



**Exploring Microsoft Teams affordances in promoting the
development of IsiZulu First Additional Language skills for Grade 7
learners in an urban private school**

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May this study be a source of motivation to the upcoming Bachelor of Education students.

DECLARATION

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



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28 October 2021

Date

ABSTRACT

Microsoft (MS) Teams is a virtual conference software that incorporates a Learning Management System (LMS). Like many such learning environments, the affordances of this tool are underutilized by teachers who could use them to achieve learning outcomes especially in second language subjects that need extended learner engagement. IsiZulu First Additional Language (FAL) is one of the nine indigenous South African languages that is taught as a second language in English medium schools in compliance with the Language in Education Policy. English is the mother tongue of most learners in these schools, and they generally struggle to acquire IsiZulu FAL proficiency within the confines of a classroom. It is therefore the aim of this study to explore how Microsoft Teams affordances can be utilized to promote the development of the four IsiZulu FAL skills for Grade 7 learners in an urban private school. This is a practice-based case study that adopts a mixed-methods research design and uses a questionnaire, and lesson observations to determine the pedagogical benefits of using this technology. Critical reflection was employed in this study to help the teacher (researcher) understand or make explicit how IsiZulu FAL teachers can use MS Teams affordances seamlessly to develop and enhance specific FAL outcomes in a blended learning environment that employs the communicative teaching approach. The findings indicate that the access affordance is essential as it ensures all learners have access to content prior to and after synchronous teaching. Thus, the affordances help supplement learning as learners are exposed to the language and its conventions. Guided practice emerges as the approach that enables the success of this learning experience as illustrated in the framework developed in this study. This study contributes to the advancement of teaching and learning of IsiZulu First Additional Language with Information Communication Technologies (ICTs).

Keywords: *Blended Learning, Language Learning Outcomes, Microsoft Teams, Affordances, Communicative teaching approach*

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LIST OF ABBREVIATIONS

CAPS - Curriculum Assessment Policy Statement

DoE - Department of Education

DBE - Department of Basic Education

ICTs - Information Communication Technologies

LiEP - The Language in Education Policy

LOs - Learning Outcomes

MS - Microsoft

FAL - First Additional Language

LMS - Learning Management System

DEFINITION OF TERMS

Information Communications Technology (ICT) - refers to the digital technology that may be utilized for information storage, communications, and projecting information, data, and content.

Teacher Practice - refers to the enacted methods of teaching.

Student - a synonym for the learner, any person registered for classes within the Senior Phase (SP) in South Africa.

Microsoft Teams – refers to a cloud-based learning management system that supports interaction and collaboration.

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CHAPTER 1

1. INTRODUCTION

African languages like IsiZulu were marginalized in South Africa during the apartheid era and as a result, their development is not at the level of English and Afrikaans. The South African Language in Education Policy (LiEP) states that these languages should be recognized as South African official languages and be given the same status as the other two dominant languages (English and Afrikaans) in educational institutions (DoE, 1998). However, without adequate exposure to the language and the use of appropriate language teaching methods, it becomes difficult for second language learners to learn it within the confines of a classroom. Information and Communication Technologies (ICTs) offer numerous possibilities that can be used to alleviate these challenges.

The use of web-based learning platforms such as Microsoft (MS) Teams in language learning environments has significantly enhanced language acquisition in European countries (Cañares et al., 2018). There is therefore potential for improved teaching and learning experiences in the use of these platforms for indigenous language learning. However, due to lack of knowledge and skills of how to go about it, it is a challenge to develop and access indigenous e-learning materials (Cañares et al. 2018; Osborn, 2006). Thus, there is a need to investigate the affordances of these platforms and devise ways of developing and presenting content in a way that can exclusively expose FAL learners to the target language if they are to acquire or learn the desired language skills.

1.1. PROBLEM STATEMENT

Some of the challenges regarding FAL teaching, and learning include (a) “Improperly trained teachers or inadequate teaching methodology (b) lack of emphasis on developing skills – the emphasis is rather on rote learning (which is not appropriate for learning a language), and (c) lack of teaching materials” (Fareh, 2010: 3601-3603). What makes teaching FAL difficult is that learners face difficulties in using the target language in the classroom as they are not exposed to the language at home. ICT

affordances can be used to supplement classroom learning experiences (Birch in Hinkel, 2005 in Maswanganye, 2010; Little & Hines, 2006). Consequently, the teachers struggle to develop the four FAL skills to a point where they can communicate proficiently as required by the curriculum. There is, therefore, a need to identify online learning platforms that can provide learners with extended learning experiences to provide them with opportunities that immerse them in the language as they listen to recordings and participate in interactive activities off and online.

1.2. PURPOSE

This study aims to explore how Microsoft Teams affordances can be utilized to promote the development of the four IsiZulu First Additional Language (FAL) skills for Grade 7 learners in a South African urban private school. The researcher (the teacher) sought to understand how he creates a learning environment that facilitates the development of IsiZulu FAL skills for Grade 7 learners. This is a practice-based study that sought to use analysed data to develop a model that FAL teachers can employ when utilizing a Learning Management System like MS Teams to teach IsiZulu FAL.

1.3. OBJECTIVES

- To determine the extent to which Grade 7 learners perceive MS Teams affordances to be significant in the development of their IsiZulu FAL skills.
- To describe how the teacher (researcher) uses MS Teams affordances to develop IsiZulu FAL skills.
- To make explicit how the use of MS Teams affordances enhance the development of IsiZulu FAL skills.

1.4. RESEARCH QUESTION

How can MS Teams affordances be used to promote the development of the four IsiZulu FAL skills?

1.5. SUB-QUESTIONS

- To what extent do Grade 7 learners perceive MS Teams affordances to be significant in the development of their IsiZulu FAL skills?
- How are MS Teams affordances used by the teacher understudy achieve IsiZulu FAL skills?
- How can MS Teams affordances be used to enhance the development of the Grade 7 IsiZulu FAL skills?

1.6. SIGNIFICANCE OF THE STUDY

While the implementation of ICTs in education promises to improve FAL teaching and learning, Gudmundsdóttir (2010) and Wang (2009) suggest that learners and their teachers find it difficult to integrate or implement ICTs in FAL classrooms. There seem to be “limited research regarding the implementation of FAL instruction “...on learners’ computer use, attitudes, and skill” (Gudmundsdóttir, 2010:186). The available studies around ICTs and language learning are based on English-speaking countries (Gudmundsdóttir, 2010; Osborn, 2006).

There is lack of evidence regarding the implementation of the IsiZulu FAL policy using Microsoft Teams affordances (Singh & Gookol, 2018; Watson & Watson, 2007). Little is known about the affordances of MS Teams that may be employed by teachers to encourage instruction (practice) that supports the implementation of IsiZulu FAL core skills (Learning Outcomes) mandated by the Department of Education within the Curriculum Assessment Policy Statement (DoE, 2012). There is therefore a need to close this literature gap and to conduct research that provides evidence on how to effectively use ICTs in learning environments to enhance the teaching of South African indigenous languages. Although the target language is IsiZulu, all South African FAL teachers should benefit from the findings of this study as they use the same curriculum.

