, and employment opportunities”. Participants mostly expressed that access was a problem for both the school and the learners. It is established that economic status determines which category of schooling we fall under. Blossom High School is funded by government, thus had resources for learners to utilise at school. The main issue was after school hours as learners

struggled without resources at home. This can be linked to a form of oppression which may be referred to as distributive injustice (sub-section 2.3.1.2.1).

Sinenhlanhla said, *“I did not have the multimedia content because I do not have a phone or computer. I just read the notes. The library has free Wi-Fi but it’s far from home”*.

### ***Textual analysis of discourse***

The phrase *“...I don’t have a phone or computer...”* shows that not all learners have devices to access resources that may be disseminated when using the flipped classroom approach. The utterance *“...I just read the notes...”* shows that as much as the electronic resources were not accessible to the learner, the hardcopy notes helped the learner to understand the lesson.

### ***Discursive analysis of discourse***

It is important to note that both hard copy and soft copy of learning resources are essential. Beside affordability, electronic resources have disadvantages. For example, the trend of load shedding in South Africa makes it difficult for learners to use their devices to access resources. At times, these devices need power or need to be charged. This is a big setback, especially for teachers.

### ***Social analysis of discourse***

In this case, implementing the flipped classroom approach would disadvantage learners like Sinenhlanhla. Accessibility has to be for all and not for a select few. This is an indication of how society is still oppressed as opportunities are not equal. South Africa still suffers from the aftermath of apartheid (Gumede, 2019; Roets, 2015; Mattes, 2002). An alternative to not having access can be by using the library to access instructional content, however, this resource was inaccessible for Sinenhlanhla. This is due to the cost factor and distance.

Mrs Moodley maintained, *“There will always be barriers in implementing such an approach in a school where we have learners of different social backgrounds. As much as schools need access to technological resources, learners also need access out of school”*.

### ***Textual analysis of discourse***

The phrase *“There will always be barriers in implementing...”* suggests that teachers are able to identify with hindrances in using the flipped classroom for engaged learning. Such hindrances may stem due to differing social backgrounds. The utterance *“...where we have learners of different...”* signifies that the teacher is able to identify with learners coming from different backgrounds and social classes since it may be applicable to a description of her classroom. The “we” may refer to teachers in the research context. The phrase *“...learners also need access out of school”* denotes access as a problem for the learners in the research context. This further reiterates the digital divide.

### ***Discursive analysis of discourse***

Mrs Moodley does not seem content whilst saying, *“There will always be barriers...”* From such an utterance, interaction is received as being demotivated as a teacher. This may be due to a lack of support from school management in implementing innovative teaching approaches. Moreover, demotivated teachers lead to disengaged learners. Learners cannot be engaged if teachers lack interest. It is a challenge for teachers to implement the flipped classroom approach when not all learners have access. Schools try their best to provide access within the school context; however, access cannot be gained out of school for certain learners. This again, places a burden on the teacher to ensure learning resources are accessible and equally received for all.

### ***Social analysis of discourse***

It is understood that teachers set the tone for engaged learning. To prevent learners from undergoing demotivation, teachers need to administer learning resources more efficiently (sub-section 3.2.10.6). Moreover, teachers need to construct a learning ethos to allow learners to focus and concentrate, and be keen about learning. Learners

will be empowered when teachers are empowered in the work place. The need for resources has to be prevalent for both ends, which for within the school and for the learner out of school. Francis (2017, p. 15) concurred, “With poor quality, faulty, and out of date ICT equipment one the main reasons for teachers not using technology in the classroom, this can be a barrier to success”. Therefore, flipped learning necessitates learners to have basic access to a computer and internet access at home (Crampton, 2019). It cannot be assumed that all learners are privileged to have this irrespective of their social backgrounds. The words ‘out of school’ may refer to home, the internet café or the library. As Sandiso pointed out previously, the cost factor and distance is a further hindrance for flipped classrooms.

Under this section, it is construed that the digital divide is a huge hindrance for the successful employment of the flipped classroom for engaged learning. One of the learners did not have a device, thus, she could only read the notes that was given to her and failed to listen to the audio clip and stream the video. Teachers indicated that there may always be issues with regards to access from home as learners come from different backgrounds. Hence, as much as schools may provide access, learners still need access at home for the flipped classroom to be a successful approach.

#### **5.4.2 Affordability as a determining factor**

Homework remains a requirement at school. However, not all learners have the same resources to accomplish their tasks. While some learners may be able to access flipped content at home, others cannot. At least four of the six learners participated claimed that they needed data to download and access resources on the internet. When the researcher asked why they did not access the link for the lesson, four learners responded at the same time by saying “*because we did not have enough data*”.

##### ***Textual analysis of discourse***

Beside parents’ views on affordability of technological devices described in section 5.3.3, learners who have devices also cannot afford to buy data. The phrase above indicates that affordability of data is an issue.

##### ***Discursive analysis of discourse***

The utterances “...*did not have enough...*” furthermore suggests that the size of resources to be downloaded was large, as a result, learners’ data were depleted whilst downloading these resources.

##### ***Social analysis of discourse***

Understandably, data costs in South Africa are exorbitant as compared to other countries. Prior (2019, p. 13) notes with concern, “SA was placed 143rd out of the 230 countries with an average data price of R106. 20 per GB which, surprisingly, is under the global average of \$8.53 (R126. 39)”. This gives us more reason for why learners cannot access instructional content online. Affordability is the greatest disadvantage facing South African learners since the use of the internet revolves around what one can afford.

Reduction of data costs in South Africa is essential to bring the population abreast of technology so that they can benefit from the digital economy (Payi, 2019). Lifa stated, *“Technology is always upgrading so maybe we won’t have access to the new features since we don’t have money to upgrade our devices”*.

### ***Textual analysis of discourse***

The phrase *“Technology is always upgrading so maybe...”* indicates that learners are aware of the current trends, hence maintain that they cannot afford it in the statement, *“we don’t have money to upgrade...”* Yet again, affordability is an issue to keep up with the global move to a technological society.

### ***Discursive analysis of discourse***

Although some learners have devices, these devices may not have the latest features. For example, not all devices are upgraded, as a result, it would be a tedious task to install new software and upgrade features for a learning management software. Accordingly, not all learners will have equal access to upgrades in the learning management software. All learners will not be engaged if they do not have equal access. This then goes back to the issue of the digital divide for learners that cannot afford to keep abreast of technology due to affordability.

### ***Social analysis of discourse***

To concur with Lifa, as much as technology keeps us in the loop of our surroundings, it can be an obstacle if devices are obsolete and do not exist on the market anymore. Moreover, it would be impossible for the flipped classroom to work if learners do not have devices at home.

Mrs Dlamini and Mrs Ndlovu both stressed affordability as a barrier to the implementation of the flipped classroom for engaged learning. Mrs Dlamini stated, *“The flipped classroom is good but it can be demanding from our pockets for us as parents”*.

### ***Textual analysis of discourse***

The utterance above indicates that these parents agree with their children using the flipped approach for engaged learning, however, they place emphasis on affordability in the utterance *“...it can be demanding from our pockets”*. Affordability may refer to parents' inability to purchase devices for children to access learning resources at home.

### ***Discursive analysis of discourse***

Affordability is also mentioned in section 5.3.3 on parents' views of flipping the classroom for engaged learning. Technology is continuously changing and becoming more expensive when features are improved. Social status is not equal due to differing backgrounds. As a result, technological affordability is an impedance to implementing the flipped classroom for engaged learning.

### ***Social analysis of discourse***

Affordability as a determining factor is due to the ever-changing trend of technology; moreover, parents will try their best to keep up since children are largely enthusiastic about the latest technology. Although technology can help to engage learners, it does not really ensure that learners are not deviating from their work whilst they are online.

Under affordability, it can be deduced that learners had issues for accessing the internet at home since they had limited or no data to stream instructional content. Moreover, most of their devices are old and could not accommodate storage of files and downloading of educational applications. As a result, one of the learners stressed that their parents would not be able to afford to upgrade their devices. One of the parents liked the concept of flipping the classroom for engaged learning but worried that she would not be able to afford a device for her child.

### 5.4.3 Lack of supervision

While there are numerous advantages of implementing the flipped classroom approach, there are numerous disadvantages. Lifa uttered:

*“If the teacher is not physically there, the learner is not encouraged to do the work because they would say okay I have this on my phone or I have this on the internet. If we have something to write or present to the teacher, the learner may not end up doing their work because the teacher is not there to supervise us.”*

#### ***Textual analysis of discourse***

The phrase *“If the teacher is not physically there, the learner is not encouraged...”* means that the teachers’ role, regardless of technology, cannot be replaced by recorded lessons. The revelation, *“...the learner may not end up doing their work because the teacher is not there to supervise us”* indicates that learners rely on the teacher to drive them to complete tasks.

#### ***Discursive analysis of discourse***

Regardless of the vast amount of resources accessible over the internet, engaged learning takes place when learners are engaged. The internet opens numerous doors for disengagement (section 3.2.5). Thus, the only entities that can supervise learners at home are parents.

#### ***Social analysis of discourse***

Lifa’s view about the lack of supervision can be related to lack of parental involvement. Whilst at school, teachers are facilitators and it is the responsibility of parents to ensure that their children study at home. However, the disadvantage for parents is that it is difficult to check whether their child is doing their schoolwork on their devices in contrast to simply just using social network platforms or using the internet for entertainment purposes.

The researcher posed the question to parents, “Please share your impression of your child’s progress in school after using the flipped approach”. Mrs Dlamini responded:

*“Sandiso was watching the video his teacher gave him late last night. I saw him sitting on his bed with his phone but also...he could have been chatting to his friends on WhatsApp. I would prefer seeing what my child is learning like in books or on paper”.*

### ***Textual analysis of discourse***

The statement, “*Sandiso was watching the video his teacher gave him late last night...*” indicates the freedom that the flipped classroom approach permit learners. Regardless of the time or place, the learner is engaged in watching the video that explains a teaching lesson. The utterance “*...he could have been chatting to his friends...*” implies the uncertainty that Mrs Dlamini has as a parent of her child being engaged in schoolwork or social media. The phrase “*...I would prefer seeing what my child is learning...*” confirms that Mrs Dlamini prefers the traditional approach since she is able to see hard copies of content such as notes and books.

### ***Discursive analysis of discourse***

Interaction is received as the parent being hesitant of her child learning using the flipped approach. This is linked to the dark side of technology discussed in section 3.2.10.5 under the cons of the flipped classroom. As much as learners can be engaged in learning, they can also be distracted since the internet opens numerous doors for entertainment. Moreover, notification sounds or pop-ups can hamper the concentration levels of learners.

### ***Social analysis of discourse***

This response can be interpreted as the parent not being confident about the flipped classroom approach. Himmelsbach (2019, p. 1) advocates, “Technology allows you to experiment in pedagogy, democratize the classroom and better engage students. On the other hand, it can be argued technology in the classroom can be distracting and even foster cheating”. It is explicable that using technology cannot always result in engaged learning since the list for entertainment is endless.

Karabo expressed, *“I got distracted when I had an incoming call whilst watching the video. I also had WhatsApp messages that kept pinging on my phone. So I kept putting the video on pause and reading the messages”*.

### ***Textual analysis of discourse***

The phrase *“I got distracted when...”* is a good indication of the previous utterance from one of the parent participants. The utterance *“...that kept pinging on my phone...”* shows how one can get distracted when using a smart phone to access learning resources. As a result, one has to question the level of engagement in learning when one is always *“putting the video on pause and reading the messages”*.

### ***Discursive analysis of discourse***

Karabo had expressed how the flipped classroom could get in the way of engaged learning rather than encourage it. Whilst in a working environment, one could get very easily distracted when using any technological device.

### ***Social analysis of discourse***

During data generation, media files were loaded on the learners' phones to make sure they all have access regardless of not having a computer. Though this was a good idea, smartphones are very distracting devices. Li (2018, p. 28) agrees that smartphones “distract students from serious business like study and also encourage academic laziness and plagiarism”. The internet has a vast variety of resources which even includes books. Nowadays it is deemed uncommon for learners to visit the library to search for information. This information which exists in the library is now available at one's fingertips. This adds to academic laziness and plagiarism which Li (2018) speaks about.

Under supervision, it can be inferred that parents are not sure how to supervise their child whilst they learn on their devices due to numerous applications that may be a distraction and hinder engaged learning. Learners admitted that it may also be difficult to learn content ahead of the lesson as there is no encouragement if the teacher is not physically present. Furthermore, one of the learners said that she was distracted by the sound of her notifications on her device.

#### **5.4.4 Lacking a foundation of computer skills**

The skill of using computers is advantageous in the digital age since it shapes the future of the job market. Nowadays, learners are more in tune with technology since they are born in the digital age. As a result, these learners are referred to as 'digital natives', conversely this does not necessarily indicate that since they are digital natives they should have the ability that is needed to make it in a digital-based job market (Woods, 2018). Burns (2017, p. 10), Woods (2018) and Suva (2019) argue, "Digital literacy should be the fourth pillar of a child's education alongside reading, writing and mathematics and be resourced and taught accordingly". Therefore, it cannot be assumed that all learners hold a skill of using technology that is innate. Learner participants within the study have an ICT background due to their subject choices. When the researcher asked about what suggestions they can make to improve the way in which they are currently learning, Lifa articulated:

*"My wish is that I started learning with computers from grade 8 for it to have grown in me because when you go to varsity; it would be difficult if you don't know how to switch on a computer. The CAT learners have an advantage over the rest of the learners at school of using computers. It is very important for us to have a computer background because we don't know where life is going to take you so we going to have to know about how to use the computer".*

#### ***Textual analysis of discourse***

The phrase "*My wish is that I started learning with computers from grade 8 for it to have grown in me...*" demonstrates the learner is longing of computer skills since a younger age since it is a requirement in modern world. The learner further expresses "*...The CAT learners have an advantage...*" since CAT learners are equipped with basic skills to carry them over through to the world of work.

#### ***Discursive analysis of discourse***

Interaction is received as remorse from the learner concerning not learning about computers from a younger age. The learner realises that it is important to have the

skill of using computers to perform day-to-day tasks. The utterance “...*It is very important for us to have a computer background because we don't know where life is going to take you...*” points towards the use of using the flipped classroom approach for engaged learning since learning about computers does not only mean using it for day-to-day tasks as discussed above. Rather, it allows teachers to access and send resources to learners. In addition, it allows learners to explore and be able to collaborate with others when learning.

### ***Social analysis of discourse***

It is vital to have a foundation of computers before selecting CAT as a learning area in grade 10. Some schools that have the necessary resources offer Computer Literacy as a compulsory learning area. A foundation of computers empowers learners when they reach the higher grades since it provides them with background knowledge. Basel (2017, p. 1) maintains, “Universities acknowledge the importance of computer skills and some institutions require their students to complete a basic computer literacy module in their first year of study”. Additionally, the computer literacy module is compulsory to ensure that all university students possess basic computer skills.

From this section, it can be deduced that learners see a strong importance of computer skills in the technologically driven society. Moreover, learners elaborated the importance for job seekers to be well acquainted with computers, as progressive industries rely profoundly on computerised resources to accomplish vast amounts of tasks (Basel, 2017). Due to the demands of technological skills, the DBE is allowing schools to introduce a new learning area called Digital Skills (Writer, 2019). It can be argued that although this is a necessity, many schools may still not implement this learning area due to the lack of resources.

#### **5.4.5 Support from various stakeholders**

A stakeholder in terms of education can be defined as someone who is interested or associated with the welfare and success of a school (Roundy, 2016 & Warsi, 2018). This may include entities directly or indirectly affected by the failure or success of an educational system.

Data was generated from three stakeholders: learners, teachers and parents. The current situation of Blossom High School indicated limited or no support from stakeholders in the school for flipping the classroom for engaged learning. Mrs Moodley expressed *“Our school was given an ibox, tablets, and Wi-Fi from the DoE. I can say only maximum three teachers have used the ibox. The tablets have never been used and the Wi-Fi has never been loaded with data”*.

##### ***Textual analysis of discourse***

The above utterance indicates that some schools have resources but do not use it for its purpose. The statement *“...I can say only maximum three teachers have used the ibox... tablets have never been used... Wi-Fi has never been loaded with data”* is a strong suggestion that teachers are not willing to change their teaching approach since the tools given to the school have not been used.

##### ***Discursive analysis of discourse***

Mrs Moodley expresses the non-use of various resources. A reason can be that minimal or no training was given to teachers regarding the use of the tools. Moreover, for teachers to create instructional content online, they need access to the internet. The school has to buy data bundles for this to take effect since data bundles are expensive (section 5.4.1).

##### ***Social analysis of discourse***

This is an indication of the lack of support coming from the DBE. According to South African Government (2019, p. 21), some of the responsibilities of the DBE with regards to teaching and learning resources in schools is to “focus on providing well designed

print and digital content to teachers and learners; expanding access to and improving the use of ICT at schools; and providing teachers with essential tools and support". To counter this statement, it can be argued that this responsibility is not being fulfilled. The school has the necessary teaching resources but most teachers are unskilled for the successful implementation of such resources.

The flipped classroom can only be a success for engaged learning if teachers are confident with the skills they possess. Mrs Moodley articulated:

*"There is no support from the DBE. Only a one-day workshop was given to teachers on the use of such technology in the classroom. Workshops should be a priority from the department. Our skills need to be updated. Teachers are hesitant to take on the initiative of using such tools in the class without proper supervision. Management also needs to be more supportive and encourage the DBE to hold workshops within the school".*

### ***Textual analysis of discourse***

The phrase "*There is no support...*" indicates that teachers are not being assisted from the DBE yet they are required to implement e-learning as per the white Paper policy (section 1.2.5) in their curriculum. The utterance "*Workshops should be a priority from the department...*" depicts the concern of training from teachers. The phrase "*Teachers are hesitant...*" reiterate the reason for teachers to be adequately trained to manipulate their teaching approach by incorporating technology in their lessons as a tool for engaged learning. The utterance "*Management also needs to be more supportive...*" shows that besides the DBE lending support, the management of the school is uncooperative in assisting teachers within the classroom to improve their teaching approach.

### ***Discursive analysis of discourse***

According to Roland (2015, p. 3), "the nationwide survey of K-12 teachers revealed that while schools are putting more technology into classrooms, not enough is being done to ensure that teachers know how to integrate it into their lessons". It is for this reason that a series of workshops need to be held to train teachers so that learners

can benefit. From the above discourse, it can be determined that a lack of skills is one of the reasons for teachers resisting change.

### ***Social analysis of discourse***

Engaged learning cannot be achieved if teachers are unsuccessful in the classroom. Teachers have a profound effect on the learners they teach. According to Savides (2017, p. 7) “in 2016 KZN had 2,875 unqualified or under-qualified teachers last year, 57% of the total number of such teachers across the country”. This indicates that such teachers pose in front of learners without the necessary knowledge and skills. Hence, this might be one of the reasons why learners are disengaged in their learning. Notwithstanding the fact that the DBE stresses the use of ICT in the classroom, however, many schools are not provided with such resources. Implementing the flipped classroom for engaged learning necessitates a great deal of training for teachers and also requires learners to have such technological resources at home. With support for internal and external stakeholders, teachers would be willing to implement the flipped classroom approach (section 3.2.1).

Under this section, it was comprehended that teachers are given little to no training on resources given by the DBE, hence, teachers are hesitant to incorporate such resources in their lessons without proper training. Besides support from the DBE, teachers stressed that the SMT encouraged them to change their methods but did not hold training sessions in this regard to lend support to teachers.

### **5.4.6 Summary**

The above issues in section 5.4.1 to 5.4.6 outlined the hindrances for the successful implementation of flipping the classroom for engaged learning. The common challenges indicated were learners not having access due to the digital divide, teachers not having skills and knowledge to implement the flipped classroom approach, parents stressing about the issue of affordability and teachers refusing to change from traditional methods to a flipped approach due to lack of support from various stakeholders.

## 5.5 EXPLORING HOW THE CLASSROOM CAN BE FLIPPED FOR ENGAGED LEARNING

Notwithstanding the obstacles that may be present for the successful employment of the flipped classroom, one needs to investigate other methods to ensure engaged learning is a success whilst using the flipped approach. Two issues had emerged when presenting data under this objective.