The following is the breakdown of the study in six chapters:

Chapter 1

In this chapter, I briefly introduce the study and provide the problem statement, purpose, objectives, research questions, sub-questions, and the significance of the study.

Chapter 2

This chapter presents literature of the previous studies that are relevant to the research. These are: The Curriculum Assessment Policy Statement (CAPS); The Communicative Approach, Blended Learning, Social Constructivism, ICT affordances and their value for teaching and learning, Microsoft Teams affordances, The Conversational Framework, and the Media Forms. The chapter concludes with the Conceptual Framework.

Chapter 3

This chapter discusses the practice-based approach that this study adopted for its research methods.

Chapter 4

This chapter presents and analyses the findings from the learner questionnaire and the three lessons presented in the classroom by the teacher (the researcher).

Chapter 5

In this chapter, the findings are discussed, based on data presented in Chapter 4 to illumine the value of MS affordances in enhancing the learning of grade 7 isiZulu FAL.

Chapter 6

In this chapter, I highlight how this study responds to the research questions and how it provides guidance on how MS Teams can successfully create a learning environment that promotes the development of IsiZulu FAL skills.

Chapter 7

This is the conclusion of the study and makes recommendations for further studies that can extend the knowledge found from this study.

CHAPTER 2

2. LITERATURE REVIEW

2.1. INTRODUCTION

The aim of this study is to explore the use of MS Teams affordances to promote the development of the grade 7 IsiZulu FAL skills. To achieve this aim, this chapter engages with the following concepts: IsiZulu FAL Learning Outcomes (LOs) in the national curriculum statement, the Curriculum Assessment Policy Statement (CAPS) informs the core skills that guide FAL teaching and learning. Blended learning and the concept, ICT pedagogical integration is discussed as the teacher under study uses them to teach IsiZulu lessons with MS Teams. In addition, social constructivism is included, as it is aligned with the teaching approach used for teaching the IsiZulu FAL class. It also informs the Conversational Framework coined by Laurillard (2002) that provides the language used in this study to describe how learning takes place when ICTs are used. Ndlovu's (2015) analytical framework for determining the value that Laurillard's media is used to assign pedagogical value to MS Teams affordances use in teaching and learning. A brief discussion on how MS Teams (ICTs) affordances are employed to enhance the development of IsiZulu FAL skills was highlighted. This chapter concludes with a conceptual framework.

2.2. THE CURRICULUM ASSESSMENT POLICY STATEMENT

The Curriculum Assessment Policy Statements (CAPS) is the South African curriculum that specifies the content to be covered, and how it should be taught and assessed (DoE, 2012; Walker, 1990 in Du Plessis, 2005). IsiZulu FAL core skills that learners should achieve in each grade are made explicit in this policy (DoE, 2012). The policy stipulates that the teaching of IsiZulu FAL should promote the acquisition of the following Learning Outcomes (LOs):

1. Listening and Speaking (LO1)

- "to gather and create knowledge or information, resolve problems, and communicate different ideas and views."

2. Reading and Viewing (LO2)

- to “develop proficiency in reading and viewing a wide range of literary and non-literary texts, including visual texts.”

3. Writing and Presenting (LO3)

- to create and convey learners’ thoughts and ideas comprehensibly in verbal or written forms;

4. Language Structures and Conventions (LO4)

– to equip learners with the “vocabulary and grammar” that provides the basis for the development of the target language (DoE, 2012:9-12).

Developing language skills is not easy for FAL learners. Most of these learners are not exposed to the language except in the IsiZulu classroom. For the learners to make sense of the content presented in a learning environment, they need to have an existing understanding, skills, or knowledge base of that target language (Maphumulo, 2012). Generally, learners who are exposed to the target language outside the classroom, find it possible and easy to comprehend the instructions and content presented. The teaching approach plays a big role in circumventing this learning challenge.

2.2.1. THE CURRICULUM ASSESSMENT POLICY STATEMENT AND ICTS

Information Communication Technologies (ICTs) have the potential to influence teaching practice that fosters FAL skills development (Ghasemi & Hashemi, 2011; Etxebarria et al., 2012) and thus, promotes the achievement of learning outcomes and supports assessment activities (Jaffer et al., 2007; Wan’s et al., 2008; Atoum et al., 2017). This is consistent with the South African ICT in Education policy which assumes that the implementation of various e-learning materials, activities, and assessments can enhance the delivery of the curriculum, and that includes IsiZulu FAL (DoE, 2004). For example, ICT like social media and tools like discussion forums in Learning Management Systems (LMSs) enable the implementation of the communicative approach (addressed in the next section) in the delivery of the learning materials in context and thus help achieve IsiZulu FAL learning outcomes.

While ICTs can promote language skill development, Ghasemi and Hashemi (2011:3091) argue that “pedagogy determines the quality of the learning process, and not ICTs” on their own. It is therefore, instruction (coupled with ICTs) that can bring change in the learning process (Rastogi & Malhotra, 2013). The communicative approach facilitates the success of this process in the teaching of IsiZulu FAL (CAPS, 2011).

2.3. THE COMMUNICATIVE APPROACH

According to the CAPS document, “a communicative approach suggests that when learning a language, a learner should have a great deal of exposure to the target language and many opportunities to practise or produce the language by communicating for social or practical purposes” (DoE, 2012:9). The communicative approach refers to the teaching of FAL communicatively while instruction is facilitated by the use of the target language (Nunan, 1987).

This approach supports the implementation of different tasks such as listening comprehension, reading passages, and language activities that equip learners with vocabulary (knowledge) which in turn, allow them to make sense of the content that will be presented in the future. Their listening and speaking skills can be developed through narrating, reading out loud, presenting content through audio or video materials, engaging in a conversation using the target language, and providing feedback. All these experiences expose learners to the target language, encourage understanding, and allow them to build on their existing knowledge (Maphumulo, 2012; Laurillard, 2002).

The communicative approach has challenges in FAL teaching and learning. For instance, some FAL teachers have a sense of what a communicative approach to FAL teaching and learning is in theory, but fail to apply it (Nunan, 1987; Krashen and Terrell, 1983). Instead, they emphasize “non-communicative interactions such as grammar focus, error correction, and drills” (Nunan, 1987:136) in their teaching. These types of non-communicative interactions do not promote the development of proficiency in a new language.

The use of ICTs in the communication approach can contribute to the learners' development of FAL language skills (Wang, 1990 in Savignon & Wang, 2003; DoE, 2012). For instance, it can be used to expose the learner through online learning environments such as chats, discussions, and question and answer sessions using the target language (Al-Ani, 2013). While ICTs may have the potential to promote the communicative approach, teachers need the knowledge of integrating ICT tools into traditional teaching in these blended learning contexts (Zhao, 2003).

2.4. BLENDED LEARNING

Liebowitz and Frank, in Al-Ani, (2013:99) “define blended learning as a hybrid of traditional face-to-face and online learning instruction occurring both in classrooms and online and where the online component becomes a natural extension of traditional learning.” Blended learning is essential in language teaching (Motteram & Sharma, 2009; Hubackova & Semradova, 2016). This allows the teacher to present content and engage with learners in different learning environments. Al-Ani (2013) submits that the blended learning approach is crucial when using a platform like MS Teams to enhance learners' development of the core skills.

A characteristic of blended learning in a FAL classroom would be to post materials to MS Teams before the language class commences and engage with such content during the scheduled language lesson (Hubackova & Semradova, 2016). This strategy may be implemented to engage learners with listening activities such as vocabulary and listening comprehension tasks (Motteram & Sharma, 2009). Blended learning can inspire different ways to enhance the frequency and the time that learners take to engage with the content and with one another.

According to Al-Huneidi and Schreurs (2011:3) “Blended Learning environment facilitates and improves discussion, communication, and knowledge construction processes.” These methods are fundamental in social constructivism; a paradigm that describes “learning as a social process” (Kim, 2001:3). Blended learning that employs a social constructivist approach suggests that the online and/or face-to-face environment should encourage interaction, cooperation, and collaboration between learners so that learning is encouraged (Al-Huneidi & Schreurs, 2011).

2.5. THE SOCIAL CONSTRUCTIVIST ASSUMPTIONS

Blended learning is essential as it enables interactions or conversations that facilitate learning both in the classroom and in MS Teams (Al-Ani, 2013; Laurillard, 2002). This is in accordance with social constructivism – a theory that emphasizes interaction as teaching and learning happens in the classroom (Kim, 2001).

Social constructivism suggests that learning does not take place “within an individual” and it is not portrayed as a “passive development of behaviours that are shaped by external forces” (McMahon, 1997 in Kim, 2001:3). Rather, learning happens when members in a particular environment participate or partake in social activities to create or construct understanding. The pedagogical use of ICTs that applies social constructivist ideas promotes meaningful engagements between learners to foster language skill development and the ability to apply existing knowledge (Al-Huneidi & Schreurs, 2011) in real life. The understanding of ICT pedagogical integration is pertinent if the teacher will successfully create learning environments that enhance the achievement of desired learning outcomes.

2.6. ICT PEDAGOGICAL INTEGRATION

ICT pedagogical integration refers to ICT use that seeks to maintain learners' learning (Henderson et al., 2012). What is important here is that instruction that presents the appropriate knowledge and suitable activities using appropriate ICTs ensures skills development (MacKeracher, 1980 in Jung, 2015).

Having knowledge of ICTs encourages the meaningful selection of the appropriate ICTs that may be used to support learning. This may be achieved by going through the learners' work on a platform like MS Teams and facilitating a dialogue about this activity in the classroom context (Al-Huneidi & Schreurs, 2011). Teachers can use cues or utilize multimedia or activities that draw learners' attention or existing understanding to encourage engagement, and in the process, give feedback and clarify misconceptions (Phung, 2021; Pal & Vanijja, 2020). Failure to do so discourages meaningful FAL skills development and the acquisition of the LOs.

Teachers find stimulating activities coupled with the use of ICTs to provide efficient learning experiences for learners (Richards, 2005). In the South African context, ICT integration has focused on English as it is the predominant medium of instruction, and indigenous languages have not received this level of attention (Diab et al., 2016). In addition, the integration of ICTs into pedagogy is compromised by the lack of skills and knowledge of the available ICTs by teachers of these languages (Henderson et al., 2012). The challenge is knowing how to enhance classroom conversation with the technologies.

Laurillard's (2002) Conversational Framework attempts to make explicit how ICTs like MS Teams may benefit the conversation in any learning context. The following portion reviews the Conversational Framework and how media affordances can be used to enhance pedagogy.

2.7. THE CONVERSATIONAL FRAMEWORK AND THE MEDIA FORMS

Laurillard's (2002) Conversational Framework assisted the teacher (the researcher) in identifying the teacher and learner's actions when learning activities were implemented. The following diagram is Laurillard's (2002) Conversational Framework that illustrates the activities or events that take place in a constructivists' learning environment (Czerniewics & Brown, 2005) where learners participate in their own learning. These are divided into four processes that may occur in any order.

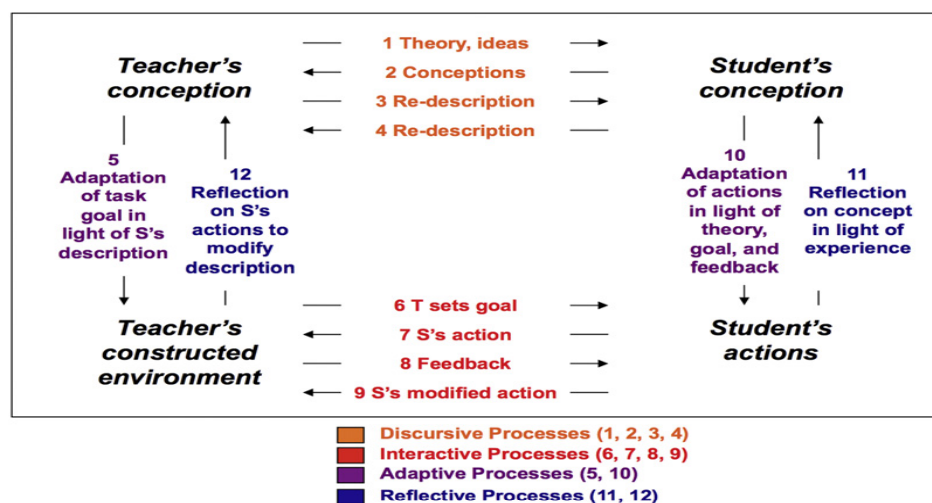


Figure 1: Conversational Framework (Laurillard, 2002:87).

Laurillard has divided ICTs into five media forms that can be used in the four phases of the conversation in the classroom. These media can enhance the delivery of the curriculum in their digital or non-digital form to support different learning experiences (Laurillard, 2002). The five media forms are: narrative, interactive, communicative, adaptive, and productive (Czerniewics & Brown, 2005:4). It is, essential to explore these ICT media forms and to know how they encourage the teaching and learning process in any phase in the framework.