### 5.5.1 Bridging the gap with Bring Your Own Device (BYOD)

Olwethu supported, *“Why can’t the school give us free Wi-Fi and allow us to bring our own devices to school so we can access internet resources to use the flipped classroom appropriately”*.

#### ***Textual analysis of discourse***

The expression *“Why can’t the school give us free Wi-Fi and allow us to bring our own devices...”* shows that some learners have devices but cannot afford data. The learner stresses free Wi-Fi so he can *“...use the flipped classroom appropriately”*. This shows that the learner acknowledges that data usage is required to access resources online when using the flipped classroom approach.

#### ***Discursive analysis of discourse***

The learner maintains a valid point in saying that if the school requires them to use the internet to access learning content, the school should provide them with internet access out of the school context. This is to bridge the gap amongst the digital divide.

#### ***Social analysis of discourse***

Olwethu questions his oppression by giving a suggestion to achieve emancipation for engaged learning. Wi-Fi connectivity and a BYOD policy in schools can bridge the digital divide for access. However, there are barriers to implementing the BYOD policy as discussed sub-section 3.2.10.3 the study.

## 5.5.2 Solutions from the Department of Basic Education (DBE)

Besides schools being equipped with technological tools, learners also lack access. Miss Khumalo said, “*As much as our school needs access, what about our learners? The DBE should work toward sponsoring equipment to learners and making Wi-Fi available to learners*”.

### ***Textual analysis of discourse***

The phrase “...*what about our learners...*” indicates a worry that Miss Khumalo has for the learners that she teaches regarding access. This is a major hindrance towards implementing the flipped classroom for engaged learning. The utterance “*The DBE should work toward sponsoring equipment...*” signifies a solution given by Miss Khumalo in combating the digital divide. Miss Khumalo also deem it to be necessary for the DBE in “*making Wi-Fi available to learners*” for those that struggle with issues of affordability of data.

### ***Discursive analysis of discourse***

If some learners do not have access, how will implementing the flipped approach help for engaged learning? Implementing the flipped approach is for benefit of the learners, however, from a teacher’s standpoint it would be pointless if there is no support given to learners as well.

### ***Social analysis of discourse***

Miss Khumalo’s opinion reiterates learners’ lack of access. This is detrimental for the current digital era. Moreover, learners are being disadvantaged due to their parents’ affordability. This puts a strain on their parents’ pockets to ensure that they are able to provide for their children along with their current situation of schooling.

From this section, it can be deduced that learners and teachers are thinking about alternative means to incorporate the flipped classroom for engaged learning. Implementing a BYOD policy in school will assist in creating an “In-class flipped classroom” as explained in section 3.2.10.3 of the study. Moreover, teachers

maintained that the DBE should intervene in assisting learners to bridge the digital divide.

### **5.5.3 Summary**

The issues in section 5.5.1 and 5.5.2 outlined the implementation of the two options gathered from data generation for the successful implementation of flipping the classroom for engaged learning. The common challenges indicated were lack of resources in school and lack of access for learners out of school.

## **5.6 SYNTHESIS**

To summarise, the chapter presented, analysed and interpreted the data generated from the field. The data was presented and analysed as per the four objectives of the study. The data generated interpreted the current situation of engaged learning. Blossom High School was not aware of the flipped classroom approach. It was discovered that teachers used the traditional approach. Teachers indicated that they refused to change due to having no assistance from other stakeholders within the classroom and out of the classroom in terms of training. Learners indicated that they did not find instruction engaging when teachers used the traditional approach. This was because teachers failed to engage them using the existing teaching and learning resources. Furthermore, instructional resources were not challenging and motivating.

The need for flipping the classroom for engaged learning was also identified. Data generated showed that there is a need for flipping since learners find learning with the existing teaching and learning approach monotonous and tedious. Hence, they cannot engage themselves in these lessons. A deliberation on a SWOT analysis indicated the need of implementing the flipped classroom approach. The participants identified the challenges for the employment of the flipped classroom. Data generated showed that numerous factors such as the digital divide, affordability, lack of skills and lack of support might hinder the proper implementation of the flipped classroom for engaged

learning. Moreover, these were a cause for concern since the digital divide and lack of support were among the biggest challenges in implementing the flipped classroom approach for engaged learning. Lastly, learners and teachers deliberated on innovative ideas for exploring how the classroom can be flipped with regards to the current circumstances. Data generated indicated that all stakeholders need to get involved to ensure the success of the flipped classroom approach for engaged learning.

This chapter had primarily used literature to comprehend the data which transpired from the field. Chapter six presents the findings, aspects of further research and the conclusions on flipping the classroom for engaged learning.

## CHAPTER SIX

### SUMMARY OF FINDINGS, CONCLUSIONS AND IMPLICATIONS FOR FLIPPING THE CLASSROOM FOR ENGAGED LEARNING

#### 6.1 INTRODUCTION

The preceding chapter presented, analysed and interpreted data in accordance to the objectives of the study for flipping the classroom for engaged learning. This chapter delivers a summary on informing the findings of the study, eliciting conclusions, constituting recommendations and proposing strategies for flipping the classroom for engaged learning. The chapter further highlights the limitations that posed as challenges for the effective implementation of the flipped classroom for engaged learning. Moreover, the chapter reports on the components of the solutions, the conditions that made them work and the obstacles that may possibly impede the successful implementation of the flipped classroom for engaged learning.

The main purpose of the study was to respond to the following main question:

#### **How can we flip the classroom for engaged learning?**

The following objectives endeavoured to answer this question:

1. To explore the current situation in respect of flipping the classroom for engaged learning.
2. To examine the need of flipping the classroom for engaged learning.
3. To explore how we can flip the classroom for engaged learning.
4. To understand hindrances/ impence/ barriers/ threats to successfully flipping the classroom for engaged learning.

The focus of this chapter is to report on the findings aligned to the three main objectives of the study. Four findings had emerged after analysis and interpretation was done. These were:

- The current situation does not allow for flipping to be effectively done (section 5.2);
- There is a need for flipping the classroom for engaged learning (section 5.3);
- The digital divide, affordability and support were the main aspects identified as hindrances for the successful implementation of the flipped classroom for engaged learning (section 5.4); and,
- The flipped classroom can be made a reality in impoverished communities by employing an 'in-class' flip and support coming in from the DBE (section 5.5).

Each of the four findings above were related to the basic assumptions of CT concerning emancipation and critique of exploitation using theoreticians from the Frankfurt school (section 2.3.1.1). Extracts from the data will be cited in brackets and italicised merely to signal to the reader to data at which I draw on from the analysis chapter (chapter 5).

## **6.2 SUMMARY OF THE STUDY**

This study sought to critically analyse the flipped classroom for engaged learning. A need was identified to change the traditional approach and incorporate it with an approach that is more learner-centred. Manqele (2017, p. 1) upholds, "The educational changes introduced by the South African democratic dispensation after 1994 were meant to address the apartheid imbalances". These changes were made to give learners a voice and for them to become critical thinkers in their own learning.

The shift from a teacher-centred to learner-centred approach had a profound impact on teachers to adapt to the change of a pedagogy, which permits learners to drive the lesson. As a result, the DoE had included e-learning in the white paper policy on e-

Education and stressed that schools incorporate technology in teaching and learning. Nonetheless, attempting to move away from the traditional approach to a learner-centred approach necessitates an upgrade of teaching and learning resources.

The flipped classroom approach was identified in the study as an innovative way to engage learners in the classroom (section 3.2.10). This was established during data generation. Learner participants were very enthusiastic since they enjoyed learning using the flipped approach. However, it was discovered that the digital divide posed challenges for the successful employment of the approach. Moreover, learners needed such technological resources to learn at home, for example, a computer and internet access. Besides educating learners on how to learn electronically, teachers have to be trained to teach these skills to learners. During the process of data generation, it was discovered that teachers at the school were not given such training. Consequently, they were hesitant to transform their teaching approach; hence, they chose to keep to their traditional approach.

This study was steered by CR as the theoretical framework which supported the argument of the study (chapter two). This lens permitted the researcher to consider the participants as human beings that can yield change and transformation in their current situation. It was possible to create a platform to bring about equality in the research process by using PAR as the research methodology. PAR allowed the researcher to blend in the research context and befriend participants to form a level of trust. Participants were free to impart their opinions in addition to their experiences of the current situation of teaching and learning and proposed recommendations considering the implementation of change in the current education system. Participants, who were particularly marginalised, were able to voice their thoughts and beliefs in a tranquil platform on which their voices were appreciated. Furthermore, PAR enabled the researcher to work together with the participants in classifying challenges and bestowing solutions to them.

The generated data revealed many aspects that need to be discussed for the successful implementation of the flipped classroom. However, there is a challenge of

applying solutions to all schools due to affordability and the digital divide. Based on how the study unfolded, findings were drawn, and recommendations and conclusions were made.

### **6.3 FINDINGS ON THE CURRENT SITUATION OF FLIPPING THE CLASSROOM FOR ENGAGED LEARNING**

An exploration of the current situation regarding flipping the classroom for engaged learning shows that the process is affected by some obstacles.

#### **6.3.1 Teachers' inability to effectively engage learners in the classroom**

From the data generation process, it was identified that learners are opposed to the traditional teaching and learning style (*I dislike the way we are learning now and I think flipped classrooms are more interesting*). Tularam and Machisella (2018, p. 129) define the traditional teaching approach as “generally teacher-directed and where [learners] are taught in a manner that is conducive to sitting and listening”. Moreover, the traditional approach does not develop learners as critical thinkers (Giraldo-Garcia, Roy & Alotebi, 2015). From the focus group discussions held with learners, learners mentioned (section 5.2.1) that they found their teachers' methods of teaching boring and it did not help them to be engaged in lessons (*a waste of time and boring*). This could be so for the reason that learners are taught with limited resources. Moreover, the context under study relied on textbooks as the primary resource for teaching and learning. Lau, Lam, Kam, Nkhoma, Richardson and Thomas (2017, p. 11) confirm that the “traditional way of learning and teaching relies very much on using a prescribed textbook as a vehicle for delivery of course content”. Hence, from participant observations conducted, it has been observed that teachers still use the traditional approach of teaching. As a result, this approach proved to ineffectively engage learners in the classroom since many learners reported late to class, some were truanting and those that were present were not engaged in the lesson. Kim (2016, p.

5) agrees in maintaining that the “traditional education system doesn't serve the needs of the current generation”.

As the flipped lesson progressed, disengagement was tested by the teacher asking the learners questions of what was taught (section 3.2.5). Moreover, homework, which was assigned to learners, was not done. Learners had come to school the following day after the teachers lesson without completing the given homework. Thus, this proves that learners were not engaging with the task as it was probably not interesting nor challenging to motivate learners to work out of the classroom context. Learners further stressed their annoyance with their teachers' current teaching approach by stating that it is boring and a waste of time (section 5.2.2). Ganim and Evely (2017, p. 4) points out, “Disengaged students are not necessarily unmotivated to achieve in all subjects. They may be disengaged in one particular class or across several subjects. In other subjects they may be alert and engaged, particularly if topics interest them”. As a result, learners may be disengaged for various reasons other than a monotonous textbook and their disengagement within the learning context cannot be generalised for all subjects and all teachers (*when we engage ourselves more in our learning in a fun way then they will be engaged in the classroom*).

### **6.3.2 Stimulating the learning process**

It emerged from focus group discussions with learners that they were not stimulated during lessons (*if you reading a story or something, you would like to see some pictures and if you don't, you get bored and you will want to move on to another book.*). Nissim, Weissblueth, Scott-Webber and Amar (2016, p. 29) upholds, “A learning environment should be flexible and dynamic so as to be adaptable to the changing needs of the teaching-learning-evaluation processes”. Hence, the teaching and learning environment should be one that is dynamic to ensure that all learners are accommodated in the learning context. Learners expressed that they would like to learn by looking at multimedia such as videos which is both visual and auditory (*we like to watch videos nowadays and we like to do things on the internet so if we use the internet to learn plus the books that we read, it would be much better*). It was further

stressed by learners that using videos to learn makes room for entertainment whilst learning. Studies have shown that video learning has positive outcomes of increased motivation and can precisely influence learners' capacity to identify problems and facilitate discussions (Brame, 2015; Hadijah, 2016; Vronska, 2017). In contrast, teaching with videos can also be a disadvantage. Liimatta (2015, p. 16) put forward that "not being able to communicate with the teacher is a major disadvantage". Moreover, the lack of social interaction amongst other learners hinders learners' knowledge development since social interaction is an important element in the learning process.

Learning styles have to be accommodated to ensure the proper stimulation of learning (section 2.2.2). Larias (2016, p. 2) expresses that "an individual's learning style refers to the preferential way in which the student absorbs, processes, comprehends and retains information". Consequently, the use of technology in the teaching and learning space may allow all learning styles to be catered for (Boorang, Fard, Sharahi & Khodabandelou, 2018). To refer back to section 1.2.5 of the study, the White Paper on e-Education (2004, p. 16) claims, "ICTs can accommodate differences in learning styles and remove barriers to learning by providing individualized learning capabilities". Thus, the South African education system stresses on schools incorporating technology in teaching and learning. During the course of data generation, it was evident that teachers were not planning their lessons around the needs of learners. The linguistic and intrapersonal learning style were given more preference over the other five learning styles which are interpersonal, spatial, kinaesthetic, mathematical and auditory (Krasnoperova, 2019). Moreover, learners were not allowed to work in groups as they became noisy. They had to work on their own. This restricted interpersonal learners as they learn best when they collaborate (Ferdous, 2019). Since the teachers used the traditional approach, learners who learnt best through the linguistic learning style were favoured. As a result, traditional teaching and learning favours the linguistic and intrapersonal learning styles. Hoerner (2013, p. 1) explains, "When students are not performing as well as they could be, it is likely they just need to be taught in a different way". Hence, teachers need to ensure that they include all learners in their approach to teaching. It was concluded that most learners in the classroom were not stimulated, as they were not engaged in the lesson.

Moreover, this showed that they were not linguistic or intrapersonal learners but could have fallen under any of the other five learning styles (interpersonal, spatial, kinaesthetic, mathematical and auditory) that were not accommodated for.

### **6.3.3 Lack of knowledge and skills**

The current situation stipulates that learners may have only been exposed to the textbook for each learning area as their primary learning resource (*Teachers focus too much on theory. They don't give us real-life examples. They just read from the textbooks*). Textbooks are currently used by teachers for engaging learners in and out of the school context. When learners rely on textbooks as a primary source, there is very little room for imagination and stimulation (Chadha, 2017). According to research, recurrent use of learning resources over and above the textbook can stimulate enhanced learning opportunities (Westbrook, Durrani, Brown, Orr, Pryor, Boddy & Salvi, 2013; Lau, Lam, Kam, Nkhoma, Richardson & Thomas, 2017). Nonetheless, many teachers are not adequately trained or lack regard of exposing learners to alternate resources. Section 3.2.15.1 of the study identifies literature around challenges faced by teachers when using the flipped classroom approach. One of the challenges identified was lack of training and the inability to effectively use technology in the classroom (*teachers shy away from using such tools due to them not being adequately trained*).

The data generation process uncovered that teachers were not adequately trained to incorporate various teaching approaches that may stimulate learning through the use of technology (*not all teachers have the skill of using technology in and out of the classroom*). The DoE provided electronic resources to the school researched; however, they failed to train teachers to use it in the classroom. This disadvantages the teacher and the learners. Makgato (2014, p. 1285) upholds, "There should be regular computer training for teachers, which also focus on instilling in teachers the interest and belief in using ICT in the school curricular". Hence, this may bring about confidence among teachers when using ICT in the classroom, especially in the flipped classroom for engaged learning.

Teacher participants were not aware of the flipped approach prior data generation (*It is my first time using such an approach after you introduced me to it*). As stated in the study, the flipped classroom approach is generally is a new approach in South Africa (Daniel, 2016). Le Roux (2018, p. 10) justifies the later by maintaining, “[learners] have come largely from poor educational backgrounds and are used to a particular way of learning, therefore adapting may be tough”. It could be for this reason that teachers in the study admitted to only using the traditional approach of teaching since they are limited in terms of skills and resources in addition to learners being in the same circumstances. Moreover, the digital divide also disadvantages learners of impoverished backgrounds. However, teachers enjoyed incorporating the ‘in-class’ flipped approach (section 3.2.10.3) during data generation (*I have tried it in my class and I noticed that the learners were more actively engaged in the learning process*). They acknowledged that this method had a positive effect on engaging learners both in and out of the classroom.

#### **6.3.4 Instructional strategies and learner engagement**

During data generation, it was discovered that most learners at the school did not have or had limited internet access as well as computer devices at home. Teachers had to employ an ‘in-class flip’ whereby teachers transferred files in the format of an audio and video clip for learners to listen and watch at home since it was understood that all learners had access to cell phones (section 5.2.4). Tucker (2016, p. 5) asserts that the in-class flipped approach “is a great way to take the benefits of the flipped classroom and embed them into the station rotation model”. The in-class flip approach was used to make content accessible for all. I support the in-class flipped approach, however, issues may arise when schools do not have the resources to set up an online learning station. In addition to the audio and video clip, a web-link was given to learners for them to access an Open Educational Resource (OER) based on the topic, however, not all learners could visit the website due to lack of internet access (*we did not have enough data*). UNESCO (2019, p. 1) defines OERs “as any type of educational [material that is] in the public domain or introduced with an open license”.

Some learners may struggle to access OERs due to slow internet connection, not having access to the software required to use the material or not having a device at all (Affouneh & Khlaif, 2020). Ngozo and Mtantato (2018, p. 8) pronounce that “various international studies attest to the poor quality of our education system”. This may be for the reason that SA is a developing country, thus, technology may not be the forefront for many citizens due to lack of exposure or poverty.

During data generation, the teacher used whole-class discussion and explanation as an instructional approach. The flipped approach was used to teach a specific topic in the subject of CAT and NS. Teachers indicated that flipping worked to engage learners since they could learn at their own pace and they were given a variety of resources to learn from. Smallhorn (2017, p. 43) indicates that “results of the flipped classroom suggest an increase in learner engagement and a positive attitude towards the learning method”. In contrast to the flipped classroom, it was discovered that learners were not stimulated in the learning process whilst using the traditional approach as it was simply regurgitation of content, which can be referred to the banking model (sub-section 2.3.1.2). To summarise, it was found that the current situation of using the flipped approach for engaged learning is not put into practice since the traditional approach is still being used. In addition, a number of obstacles hinder the proper implementation of the flipped classroom approach, which is discussed in section 6.5.

## **6.4 FINDINGS ON THE NEED FOR FLIPPING THE CLASSROOM FOR ENGAGED LEARNING**

An exploration on the findings on the need for flipping the classroom for engaged learning concluded that there is a need since employing the flipped classroom approach allows for individualised learning. Moreover, it gives learners the responsibility to be in charge of their own learning. The focus of this section is to report on the findings on the need for flipping the classroom for engaged learning.

### **6.4.1 Opinions of learners in flipping the classroom for engaged learning**

Data generation revealed that learners desire a distinguished learning approach that caters for differentiated learning (*some like listening to music, some like watching videos and some like reading notes so it does help us to be more active if our learning styles are accommodated*). Basye (2018, p. 4) defines differentiation as “a type of learning where instruction is tailored to meet the learning needs, preferences and goals of individual students”. Hence, differentiation in the classroom should be a reaction to diverse learning styles. Moreover, it allows teachers to be flexible in setting assessments, and creating instructional content to construct the best learning experience for every child. Weselby (2020, p. 20) maintains, “Differentiated instruction requires more work during lesson planning, and many teachers struggle to find the extra time in their schedule”. Consequently, it could be a time-consuming process to determine each learner’s learning style and tweak the lesson plan for each child. For this reason, many teachers choose to not differentiate their teaching style and retain the traditional approach. It was also discovered that most of the time learners are intimidated by their teachers since teachers are seen as content providers (section 5.3.1). This form of oppression can be referred to as cultural imperialism, which can be designated as a component of power, or control in which the oppressed consents to these as a norm (Sparks, 2012). Learners allow teachers to be content providers due to the standardisation of learning. Thus, learners conform to being oppressed.