The Narrative form allows the teacher to present, define, and explain content whilst the learner actively engages, acquires, and listens to the content presented (Laurillard, 2002). The Interactive form includes social engagements that are facilitated by exploration or investigation of the information necessary to enhance the learner's understanding (Laurillard, 2002). The Communicative form allows the sharing of ideas through conversation between the teacher and the learner in relation to the content presented, the Adaptive form refers to instruction that communicates ideas that seek to amplify or rectify learners' understanding, and, lastly, the Productive form refers to instruction that allows learners to present their knowledge in different forms (Laurillard, 2002). As a Learning Management System, MS Teams has all these media forms and the next section describes the software understudy (MS Teams) in the context of teaching and learning.

2.8. MICROSOFT TEAMS AND ITS USE FOR EDUCATIONAL PURPOSES

Microsoft Teams is a "cloud-based" learning management system that supports interaction and collaboration (Martin & Tapp, 2019:58). The essential characteristic that this platform brings to education is that it allows learning that occurs in real-time (synchronized learning) and allows participants to interact with the learning materials/curriculum and with one another in an offline situation (asynchronized learning) (Martin & Tapp, 2019). It includes tools such as, Posts, Chats, Files, Teams meeting, OneNote, Class Notebook, and Assignments which embed different web-based tools such as Word, PowerPoint presentation, FlipGrid, and other essential tools. These tools can be used as any of the media forms depending on the affordances the teacher engages at any phase of the conversation.

To give an instance regarding the above, synchronized learning may occur when a teacher presents content and learners ask for clarity or respond to questions during a live MS Teams meeting. This occurs when learners use the Raise Hand feature in MS Teams meeting to pose a question or to ask for more details while the lesson is live or in progress. Asynchronous learning may occur when learners engage with a pre-recorded video that presents curriculum content (Martin & Tapp, 2019). In addition, MS Teams is equipped with tools such as Assignment that allows the presentation or delivery of the curriculum content through themes or topics and uses the relevant practice activities to assess the learners' understanding (Brandl, 2005; Martin & Tapp, 2019; Watson & Watson, 2007).

Studies indicate that a learning platform such as MS Teams may be used to facilitate the teaching and learning of languages (Etxebarria et al., 2012; Ghasemi & Hashemi, 2011; Jaffer et al., 2007; Mullamaa, 2010; Zepp, 2005). To emphasize the above, a recent study conducted by Tran (2021) highlighted that learners benefitted from learning using the MS Teams as it allowed them to interact with their classmates and teachers and engaged with relevant activities that were presented through the Assignment tool. Essentially, the learners who took part in the study indicated that they benefitted greatly from the detailed feedback given by the teacher following the completion of an activity (Tran, 2021; Buchal & Songsore, 2019).

Another recent study regarding English learning conducted by Bsharat & Behak (2021) shows that teachers used MS Teams to allow the presentation and the accessibility of content using ICT materials such as Word, slideshows, PDF, and audio-visual resources. Rababah & Rababah's (2020) study demonstrated that the participants (learners) benefitted from sharing learning materials (audio-visual materials) amongst themselves through the MS Teams. However, this study also made explicit the negative implications brought by MS Teams for language learning that make it difficult for learners to use the target language (Andika, 2021; Rababah, & Rababah, 2020). Teachers need to elaborate on the work that is presented online in the classroom and enable dialogues to enhance understanding (Al-Huneidi & Schreurs, 2011; Tran, 2021; Al-Ani, 2013) if the development of skills and the achievement of learning outcomes will be realized. This is possible when teachers are aware of and are able

to utilize the affordances of the software (MS Teams) meaningfully in their language lessons.

2.9. MICROSOFT TEAMS AFFORDANCES

Gibson (1986:127) describes affordance as “a relationship between an organism and an object with the object perceived in relation to the needs of the organism.” Kirschner et al. in Haines (2015) argues that the understanding of ICTs goes beyond this definition and describes affordances as the properties of a tool in an online learning environment that encourages the users to interact in certain ways. In relation to this study, MS Teams has the property to allow chats that may take place virtually such as the Chat forum. The software also affords the creation of an environment that determines how content will be presented and engaged with by its users (teachers and learners) (Haines, 2015; Hammond, 2010).

Conole & Dyke (2004) suggest a taxonomy of the ICT affordances that may encourage learning. The ten affordances are, Accessibility, Speed of change, Diversity, Communication and collaboration, Reflection, Multimodal and non-linear, Risk, fragility and uncertainty, Immediacy, Monopolization, and Surveillance (Conole & Dyke, 2004). Some of these affordances enable different teaching strategies that are facilitated by social interactions (i.e., immediacy and collaboration) and in the process, encourage learners' development of the core skills.

This study will adopt the affordances that were drawn from Conole and Dyke's (2004) ICT affordances and Laurillard (2002) by Ndlovu (2015) as they are evident in the five media forms referred to in the Conversational Framework section. These affordances are: Non-linear (multimodality), Immediacy, Collaboration, Diversity, and Articulation.

The selected affordances can benefit the learning of languages in the following manner:

(a) non-linear (multimodality) – use of different media to encourage different learning pathways and processes of learning the language.

(b) immediacy - giving instant feedback between the teacher and the learner inspires understanding of the language,

(c) collaboration – communicating and sharing of information between instruction and learners using the target language,

(d) diversity – use of ICTs that enhances learning using simulated environments.

(e) articulation – learners present knowledge in different forms to determine if their understanding is enhanced.

Given the concepts presented in this literature review, the following conceptual framework has been developed to guide this study.

2.10. THE CONCEPTUAL FRAMEWORK

The outcome of this study should be a demonstration of how the MS Teams can enhance the development of IsiZulu FAL skills to foster the achievement of the LOs that are prescribed in the CAPS document. Literature demonstrates that the advocacy for the communicative approach by the curriculum policy is aligned with social constructivist principles. Social constructivism informs the Conversational Framework (CF) that illustrates the teaching and learning activities within the learning environment.

The Practice-Based Fundamental Design Research (Walker, 2013) that is elaborated in the methodology chapter is used to establish the key elements in addressing the research questions. In the *theorising* stage, the study used learner perceptions to identify what is of significance in their use of the MS Teams media forms and affordances for learning IsiZulu FAL. These perceptions were displayed through quantitative diagrams. At the *designing* stage, the teacher designed three lessons that were aimed at providing a description of how the teacher (the researcher) under study uses MS Teams to enhance the development of IsiZulu FAL skills. The descriptions ensured that the researcher provides qualitative data. It is then that the teacher was able to focus on what he does in relation to the learners' perceptions, that

he was able to *reflect* and discover how he can create successful learning environments where MS affordances promote the learner's development of FAL skills to foster the achievement of the LOs.