Moreover, learners restrict themselves from questioning and exploring beyond what is taught to them. Standardisation of teaching goes against the basic assumptions of CT since CT maintains that questioning is imperative for the oppressed to be liberated in a society that is compelled by dominant forces (Palmer, Fernandez, Lee, Masud, Hilson, Tang, Thomas, Clark, Guzman & Bernai, 2019). It is for this reason that critical thinking amongst learners should be encouraged to bring about engaged learning within the classroom. Radulovic and Stancic (2017, p. 11) maintain that “schools are still criticised for not teaching pupils how to think, which is supported by professional and scientific debates on the test results of pupils in international assessment studies”. Thus, Kronenberg (2019, p.2) defends “that the learner’s critical thinking levels can be raised with specific pedagogical approaches”. This is when the need for flipping the classroom for engaged learning comes in since it allows for implementing a teaching style that varies for each learner according to his/ her learning style.

During data generation when the flipped approach was used, a variety of learning resources were given to learners in the hope that if not all then some would cater for each learner’s learning style as learners are unique and have dissimilar learning styles which should be accommodated for within the classroom. The disadvantage of doing this is that not all learners will actually go through the vast resources given in a flipped lesson (Acedo, 2019). As a result, this may put a strain on lesson planning and can frustrate the teacher. Nonetheless, if learners learning styles are catered for then there is no need for learners to be disengaged in learning (Larias, 2016). Moreover, the flipped approach gives learners ample thought-provoking methods to learn by such as collaborative learning (Ouda & Ahmad, 2016).

From the researcher being a participant in the observation process, it was observed that learners enjoyed the flipped lessons in contrast to the traditional lessons. In Tang, Chen, Zhu, Zuo, Zhong and Wangin’s (2017, p. 6) study, it was found that learners “in the flipped classroom group felt more motivated for learning when compared to those in the traditional lecture-based classroom group”. During the learner focus group discussions, it was discovered that monotonous teaching encouraged the high rate of truancy and absenteeism (*The other cause of why learners bunk is because of the*

*traditional way of learning*). Furthermore, learners supported the need for implementing the flipped classroom for engaged learning to effect positive change in the teaching and learning environment (*I feel like it's a fresh start and it's time for innovation*).

#### **6.4.2 Teachers' interpretations of the flipped classroom approach**

From data generation, it emerged that in addition to learners, the teacher participants enjoyed employing a different teaching approach (*giving learners content to explore out of the classroom assists them in becoming curious and wanting to learn more*) other than the usual traditional approach, which was what they were currently using. Moreover, teachers reported that they noticed a difference among learner engagement. Teachers stated that there was a difference in the manner in which interaction took place amongst learners in the classroom when using the flipped classroom approach for data generation (section 3.2.4.1 and 5.3.2) (*Learners were very happy when they were given so many resources instead of a traditional textbook and I immediately saw a difference of engagement when the flipped approach was used*). Learners were engaged in the lesson and were able to answer questions regarding the topic that was given to them to study. This showed that learners engaged with content at home, as they were able to answer questions and participate in the whole class discussion. It was found in one study that teacher participants “perceived that the flipped classroom creates time for varied instructional techniques, including active learning and higher order thinking, along with increased student-to-teacher interaction” (Gough, Dejong, Grundmeyer, Baron & De Jong, 2017, p. 390). Hence, the flipped classroom approach can help teachers to engage learners in the classroom.

The main purpose of using the flipped class approach for engaged learning is to accommodate all learning styles within the classroom for personalisation. Sota (2016, p. 75) defines personalisation as “the use of multiple instructional modes to scaffold each student’s learning and enhance the student’s motivation to learn and achieve

mastery of knowledge and skills”. Consequently, such motivation may come extrinsically, which may be based on a reward, or intrinsically by the learner being interested in a task. This then can be viewed as engaged learning. Thus, personalisation should be of priority to ensure that all learners are given the utmost attention to unleash their abilities within the classroom. Lesson preparations for the flipped classrooms require teachers to personalise lessons according to allocating resources for learners’ self-study, additionally, teachers have to plan for the classroom (sub-section 3.2.4.4).

Besides the positive aspects that teachers outlined, it was revealed that teacher training on incorporating technology in the classroom for teaching and learning is not carried out in some schools. As a result, teachers are hesitant to employ the flipped approach for engaged learning. Teachers stressed that as much as they would like to use such an approach, it is very time consuming especially for large classes (section 2.2.2) to accommodate each learning style for engaged learning (*class sizes are maximum 48*). Al-Hammoud (2016, p. 1) defends that “in large classes, students may tend to attend class unprepared and be passive during lectures, which defeats the purpose of flipped classrooms”. Accordingly, it may be difficult in a large classroom for teachers to check that each learner did study their work prior to the class.

### **6.4.3 Parents’ views on flipping the classroom for engaged learning**

Bond (2019, p. 6) defends that “given the importance of parent involvement in and engagement with children’s learning, it is also important to understand parent perceptions, and how they might impact on the approach”. Under this topic, findings from conversational interviews revealed two differing views on the need for the flipped classroom for engaged learning. One parent supported incorporating the flipped approach for engaged learning since she mentioned that it is an innovative method other than what teachers were currently using (*Our world is evolving and changing so I think our children should also do the same*).

The other parent did not see a need since she thought it was expensive as affordability was a challenge (*it can be demanding from our pockets for us as parents*); however, she maintained it is a fun approach to use for teaching and learning. The flipped classroom approach may not work for everyone (section 5.3.3). For it to be implemented in teaching and learning, learners have to have the proper resources to access instructional content out of the school context. In addition, technology is not always good since it also has a disadvantage of addiction for entertainment purposes. Sandiso's mum, Mrs Dlamini expressed that she was concerned (*He still can be learning while having fun...it's just that with technology there is no limits and we as parents cannot control it*) since she would not know whether her child is on his device for entertainment purposes or for learning (section 5.4.3). Limniou, Schermbrucker and Lyons (2017, p.18) argue that the "integration of technology into the teaching process may increase learners' satisfactions, but it may not be enough to enhance the learning process".

Parents play a significant responsibility for implementing the flipped classroom for engaged learning. According to Bond (2019, p. 2), "[parental] involvement in and engagement with children's learning has been shown to strongly influence learner motivation, achievement, engagement and school completion". Employing the flipped classroom approach requires learners to learn out of the school context. Accordingly, it is difficult for teachers to supervise learners out of the learning context. As a result, parents are central to ensure the success for implementing this approach for engaged learning. Learning by means of using technology can be very distracting (section 3.2.2). If learners are not properly monitored in their learning journey whilst working with content by technological means, they can easily be distracted and this will lead to disengagement.

#### **6.4.4 Deliberation on a SWOT analysis for flipping the classroom for engaged learning**

During the focus group discussions, learner participants reflected on the feasibility of the flipped classroom for engaged learning. The findings of this reflection indicated that there is a lot of opportunities that may arise when using this approach for teaching and learning (*By giving learners content to explore out of the classroom assists for them to be curious and want to learn more*). Arnold-Garza (2014, p. 11) defends, “There is more time for extended classroom discussion and exercises which permits learners to engage with learning materials, concepts and peers in the classroom.” Learners may be exposed to a method that may excite them and cater for the way in which they learn. This is a positive aspect and may point to the strengths of incorporating this approach for engaged learning.

The weaknesses of the flipped approach points to not being a success for all schools and learners. In support of this statement, the flipped classroom approach may aggravate the digital divide and learning issues already caused by learners coming from lower income families and disadvantaged backgrounds (Steele, 2018). Hiefield (2017, p. 2) maintain with concern that “flipped classrooms assume that students have broadband internet access at home”. This can also be seen as a threat for engaged learning as not all learning may have access to basic resources that fortunate learners may access by using a computer and the internet. Affordability was also identified as a threat as learners stressed that they may have devices but these devices in most cases are obsolete so accessing multimedia would be an issue (*technology is always upgrading, so maybe we won't have access to the new features since we don't have money to upgrade our devices*).

These issues had arose during the deliberation session of a SWOT analysis for flipping the classroom for engaged learning. Learners from the research context enjoyed learning through this approach during data generation but admitted that it would be difficult to download resources since data is expensive and they do not have any other

device besides a phone. Moreover, the phone distracts them whilst perusing educational content (*I got distracted when I had an incoming call whilst watching the video*). To reiterate, the in-class flipped approach was used to accommodate learners that may encounter issues with access (sub-section 3.2.10.3).

The need for flipping the classroom for engaged learning may be justified. It can be established that the need for flipping the classroom for engaged learning all depends on access as a determining factor. The desire to flip the classroom for engaged learning is hampered by a number of obstacles including access and the digital divide. These obstacles would be appearing in the subsequent section.

## **6.5 FINDINGS ON THE HINDRANCES FOR THE SUCCESSFUL IMPLEMENTATION OF FLIPPING THE CLASSROOM FOR ENGAGED LEARNING**

The current study found that some hindrances must be borne in mind when flipping the classroom for engaged learning.

### **6.5.1 The Digital Divide**

As pointed out in (section 6.4.4), the digital divide is one of the weaknesses in implementing the flipped classroom for engaged learning. The digital divide is a big challenge, especially concerning the historical background of education in SA. Bridging The New Digital Divide (2019, p. 10) notes that “access to digital skills as well as affordable and quality internet coverage remains unevenly distributed in South Africa.” Consequently, the findings during data generation indicated that most learners are still oppressed as there are no equal opportunities in education (*we are disadvantaged when schools don't have the technology to offer to learners or when they have the technology and are still not giving it to the learners to use*). Some schools in the rural areas lack basic resources for teaching and learning. Chakanika, Sichula,

Sumbwa and Nduna (2012, p. 7) defend, “There is a marked shortage of teachers and learning materials and other educational resources such as libraries (Harmon and Weeks, 2011). Hence, these pose as examples of only a few hindrances which make rural education in SA challenging”. This oppression can be viewed as procedural injustice since media centres are central in urban or developed areas (Deutsch, Coleman, and Marcus, 2015). Learners who come from and school in rural or township areas have to travel vast distances to gain access to such facilities (Atkinson, 2014). Hence, this shows that learners are still trapped in shackles that prevent a proper education equivalent to the dominant groups (*I can go to the library for free Wi-Fi but then it's too far*).

During data generation, one of the learner participants was not able to participate in the lesson since she did not have a device to watch the video and listen to the recording. In an instant, this learner had been disadvantaged as others were able to attain the resources. This is one of the limitations of the employing the flipped classroom approach for engaged learning. It would be difficult for the flipped classroom approach to be employed for engaged learning if any one of the learners in the class lack access to resources, however it is not impossible to overcome. Teachers have to determine what is lacking, and then think creatively to remedy the problem. For example, teachers can construct a ‘modified flipped classroom’ where the teacher implements the ‘in-class flip’ to meet the needs of individual learners (Hiefield, 2017).

### **6.5.2 Affordability as a determining factor**

As described above in section 6.5.1, it is vital to ensure that all learners have access. The learner participants in the study mainly came from disadvantaged backgrounds. This was concluded whilst the researcher engaged and bonded with participants before data generation. Some learner participants mentioned that they did not have computers, some indicated that data is expensive so they cannot download a video to prepare for the lesson, and some indicated that their phones were outdated and do not have smartphones.

Findings from conversational interviews with parents showed that affordability is an issue. One parent was positive about the flipped approach while the other parent maintained that it is a good approach but she cannot afford to buy her child a device to access instructional content (section 5.4.2). While some parents can afford to buy the latest devices for their children, other parents are struggling to provide food for them yet alone purchase a technological device. This is a reflection of the socio-economic imbalances that are prevalent in society, which impacts negatively on engaged learning (Lukwa, 2020).

It is not necessary for schools to have computer resources for learners in a flipped class, as learners are the ones whom should be engaging with these resources to access instructional content at home. However, the in-class flip (section 3.2.10.3) can be implemented and if funds permit, schools can purchase resources so time can be arranged after school hours for learners to make use of these resources. Rathner and Schier (2020, p. 2) note with concern that “affordability of digital technologies are having a disruptive impact throughout the education sector that is motivating change in teaching practice”. Hence, schools opt to use the cheapest method in which is the traditional approach. Nonetheless, the flipped classroom approach makes it easier for information to be disseminated through multiple platforms for engaged learning.

### **6.5.3 Lack of supervision**

Findings during data generation in focus group discussions indicated that as much as learners enjoy the freedom of learning on their own, they still long for their teachers to encourage them to do their work (*if the teacher is not physically there, the learner is not encouraged to do the work*). Moreover, some learners indicated they were distracted from going through instructional content. They constantly checked their social media applications and their notification sounds kept on disturbing them (section 5.4.3).

Parents also maintained that it is difficult to ascertain whether their child is doing their schoolwork or not as there is no way in which they can track what their child is doing. As much as it gives learners freedom, it limits parents in checking whether their child is actually doing his/her schoolwork (Lo & Hew, 2017).

It is ironical to say that technology is a necessity in teaching and learning but can also be a big distraction. This can also be related to the schools that employ the BYOD policy (sub-section 3.2.10.3). Smartphones can be a distraction in the class environment, however, there is supervision in a BYOD setting. Thomas (2019, p. 2) maintains, “Teachers may not be able to control how learners use their phones after school, but they can regulate how much these digital devices are used at school”. Thus, teachers can reprimand learners that use their devices for entertainment instead of learning. In contrast, when learners are out of their home environments, there are no teachers to supervise them. Parents should supervise their children and ensure that they are engaged. This may be impossible if parents are not at home or choose to not supervise their child learning at home (*There is minimal parental involvement*). Bond (2019, p. 1) describes, “Parent involvement in and engagement with children’s learning has been shown to strongly influence learner achievement and motivation”. Thus, parents are an important element for ensuring the success for the implementation of the flipped classroom.

#### **6.5.4 Lacking a foundation of computer skills**

During data generation, it was discovered that learners desired to be taught basic computer skills since the world is thriving through technology integration in all facets of life (section 5.4.4). Learner participants were at an advantage as they were able to get these skills in the CAT subject (*we have an advantage over the rest of the learners at school in using computers*). It can be assumed that other learners were disadvantaged since they lacked the basic skills required to explore content on their own by means of surfing the internet. Since the DoE had placed e-learning in the white paper policy and advised schools to employ e-learning (section 1.2.5) in their lessons,

it is important for both learners and teachers to be skilled in using technology (*It is very important for us to have a computer background because we don't know where life is going to take you so we going to have to know about how to use the computer*).

While teachers are required to integrate technology into the classroom or incorporate a flipped approach to teaching and learning, the reality can be very different depending on the current situation. During data generation, teachers indicated that some are hesitant to incorporate a different approach to teaching due to lack of skills (*most teachers do not possess adequate skills to enable the use of technology in lessons*). Li (2018, p. 19) maintains that proper implementation of the flipped classroom approach for engaged learning does “not only depend on a teacher’s own professional and educational knowledge and skills, but also the knowledge and skills of modern technology”. It is understood that teachers were at a disadvantage since they are required to change their approach of teaching to one that is driven by technology.

Johnson, Jacovina, Russell and Soto (2016, p. 14) uphold, “Teachers often worry that their knowledge level does not match those of their 'digitally native' learners”. Since teachers are supervisors in the classroom, they need to be the ones that teach learners about technology and not have learners teaching them. Having a strong foundation in this regard helps teachers become more confident in their teaching. Moreover, teachers can also fall under the digital divide wherein they do not have access to create instructional content (Suva, 2019). This will then disadvantage both teachers and learners.

### **6.5.5 Support from various stakeholders**

From the above, it is apparent that most schools lack support from stakeholders (*There is no support from the school or the department of education*). During conversational interviews with one of the teachers, it was revealed that the DoE had given the school an ibox, which is a technological educational resource, but had not given the teachers

proper training to utilise this resource (*Only a one-day workshop was given to teachers on the use of such technology in the classroom*). Accordingly, this resource is not currently being used by teachers in the school. This is an indication of lack of support coming from the DoE.

Teachers further pointed out that their skills need to be updated as department officials cannot simply just give them a one-day-training workshop and expect them to start using these resources in their lessons. There is also an issue of management not being supportive of teachers in asking the DoE for support as teachers should educate themselves on the usability of such resources (*we are very unfortunate in the sense that we do not receive support from the school management*). During data generation, teachers asked about support for learners since most of them come from disadvantaged backgrounds and are expected to use the internet to do their research projects and type out their assignments. This goes back to affordability and the digital divide as limitations for implementing the flipped classroom for engaged learning.

## **6.6 FINDINGS ON EXPLORING HOW THE CLASSROOM CAN BE FLIPPED FOR ENGAGED LEARNING**

The study finds that there are ways in which the classroom may be flipped for engaged learning by implementing the BYOD policy and by means of intervention from the DoE.

### **6.6.1 Bridging the gap with Bring Your Own Device (BYOD)**

Findings under this section during focus group discussions indicated that the learner was making a plea to bring his device to school to use solely for research purposes (*A suggestion can be to bring our own devices if we don't have computers at school. The school can give us Wi-Fi so we can access internet resources to use the flipped classroom appropriately*). However, the learner failed to realise that his colleague did not have a device to bring to school in the first place. Christensen (2019, p. 14) explains that “implementing a BYOD policy doesn't solve the problem of fair access to

technology as some learners may not have personal devices, or the mobile tech they do have may be obsolete”. Nonetheless, this may help to curb the issue of affordability but the digital divide may still exist as not all learners may have devices to bring to school.

Implementing the BYOD policy in a school similar to the research context may further perpetuate inequality in education and amongst learners. It may not be a requirement to have the latest devices, however, as stated initially, learners stem from different backgrounds. As a result, employing the BYOD policy might enhance the existing gap amongst the different working classes followed by learners differentiating from one another based on the devices they use. Consequently, this may prompt victimization of learners with ‘obsolete devices’ by the other learners with the latest devices on the market.

BYOD comes with both advantages and disadvantages. Datta (2019, p. 12) upholds, “Teachers majorly worry about the usage of electronic devices and smartphones as they have witnessed learners getting distracted by them in the learning context”. Smartphones within the classroom setting is not only a distraction to the teacher but also to the rest of the learners in the classroom. For successful implementation, it all depends on how the rules and regulations are governed in terms of pertinent policies and best practices.

### **6.6.2 Solutions from the Department of Basic Education (DBE)**

From the data generation, it emerged that teachers advocated for the DBE to sponsor devices and internet access to the disadvantaged groups to bridge the gap (*The DBE should work toward sponsoring equipment to learners and making Wi-Fi available to learners*). This may seem justified; however, the quantity of disadvantaged learners is vast. Therefore, this suggestion may not prove to be effective for individual learners where finances in education are limited. Moreover, technological devices are expensive and vary in terms of specifications.

In a recent meeting held regarding ICT in schools, the DBE “required network operators to provide 5 250 public schools with internet connectivity and ICT equipment as part of their obligations” (ICT Roll-Out, 2020, p. 1). However, this does not help the learner that wants to learn outside the school context. Access would still remain an issue. Hence, one of the teachers called for devices to be sponsored to learners and not the school. Learners can be engaged in any context and should not be restricted to only the school environment.

### **6.6.3 Employing the in-class flipped approach**

During data generation, there were issues that existed amongst learners having limited or no access to technological devices at home. Many learners in the school context researched came mostly from deprived upbringings and were used to a particular way of learning which might be the traditional approach. However, understanding can be achieved when instructional content is challenging and when there is collaboration. Sharma, Leftheriotis, and Giannakos (2020, p. 1) support, “Interactive displays have the potential to reinforce and maintain collaboration and rich-interaction with the content in a natural and engaging manner”. Hence, true understanding can be achieved only when learners are engaged. The in-class flipped approach provides a platform for collaboration for those learners whom may face difficulty in retrieving enhanced instructional content.

The flipped classroom approach can be adjusted to cater for all learners. Storer (2016, p. 17) suggests, “Where internet access is limited or prohibitively expensive, an alternative is necessary to provide [teaching] content”. Thus, it is the responsibility of teachers to change the existing situation to accommodate all learners and ensure that all are included. Instructional content does not have to necessarily be electronic material. Teachers can hand out notes or topics for learners to go through. Class time can be adjusted to accommodate learners to go through the instructional content, collaborate and lastly have a whole-class discussion. To check whether learners are doing their work, teachers can write down short quizzes on the board which relate to

the content that learners ought to have learned. The above may solve the issue of computer literacy that may exist amongst teachers and learners (Le Roux, 2018).

## **6.7 SUMMARY OF FINDINGS**

The findings in this study discovered the omission of the voices of teachers and learners in the teaching and learning situation. Hence, it was perceptible that application of rules in certain schools are often imposed to achieve inequality. This not only disadvantages the teacher but also the learners and parents. The summary of findings are in accordance with the four objectives of the study and guided by the four main findings of the study indicated in section 6.2.