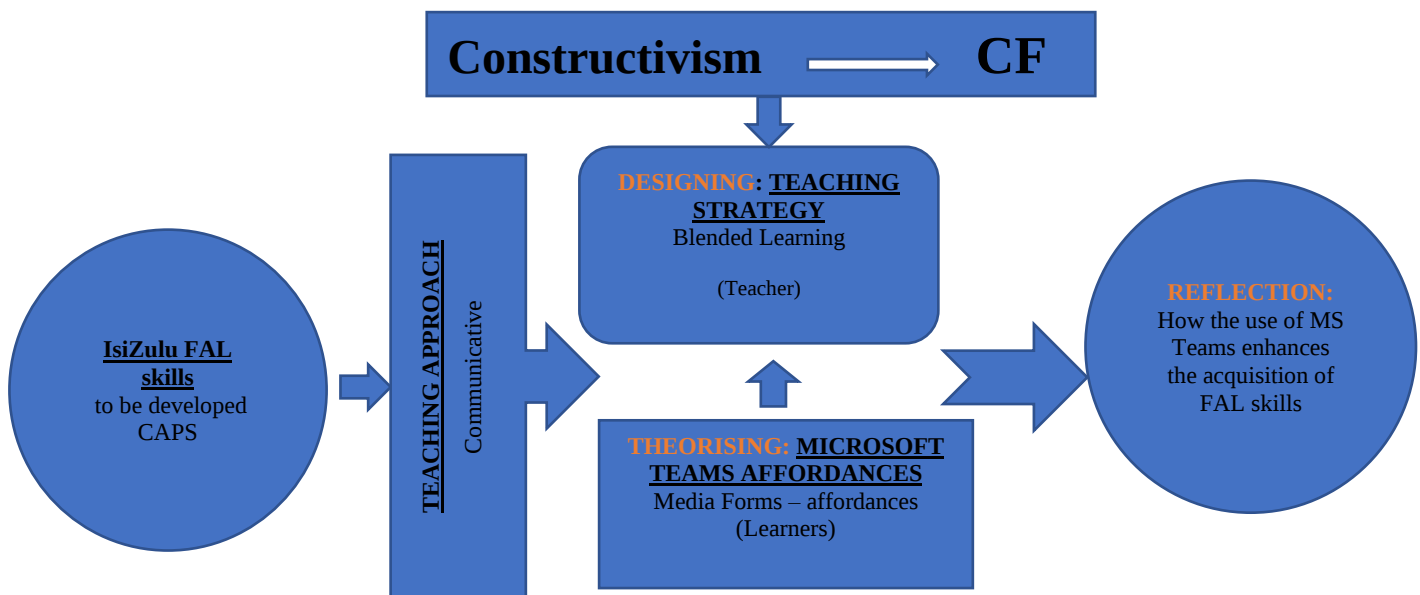


Figure 2: Conceptual framework for this study.

2.11. CONCLUSION

This chapter has reviewed literature relating to ICTs and FAL teaching and learning. It has described the following concepts: communicative approach, blended learning, Social Constructivism, ICT pedagogical integration, the Conversational Framework, media forms, and MS Teams affordances and these are necessary for the study. These concepts have been used to develop a conceptual framework that is used in this study. The following chapter discusses the research methodology that makes explicit how this study was conducted.

CHAPTER 3

3. METHODOLOGY

3.1. INTRODUCTION

This study aims at elucidating how MS Teams affordances are used to promote the development of the four IsiZulu FAL skills for Grade 7 learners in the selected school. This is a practice-based case study. The researcher is investigating his practice in the classroom as he teaches isiZulu FAL and how it encouraged students' FAL development. This chapter describes the research methods that were used, identifies the stages and processes that were followed to gather and analyse data.

The research 'onion' is used to highlight "the philosophy, approach, methodology, strategy for collecting data to achieve the purpose of the study" (Saunders et al., 2003:108). The aspects that will be implemented for the study are highlighted in red circles, on the research onion (see Figure 3).

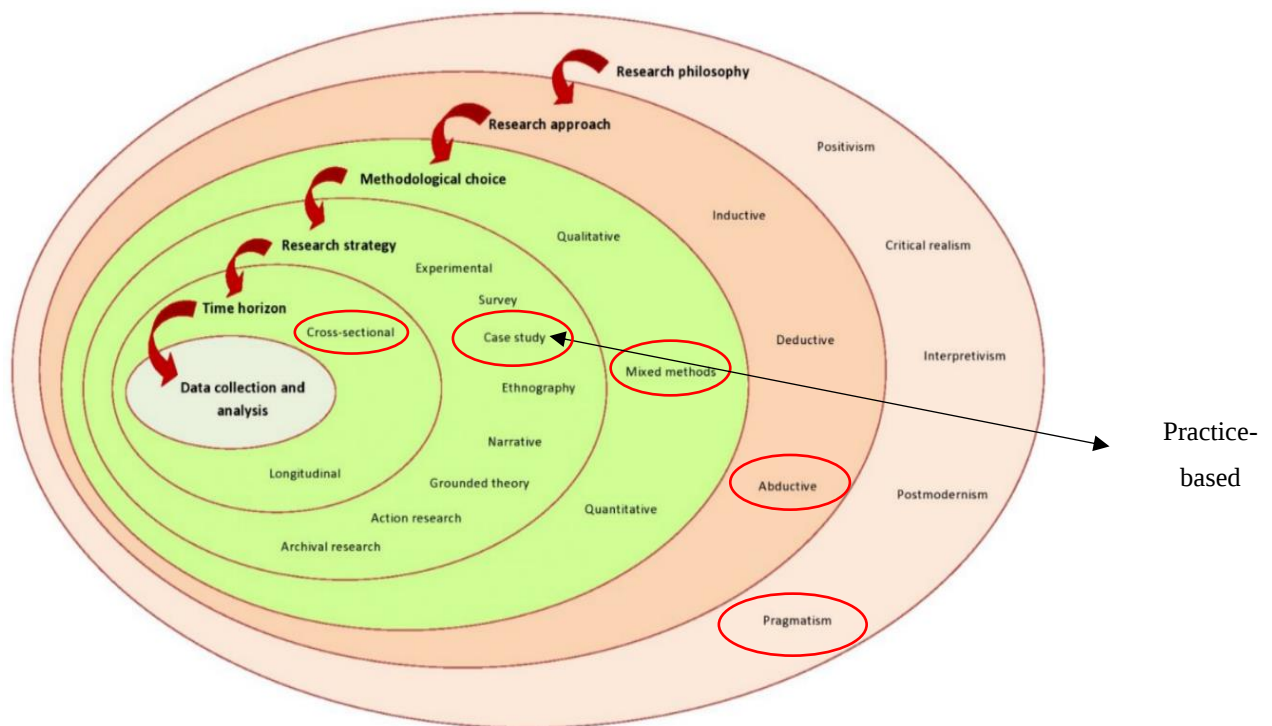


Figure 3: The research 'onion' (Saunders et al., 2009).

3.2. RESEARCH PHILOSOPHY

Research paradigms are philosophical frameworks that acknowledge the essential assumptions, beliefs, or perspectives regarding how we perceive the world, and these provide the thinking structures that regulate or influence the actions of the researcher (Saunders et al., 2009; Scott & Morrison, 2005). **Table 1** makes explicit the paradigms that have been developed over time. These are Positivism/empiricism, Critical Realism, Interpretivism, Postmodernism, and Pragmatism. Since the study is guided by pragmatism principles, it explains why certain paradigms are not suitable for the study.

3.2.1. PRAGMATISM

Pragmatism focuses on the subjective and objective practical application of a study. It reflects on the subjective reality whereby the engagements or interactions between members of a society (teacher and learners) are studied and attempts to get a sense of the “details of the situation and the subjective meanings motivating these actions (Saunders et al., 2009:11). It also focuses on the objective reality, that is, it investigates the consequences or engagements and interactions under study (Creswell,1994:10).

The adopted paradigm is essential for this study as it pays attention to the subjective reality or the understanding and interpretations of the researcher’s teaching and learners’ perceptions on the value Teams tools have on their development of FAL knowledge and skills (Goldkuhl, 2012). The objective reality is in the analysis of the students’ responses to the questionnaire on their use of MS Teams affordances to develop FAL skills.

Table 1: Research paradigms.

Positivism	Critical realism	Interpretivism	Postmodernism	Pragmatism
Only recognizes scientifically proven facts.	What is real is independent of human perceptions and theories.	Seeks to understand the interactions of members of a social group and how these inform their actions.	Emphasis is placed on a variety of human interpretations and experiences.	Asserts that meaning is to be found in the practical implications. The researcher has the ability to put theory into practice. All impractical ideas are to be rejected.
THE FLAWS OF THE OTHER PARADIGMS REGARDING THIS STUDY				

Positivism	Critical realism	Postmodernism	Interpretivism
It does not consider the subject experiences of its participants.	Reality does not include human perceptions that contribute to the study.	It considers interpretations that are beyond the phenomenon under study.	It only considers the subjective engagements and interpretations (causes) and fails to reflect on the effects or results of these actions.

(Creswell,1994; Given, 2008; Phillips, 2000; Scott & Morrison, 2005; Saunders et al., 2009; Gold Kuhl, 2012; Johnson & Onwuegbuzie, 2004).

3.2.2. RESEARCH APPROACH

The second layer of the research onion presents the inductive, abductive, or deductive research approaches. The abductive approach pertains to the researcher's interpretations that go beyond general assumptions about social events. On the other hand, the deductive approach refers to the recognition of the existing theories or conceptual framework(s) that will be tested - "proven or disproven" - using the data gathered (Saunders et al., 2009; Scott & Morrison, 2005:129). The inductive approach requires the researcher to gather evidence or truths about a unit of study and merge these to create a theory or conceptual framework. This research used data on the students' perceptions of their learning experiences on MS Teams and mapped out how its affordances were used by the teacher in her teaching with this tool to develop IsiZulu FAL skills.

3.2.3. MIXED METHODS RESEARCH METHODOLOGY

This study used a mixed methods research approach. Mixed methods utilises "inductive and deductive logic through abductive thinking" (Morgan in Creswell., et al, 2017). It used inductive reasoning - "...an interpretive understanding that looks at deconstructing meanings..." (Thorne in Maswanganye, 2010:35), and used deductive reasoning to investigate whether the phenomenon under study (Saunders et al., 2009), teacher-student engagements and how MS Teams affordances promotes the development of FAL skills.

Mixed-methods research focuses on giving a detailed explanation and interpretation about the ideas that people have about the world, how they feel about their experiences and situations around them in the setting they are occupying at a certain time, and the results or practical consequences of their actions (Creswell, 1994, Thorne, 2000; Cutcliffe & McKenna, in Maswanganye, 2010). This methodology guided the researcher in the selection of the multiple data collection tools (questionnaire and written observations) that assisted with the provision of detailed information (data) (Scott & Morrison, 2005). Learners in one Grade 7 class's perceptions (quantitative) and the teacher's lessons (qualitative) are interpreted in pursuit of establishing how the MS affordances promote the development of the IsiZulu FAL skills.

3.2.4. RESEARCH DESIGN

This study adopted a case study research design as it considered the “what, how and why questions,” the actions of the participants (teaching practices and learner engagement), the consequences of these actions and the contexts in which the study took place (Yin, 2003 in Hafiz, 2008:545). It is an in-depth investigation of a single case that seeks to make clear the phenomenon under study, which is how Teams affordances can enhance the learning of Grade 7 IsiZulu FAL skills. It uses an exploratory sequential design (Creswell and Clark, 2011) where in the first phase quantitative data is collected and analysed. In the second phase, qualitative data methods are used to describe the teachers use of Teams affordances.

3.2.5. PRACTISE-BASED RESEARCH

Practice-based research design stems from Action research (Saunders et al., 2009; Scott & Morrison, 2005). It, therefore, has attributes of action research in that the researcher may study his own practice with the aim of improving and making it more efficient (Scott and Morrison, 2005). Schön (1983 in Candy, 2006) and Palaganas (et al. 2017) argue that in a practice-based study, the researcher pays particular attention to his contribution to the study and thinks carefully about how his instruction (subjective) improves learning (objective). In this study, the researcher seeks to

articulate how his integration of the MS Teams into teaching enhances his practice and encourages efficient FAL learning experiences.

Figure 4 describes the practice-based components that guided the study. It makes explicit the processes required to understand how the use of MS Teams promotes the development of FAL skills.

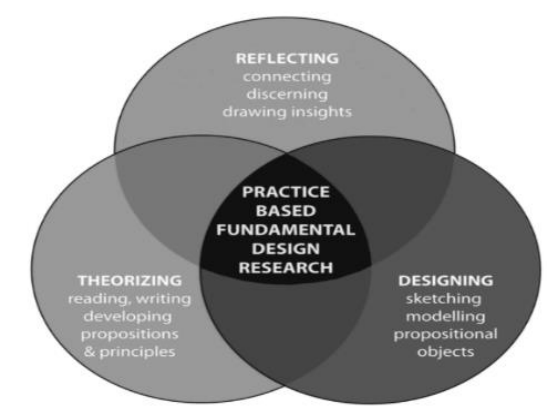


Figure 4: Practice-Based Fundamental Design Research (Walker, 2013)

The following aspects, theorizing, designing, and reflection are described to explain how they are used in this study.

Theorizing: Theorizing allows the researcher to gather evidence or concepts from existing literature (Walker, 2013). FAL skills according to CAPS, the communicative approach, blended learning, Social Constructivism, ICT pedagogical integration, media forms, and the MS Teams affordances are reviewed in the literature section. The developed conceptual framework informs the selection of data collection instruments, beginning with the learner questionnaire, that helps to respond to the first research question.