The current situation of flipping the classroom for engaged learning indicates that teachers were using the traditional approach for teaching and learning. Learners were not engaged in their learning. This was motivated by the lack of interest of learners in the current teaching and learning style. Learners were not stimulated, hence lacked engagement. Instructional resources for teaching and learning did not cater for all learning styles. Learners were interested in seeing multimedia when learning, hence they were disengaged when learning from a textbook. I am thus motivated to argue that the learners in my study were very justified in being concerned about the manner in which they are forced to learn since this is not the case for all schools. Hence, despite learners being oppressed, they were still able to foresee a change in the current teaching and learning approach.

Findings were positive on the need for flipping the classroom for engaged learning from learners, teachers and one parent, however, the other parent did not see the need to employ the flipped approach since it will be costly for her as a parent. Teachers maintained that most of them in the school would choose not to implement the flipped classroom due to lack of knowledge and skills. Moreover, classes are overcrowded and not all learners have access. However, both teachers maintained that they saw a positive difference in learner engagement when employing the approach.

From the findings under hindrances for implementing the flipped classroom, it can be summarised that the digital divide posed a massive obstacle in terms of affordability. Nonetheless, it was found that teachers could implement other means for ensuring the flipped classroom for engaged learning is a success. Furthermore, it was also found that no support was coming in from any stakeholder in the education sector. Teachers, parents and learners are forced to fend for themselves and conform to the required ICT changes relating to teaching and learning. For this reason, teachers refuse to change their approach as they are not trained how to incorporate the flipped approach to cater for all learners. As a result, learners are not taught in a manner that suits them and continue with disengaged learning. It is unfortunate that teachers are not given a voice in the democratic era of SA. It is understood that teachers in the study want to change their approach but are not assisted by other stakeholders.

Findings under exploring how the classroom can be flipped for engaged learning indicated that the in-class flip was used to accommodate learners with no access out of the school context. This worked for learners whom had phones to watch and listen to instructional content. It did not work for the one learner that did not have a device; hence, she could not participate in the lesson. Nonetheless, the learner was able to refer to other sources. The in-class flip was an excellent idea to incorporate in Blossom High School considering the backgrounds of learners.

## 6.8 IMPLICATIONS

With the above summary of findings in mind, I recommend that further studies be undertaken on finding strategies to flip all schools for engaged learning. Currently flipped classrooms are proven to only work in South African schools that have learners who can afford technological devices to access resources. The digital divide restricts learners concerning accessing resources in a flipped class. This defeats the purpose for using this approach for engaged learning if learners are not able to gain access.

The proposed strategies (section 7.4) may also be adaptable for the input of other stakeholders around the school context. Moreover, the school context (resourced or under-resourced) ought to be kept in mind for the proposed strategies to be successfully implemented for change to materialise. Nevertheless, participants whom collaborated on the proposed strategies shared a common goal for engaged learning to be effected by using the flipped classroom approach. Methodologically, this study helped the researcher to ascertain difficulties in implementing the flipped classroom for engaged learning in one school. From this, it can be understood that a variety of elements have to be complemented for positive change to be effected for engaged learning. It is recommended that schools follow the proposed strategies for engaged learning to take place when employing the flipped approach.

Schools ought to conduct a needs analysis in addition applying a whole school approach with regards to flipped classrooms for engaged learning. The needs analysis should be conducted around the learners and parents. This information should give an indication of whether to implement the approach or not. Learners are needed to be a part of this analysis as they are the most important stakeholder in the school required to be engaged in the learning context. Parents are needed to support their children to ensure that learners are indeed engaged out of the school context.

Concerning the professional development of teachers, there should be greater support from the SMT and SGB to set up workshops for teachers to gain skills within the school

context. Workshops can also be set up for parents so they can be well equipped with skills to supervise their children and make sure that they are engaged at home. This will strengthen the link between learning taking place at home and at school. In addition, the DoE should get involved to set up training workshops out of the school for teachers to ensure that all teachers are on the same level of being trained (section 7.3.3). Hence, it is recommended for training to take place in a wide spectrum instead of periodically for each school. By doing this, teachers would be on the same skill level throughout all schools regardless of the type of school. This training should be transformative and must involve all teachers to ensure that all learners learn on the same level and are not disadvantaged.

The formation of a platform in which learners are grouped collectively and given a chance to engage collaboratively in finding solutions resonates well with the flipped classroom for engaged learning. This does not only have to take place in the classroom but can take place online by means of an assortment of methods. Social groups can be created by using social platforms for group study, for example, using a Learning Management System (LMS) like Microsoft Teams. This platform can allow teachers to generate a virtual classroom so that learners can create forums for threaded topics. Moreover, online tests or quizzes can be created. Blogs and vlogs can be used to create topics of interest. These examples can all be defined as a means for empowerment that can be achieved by using the current technology in teaching and learning.

The flipped classroom approach is not only beneficial to learners but for the teachers too. It assists by helping teachers identify, target and help those learners in need. Teachers practice more individualized attention as they do not teach from the front of the classroom but rather alongside the learners. Making use of a variety of resources such as OERs (section 6.3.4) and third party or self-recorded videos and may assist teachers who lack confidence in explaining a certain topic or piece of content. As a result, this will prevent learners missing the enrichment and information they require. Once the learning material is uploaded online, the teacher does not need to teach the same lesson over again, making it efficient to manage and providing learners with focused needs.

## 6.9 LIMITATIONS OF THE STUDY

There were numerous challenges concerning keeping to scheduled dates for data generation since teachers wished to complete their lesson planned for those days. As a result, it was difficult to set up a date and time for teacher's conversational interviews due to their tight schedules. I had to reschedule my meetings numerous times. This set me back with regards to the time frame for data generation.

Setting up meetings for focus group discussion with learners was also a very tedious task due to time constraints. Coincidentally, these meetings took place during days when schools times were abnormal and school was dysfunctional. It was also very difficult to get parents in to be interviewed. Parents who were unemployed and who stayed close by the school happily volunteered but we were restricted in terms of a venue. As a result, conversational interviews took place after school hours. The principal of the school agreed to allow me to use a class after school.

Learners were limited at home in terms of attaining resources disseminated by teachers in a digital context. They lacked computers and an internet connection. The only resources they had was their smartphones. Thus, teachers had to ensure that these resources were transferred to the learners' smartphones. Moreover, learners complained about limited data which restricted them from downloading and watching the video lecture.

Although this study was conducted at one school, it should be acknowledged that the findings and conclusions cannot be generalised for all schools due to various circumstances. However, in schools where related challenges are experienced under comparable circumstances to those of the one under this study, then the findings of this study could be appropriate.

## 6.10 RECOMMENDATIONS FOR FURTHER RESEARCH

The aim of this study was to critically analyse flipping the classroom for engaged learning. Although the study addressed challenges experienced by learners, challenges faced by teachers were not addressed. Teachers still remain powerless as they are forced to conform by changing their approach but are not given any support to do so. As a result, learners may be referred to as “digital natives” (section 1.2.5) since they are preoccupied with and can adapt to technology, but they depend on teachers to help them to learn through digital means.

Teachers need to be taught important skills by means of professional development and be given continuous support to ensure that learners are engaged in learning. Moreover, I recommend that future researchers focus on the teacher development training given to teachers based on various approaches to teaching. The quality of this should be examined, as it would influence learners during knowledge transfer.

In addition, I recommend that present and future scholars focus on the needs of learners in the learning context. This will further help to improve the level of engaged learning. The flipped classroom is just one aspect that can be used for engaged learning. It is important to comprehend what motivates learners in the learning context and what teachers should do to upkeep this motivation so that engagement is constant.

The other recommendation for further research is for the researchers to look into effective ways of implementing the flipped classroom where the digital divide is prominent. Further studies ought to also be embarked on to find strategies to develop and improve the flipped classroom for engaged learning in all schools, including rural schools where learners come from disadvantaged backgrounds.

Based on the limitation of this study being conducted in one school, it is recommended that this study be conducted in other schools over different areas as findings cannot be generalised. Research must be conducted to establish whether this study is transferrable to other schools.

## **6.11 SYNTHESIS**

This chapter presented the findings in line with the objectives of the study as mentioned in Chapter one (section 1.2.4.2). The findings indicated that flipping the classroom does allow for engaged learning, however, there are other aspects that impede the successful implementation of the approach. It emerged that the digital divide is a challenge for access. Furthermore, teachers lack skills to implement the flipped approach. Lastly, parents worry about affordability as the flipped approach requires their child to have access to technological devices.

A summary of the findings was also presented. Recommendations were made in accordance to the findings of the study. The limitations of the study were also outlined. The next chapter proposes strategies to enhance the flipped classroom for engaged learning.

## **CHAPTER SEVEN**

### **A PROPOSED FRAMEWORK FOR FLIPPING THE CLASSROOM FOR ENGAGED LEARNING**

#### **7.1 INTRODUCTION**

The previous chapter discussed the findings of the study. This chapter will attempt to bring the study to a coherent close thereby responding to the main research question of the study: *How can we flip the classroom for engaged learning?* When the study commenced, the researcher set out to understand learners, teachers and parents' experiences of social injustices that exist within the school context. The phenomenon under study was related to engaged learning whilst employing the flipped classroom approach. To this study phenomenon, the study was guided by the following four research questions: 1) What is the current situation of flipping the classroom? 2) Why should we flip the classroom for engaged learning? 3) How can we flip the classroom for engaged learning? And 4) What barriers are encountered while flipping the classroom for engaged learning?

This section of the study firstly focuses on responding to the above key questions of the study. Secondly, this section attempts to address the proposed strategies in flipping the classroom for engaged learning. In this regard, the discussion under proposed strategies is based on two different levels, namely, the school level (SMT, teachers and learners) and beyond the school level (community, parents, local businesses and government).

## 7.2 RESPONDING TO THE RESEARCH QUESTIONS

Drawing from the issues that emerged under data analysis, I am now able to respond to each of the four key questions.

### 7.2.1 Current situation of flipped classrooms

In response to my first research question, the current situation of the research context depicted a standardised approach of teaching and learning. The flipped classroom was not being employed as teachers were not aware of it. Teachers found themselves in a comfort zone of employing the same style of teaching continuously since they maintained that various factors hinder the successful implementation of the flipped classroom approach (section 7.2.4). Moreover, both parents had differing views for accepting and rejecting the flipped classroom approach. Learners were required to learn in a context of indoctrination and were forced to conform to a standardised approach of learning. Learning styles were not taken into consideration and instruction became monotonous, hence learners chose to not engage themselves in the learning context.

### 7.2.2 The need to flip for engaged learning

With respect to my second research question, being that of why should we flip the classroom for engaged learning; learners mentioned *“I love how the teacher is now teaching us using the flipped method...I understand more”*. Learners mentioned that the flipped classroom would help them to learn in a way in which they can incorporate different media *“We had alternative resources like the audio file and the video file to help us to understand”*. In essence, the presence of learning with all of the instructional resources made it helpful to internalise this content out of the learning context.

All the learners gave positive responses during data generation after the flipped approach was used during two lessons. Furthermore, teachers advocated for the approach since they saw a difference as learners were engaged in the lesson and asked questions. The only participant who did not see a need was a parent due to the

burden of financial issues (section 7.2.4). Thus, it can be concluded that there is a need to flip the classroom for engaged learning, with an addition of addressing a few hindrances.

### **7.2.3 Exploring how the classroom can be flipped for engaged learning**

Concerning my third research question, the in-class flipped approach was used in the research context as learners faced difficulties to secure devices to access instructional content. By doing this, teachers' expectations were confirmed in exploring other techniques that can be used on learners that stem from disadvantaged backgrounds. Moreover, learners and parents were overjoyed that an improved approach was used without any additional cost factors. It just required the teacher to work harder in creating and downloading these resources. No help from the SMT or external forces were given to the teacher to employ the flipped approach. In addition, the unequal distribution of power within the school had a negative impact upon all stakeholders, which then places a huge disadvantage on learners in the learning context. Thus, the in-class flip can be used by schools that face financial difficulties such as rural schools.

It can be suggested that all stakeholders join forces in working together to implement the flipped classroom (discussion on proposed strategies in section 7.3). There should be designated roles for each member of the SMT, this would ease the burden of the teacher. Moreover, the teacher would be able to have enough time to construct instructional resources. Members of the SMT together with teachers should foster a positive learning environment and not one that is droning to the learner.

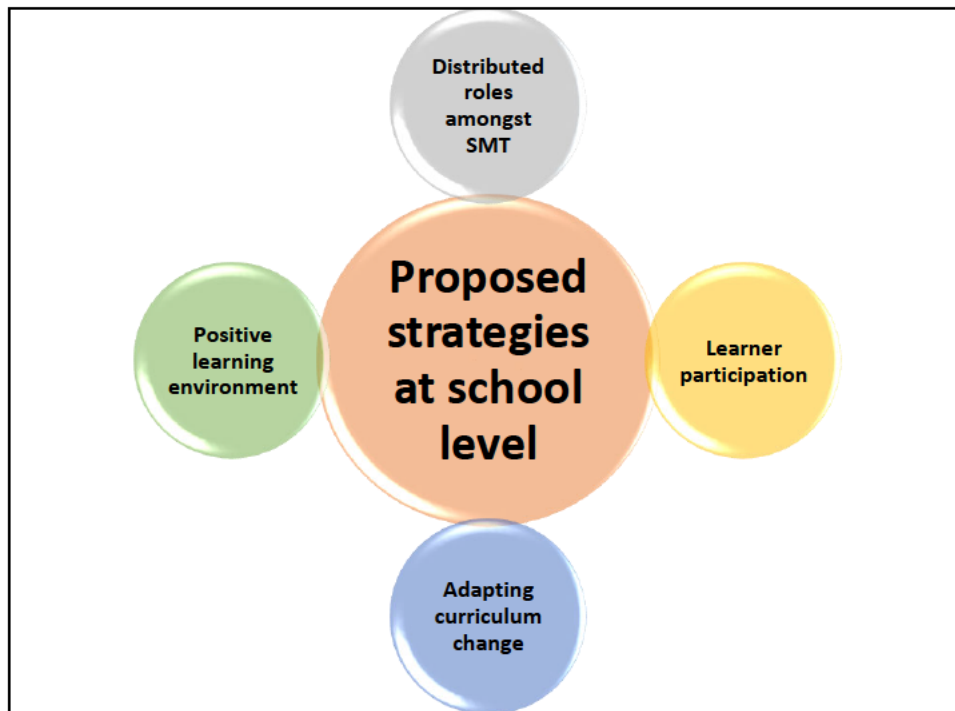
### **7.2.4 Barriers encountered while flipping the classroom for engaged learning**

There were many barriers that were encountered while flipping the classroom for engaged learning, regarding my final research question. Hindrances such as the digital divide, affordability, lack of supervision (by teachers or by parents), lack of computer skills (by teachers to create instructional content) and lack of support from various stakeholders (SMT, parents, community and DBE) were identified accordingly. These

were discussed under section 6.5 and proposed strategies to alleviate such limitations are discussed under proposed strategies in section 7.3 and 7.4 of the study.

### **7.3 A SUMMARY OF PROPOSED STRATEGIES FOR FLIPPING THE CLASSROOM FOR ENGAGED LEARNING AT SCHOOL LEVEL**

The strategies at school level entail several components that may be related to the stakeholders within the schooling system, as detailed in this section. The importance is aimed at the establishment of a harmonious relationship amongst all stakeholders. Communication of the various levels in education need to be improved for the former to be instilled. The diagram below (Figure 7.1) shows the various aspects that can be addressed at the school level.



*Figure 7.1: Proposed strategies at school level*

### **7.3.1 Distributed roles amongst the School Management Team (SMT)**

The SMT has to take on necessary roles to ensure that learners are engaged. Effective management will help schools implement the flipped classroom regardless of the schools' circumstances.

#### ***7.3.1.1 Distributed leadership***

Distributed leadership is important to ensure the smooth operation of any school. Moreover, it persuades all members of the SMT to put in more determination for the successful implementation of the flipped classroom. This will allow them to prepare themselves for equal sharing of the workload. For example, if schools were to implement an in-class flipped approach, school times need to be adjusted to allow learners to internalise content by some means within the classroom and then allow for discussion and collaboration in class. Supervision is also very essential to ensure that learners do not deviate from learning resources. Moreover, teachers need to be given support in terms of training and help with constructing instructional resources aimed for engaged learning. The above responsibilities are normally delegated to the teacher; hence, teachers draw back from changing their approaches. With shared responsibilities amongst the SMT, hindrances for implementation would be quickly identified and teachers and the SMT can work collaboratively in finding solutions to them, in contrast to teachers accepting all the burden to be upon them, as indicated in this study.

#### ***7.3.1.2 Enabling a positive working environment***

Engaged learning occurs when learners are happy in their learning context. This is possible if teachers are happy in their work environment. Richardson (2019, p. 4) describes the positive work environment as “a situation in which every employee feels safe, acknowledged, and able to do his/her best to achieve professional objectives”. Hence, a positive working environment encourages employees to perform at the best of their ability. Additionally, productivity is increased, collaboration is promoted, growth is fostered and morale is improved. A positive working environment will encourage creativity in the workplace and will ensue in directing their energy on positive issues

rather than negative ones. Particularly, negative relations in the workplace will probably to disturb the effective operation of a positive working environment.

### **7.3.1.3      *Open communication***

Good communication in a workplace is essential for a positive working environment. There ought to be an equivalent amount of communication amongst the SMT and teachers. Having the opportunity for open communication allows teachers to be empowered and valued in the work environment. Moreover, when teachers are aware that they can ask questions and give their views and opinions, this will have a positive impact on their professional growth and improve their overall quality of work. This aspect of the work environment is imperative since it necessitates that teachers are able to progress with the encouragement of other teachers and the SMT. Furthermore, the more stimulated the teacher is, the greater the output of the quantity and quality of work.

Communication has drastically changed in the digital age. Nowadays, communication can be done via social platforms. For example, Skype, WhatsApp, Zoom. Moreover, these platforms allow for communication to be done by means of instant messaging and video conference calls. Kashyap (2019, p. 3) maintains, “It is vital to measure communication so you can see what works, what doesn’t, and tweak it accordingly”. Hence, communication can be made possible by physical or digital means.

### **7.3.2      Positive learning environment**

The successful implementation of the flipped classroom can only be applicable in the reality of a setting which is favourable to teaching and learning. Teachers need to guide learners to promote the capability to learn from each other and to learn autonomously.

### **7.3.2.1**      *Maintaining order for implementation of the flipped classroom*

In this case, the SMT and teachers must firstly ensure that teaching and learning materials are challenging and are diverse for all learning styles. Secondly, teachers need to be appropriately trained on approaches for flipping the classroom for engaged learning. If teachers wish to employ an in-class flip, then an appropriate venue in the school needs to be identified and be furnished with the necessary resources. Thirdly, concerning supervision in an in-class flip, the SMT needs to guarantee that teachers or parents avail themselves to ensure that learners are engaging with the necessary instructional resources. Lastly, teachers need to make certain that all learners can access instructional resources.

All of the above will benefit the implementation of the flipped classroom and maintain order in confirming dynamic involvement and responsibility of everyone involved in the school level.

### **7.3.2.2**      *Increasing existing forms of support*

It is important that those stakeholders whom are currently not empowered be given the support that they need to thrive. For example, learners can be given evaluation sheets to rate their teachers and the manner of which lessons are delivered. The significance of doing this is for teachers to get an understanding of where learners are in the learning process. Moreover, it should be valued as constructive criticism whereby teachers can improve on their existing teaching styles. Creating and handing out pamphlets, filling in evaluation sheets, asset-mapping and holding presentations are the four activities that may be followed in order to attain the goal of reinforcing the existing means of support and care.

To assist parents, the school can hold meetings or presentations to discuss the necessity of the implementing the flipping the classroom for engaged learning. This will allow parents a platform to bring forward concerns and issues regarding the flipped

approach. Furthermore, parents who may be struggling financially can seek assistance from the school.

To assist teachers, the SMT can hold regular meetings pertaining to the daily observations of the use of the flipped classroom. This would allow teachers a platform to express the strengths and concerns that they want to raise. This should be followed-up through every meeting so teachers can be assured of positive change in support coming from the school.