Designing: This component requires the researcher to design learning environments using relevant teaching principles (Walker, 2013) that promote the development of the learner's FAL skills and thus enhance their understanding of the language as they use MS Teams. The communicative approach and blended learning are implemented to create learning environments that enhance desired skills development. The learners' results from the questionnaire assist the teacher to consciously conduct his practice and thus make explicit the benefits of the MS Teams.

Reflection: Critical teacher reflection is essential for this study as it is tied to the action research strategy (McCabe et al., 2009; Saunders et al., 2009). It allows the researcher to consistently reflect on the concepts identified in the theorizing section. Critical reflection allows the researcher to evaluate and articulate his actions and learner experiences (Dewey, 1933; Habermas, 1971, in McCabe et al., 2009) when using MS Teams affordance to enhance the acquisition of the IsiZulu FAL learning outcomes. It assists the researcher with the interpretation and analysis of the data that is collated through observations, which subsequently informs the study (Walker, 2013). The reflection on the findings should lead to the intuitive awareness needed to make explicit how the teacher (researcher) creates learning environments with MS Teams that promote the development of IsiZulu FAL skills.

3.3. DATA ANALYSIS

Mixed methodology allows the researcher to have “one dataset build on the result of the other” (Creswell et al., 2011:8). This design option is referred to as “sequential design” which allowed the researcher to begin by a quantitative analysis - learners in one Grade 7 class’s perceptions of using MS Teams tools - described through a qualitative investigation - the teacher’s lessons. This research option allows for the provision of a better comprehension or interpretation of the research problem by using both quantitative and qualitative options than either research approach alone (Creswell et al., 2011).

Ndlovu’s (2015) analytical tool uses components from Laurillard’s (2002) media forms and the ICT affordances by Conole and Dyke (2004) to make sense of the two (quantitative and qualitative) data sets.

3.3.1. QUANTITATIVE DATA ANALYSIS

Ndlovu’s (2015) analytical tool informed the designing of the questionnaire (close-ended questions) used to elicit the extent to which learners perceived *what* they considered as significant in the use of the MS Teams for learning and in developing specific FAL LOs. The students’ perceptions were collected, analysed, and presented through quantitative research methods. Template analysis was employed for

quantitative dataset in order to allow the researcher in engaging with the students' perceptions and to determine their experience or interpretations (King, 2012) when using MS Teams.

3.3.2. QUALITATIVE DATA ANALYSIS

Template analysis was also used to analyse qualitative data. This is a type of thematic analysis where the researcher uses priori codes (King, 2012) based on the analytical tool developed by Ndlovu (2015). It asserts that the following analytical tool has the potential to determine the pedagogical value of ICTs in their media forms. It depicts the affordances of each media form, **how** it should be used to enhance teaching and learning (evidence through observations) and, lastly, what its pedagogical value is.

Table 2: The Analytical tool (Ndlovu, 2015).

Media Forms	Affordances	Evidence	Pedagogical value
Narrative	Non-linear	Multimodality	Apprehending structure/connections
Interactive	Immediacy	Immediate feedback	Exploration: misconceptions amended
Communicative	Collaboration	Discussion	Re-descriptions of concepts
Adaptive	Diversity	Reproduction	Practice
Productive	Articulation	Products	Knowledge construction

The value of this analytical tool is in its contribution in depicting the pedagogical benefits of the MS Teams affordances in the development of IsiZulu FAL skills.

The use of qualitative and quantitative design provided the researcher with an integrated understanding and synthesis of the two datasets (Creswell et al., 2011). Both datasets allowed for the implementation of triangulation. Triangulation was essential as it allowed for the employment of different sources of data and the “use of multiple data techniques” (Given, 2008:139). The researcher used the analytical tool to devise a questionnaire that contributed to the quantitative dataset, and utilized the media forms and affordances to guide the design and presentation of the three lessons which informed qualitative data. These datasets assisted with the articulating of how the MS Teams affordances enhance the development of FAL skills.

The following section is a summary of how data was collected in relation to the practice-based design.

3.4. SUMMARY OF THE PROCESS

Table 3: Summary of the research method. (Walker, 2013).

Practice-based Research components	Action	Tool/ instrument	Participant
1 (Theorizing)	The theoretical and conceptual framework that inform the research tools used to collect and analyse the data	Questionnaire and literature review (quantitative)	Teacher (researcher) and Learners
2 (Designing)	Design of learning material for blended learning	Learning material	Teacher (researcher)
	Development of a learning environment	MS Teams	Teacher (researcher)
	Delivery of content	MS Teams and Teaching (qualitative)	Teacher (researcher) and learners
3 (Reflection)	Articulating how the MS Teams affordances enhance the development of FAL skills	Analytical tool (interpretation of the problem)	Teacher (researcher)

3.5. TIME HORIZONS

Time horizons are identified as the period with which the research process will take place (Saunders et al., 2009) and there are two aspects to it, namely the Cross-sectional and Longitudinal research. Cross-sectional research pays particular attention to “studying a particular phenomenon at a particular time” meaning this type of study is limited (Saunders et al., 2009:155). Longitudinal research refers to studies that consider a “long list of data-collection activities” that will assist with the phenomena studied (Scott & Morrison, 2005:147). This study is cross-sectional since data was collected in the classroom using a short scaled questionnaire and only the three lessons that were presented in three days (Saunders et al., 2009; Scott and Morrison, 2005).

3.6. RESEARCH SITE

This study was carried out in a private school in Johannesburg where the researcher teaches. English is the language of teaching and learning. The school offers IsiZulu

as a FAL from Grade 0 to Grade 12. MS Teams is the Learning Management System (LMS) that is utilized at the school.

3.7. SAMPLING AND PARTICIPANTS OF THE STUDY

“Sampling refers to the activities involved in selecting a subset of persons or things from a larger population” (Scott & Morrison, 2005:219). This study adopted a non-probability convenience sampling as it allows data to be derived from the researcher (participant) and the twenty-four Grade 7 FAL learners that he teaches using MS Teams that form the entire population to be researched.

The teacher

The researcher is a qualified IsiZulu FAL teacher and has been teaching the subject for nine years. The key role of the researcher is to gather data about his practice through learner questionnaires and the documentation of three lessons that he uses to reflect on his teaching.

The learners

The twenty-four (24) Grade 7 FAL learners make the class under study. They come from different ethnical backgrounds. Their main role is to complete the questionnaire and interact with instruction, their peers, their teacher, and the content presented using the MS Teams. Their participation forms the basis of observational data that informs this study.