### **7.3.2.3      *Modelling acceptable and a positive attitude***

It is important that teachers encourage an environment that is favourable to learning. For this to happen, teachers should display acceptable behaviour to be exemplary role models for learners. This is another proposed strategy that can be used towards encouraging a culture of optimistic learners. Learner leaders also play a vital role in exhibiting a positive attitude towards engaged learning. The main aim of RCLs should be to draw learners into learning through appropriate and challenging activities which encourage engaged learning over assimilation of instructional content. Besides the RCLs of the school, teachers should identify certain learners that can assist other learners. This in turn encourages collaboration in the flipped classroom. Moreover, these learners can concentrate on performing acts of kindness towards members of the community. By doing this, other learners will follow suit, model such behaviour and learn to be more active in the classroom. Angelle (2018, p. 5) maintains that engaged learning “has been built around the hopeful goal of enhancing all students’ abilities to learn how to learn and to become lifelong learners in a knowledge-based society”. Therefore, modelling good and acceptable behaviour for learners is an activity that is substantial to ensure positive change takes place with regards to engaged learning.

### **7.3.3 Learner participation**

To achieve successful implementation of the flipped classroom for engaged learning, learners should be involved throughout the creation and practice of instructional activities. The current situation indicates that this is not currently a reality. Although the active participation of learners in classroom persists as a challenge, it is conversely significant that the learners have a say about the challenges they face with being engaged when in or out of the learning context. This will help teachers to design their lessons around the needs of learners.

#### **7.3.3.1 *Active involvement of Representative Council of Learners (RCL)***

It is important that the RCL be involved in discussions with the SMT and teachers to assure that the main objective for all lessons are aimed for engaged learning.

Rustenburg Girls High School (2017, p. 1) defines the RCL as “a mandatory body, according to departmental requirements, and consists of fifteen learners - three from each grade”. Hence, instead of an entire class debating with the SMT and the teacher, the RCL represents learners for each grade. This allows for equality amongst learners and gives them a voice. Additionally, having learners represented in these meetings with the SMT and teacher will further enrich their understanding of the lesson objectives. Along with decreasing the high rate of truancy and absenteeism due to non-engaging lessons, the levels of commitment amongst learners would escalate in the flipped classroom.

### **7.3.4 Adapting curriculum change**

To ensure that positive change takes place, two aspects should be considered. The first aspect would be for teachers to employ a mixture of methods of teaching and assessing to ensure that all learners are accommodated.

#### **7.3.4.1      *Employing various teaching styles for multi-sensory learning***

It is argued that the most effective teaching style to use is one that is multi-sensory (Aja, Eze, Igba, Igba, Nwafor & Nnamani, 2017; Manna & Deesha, 2017; Boardman, 2019; Joshi, Dahlgren & Gooden, 2002). The Gateway School (2018, p. 1) defends, “A multisensory learning approach is a term many schools use to describe teaching methods that involve engaging more than one sense at a time which may involve the use of visual, auditory and kinaesthetic pathways”. It is for this reason that applying a multi-sensory approach may indeed engage learners in the learning context. This would in turn address the problem statement of the study which states that “learning styles are not being accommodated for and ineffective instructional strategies are used” (section 1.2.4). While the above proposed strategy may be mainly directed to teachers, parents may also assist since learners may comprehend certain concepts more easily if they are taught by their parents at home in the comfort of their home. Moreover, this would be extremely useful in the flipped classroom to ensure engaged learning.

#### **7.3.4.2      *Inclusion of learners for curriculum change***

The second aspect to be considered is that all stakeholders (SMT, teachers, parents, DoE and learners themselves) in the school level should heed to the learners’ voices and act upon them. Learners play a very important role in the school environment and consequently, they should have a say about how they would want to be taught. During data generation of the study, learners were allowed a platform to be heard. Hence, learners’ voices should be allowed to be heard constantly. This can be done by various means, for example, social media platforms, through RCLs, through anonymous-boxes placed at premeditated positions around the school or in classes in addition to through discussions with teachers. This will allow for learners to be empowered and be involved in the decision making pertaining their schooling career. Moreover, allowing and acting on learners’ voices may give teachers a chance to gain a comprehensive understanding of learners’ learning styles, and acclimate them to the curriculum for lessons to be more relevant and understandable.

#### **7.3.4.3      *Forming school clusters***

Changing the schools entire approach to teaching and learning is a radical adjustment. Thus, schools would need support from each other to adapt to a new approach. Schools can make up clusters in different areas to ensure that the flipped approach is taking place effectively for engaged learning. Meetings can be held at different schools chaired by a cluster leader that oversees the proper execution of the flipped approach. The importance of convening cluster meetings may help to provide a platform where teachers from different schools can bond while networking, socialising, and share best practices and experiences. Moreover, this also allows teachers to garner support (section 7.2.2.2) from other schools.

#### **7.3.3.4      *Progression meetings***

Progression meetings may involve all stakeholders within the school (learner, teacher, parent, SGB and SMT). These meetings may be held twice a term. The importance of entertaining progression meetings is to further evaluate the level of support and means to intensify support if needed. Furthermore, these meetings can be used to raise issues from the various stakeholders, and be used to develop one another as entities in the school environment. Moreover, these meetings can identify gaps that may cause some developments for the employment of the flipped classroom to be ineffective.

## 7.4 A SUMMARY OF PROPOSED STRATEGIES FOR-FLIPPING THE CLASSROOM FOR ENGAGED LEARNING BEYOND THE SCHOOL LEVEL

Strategies beyond the school level comprise of the community, local businesses and the DoE. The diagram below (Figure 7.2) shows the various aspects that can be addressed at the beyond the school level.

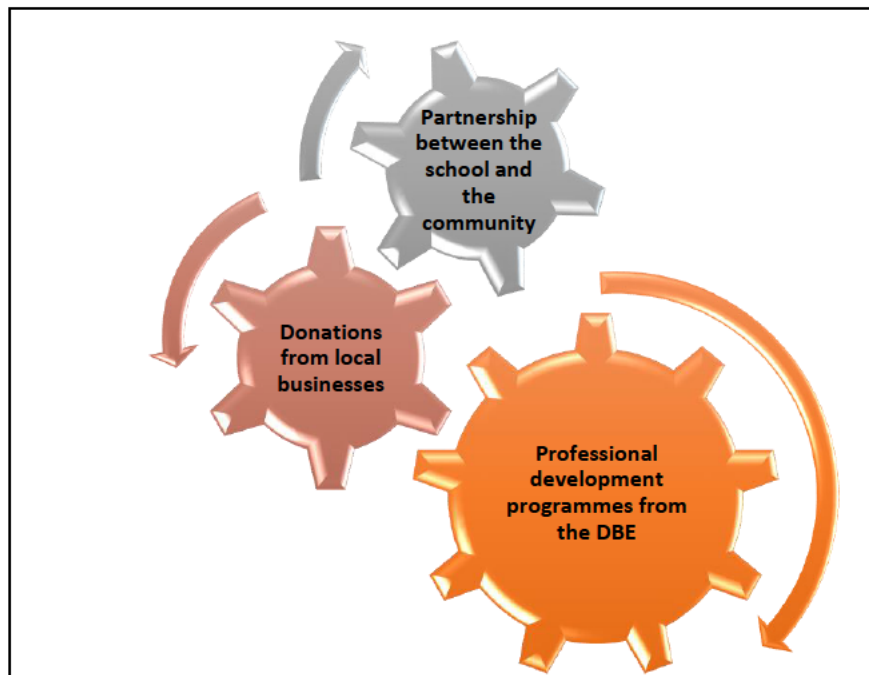


Figure 7.2: Proposed strategies beyond the school level

### 7.4.1 Partnership between the school and the community

The local community partakes a big role in making certain of the schools' proper functioning for engaged learning.

#### 7.4.1.1 Parental involvement for supervision

Schools and the local community need to ensure that parents supervise learners at school and at home. As teachers pointed out during conversational interviews, there is minimal parental involvement. Hence, increasing parental involvement will address discipline and help learners to become more engaged in the learning context.

#### **7.4.1.2      *Parental and community involvement for fundraising***

Budget shortfalls are likely to occur in instances where learners stem from disadvantaged backgrounds. As a result, this may precede to a reduced amount of extracurricular activities and obsolete teaching and learning resources. Accordingly, teachers then tend to dip into their own pockets for school resources.

To bring these issues to a halt, parents and community members can assist the school with fundraising activities. For example, community members can volunteer with enrichment opportunities before and after school, for instance teaching and being involved in athletic codes. Moreover, the school can host a fun day, raffle or a cake sale. The school can offer learners prizes for money raised as an operative approach to amplify participation of learners and, consequently, donations. Offering incentives for money raised encourages sociable competition between learners whom will then be pleading to their parents for help in fundraising.

Parents who may not want to get involved due to work can effortlessly increase their children's fundraising appeal by means of social media. Parental involvement with social media is an essential strategy for increasing funds. With word of mouth and the power of social media, relatives of the parent and learner from across the city can assist in funding.

#### **7.4.1.3      *Volunteers from the community***

Volunteers can be a comprehensive resource in a school to create a supportive and welcoming environment. For this to materialise, the school ought to appreciate volunteers and utilise them effectively in different spheres in the school environment. When people of the community are involved in the school, it allows for a wider group of people to have a broader picture of the school. It also allows for these people to see how dedicated the community volunteers are in educating the youth.

Volunteering is one of the most popular and prevalent way to foster community contribution and participation in schools. Community members can assist a school in numerous ways. Unemployed community members can assist the school for learner supervision or assist teachers in the classroom where classes are of large capacity. Community members can physically visit the school and speak about their profession and career and for 'Career Day'. A supplies drive can be hosted to collect teaching and learning resources. For example; stationery, paper, school bags, textbooks, chalk, electronic equipment, etcetera. This will help to assist the learners who are unable to afford stationery requirements as well as help teachers gather resources for their classes.

#### **7.4.2 Donations from local businesses**

The school and the community can request for donations from local businesses. Social media can be used as a tool for fundraising. An example could be using Facebook to reach out to local businesses. Facebook will allow the school to input a public post to reach the businesses that often donate to schools. By using Facebook, this can be achieved within an instant rather than doing this physically or by phone. Moreover, teachers, parents and learners can share the plea for a donation or for fundraising. This will then indicate that the Facebook post will reach a larger audience. In addition, schools can set up a 'donate button' on their Facebook page which will direct users to a webpage that would view the school's banking details.

The offerings contributed to the school can be used to purchase devices for underprivileged learners. Furthermore, additional resources can be purchased to develop the teaching and learning experience. Funds can also be used to pay community members for their extra efforts in assisting the school. Besides donations of monetary value, a plea for other educational resources such as new or used tablets, computers and books can be requested from local businesses.

### **7.4.3 Professional development programmes from Department of Basic Education (DBE)**

The DBE has to take the required steps to make sure that teachers are adequately trained to transform their teaching approach into one that uses ICT.

#### ***7.4.3.1 Striving for a common goal***

Moreover, the necessary training has to be on the same level for all schools so there is a clear vision and a shared goal for implementing the flipped classroom for engaged learning. The school comprises of numerous stakeholders, each of which have opposing opinions and priorities. Thus, having a shared goal and clear vision is significant to be dedicated to achieve a shared purpose. A suggestion could be for training to occur weekly for different clusters of schools. A once-off training session would not be beneficial, as change cannot occur over night. This training needs to include teachers and allow teachers to participate actively. Professional development training in ICT for teachers will help teachers gain a stance on best practices to use ICT to support and empower engaged learning. Furthermore, teachers will understand how to use applications and web platforms designed for teachers to enhance teaching.

#### ***7.4.3.2 Certified courses for teachers***

The DBE should assist in getting certification partners to provide teachers with professional development training that will shape their confidence to add to their success. Thereafter, teachers should be awarded with a certificate to ensure they are adequately trained to flip the classroom for engaged learning. This certificate should be accredited and thus be a requirement for all teachers when seeking employment. All teachers will accordingly necessitate the knowledge, skills and values, in addition to the essential support, to integrate the flipped classroom for engaged learning.

## 7.5 PROPOSED STRATEGIES FOR FLIPPING THE CLASSROOM FOR ENGAGED LEARNING

The above strategies discussed in section 7.2 and 7.3 can be summarised in the two tables below:

*Table 7.1: Strategies at school level*

<b>Strategies at school level</b>	<b>The person(s) responsible</b>	<b>Theme(s)</b>	<b>Benefit(s) for flipping the classroom</b>
Roles for the SMT	Principal, deputy principal and Heads of Departments	Establishment of harmonious relationships between the school leaders and the teachers	<ul style="list-style-type: none"> <li>• Increased levels of communication and co-sharing of ideas among the SMT and teachers.</li> <li>• Creation of lesson plans by teachers.</li> <li>• Classroom management by teachers.</li> <li>• Allocation and distribution of duties among the SMT members.</li> <li>• SMT manages the implementation of the flipped classroom.</li> </ul>
Positive learning environment	Teachers and SMT	The existence of an environment that is favourable to teaching and learning	<ul style="list-style-type: none"> <li>• SMT and teachers maintain discipline and control the rate of absenteeism.</li> <li>• Teachers ensure that active participation and increased by creation</li> </ul>

			<p>of instructional activities.</p> <ul style="list-style-type: none"> <li>• Declined levels of absenteeism amongst learners.</li> <li>• Vary teaching approaches so teaching is not monotonous.</li> <li>• Allows for differentiation.</li> <li>• Allows teachers to think more creatively when designing lessons- flipping does not only permit for technologically incorporated lessons.</li> <li>• Flipping speaks the language of learners.</li> </ul>
Learner participation	Learners and RCLs	Involving learners in the decision-making process for implementation of innovative approaches to teaching and learning	<ul style="list-style-type: none"> <li>• Liberate learners by giving them a voice.</li> <li>• Teachers may gain innovative ideas for lessons from learners.</li> <li>• Transparency is increased amongst the teacher and learners.</li> <li>• Allows for collaboration amongst learners.</li> <li>• Helps learners of all abilities to excel.</li> </ul>

Table 7.2: Strategies beyond the school level

Strategies at community level	The person(s) responsible	Theme (s)	Benefit(s) for flipping the classroom
Partnership between the school and community	Community members, parents	Positive relations between the community and the school.	<ul style="list-style-type: none"> <li>• Parents will be educated about flipping the classroom for engaged learning.</li> <li>• Ensuring proper supervision for learners in and out of the learning context.</li> <li>• Takes the heavy load of teachers for ensuring that learners are doing their work.</li> <li>• Increasing parental involvement.</li> <li>• Parents can contribute in fundraising activities of the school.</li> </ul>
Donations from local businesses	Teachers, learners, parents, SMT and community members	Collaborations amongst the school and local businesses	<ul style="list-style-type: none"> <li>• All stakeholders of the school can ask for donations to assist the school and the learners. This can help bridge the gap of the digital divide.</li> <li>• Social media can be used as an innovative strategy to spread the word for fundraising.</li> </ul>

			<ul style="list-style-type: none"> <li>• Funds collected can be used in paying community members for their extra effort.</li> </ul>
Professional development programmes from DoE	SMT, teachers, members from DoE	Accredited ICT training for teachers	<ul style="list-style-type: none"> <li>• Training should be done consistently.</li> <li>• An accreditation certificate may motivate teachers.</li> <li>• The school, teachers and learners will benefit.</li> <li>• Equality in terms of knowledge and skills transfer amongst schools.</li> </ul>

## 7.6 CONTRIBUTIONS OF THE STUDY

This study has conveyed to the forefront a combined framework for flipping the classroom for engaged learning. Owing to the problem statement, the key research questions, the theoretical framework as well as the findings of the study, the studies' contribution is two pleated namely amongst the theory, methodology and practice.

### 7.6.1 Contributions to theory

Following are some of the research studies done concerning the flipped classroom approach in SA: Daniel (2016), Viviers (2019), Van Wyk (2019) and Gerassi (2016). These studies were reviewed in accordance with the current study and not one of the above studies discussed employing the flipped classroom approach for engaged learning in government schools. These studies provided research with regards to implementing the flipped approach in South African private schools and HEI's.

Therefore, I posit that the current study has contributed to the formulation of a framework for government schools in flipping the classroom for engaged learning. The involvement of the various stakeholders in a school has to get involved to ensure the success of this approach for engaged learning. The DoE has to intervene in training teachers with the necessary knowledge and skills needed.

It can be postulated that the proposed framework outlined in section 7.2 and 7.3 of the study will assist in bridging the gap of the digital divide that exists in contexts of South Africa. Conversely, the study contributed to the field of educational psychology due to it being significantly enmeshed with the study of learning processes. The concept of the flipped classroom together with engaged learning came through repeatedly as the main aim of the study was to check for engaged learning through the use of incorporating the flipped classroom approach. The study found that there is an issue amongst learners not being engaged in the learning context. Findings indicated (section 6.4) that learners are not stimulated due to the current teaching methods used.

The theory of the study was Critical Theory (CT), which underpinned the study to address the key research questions in the study for flipping the classroom for engaged learning. The researcher found that CT allowed participants to express themselves. Voices were given to the voiceless and marginalised people from the study context. CT has driven this study towards the direction of bridging the gap of the digital divide in the South African context.

Through focus group discussions, the study further added to prevailing knowledge regarding the numerous forms of learner susceptibilities that exist. As a result, this negatively affects engaged learning in the learning context. In addition, this affects the quality of education that is received and pertains to the current situation of the flipped classroom for engaged learning.

## **7.6.2 Contributions to methodology**

The researcher found that the research instrumentation of this study combined with the qualitative methodology gave the research team the option in establishing how their involvement would enlighten the study. Additionally, during data generation, the research team were permitted to determine convenient times for the required meetings (Appendix O).

The research design and theory informing the study has contributed great value to the study by showing the preservation of human dignity, thereby ensuring human rights through various ethical considerations that protected the identities of participants. PAR used as the research approach together with the critical paradigm conveyed throughout, postulated respect to persona of participants that made up the research team and the researcher. Furthermore, PAR allowed for a proper foundation of a strong relationship among the researcher and the research team. The study provided numerous opportunities for the research team by giving them a voice. The participative nature of this study allowed learners, teachers and parents to voice their opinions on the flipped classroom by means of:

- Exploring the current situation in respect of flipping the classroom for engaged learning.
- Examining the need of flipping the classroom for engaged learning.
- Exploring how we can flip the classroom for engaged learning.
- Understanding hindrances to successfully flipping the classroom for engaged learning.

The study primarily afforded opportunities for the learners and the teachers to engage in a concordant approach whilst using the flipped classroom approach during data generation. Learners were afforded the opportunity to discuss the approach by which they internalise content and why it may or may not permit for engaged learning. Teachers were allowed to discuss issues relating to learner vulnerabilities and its influences on learners' education. Moreover, the study empowered learner participants from diverse backgrounds to collaborate and cooperate in combined

reasoning, to accomplish the shared goal of effecting positive change in their school. Consequently, this study encouraged the active participation of those whom were not allowed a voice. Hence, the goal of this study was to demolish dominance and subordination complexities and empower those that want to be heard to effect positive change in society.

Critical thinking was able to transpire by co-researchers during the process of data generation being steered by the objectives of the study with the intention of critically analysing the flipping the classroom for engaged learning. Furthermore, this study contributed considerably in allowing learners to be the focus of the research participative and critical reflections. This was accelerated by CDA that was used as the data analysis technique. CDA allowed for discourse to be analysed amongst three levels. CDA aided in conveying the understanding of data construed from an interpretive to a critical level to grasp a much profound meaning which was concealed by the interpretations of the participants. CDA also assisted the researcher and the research team to realise hidden dominant forces in language and how to challenge oppression perpetuated through words.

### **7.6.3 Contributions to practice**

From data generated, it was found that there are various ways that the flipped classroom could be implemented for engaged learning beside, for example, employing the in-class flipped approach in the event where learners do not have access at home. The approach may help bridge the digital divide by providing access within the school premises and allowing the SMT to ensure a space in the school timetable to learners can engage with content thereafter collaborate in the classroom and allow for the teacher to facilitate. In contrast, if schools do not have these facilities, the BYOD policy can be implemented for learners to bring their own devices for educational purposes (section 3.2.10.3). Schools have to weigh down the advantages and disadvantages of this concerning the availability of these devices and for the security of it as well. Nonetheless, if learners all have access at home, then the traditional flipped classroom can be employed where learners assimilate instructional content designed and

uploaded by teachers. In the case where learners do not have devices and the schools do not have devices, then teachers can apply innovative approaches to their lessons without using technology. Colourful notes, tables and diagrams can be given to learners to study at home. All stakeholders of the school should collaborate to seek for donations from local businesses for the school and for learners (section 7.3.2).

The researcher found it imperative that all stakeholders work towards the main aim of engaged learning. Thus, with teamwork amongst the SMT and teacher, in addition to equal distribution of the workload, the hindrances for implementation will be quickly identified and teachers and the SMT can work collaboratively in finding solutions to them.

The findings of the study made the research team realise that teamwork is achievable in the research process to involve co-researchers whom encompass traits of loyalty, compassion, persistence, empathy, acceptance of criticism, and those who applaud diversity. Furthermore, the study contributed towards emphasising the favourable circumstances for cooperation, for example, distributed and fair management, positive working relationship and open communication. This will then allow teachers to spread their wings instead of restricting themselves to the traditional approaches of teaching and learning.

Furthermore, the researched (learners, teachers and parents) should be given the opportunity to be part of policy making so that the policies can be established with care for inclusiveness. This may refer to the BYOD policy where schools are able to implement such a policy. A proposed strategy within the school level was to get learners involved my means of allowing RCL representatives to avail themselves during the discussions amongst the SMT and teachers (section 7.2.3).

## **7.7 SIGNIFICANCE OF THE STUDY**

The study is of the significance within the discipline of educational psychology in an attempt in making the teaching and environment open and pleasant (Sharma, 2017). Learners thrive in the learning context when they are engaged instead of being indoctrinated whilst learning. It is important that all stakeholders within the school context are aware of the term 'engaged'. Once this is achieved then positive change will follow. Moreover, this study shows that anyone is capable of achieving academic success despite his or her context. It requires extra effort from the school, teacher, learners and parents. Accordingly, it is anticipated that experts within the field of education and learners benefit from this message to ensure success in teaching and learning.

This study will serve to benefit schools that wish to employ the flipped classroom approach for engaged learning or schools that wish to move away from the standardised approach. Moreover, this study will pave a way forward in the direction of the accomplishment of success in the learning context whether in or out of school, notwithstanding obstacles of attaining resources to do so.

It is important to note that the current study departs from previous studies conceptually and methodologically. The former being dissimilar by using CT to underpin the study of critically analysing the flipped classroom for engaged learning and the latter being disparate by appointing participants as co-researchers to identify issues pertaining to their school context. Participants were thoroughly involved from the commencement to the culmination of the study. Additionally, the topic deferred from previous studies as engaged learning was discussed by means of employing the flipped classroom approach.

## 7.8 SYNTHESIS

This chapter responded to each of the research questions that were raised in the commencement of the study. Furthermore, proposed strategies addressed the main aim of this study, which was to deconstruct the inequalities in education and determine how the flipped classroom can aid in engaged learning. These strategies were divided into the school and beyond the school level. At school level, they include the SMT, positive learning environment and learner participation. Beyond the school level, it includes partnerships amongst the community and school, donations from local businesses and professional development from the DoE.

The research contributions to the study were explained in terms of theory, methodology and practice. The research study revealed that collaboration, equal participation and communication amongst all appropriate stakeholders at various levels might support for flipping the classroom for engaged learning. Hence, it is not impossible but can be made possible when there is teamwork. Lastly, the significance of the study was highlighted within the discipline of educational psychology and the benefit of educational experts and schools that wish to effect positive changes in the teaching and learning environment.

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# APPENDICES

## APPENDIX A: Permission Letter from Department of Education



education

Department:  
Education  
PROVINCE OF KWAZULU-NATAL

Enquiries: Phindile Duma

Tel: 033 392 1063

Ref.:2/4/8/1626

Mrs S Paragoo  
45 Zinnia Road  
Welbedacht West  
Chatsworth  
4092

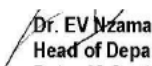
Dear Mrs Paragoo

### PERMISSION TO CONDUCT RESEARCH IN THE KZN DoE INSTITUTIONS

Your application to conduct research entitled: “**FLIPPING THE CLASSROOM FOR ENGAGED LEARNING: A CRITICAL ANALYSIS**”, in the KwaZulu-Natal Department of Education Institutions has been approved. The conditions of the approval are as follows:

1. The researcher will make all the arrangements concerning the research and interviews.
2. The researcher must ensure that Educator and learning programmes are not interrupted.
3. Interviews are not conducted during the time of writing examinations in schools.
4. Learners, Educators, Schools and Institutions are not identifiable in any way from the results of the research.
5. A copy of this letter is submitted to District Managers, Principals and Heads of Institutions where the Intended research and interviews are to be conducted.
6. The period of investigation is limited to the period from 10 September 2018 to 02 March 2021.
7. Your research and interviews will be limited to the schools you have proposed and approved by the Head of Department. Please note that Principals, Educators, Departmental Officials and Learners are under no obligation to participate or assist you in your investigation.
8. Should you wish to extend the period of your survey at the school(s), please contact Miss Phindile Duma at the contact numbers below,
9. Upon completion of the research, a brief summary of the findings, recommendations or a full report/dissertation/thesis must be submitted to the research office of the Department. Please address it to The Office of the HOD, Private Bag X9137, Pietermaritzburg, 3200.
10. Please note that your research and interviews will be limited to schools and institutions in KwaZulu-Natal Department of Education.

(PLEASE SEE LIST OF SCHOOLS/ INSTITUTIONS ATTACHED)

  
**Dr. EV Nzama**  
Head of Department: Education  
Date: 13 September 2018

**KWAZULU-NATAL DEPARTMENT OF EDUCATION**  
Postal Address: Private Bag X9137 • Pietermaritzburg • 3200 • Republic of South Africa  
Physical Address: 247 Burger Street • Anton Lembede Building • Pietermaritzburg • 3201  
Tel.: +27 33 392 1063 • Fax.: +27 033 392 1203 • Email: [Phindile.Duma@kzndoe.gov.za](mailto:Phindile.Duma@kzndoe.gov.za) • Web: [www.kzndoe.gov.za](http://www.kzndoe.gov.za)  
Facebook: KZNDOE... Twitter: @DBE\_KZN... Instagram: kzn\_education... Youtube: kzndoe

...Championing Quality Education - Creating and Securing a Brighter Future



## education

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Department:  
Education  
PROVINCE OF KWAZULU-NATAL

### LIST OF SCHOOLS/ INSTITUTIONS

1. Wingen Heights Secondary School

#### KWAZULU-NATAL DEPARTMENT OF EDUCATION

Postal Address: Private Bag X9137 • Pietermaritzburg • 3200 • Republic of South Africa

Physical Address: 247 Burger Street • Anton Lembede Building • Pietermaritzburg • 3201

Tel.: +27 33 392 1063 • Fax.: +27 033 392 1203 • Email: [Phindile.Duma@kzndoe.gov.za](mailto:Phindile.Duma@kzndoe.gov.za) • Web: [www.kzndoe.gov.za](http://www.kzndoe.gov.za)

Facebook: KZNDOE... Twitter: @DBE\_KZN... Instagram: kzn\_education... Youtube: kzndoe

**...Championing Quality Education - Creating and Securing a Brighter Future**

## APPENDIX B: Ethical Clearance Letter



22 October 2019

Mrs Sivashnee Paragoo (209514003)  
School Of Education  
Edgewood Campus

Dear Mrs Paragoo,

**Protocol reference number:** HSSREC/00000428/2019

**Project title:** Flipping the Classroom for Engaged Learning: A Critical Analysis

### Full Approval – Expedited Application


This letter serves to notify you that your application received on 05 September 2019 in connection with the above, was reviewed by the Humanities and Social Sciences Research Ethics Committee (HSSREC) and the protocol has been granted **FULL APPROVAL**

**Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment/modification prior to its implementation. In case you have further queries, please quote the above reference number. PLEASE NOTE: Research data should be securely stored in the discipline/department for a period of 5 years.**

This approval is valid for one year from 22 October 2019.

To ensure uninterrupted approval of this study beyond the approval expiry date, a progress report must be submitted to the Research Office on the appropriate form 2 - 3 months before the expiry date. A close-out report to be submitted when study is finished.

Yours sincerely,

 Dr Rosemary Sibanda (Chair)

/dd

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Humanities & Social Sciences Research Ethics Committee  
Dr Rosemary Sibanda (Chair)  
UKZN Research Ethics Office Westville Campus, Govan Mbeki Building  
Postal Address: Private Bag X54001, Durban 4000  
Website: <http://research.ukzn.ac.za/Research-Ethics/>

Founding Campuses:  Edgewood  Howard College  Medical School  Pietermaritzburg  Westville

INSPIRING GREATNESS

## APPENDIX C: Gatekeepers Permission

### Letter to the school Principal and the School Governing Body

45 Zinnia Road  
Welbedacht West  
Chatsworth  
4092

The Principal  
01 Wingen Walk Drive  
Shallcross  
4093  
Durban

Dear Sir/ Madam

RE: REQUEST FOR PERMISSION TO CONDUCT RESEARCH STUDY

I am currently a PhD student at the University of KwaZulu-Natal (Edgewood campus). I hereby request your permission to conduct the research study at your school focusing on educators teaching using technology in the classroom or using the flipped approach for teaching and learning. The research study is titled "Flipping the classroom for engaged learning: A critical analysis".

The research study requires conducting focus groups, observation and discussions with participants to be held during school hours. Focus groups and discussions will take approximately 60 minutes, and participant observations will be conducted as per classroom time-table after the necessary arrangements have been made with the respective educator.

The data generated will solely be used for this study and not for any other purpose. Educators are however, not obliged to answer any questions that they feel are not comfortable for them and are also free to withdraw from the study at any time. You are also ensured strict confidentiality of the school name, educators' real names and their responses. After completion of the study, data generated will be stored in the office of the supervisor at the University for safe-keeping for a period of five years and then it will be destroyed.

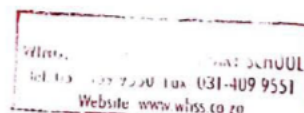
For further information, please do not hesitate to contact my course supervisor Professor Dipane Hlalele at (W) 031- 2603858 (C) 0833799328 Email: HlaleleD@ukzn.ac.za

Thanking you in anticipation

\_\_\_\_\_

Mrs S. Parago

For any queries, kindly contact me at (W) 031-9211070 (C) 0745335407



## APPENDIX D: Informed Consent Letter

UKZN Edgewood Campus  
Private Bag X03  
Ashwood  
3605

School of Education  
College of Humanities

Dear Participant:

teacher		Parent	
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### INFORMED CONSENT LETTER

My name is Mrs Sivashnee Paragoo. I am an Educational Psychology PhD student studying at the University of KwaZulu-Natal, Edgewood campus, South Africa.

I am interested in learning about the flipping the classroom for engaged learning. The objectives of my study are:

- To explore the current situation in respect of flipping the classroom for engaged learning.
- To examine the need of flipping the classroom for engaged learning.
- To explore the thoughts and feelings of teachers under which the classroom can be flipped for engaged learning.
- To understand hindrances/ impence/ barriers/ threats to successfully flipping the classroom for engaged learning.
- To provide a motivation suggesting why the classroom should be flipped for engaged learning.

Your school is my case study for the research that I am conducting. To gather the information, I am interested in asking you some questions and merely observing you within the classroom.

Please note that:

- Your confidentiality is guaranteed.
- The data generation process would consist of two sessions and would last for approximately 60 minutes each. Suitable time frames would be arranged to accommodate participants.
- Any information given by you will not be used against you, and the collected data will be used for purposes of this research only.
- Data will be stored in secure storage and destroyed after 5 years.
- You will have a choice to participate, not participate or stop participating in the research. You will not be penalized for taking such an action.
- Your involvement is purely for research purposes only, and there are no financial benefits involved.

I can be contacted at:

Email: [sivashneea@gmail.com](mailto:sivashneea@gmail.com)

Cell: 0745335407

My supervisor is Professor Dipane Hlalele who is located at the School of Education, Edgewood campus of the University of KwaZulu-Natal.

Contact details: (W) 031- 2603858 (C) 0833799328 Email: [HlaleleD@ukzn.ac.za](mailto:HlaleleD@ukzn.ac.za)

**INFORMED CONSENT**

I \_\_\_\_\_ have been informed about the study entitled “Flipping the classroom for engaged learning: A critical analysis” by Sivashnee Paragoo.

I understand the purpose and procedures of the study. I have been given an opportunity to answer questions about the study and have had answers to my satisfaction.

I declare that my participation in this study is entirely voluntary and that I may withdraw at any time without affecting any of the benefits that I usually am entitled to.

I have been informed about any available compensation or medical treatment if injury occurs to me as a result of study-related procedures.

If I have any questions or concerns about my rights as a study participant, or if I am concerned about an aspect of the study or the researchers then I may contact:

**HUMANITIES & SOCIAL SCIENCES RESEARCH ETHICS ADMINISTRATION**  
Research Office, Westville Campus  
Govan Mbeki Building  
Private Bag X 54001  
Durban  
4000  
KwaZulu-Natal, SOUTH AFRICA  
Tel: 27 31 2604557 - Fax: 27 31 2604609  
Email: HSSREC@ukzn.ac.za

Participant's signature \_\_\_\_\_

Date \_\_\_\_\_

Additional consent, where applicable

I hereby provide consent to:

Audio-record my interview / focus group discussion	YES / NO
Video-record my interview / focus group discussion	YES / NO
Use of my photographs for research purposes	YES / NO

## APPENDIX E: Assent Letter

UKZN Edgewood Campus  
Private Bag X03  
Ashwood  
3605  
School of Education  
College of Humanities

Dear Participant

### ASSENT LETTER

My name is Mrs Sivashnee Paragoo. I am an Educational Psychology PhD student studying at the University of KwaZulu-Natal, Edgewood campus, South Africa.

I am interested in learning about the flipping the classroom for engaged learning. The objectives of my study are:

- To explore the current situation in respect of flipping the classroom for engaged learning.
- To examine the need of flipping the classroom for engaged learning.
- To explore the thoughts and feelings of teachers under which the classroom can be flipped for engaged learning.
- To understand hindrances/ impence/ barriers/ threats to successfully flipping the classroom for engaged learning.
- To provide a motivation suggesting why the classroom should be flipped for engaged learning.

Your school is my case study for the research that I am conducting. To gather the information, I am interested in asking you some questions and merely observing you within the classroom.

Please note that:

- Your confidentiality is guaranteed.
- The data generation process would consist of two sessions and would last for approximately 60 minutes each. Suitable time frames would be arranged to accommodate participants.
- Any information given by you will not be used against you, and the collected data will be used for purposes of this research only.
- Data will be stored in secure storage and destroyed after 5 years.
- You will have a choice to participate, not participate or stop participating in the research. You will not be penalized for taking such an action.
- Your involvement is purely for research purposes only, and there are no financial benefits involved.

I can be contacted at:

Email: [sivashnea@gmail.com](mailto:sivashnea@gmail.com)

Cell: 0745335407

My supervisor is Professor Dipane Hlalele who is located at the School of Education, Edgewood campus of the University of KwaZulu-Natal.

Contact details: (W) 031- 2603858 (C) 0833799328 Email: [HlaleleD@ukzn.ac.za](mailto:HlaleleD@ukzn.ac.za)

**INFORMED CONSENT**

I \_\_\_\_\_ have been informed about the study entitled “Flipping the classroom for engaged learning: A critical analysis” by Sivashnee Paragoo.

I understand the purpose and procedures of the study. I have been given an opportunity to answer questions about the study and have had answers to my satisfaction.

I declare that my participation in this study is entirely voluntary and that I may withdraw at any time without affecting any of the benefits that I usually am entitled to.

I have been informed about any available compensation or medical treatment if injury occurs to me as a result of study-related procedures.

If I have any questions or concerns about my rights as a study participant, or if I am concerned about an aspect of the study or the researchers then I may contact:

**HUMANITIES & SOCIAL SCIENCES RESEARCH ETHICS ADMINISTRATION**

Research Office, Westville Campus

Govan Mbeki Building

Private Bag X 54001  
Durban  
4000

KwaZulu-Natal, SOUTH AFRICA

Tel: 27 31 2604557 - Fax: 27 31 2604609

Email: [HSSREC@ukzn.ac.za](mailto:HSSREC@ukzn.ac.za)

Parent’s signature \_\_\_\_\_

Date \_\_\_\_\_

Participant’s signature \_\_\_\_\_

Date \_\_\_\_\_

*Additional consent, where applicable*

I hereby provide consent to:

Audio-record my interview / focus group discussion

YES / NO

## APPENDIX F: Invitation to Participate in Research

# Invitation to Participate in Research Project

## University of KwaZulu-Natal

We invite you to participate in a research study entitled:

### “Flipping the Classroom for Engaged Learning: A Critical Analysis”.

This study will take approximately 60 days. The following participants are needed for the study.

- 6 Learners
- 2 teachers
- 2 Parents

In order to participate, Learners must:

- Be grade 10 or grade 11.
- Be from an Information Technology (IT) or Computer Applications Technology (CAT) class.
- Have internet access other than within the school context.
- Participate in a focus group of approximately  $\pm 60$  minutes.

Teachers must:

- Teach either IT, CAT or both.
- Administer tasks to learners during class-time.
- Allow learners to assimilate content on their own out of the school context.
- Participate in a focus group of approximately  $\pm 60$  minutes.

Parents must:

- Be willing to observe their child at home performing tasks.
- Partake in a conversational interview that would last  $\pm 45$  minutes.

Participants will be given refreshments during data generation. Your participation will be highly valued.

*For more information, contact the researcher, Sivashnee Paragoo at:*

✉ [sivashneea@gmail.com](mailto:sivashneea@gmail.com)

☎ 0745335407

**The study has been approved for research by the Department of Education  
(Ref.:2/4/8/1626)**

## APPENDIX G: Research Instrument- Participant Observation Schedule

### Participant observation schedule

My name is Mrs Sivashnee Paragoo. I am an Educational Psychology PhD student studying at the University of KwaZulu-Natal, Edgewood campus, South Africa.

I am interested in learning about the flipping the classroom for engaged learning. The objectives of my study are:

- To explore the current situation in respect of flipping the classroom for engaged learning.
- To examine the need of flipping the classroom for engaged learning.
- To explore the thoughts and feelings of teachers under which the classroom can be flipped for engaged learning.
- To understand hindrances/ impence/ barriers/ threats to successfully flipping the classroom for engaged learning.
- To provide a motivation suggesting why the classroom should be flipped for engaged learning.

Your school is my case study for the research that I am conducting. To gather the information, I am interested in asking you some questions and merely observing you within the classroom.

Learning Area: \_\_\_\_\_

Date: \_\_\_\_\_

1. Describe the interaction between the teacher and the learner when teaching and learning is taking place.

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2. Is the flipped classroom approach taking place effectively?

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3. Do learners seemed engaged in the classroom?

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4. Is proper discussion between the teacher and learners taking place?

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5. Are learners active within the classroom?

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6. Describe classroom management strategies that the teacher uses.

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7. Are learners interacting with peers?

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8. Do learners show that they have studied content at home?

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9. Describe the pedagogical practices used by the teacher to facilitate discussion.

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10. Is instructional content effective for engaged learning?

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## **APPENDIX H: Research Instrument- Conversation Schedule for Teachers**

### **Conversation schedule for teachers**

My name is Mrs Sivashnee Paragoo. I am an Educational Psychology PhD student studying at the University of KwaZulu-Natal, Edgewood campus, South Africa.

I am interested in learning about the flipping the classroom for engaged learning. The objectives of my study are:

- To explore the current situation in respect of flipping the classroom for engaged learning.
- To examine the need of flipping the classroom for engaged learning.
- To explore the thoughts and feelings of teachers under which the classroom can be flipped for engaged learning.
- To understand hindrances/ impence/ barriers/ threats to successfully flipping the classroom for engaged learning.
- To provide a motivation suggesting why the classroom should be flipped for engaged learning.

Your school is my case study for the research that I am conducting. To gather the information, I am interested in asking you some questions and merely observing you within the classroom.

1. Flipping the classroom, is a response to the idea that class time can be used to engage students in learning through active learning techniques, rather than through delivering lessons alone. Describe the current situation of using the flipped classroom approach for engaged learning.
2. A flipped classroom is an instructional strategy that reverses the traditional learning environment by delivering instructional content, often online, outside of the classroom. It moves activities, including those that may have traditionally been considered homework, into the classroom. Please share your thoughts or feelings of using the flipped class approach for teaching and learning?
3. In education, student engagement refers to the degree of attention, curiosity, interest, optimism, and passion that students show when they are learning or being taught, which

extends to the level of motivation they have to learn and progress in their education. Kindly share your views around the need for flipping the classroom?

4. There are various factors to consider before adopting the flipped classroom approach. What might be barriers/ challenges to implementing the flipped approach within your classroom?
5. The flipped class approach requires support from various stakeholders since it can be difficult to implement. Please share your experiences of the current support that you are receiving from the school and parents whilst using the flipped class approach.
6. The major problems of using flipped classroom approach include teachers' considerable workload of creating flipped learning materials, and students' disengagement in the out-of-class learning. How then do you prepare your lessons for the classroom and for out of the classroom?
7. Active learning means students engage with the material, participate in the class, and collaborate with each other. Do you think that flipped classroom could help your students become more active in learning? Is there any example to give to support/not support your claims?
8. Using technology within and out of the classroom can be used in all learning areas to enhance the teaching and learning process. Have you been able to implement the flipped approach to other learning areas beside ICT?
9. Employing the flipped classroom requires a lot of skill and training within the technology field. From your point of view, would your other colleges be keen on implementing the flipped approach in their classrooms to enhance engaged learning?
10. Implementing technology within the classroom requires a lot of training for teachers and also requires learners to have such technological resources at home. Do you have any suggestions to enhance the flipped approach?

## **APPENDIX I: Research Instrument- Conversation Schedule for Parents**

### **Conversation schedule for parents**

My name is Mrs Sivashnee Paragoo. I am an Educational Psychology PhD student studying at the University of KwaZulu-Natal, Edgewood campus, South Africa.

I am interested in learning about the flipping the classroom for engaged learning. The objectives of my study are:

- To explore the current situation in respect of flipping the classroom for engaged learning.
- To examine the need of flipping the classroom for engaged learning.
- To explore the thoughts and feelings of teachers under which the classroom can be flipped for engaged learning.
- To understand hindrances/ impence/ barriers/ threats to successfully flipping the classroom for engaged learning.
- To provide a motivation suggesting why the classroom should be flipped for engaged learning.

Your school is my case study for the research that I am conducting. To gather the information, I am interested in asking you some questions and merely observing you within the classroom.

1. The flipped class approach can only be successful if both the teacher and learners participate. Teachers have to play the role of the facilitator and also create instructional content for learners such as videos. Learners have to play to role of that of an explorer and an active learner and cannot rely on the teacher as the content provider. From your understanding of the flipped class approach, what are your views of teachers using this kind of approach within the classroom?
2. In a traditional classroom, a learner may seem engaged by simply just looking at the teacher, however, when the teacher asks them questions and probes them to check for understanding, it is evident that most learners are not able to recall what was taught in the lesson. From your point, what is your understanding of your child being engaged in learning?
3. In the home environment, completion of homework tasks can be problematic, however the flipped classroom inverts learning and allows learners to take the onus upon themselves in studying content at home and discussion and homework is done in the

classroom. From your point of view, do you think your child is engaged in school work at home?

4. The issue of the current situation in a traditional classroom is that learners are not engaged in the learning process. This is due to their learning styles not being accommodated for. Thus they may seem uninterested in the learning content given by means of black and white worksheets, textbooks or notes on the black board. What is your perception of your child being engaged in learning?
5. A range of benefits associated with flipping the classroom have been identified for students, including differentiation of teaching, allowing the “pausing and rewinding’ of teachers in recorded presentations, informed parents, a more transparent classroom, greater student motivation and interest, and improved classroom management. Please share your impression of your child’s progress in school after using the flipped approach.
6. In the flipped classroom, teachers typically record and narrate screenshots of work they do on their computer screens and create videos of themselves teaching. What are your views about the role of the teacher whilst using the flipped approach?
7. Learning is personalised for all learners to be engaged in and out of the classroom whilst using the flipped approach. Thinking about the learning style of your child, do you think that his/ her learning style is being catered for whilst learning with the flipped approach?
8. Since there is a high demand of using technological resources at home whilst using the flipped approach, parents have to fork out extra money to make sure that their children have computers and access to the internet at home. Drawing from your situation at home, what do you think about the affordability of implementing the flipped class approach?
9. Looking at the current situation of the teaching approach employed by your child’s teacher, do you have any suggestions for improving the manner in which your child is being taught?
10. Using technology within the classroom can have both advantages and disadvantages. Do you think that there is a need to flip the classroom for engaged learning?

## **APPENDIX J: Research Instrument- Conversation Schedule for Learners**

### **Conversation schedule for learners**

My name is Mrs Sivashnee Paragoo. I am an Educational Psychology PhD student studying at the University of KwaZulu-Natal, Edgewood campus, South Africa.

I am interested in learning about the flipping the classroom for engaged learning. The objectives of my study are:

- To explore the current situation in respect of flipping the classroom for engaged learning.
- To examine the need of flipping the classroom for engaged learning.
- To explore the thoughts and feelings of teachers under which the classroom can be flipped for engaged learning.
- To understand hindrances/ impence/ barriers/ threats to successfully flipping the classroom for engaged learning.
- To provide a motivation suggesting why the classroom should be flipped for engaged learning.

Your school is my case study for the research that I am conducting. To gather the information, I am interested in asking you some questions and merely observing you within the classroom.

1. The main reason for implementing the flipped class is because of personalisation. Learners are unique and have different learning styles. Each of which should be catered for within the classroom. What are your feelings about the flipped classroom?
2. Engaged learning can be achieved when learners find content interesting for self-motivation. Do you think flipping the classroom enhances engaged learning?
3. The flipped approach requires learners to have technological resources at home to access content sent out by the teacher. Have you encountered any difficulties in using the flipped class approach to learn?
4. Learners are unique and have different learning styles. Each of which should be catered for within the classroom. The main purpose of using the flipped class approach for engaged learning is to accommodate all learning styles within the classroom. Do you think that flipped classroom could help you become an active learner?
5. The traditional approach of teaching and learning is much standardised compared to the flipped approach. Flipped classroom learning, by default, means less

instructor/lecturer/mentor availability, compared to traditional learning approaches. If you had to choose between the traditional approach and the flipped approach of learning, which would it be and why?

6. As much as the flipped approach accommodating all learning styles, there are also problems relating to this approach. Drawing from your experience, what do you like or don't like about the flipped approach?
7. Implementing technology within the classroom requires a lot of training for teachers. Do you think your teacher is doing a good job in implementing the flipped approach to enhance engaged learning?
8. With the rapid advancement of IT, more and more attempts have been made to incorporate this modern technology into education. What suggestions can you make to improve the way in which you are currently learning?
9. Using technology within and out of the classroom can be used in all learning areas to enhance the teaching and learning process. Are you learning using the flipped approach in all your learning areas or is it just for ICT learning areas?
10. Not all learners come from privileged backgrounds to afford new technologies such as smartphones, tablets, computers or the internet. Have you stumbled upon any difficulties with regards to accessing learning content via the internet outside the classroom?

## **APPENDIX K: Combined Teacher Conversation Transcript**

### **Teacher conversation transcript**

#### **Teachers- Mrs Moodley and Miss Khumalo**

**Principal researcher:** Flipping the classroom, is a response to the idea that class time can be used to engage students in learning through active learning techniques, rather than through delivering lessons alone. Describe the current situation of using the flipped classroom approach for engaged learning.

*Mrs Moodley:* We don't use the flipped approach. It is my first time using such an approach after you introduced me to it. The teachers of the school all use a traditional approach of instruction. We have an ICT lab for the CAT learners of our school. Our school was given an ibox, tablets, and Wi-Fi from the department of education. I can say only maximum 3 teachers have used the ibox. The tablets have never been used and the Wi-Fi has never been loaded with data.

*Miss Khumalo-* Previously I used the traditional teaching method whereby all teaching was done in class, however, after recently learning or discovering the new concept of flipping the classroom, I realised that it could be an advantage to my learners. I have tried it once in my classroom and I have noticed that the learners are more actively engaged in the learning process.

**Principal researcher:** A flipped classroom is an instructional strategy that reverses the traditional learning environment by delivering instructional content, often online, outside of the classroom. It moves activities, including those that may have traditionally been considered homework, into the classroom. Please share your thoughts or feelings of using the flipped class approach for teaching and learning?

*Mrs Moodley:* Since I am an ICT teacher, I am all for the flipped classroom approach, however there will always be barriers in implementing such an approach in a school where we have learners of different social backgrounds. Access will always be a problem for learners. Besides barriers regarding learners, most teachers do not possess adequate skills to enable the use of technology in lessons.

*Miss Khumalo-* I personally feel that most learners will benefit tremendously from using the flipped classroom approach, however, not all learners have access to the internet and as a consequence may pose as a barrier to those that do not have access. Every learner is unique and some learners will not prefer to learn using the traditional teaching method for instance, if you give them a worksheet and you want them to answer questions in their exercise book. This is the method that is used almost every single day and learners tend to get bored. We live in a modern era and learners want new ways to learn.

**Principal researcher:** In education, student engagement refers to the degree of attention, curiosity, interest, optimism, and passion that students show when they are learning or being taught, which extends to the level of motivation they have to learn and progress in their education. -Kindly share your views around the need for flipping the classroom?

*Mrs Moodley.* I believe that for one to be engaged, they have to find instruction interesting and challenging. When we give learners tedious tasks, we find that most of them come to class not understanding anything or basically copying the answers from a fellow class mate. By giving learners content to explore out of the classroom assists for them to be curious and want to learn more. So instead of them copying in class, they are actually discussing with their classmates about what they listened to, watched, read or researched.

*Miss Khumalo-* Most of the time in the classroom, it is always the teacher that has to deliver the content and the students have to sit and listen. However, with the flipped classroom technique, learners do not have to merely regurgitate information that is taught by the teacher in the classroom. With this technique, it will give the learner an opportunity to explore and go beyond what they are given.

**Principal researcher:** There are various factors to consider before adopting the flipped classroom approach. What might be barriers/ challenges to implementing the flipped approach within your classroom?

*Mrs Moodley.* As I answered in the previous question, access is a problem. Data is expensive for content to be downloaded. Teachers also have to have the necessary skills to record a lesson by means of audio or video, download content and disseminate such multimedia. Not all teachers are daring enough to implement such

an approach. Learners can also deviate from doing their research at home and come to school not knowing anything. This then lays back the teacher in their lesson preparations. The flipped approach may be an enjoyable one but it also is a lot of work for the teacher to gather and disseminate content.

*Miss Khumalo-* Not all learners have access to the internet due to them coming from different social backgrounds and due to this, teachers might be put off from the idea. Apart from this, most teachers will find this approach as a challenge because they may not be equipped with the skills that are needed to implement this approach. I speak for myself in saying that I am not confident with teaching with technology, however, I would like to learn.

**Principal researcher:** The flipped class approach requires support from various stakeholders since it can be difficult to implement. Please share your experiences of the current support that you are receiving from the school and parents whilst using the flipped class approach.

*Mrs Moodley:* There is no support from the school or the department of education. The DOE had given us the ibox and tablets. Only a one-day workshop was given to teachers on the use of such technology in the classroom. Teachers in school are hesitant to take on the initiative of using such tools in the class without proper supervision. There is minimum parental involvement in the school.

*Miss Khumalo-* in this school, we are very unfortunate in the sense that we do not receive support from the school management and the parents. This makes it difficult to implement without their support.

**Principal researcher:** The major problems of using the flipped classroom approach include teachers' considerable workload of creating flipped learning materials, and students' disengagement in the out-of-class learning. How then do you prepare your lessons for the classroom and for out of the classroom?

*Mrs Moodley:* As I said, we do not use the flipped classroom approach. Our teaching is very standardised. We teach learners at school and we give them homework in terms of what was discussed in the class.

*Miss Khumalo-* I use the traditional approach. I prepare lessons plans only for the classroom and not out of the classroom. Learners are given homework to do out of the classroom.

**Principal researcher:** Active learning means students engage with the material, participate in the class, and collaborate with each other. Do you think that the flipped classroom could help your students become more active in learning? Is there any example to give to support/not support your claims?

*Mrs Moodley:* Yes, I am a strong believer of the flipped approach. I found that learners enjoyed the lesson about operating systems. It is a boring topic but the video highlighted an example of the need of the operating system. The audio clip explained the chapter just like having a teacher explain it to them. Learners were very happy when they were given so many resources instead of a traditional textbook. I did see a difference of engagement when the flipped approach was used.

*Miss Khumalo-* I felt that when I did use this method in the classroom, learners were more responsive in reciprocating what was learnt through watching the videos in their own time. As I have mentioned previously, learners are yearning for new and creative techniques to spark an interest in the way that they receive and transfer knowledge.

**Principal researcher:** Using technology within and out of the classroom can be used in all learning areas to enhance the teaching and learning process. Have you been able to implement the flipped approach to other learning areas beside ICT?

*Mrs Moodley:* I would love to but our school does not have enough resources, moreover, class sizes are maximum 48. It would be very difficult to work with bigger classes.

*Miss Khumalo-* Yes, I did the flipped lesson in my grade 9 NS class. I taught a lesson on photosynthesis. The video really helped learners understand the whole process and sparked a lot of interest and curiosity on the topic.

**Principal researcher:** Employing the flipped classroom requires a lot of skill and training within the technology field. From your point of view, would your other colleagues be keen on implementing the flipped approach in their classrooms to enhance engaged learning?

*Mrs Moodley:* As I answered in the previous question, not all teachers have the skill of using technology in and out of the classroom. They shy away from using such tools due to them not being adequately trained.

*Miss Khumalo-* This depends on whether the teacher is confident in employing the flipped approach and whether they have the appropriate tools and resources to implement it.

**Principal researcher:** Implementing technology within the classroom requires a lot of training for teachers and also requires learners to have such technological resources at home. Do you have any suggestions to enhance the flipped approach?

*Mrs Moodley:* Workshops should be a priority from the department. Our skills need to be updated. Technology is advancing and we need to keep up. As much as schools need access to technological resources, learners also need access out of school. The Department of education should work towards sponsoring equipment to learners and making Wi-Fi available to learners. The flipped classroom approach will work only when all learners have access in a specific group.

*Miss Khumalo-* I believe that a teacher who has used this approach in their classroom and has achieved success in implanting it should hold a workshop for their fellow colleagues on what the benefits could be. Furthermore, management should be more supportive and encourage the department to hold workshops whereby people could also come in to the school and promote this topic. With support from all sides, teachers would be willing to implement it.

## **APPENDIX L: Combined Parent Conversation Transcript**

### **Conversation schedule for parents- Mrs Dlamini and Mrs Ndlovu**

**Principal researcher:** The flipped class approach can only be successful if both the teacher and learners participate. Teachers have to play the role of the facilitator and also create instructional content for learners such as videos. Learners have to play a role of an explorer and an active learner and cannot rely on the teacher as the content provider. From your understanding of the flipped class approach, what are your views of teachers using this kind of approach within the classroom?

*Mrs Dlamini:* I think that its good but it can be demanding from our pockets for us as parents. Sandiso can ask me for a new computer for his studies and I will have to buy it because it is for his education but what if I cannot afford it? New technology can be so expensive nowadays.

*Mrs Ndlovu:* From what you just told me, I think it's great. Our world is evolving and changing so I think our children should also do the same. It seems exciting because it's something new. I just want my child to enjoy learning and I think it they can through this new method.

**Principal researcher:** In a traditional classroom, a learner may seem engaged by simply just looking at the teacher, however, when the teacher asks them questions and probes them to check for understanding, it is evident that most learners are not able to recall what was taught in the lesson. From your point, what is your understanding of your child being engaged in learning?

*Mrs Dlamini:* I think it means when my child is doing his work in the classroom and working with the other children.

*Mrs Ndlovu:* I would think when he is doing his work on his own.

**Principal researcher:** In the home environment, completion of homework tasks can be problematic, however the flipped classroom inverts learning and allows learners to take the onus upon themselves in studying content at home and discussion and homework is done in the classroom. From your point of view, do you think your child is engaged in school work at home?

*Mrs Dlamini:* Not really...I have to force him and scold him to wake up and do his work. I don't think the flipped will work for my son because he uses his laptop and phone to socialise rather than for educational purposes.

*Mrs Ndlovu:* I see him with his books but I don't know if he is actually learning or doing his work. Most of the time he watches tv or is using his phone because he says he doesn't have any homework. But recently he brought homework but was watching a video. He seemed engaged because he was watching the video.

**Principal researcher:** The issue of the current situation in a traditional classroom is that learners are not engaged in the learning process. This is due to their learning styles not being accommodated for. Thus they may seem uninterested in the learning content given by means of black and white worksheets, textbooks or notes on the black board. What is your perception of your child being engaged in learning?

*Mrs Dlamini:* As I said previously, to me it means my child is doing his work in class.

*Mrs Ndlovu:* I would think when he is doing his work and is enjoying doing it at the same time. My child is more interested in technology. If you give him notes then he would want me to help him to understand, but if you give him a video then he finds it interesting and works on his own.

**Principal researcher:** A range of benefits associated with flipping the classroom have been identified for students, including differentiation of teaching, allowing the "pausing and rewinding" of teachers in recorded presentations, informed parents, a more transparent classroom, greater student motivation and interest, and improved classroom management. Please share your impression of your child's progress in school after using the flipped approach.

*Mrs Dlamini:* Sandiso was watching the video his teacher gave him late at night. I saw him sitting on his bed with his phone but also...he could have been chatting to his friends on WhatsApp so it can be a bad thing as well. I prefer seeing what my child is learning like in books or on paper.

*Mrs Ndlovu:* From that one lesson, my child was really interested. He sat in his room and I could hear that he was watching and listening to the files that was given to him. He paused it when he wanted to eat or go to the toilet. He was also writing notes in his books which...for me...meant he was engaged.

**Principal researcher:** In the flipped classroom, teachers typically record and narrate screenshots of work they do on their computer screens and create videos of themselves teaching. What are your views about the role of the teacher whilst using the flipped approach?

*Mrs Dlamini:* Like I said, if my child says he has work to do...I can't be sure that he is actually doing his work if he is using the computer. I don't really support this idea because of this and especially because I can't afford all of the technology needed to my child to get these videos at home.

*Mrs Ndlovu:* I think it is good because they are changing their methods. They need to create interest for our children to be motivated. This is something good and I can see it when my son studies at home with the recent topic on operating systems.

**Principal researcher:** Learning is personalised for all learners to be engaged in and out of the classroom whilst using the flipped approach. Thinking about the learning style of your child, do you think that his/ her learning style is being catered for whilst learning with the flipped approach?

*Mrs Dlamini:* Yes, it is because he likes using his phone for entertainment. He still can be learning while having fun...it's just that with technology there is no limits and we as parents cannot control it.

*Mrs Ndlovu:* Yes, as I said just now...my son likes watching videos and using his phone. His learning style is learning with such things that uses technology instead of a textbook.

**Principal researcher:** Since there is a high demand of using technological resources at home whilst using the flipped approach, parents have to fork out extra money to make sure that their children have computers and access to the internet at home. Drawing from your situation at home, what do you think about the affordability of implementing the flipped class approach?

*Mrs Dlamini:* In my reply to one of your questions...I did say that this is an issue for me. I cannot afford such things. Even if it is given to my son...we stay in an area that is so dangerous. I would fright so much if his devices are stolen and especially if he needs it to study.

*Mrs Ndlovu:* I am unemployed. My husband is the only breadwinner so it is difficult to buy a computer or the latest phone for him. Learning with technology is such an advantage but we cannot afford it for my child. Affordability is really a disadvantage for my child's education.

**Principal researcher:** Looking at the current situation of the teaching approach employed by your child's teacher, do you have any suggestions for improving the manner in which your child is being taught?

*Mrs Dlamini:* Yes, they need to try and make the lessons creative and motivate our children when they are teaching. Schools also need to help teachers by giving them support to change their teaching.

*Mrs Ndlovu:* beside the new lesson in which he was taught, when teachers use the old methods, they need to be more creative. Looking at black and white pictures does not do justice. I, myself hated learning in the traditional way. It is 2020, teachers need to change their ways so our children can benefit.

**Principal researcher:** Using technology within the classroom can have both advantages and disadvantages. Do you think that there is a need to flip the classroom for engaged learning?

*Mrs Dlamini:* No not really because children are doing fine with learning by the old fashioned style. The flipped method seems very expensive. As much as it may be fun, it won't work for everyone because of the cost factor.

*Mrs Ndlovu:* yes, there is. But maybe the government can consider giving the poor children.

## **APPENDIX M: Learner Focus Group Transcript**

### **Learner Focus group transcript- 5 November 2019**

(Members: Sandiso, Lifa, Olwethu, Lucia, Karabo, Sinenhlanhla)

**Principal researcher:** The main reason for implementing the flipped class is because of personalisation. Learners are unique and have different learning styles. Each of which should be catered for within the classroom. What are your feelings about the flipped classroom?

Sandiso: I personally think that it's a good thing to be introduced to like when you said that you have to accommodate or cater for the different styles of how learners like to learn. For example, if you reading a story or something, you would like to see some pictures. Some of us would like to see some pictures. If you don't see some pictures, you get bored and you will want to move on to another book. So I think it's a good way of learning and anyone who learns, for example CAT, if you learn CAT and you are learning in this style that is being introduced to us, it would be more fun.

Karabo: I think flipped classrooms are more interesting because it includes a lot of fun in it and you get a lot of information.

**Principal researcher:** So how do you feel about...maybe teachers...your teachers becoming facilitators rather than them giving you all the knowledge and information?

Sandiso: Have you ever had the feeling of feeling that maybe your teacher is a goon or something like that? Like every time when they are here, like in front of your face...sometimes you get uncomfortable and you want to do things fast to try to impress the teacher. But you know when you get time to...like if you want to get settled...or when you like to learn something you usually get settled and you look at those videos and they teach you more. Because you know us youngsters like to watch videos nowadays and we like to do things on the internet so if we use internet to learn plus the books that we read, it would be much easier so it feels good.

Lifa: We should implement the flipped classroom in most of our subjects, like economics. Because the subjects that we do has limited information and we want to go beyond.

**Principal researcher:** Okay I just want to ask you if you are uncomfortable now...like me being here with you?

Lifa, Sandiso, Olwethu, Asa: No

**Principal researcher:** So you would prefer learning like this instead of me being in front of you and teaching you?

Sandiso: Yes, because it's much easier to understand what you are saying and where you coming from about the topic...rather than the style that we are used to. Although it works [traditional style], this style [flipped] is like we are discussing our views and also being corrected on the way.

Olwethu: I feel like it's a fresh start and it's time for innovation.

**Principal researcher:** Engaged learning can be achieved when learners find content interesting for self-motivation. [Gives examples in a classroom situation] Do you think flipping the classroom enhances engaged learning?

Asa: Yes, it does enhance engaged learning.

**Principal researcher:** How does it enhance engaged learning? [Explains engaged learning]

Olwethu: Because everyone thinks differently...someone has another view about a situation and this one has another view...different opinions and that's why it's so interesting.

Lifa: So when you gather the information that you get [in the flipped classroom], you can come up with something solid.

Sandiso: It helps with different learning styles because we not all the same since we learnt about the various learning styles in Life Orientation. So if we cater for those types of learning styles then it would be much easier...not only for the fun part of the flipped class but easier in the sense that I am learning. It will be much easier for a certain learner to know or understand what they are doing.

**Principal researcher:** So it actually makes your life as a learner easier by using different resources to learn?

Sandiso: Yes, it does.

**Principal researcher:** The flipped approach requires learners to have technological resources at home to access content sent out by the teacher. Have you encountered any difficulties in using the flipped class approach to learn?

Olwethu: No not yet.

Sandiso: Not yet since this was our first time learning like this.

**Principal researcher:** Ok so did you access the web link that I gave you? Karabo accessed it but had troubles with the webpage loading. Why didn't the rest of you access the link?

Lifa, Olwethu, Sandiso, Snehlanhla, Asa: Because we did not have enough data.

Olwethu: I understood the notes from the booklet.

Sandiso: We had alternative resources like the audio file and the video file to help us to understand.

**Principal researcher:** Okay so if you did not have access to the internet you had alternative of your teacher giving you other resources.

Sandiso: Yes, it becomes much easier so there's no reason for you not to learn.

Lifa: Because you can relate to the booklet, audio and video.

**Principal researcher:** Learners are unique and have different learning styles. Each of which should be catered for within the classroom. The main purpose of using the flipped class approach for engaged learning is to accommodate all learning styles within the classroom. Do you think that flipped classroom could help you become an active learner?

Sandiso: Yes, because...like I said in terms of learning, it's much easier but for the fun type. If I make an example of when we are learning in class, there are some learners that do not usually come to class because they are bunking and doing other stuff. We are using all these types of learning, like the one we are using now [flipped learning], I for one think that it is something interesting we are doing in class today...we learning by using a different approach and I love how the teacher is now teaching us using this method and pictures as well...I understand more. The other cause of why learners bunk is because of the traditional way of learning.

Lifa: They think that it is annoying, a waste of time and boring. So when we engage ourselves more in our learning in a fun way then they will be engaged in the classroom.

Karabo: Like you said, some like listening to music, some like watching videos and some like reading notes so it does help us to be more active if our learning styles are accommodated.

**Principal researcher:** The traditional approach of teaching and learning is much standardised compared to the flipped approach. Flipped classroom learning, by default, means less instructor/lecturer/mentor availability, compared to traditional learning approaches. If you had to choose between the traditional approach and the flipped approach of learning, which would it be and why?

Karabo: I would choose the flipped approach.

**Principal researcher:** why?

Karabo: Because it integrates technology in teaching and learning, so when the teacher comes to class, he/she discusses what we learnt and doesn't waste time by talking too much.

Lifa: I'm sorry to out of topic but I think the flipped class has its own disadvantages too. For example, if the teacher is not physically there, the learner is not encouraged to do the work because they would say okay I have this on my phone or I have this on the internet. So in terms of learning...let's say you have something to write or present to the teacher, the learner may end up not doing their work because the teacher is not there to tell you "Sandiso do it like this". So there is no supervision. If we are required to research on our own by using the internet, sometimes you don't understand certain words on the internet.

**Principal researcher:** Okay, did anyone of you have any difficulty learning this content on your own, for example, did you get distracted by some sort?

Sandiso: For me there was this sound that was frightening that was coming from the video. I was scared because I was watching the video at night and I was alone at home so I could not concentrate after that.

Karabo: I got distracted when I had an incoming call whilst watching the video. I also had WhatsApp messages that kept on pinging on my phone. So I kept on pausing the video and reading the messages.

Sinenhlanhla: I did not have the multimedia content. I just read the notes.

Lucia: I had no difficulties.

**Principal researcher:** As much as the flipped approach accommodating all learning styles, there are also problems relating to this approach. Drawing from your experience, what do you like or don't like about the flipped approach?

Sandiso: I don't like that there is no one there to encourage you. Sometimes you need someone to push you.

Karabo: There are a lot of disturbances.

Olwethu: It consumes too much data and data is expensive.

Lifa: As we all know technology is always upgrading, so maybe we won't have access to the new features since we don't have money to upgrade our devices.

Principal researcher: Yes, it's also a disadvantage of schools not having the technology to offer to learners or having the technology and still not giving it to the learners to use.

Sandiso: There is also the danger of devices and computers being stolen from school because we had computers but it was stolen. And it would be impossible to learn CAT without computers.

Principal researcher: Okay so what do you like about the flipped approach?

Lucia: It gives us so many interesting ways to learn. Once you see a video, you get interested in exploring more.

Sandiso: I like that it caters for all learners. I listened to the audio file when I came to school and not at home. It made me understand the content about the user interface.

**Principal researcher:** Implementing technology within the classroom requires a lot of training for teachers. Do you think your teacher is doing a good job in implementing the flipped approach to enhance engaged learning?

Olwethu: Yes, but maybe the teacher could have used the smart board or the data projector to facilitate.

Sandiso: You saw how we are in a traditional class. We don't usually speak but now we are speaking and you can see the difference in us. We are talking and we are interacting which is a result that the flipped lesson was successful.

**Principal researcher:** With the rapid advancement of IT, more and more attempts have been made to incorporate this modern technology into education. What suggestions can you make to improve the way in which you are currently learning?

Lifa: I would recommend for government intervention. My wish is that I started learning with computers from grade 8 for it to have grown in me because when you go to varsity, it would be difficult if you don't know how to switch on a computer. The CAT learners have an advantage over the rest of the learners at school of using computers.

**Principal researcher:** Okay so do you know that there is a subject that is being implemented in schools from next year called digital literacy from grade 0?

Sandiso: Yes. It would be much easier for them when they get to varsity. For us, it will be assumed that we do have the knowledge and skills to use a computer. It is very important for us to have a computer background because we don't know where life is going to take you so we going to have to know about how to use the computer. The world is changing and there is much technological stuff that are developing so we need to familiarise ourselves with it.

Karabo: What I do for myself to improve my learning is... I have this thing that I use...well it's for Vodacom users. It's a website and gives you resources like past year papers and other multimedia for the subjects that you select.

**Principal researcher:** Okay then that is good. So you are doing this on your own...so what suggestions can you give to improve learning at school?

Karabo: I think we must have...videos or watch videos in school.

**Principal researcher:** What about your teachers and their teaching style?

Lifa: I think that they should improve and engage themselves more practically like using projectors so that learners will know what exactly they are talking about by means of graphs, diagrams.

Olwethu: Teachers focus too much on theory. They don't give us real-life examples. They just read from the textbooks.

**Principal researcher:** Okay so the textbooks are actually for yourselves, the teacher should facilitate and not read from the textbook.

Olwethu: A suggestion can be to bring our own devices if we don't have computers at school. The school can give us Wi-Fi so we can access internet resources to use the flipped classroom appropriately.

Lucia: I think we need to look at the environment first because of the safety issues of the area of the school.

**Principal researcher:** Using technology within and out of the classroom can be used in all learning areas to enhance the teaching and learning process. Are you learning using the flipped approach in all your learning areas or is it just for ICT learning areas?

Lifa: it's new to us.

**Principal researcher:** Karabo you said that you find your own resources, so it's not your teachers that are actually giving you the resources.

Lifa: To be honest mam, flipped learning is just new to me.

Olwethu: I agree.

Sandiso: Yes, I agree with Lifa, but sometimes our English teacher brings the projector to the class. It is more interesting if we are learning about things...he projects cartoons on the board. So we are learning with technology but not all the time and not in all our subjects.

**Principal researcher:** Not all learners come from privileged backgrounds to afford new technologies such as smartphones, tablets, computers or the internet. Have you stumbled upon any difficulties with regards to accessing learning content via the internet outside the classroom?

Karabo: Yes, I did...this Vodacom website that I'm using...it doesn't ask me to login so I automatically am able to use the website. But one day it asked me for my password and I realised that I forgot it.

Lucia: We can also lose our devices which will make it difficult for us to access the content at home.

Sandiso: Data is also very expensive.

**Principal researcher:** so if I give you a website link and tell you to go on the net and open it and download this video or watch a 20-minute video...

Lifa: Wow that's too long and too expensive.

Sandiso: I can go to the library for free Wi-Fi but then it's too far.

**Principal researcher:** So transport will be a problem. You can also not afford the data as well. Do you have any questions regarding the conversation that we just had?

All learners: No

**Principal researcher:** Thank you all for your time and your feedback.

## APPENDIX N: Participant observation schedules

### Participant observation schedule (1)

My name is Mrs Sivashnee Paragoo. I am an Educational Psychology PhD student studying at the University of KwaZulu-Natal, Edgewood campus, South Africa.

I am interested in learning about the flipping the classroom for engaged learning. The objectives of my study are:

- To explore the current situation in respect of flipping the classroom for engaged learning.
- To examine the need of flipping the classroom for engaged learning.
- To explore the thoughts and feelings of teachers under which the classroom can be flipped for engaged learning.
- To understand hindrances/ impence/ barriers/ threats to successfully flipping the classroom for engaged learning.
- To provide a motivation suggesting why the classroom should be flipped for engaged learning.

Your school is my case study for the research that I am conducting. To gather the information, I am interested in asking you some questions and merely observing you within the classroom.

Learning Area: [CAT- Traditional Approach lesson](#)

Date: [6 November 2019](#)

1. Describe the interaction between the teacher and the learner when teaching and learning is taking place.

[Interaction is autocratic- teacher is driving the lesson and is merely giving learners all the content. Learners did not ask questions- they just accepted all content as true without questioning or asking for clarity.](#)

2. Is the flipped classroom approach taking place effectively?

[No- traditional approach was used.](#)

3. Do learners seemed engaged in the classroom?

[No- learners are physically in class and seem as if they are listening. When the teacher asked a learner a question- the learners was unable to answer. This shows that this learner was not engaged in the classroom.](#)

4. Is proper discussion between the teacher and learners taking place?

No- the teacher did all the talking, at the end of the lesson, the teacher asked learners a few questions based on their understanding.

5. Are learners active within the classroom?

No- they were required to listen to the teacher only. No participation was needed from the learners during the lesson.

6. Describe classroom management strategies that the teacher uses.

Classroom management was excellent since the teacher was only required to speak. The teacher was located at the front of the class during lesson delivery.

7. Are learners interacting with peers?

No- this was not needed since the teacher did all the talking.

8. Do learners show that they have studied content at home?

No- the teacher introduced the content in class and discussed it as well. It was evident that teachers taught new content. The traditional approach does not require learners to study content ahead of the lesson.

9. Describe the pedagogical practices used by the teacher to facilitate discussion.

The teacher employed an explanation teaching methodology since she was the one whom delivered all the content. The teacher used the textbook as a guide.

10. Is instructional content effective for engaged learning?

No it was not effective. Only was resource was used. Textbooks were used as the primary resources for learners. Many learners did not bother to open their textbooks but rather observe the teacher during content delivery.

## **Participant observation schedule (2)**

My name is Mrs Sivashnee Paragoo. I am an Educational Psychology PhD student studying at the University of KwaZulu-Natal, Edgewood campus, South Africa.

I am interested in learning about the flipping the classroom for engaged learning. The objectives of my study are:

- To explore the current situation in respect of flipping the classroom for engaged learning.
- To examine the need of flipping the classroom for engaged learning.
- To explore the thoughts and feelings of teachers under which the classroom can be flipped for engaged learning.
- To understand hindrances/ impence/ barriers/ threats to successfully flipping the classroom for engaged learning.
- To provide a motivation suggesting why the classroom should be flipped for engaged learning.

Your school is my case study for the research that I am conducting. To gather the information, I am interested in asking you some questions and merely observing you within the classroom.

Learning Area: [CAT- Flipped lesson](#)

Date: [8 November 2019](#)

1. Describe the interaction between the teacher and the learner when teaching and learning is taking place.

[Learners- can be described as focused. They also participated in the discussion and asked questions.](#)

[Teachers- encouraged discussion by asking learners about the instructional content.](#)

2. Is the flipped classroom approach taking place effectively?

[Yes \(for this lesson only\). Teachers at the schools usually employ the traditional approach. During this lesson, the flipped approach was employed to expose learners to a different teaching and learning style.](#)

3. Do learners seemed engaged in the classroom?

[Yes- they were interested when the teacher explained the flipped approach. Learners were engaged since they were listening to the audio clip on their phones. Some](#)

learners were not active since they were not able to watch the video or listen to the audio.

4. Is proper discussion between the teacher and learners taking place?

Yes- the teacher is facilitating the discussion and guiding learners to answer questions and collaborate with other learners.

5. Are learners active within the classroom?

Learners are active in the lesson as many of them went through the instructional content at home.

6. Describe classroom management strategies that the teacher uses.

The teacher was not able to control/ manage the class as all learners wanted to participate as well as collaborate with their peers. The class became very noisy and disruptive. The teacher was located at the front of the class- this was not adequate for the flipped approach since it shows authority.

7. Are learners interacting with peers?

Yes- interaction was based on discussing the different resources they used to learn and what was understood.

8. Do learners show that they have studied content at home?

Most learners showed understanding since they were able to contribute to the lesson. However, one learner told the teacher that she did not have a device to watch/ listen to the content. Nonetheless, she had the hardcopy of notes but still did not study the content at home.

9. Describe the pedagogical practices used by the teacher to facilitate discussion.

The teacher used the whole-class discussion approach. It allowed learners to become active and allowed the teacher to facilitate.

10. Is instructional content effective for engaged learning?

Yes- video, audio and notes (hard copy) were given to learners.

## **APPENDIX O: Meeting Agenda for Focus Group**

**Date:** 5 November 2019

**Time:** 8:30

**Venue:** School library

### **Meeting 1: First Forum (Learners)**

- Opening and welcome
- Introduction
- Problem and way forward
- Background and objectives of study.
- Explain research topic: Flipping the classroom for engaged learning: A critical analysis
- Show learners the PowerPoint which will explain the need for the research, as well as keywords (flipped classroom and engaged learning).
- Give learners resources on the topic: System Software and Computer Management
  - Notes (Booklet)
  - Open educational resources (OERs)
    - podcast (laptop and cable) 14:35 minutes
    - Video (OS explained with example) 4:49 minutes
    - OERs (OER Commons- <https://bit.ly/2WuM7g2>)
- Schedule next meeting for 6 November 2019.
- Closure

**Date: 6 November 2019**

**Time: 11:30**

**Venue: School library**

### **Meeting 2: Brainstorming (Learners)**

- Opening and welcome
- Minutes of previous meeting.
- Adoption of agenda.
- Ask learners about their experiences of self-directed learning.
- Ask learners about their experiences of learning by means of the flipped approach.
- Show learners the PowerPoint for facilitation of the topic given for self-study.
- Planning of next forum.

**Date: 7 November 2019**

**Time: 11:00**

**Venue: School library**

### **Meeting 3**

- Opening and welcome
- Minutes of previous meeting.
- Adoption of agenda.
- Conversational interview as focus group (1<sup>st</sup> session).
- Questions from learners.
- Closure

**Date: 11 November 2019**

**Time: 8:00**

**Venue: School library**

**Meeting 4**

- Opening and welcome
- Minutes of previous meeting.
- Adoption of agenda.
- Conversational interview as focus group (2<sup>nd</sup> session).
- Questions from learners.
- Closure

## APPENDIX P: TURNITIN REPORT

Prof Hlalele student

### ORIGINALITY REPORT

<b>3%</b>	%	<b>3%</b>	%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

### PRIMARY SOURCES

- 1** Chi Cheung Ruby Yang. "An Investigation of the Use of the 'Flipped Classroom' Pedagogy in Secondary English Language Classrooms", Journal of Information Technology Education: Innovations in Practice, 2017  
Publication <1%
- 2** Caesar DeAlwis. "Code-switching in Malaysian Classroom as the Microcosm of Society in Socio-cultural Context", International Journal of Service Management and Sustainability, 2020  
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- 3** "The Palgrave Handbook of Ethics in Critical Research", Springer Science and Business Media LLC, 2018  
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- 4** Md. Sayeed Al-Zaman. "chapter 4 Digitalization and Transformation of Teaching and Learning in Bangladesh", IGI Global, 2020  
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- 5** "Active Learning in College Science", Springer <1%

## APPENDIX Q: LETTER FROM THE EDITOR

28 NEWBERRY CRESENT  
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21 JANUARY 2021

### TO WHOM IT MAY CONCERN

**EDITING OF PHD THESIS:** SIVASHNEE PARAGOO

**STUDENT NUMBER:** 209514003

SCHOOL OF EDUCATION

COLLEGE OF HUMANITIES

UNIVERSITY OF KWAZULU-NATAL

**TITLE:** FLIPPING THE CLASSROOM FOR ENGAGED LEARNING: A CRITICAL ANALYSIS

I certify that I have edited the above thesis. The abstract, acknowledgements, dedication, chapters, conclusion and bibliography were addressed via text marked-up onscreen and verbal discussions. Editorial advice was provided throughout the thesis on the following aspects:

- matters of substance and structure
- paragraph and sentence structure
- language (including academic language, phrasing, labelling of figures and illustrations.
- font size, matters of clarity, referencing format, verbosity and circumlocution, voice and tone, grammar, spelling and punctuation.
- contextual issues
- presentation of content

Yours faithfully

**DR K SEVNARAYAN**