3.8. DATA COLLECTION

According to O’ Donoghue and Punch (2003:78), triangulation is “a method of cross-checking data from multiple sources to search for regularities in research data”. Triangulation allowed the researcher to use different data collection tools which are not only necessary for collecting information but also essential for verifying it (Scott & Morrison, 2005). The following instruments allowed the researcher to establish how

the MS Teams tools promote FAL skills development. To elaborate, the researcher issued:

- a) **A questionnaire** with close-ended questions was sent to the learners through Microsoft Forms. The aim was to identify the MS tools they perceived to be helpful during their learning experiences when using the MS Teams. “A closed question is a type of question posed by researchers to participants in research projects that specifies the parameters within which participants can frame their answers” (Given, 2008: 83). Learners could choose more than one MS Teams tool in responding to the question and the frequencies were used as indications of the extent to which learners valued the tool in the development of their FAL knowledge and skills.
- b) **Observations:** since observations are used to “describe events, behaviours, and artifacts in the social setting” such as a school (Marshall & Rossman, 1989:79 in Kawulich, 2005:2), the observations of interactions between learners and technology (instruction) were captured as learners participated in the learning activities while their development was monitored. Field notes were taken in a notebook, and this was transcribed and used to inform the data collection process.

A handwritten notebook was used to record the observations. Candy (2006) asserts that it is essential to record events regardless of their nature - whether they occurred in an online platform or a natural event. The face-to-face interactions that took place in the classroom and the experiences in the MS Teams meeting during the teaching and learning process were recorded. The documentation of the interaction between instruction and learner engagement did not happen in isolation but the observer's interpretation shaped and guided the content or information gathered.

A video recording during interaction and learning in the use of the MS Teams was taken using the MS Team Meeting record tool. This recording allowed the researcher to reflect on activities and events that were performed in the process (Candy, 2006). The data captured from this process included my interpretations

regarding learner interaction and instruction. These interpretations were used to inform the data collection process.

3.9. VALIDITY AND RELIABILITY

According to Scott and Morrison, (2005:253) validity measures the “accuracy or authenticity of the description being made and its application to the other cases, across place and time. “Validity comes in handy for examining the correct interpretation of information (Watkins, 1991). The issue of validity for this study is whether the researcher interpreted the learners’ experiences and observations accurately when using the MS Teams. To address these concerns, the learner’s responses to the questionnaire were returned during the data collection process and these were validated (by the learners) to ensure that there were no adjustments, misunderstanding, and misinterpretation.

“Reliability is used as a measure of quality and the term means repeatability or consistency”(Scott and Morrison, 2005:208). In the case of reliability, interactions with the learners were documented on a handwritten notebook which may be reviewed against the video footage taken during the study to verify if the interactions were carefully interpreted without any prejudice (Hagenaars in Lafaille & Wildeboer, 1995; Watkins, 1991:5). The researcher did not manipulate the learner's actions nor make it obvious that he was observing them for data collection purposes (Lafaille & Wildeboer,1995).

The mixed methodology allowed for the adequate collection of data using different tools. Validity in this study was increased by the researcher’s use of the “well-entrenched procedures and strategies” (Given, 2008:909). The research methods (questionnaire and observations) allowed for authenticity – by focusing on whether the evidence is genuine and undoubted, and trustworthiness – by providing the evidence that was reliable and truthful (Creswell & Clark, 2017; Scott & Morrison, 2005:75). The data derived from the students’ perceptions via questionnaire (quantitative), the process of teaching and learning (qualitative), and the practice implications (pragmatist) were not interfered with or manipulated in the analysis and reflection stage in the data presentation (Chapter 4).

3.10. LIMITATIONS OF THE STUDY

“A limitation of the study design or instrument is the systematic bias the researcher did not or could not control and which could inappropriately affect the result” (Price & Murnan, 2004:66). The concern in action research is to what degree are the results relevant to the participants (Watkins, 1991). The anticipated systematic bias for the study occurred when data was collected only from the twenty-four (24) learners who take IsiZulu in the Seventh Grade. This information was insufficient to represent the implementation of ICTs in FAL teaching and learning contexts. It is not enough to allow the researcher to make general inferences about MS Teams and FAL teaching and learning. In addition, the observations and inferences were systematically biased as they were transcribed by me as a Zulu teacher; who happens to be the subject of the study and also investigating his practice. Since the researcher was also studying his practice, his interpretations were focused on his role (instruction) but his analysis of the learning experience may have not been consistent and the frequent reference to the analytical tool alleviated subjectivity.

3.11. ETHICAL CONSIDERATIONS

Prior to the study, the research proposal was submitted to the University of the Witwatersrand Human Research Ethics Committee and was awarded the protocol number: **2020ECE002M**. The findings were derived from the researcher’s instruction and the learners’ engagement with instruction on an online platform. The learner’s identity was not revealed (i.e., name, avatar, profile). My institution was informed about my plans and documentation that grants permission to use the Grade 7 learners as participants were sent to both the parents and the learners for their approval. The researcher did not ask for learners’ profiles beyond what he knows and the information that the learners provided was held securely and not disclosed to anyone. The parents whose children agreed to participate were issued with Participation Information Sheets and Consent Forms. All twenty-four learners participated in the study.

3.12. CONCLUSION

This chapter has discussed the research methodology and the data collection tools that were used in the data collection process. An explanation for selecting the paradigm that informs practice-based research and the mixed methodology was presented. The justification for selecting the analytical tool was given. Ethical considerations and the reliability and validity of the study were also presented.

CHAPTER 4

4. DATA PRESENTATION AND ANALYSIS

4.1. INTRODUCTION

This chapter presents the quantitative and qualitative data. It presents the data captured from the twenty-four (24) Grade 7 FAL learners via the questionnaire that was assigned through the MS Forms to inform the researcher about the learner's perceptions to identify what is of significance in their use of the MS Teams media forms and affordances for learning IsiZulu FAL (quantitative) and the three lessons that were designed to describe how the teacher (the researcher) under study used the MS Teams to promote the development of IsiZulu FAL skills (qualitative). The lessons were blended and presented through MS Teams and face-to-face context.

Appendix 2: The analytical tool by Ndlovu (2015) was used to create the questionnaire and made explicit the LOs that learners needed to acquire. The data derived from the questionnaire will be presented using graphs.

4.2. DATA COLLECTION

This portion illustrates learner's responses obtained from the questionnaire. Learners were exposed to MS Teams tools as follows:

Table 4: Responses obtained from the questionnaire.

MS Teams tools used	How tools are generally used
The Chat tool	It allows learners to create groups and interact in those spaces and it also allows them to chat with the teacher in a one-to-one setting.
The Teams meeting	It enables the teacher to schedule and facilitate conference calls (as seen in lesson 3) to allow group engagement with the content using the target language.
Files	It allows learners to access curriculum content through attachments such as PDFs, Word documents, and PowerPoint presentations. Learners are able to comment on the content presented.

Post	It allows learners to engage with instruction regarding the activities that will take place.
Assignments	It allows the teacher to create assignments or activities that focus on assessing specific skills. This tool has properties (such as Quizzes) that allow the teacher to evaluate the learners and provide feedback through written comments.
OneNote Notebook	Class Allows the teacher to present and share content or notes.

Learners could choose more than one tool in responding to the questions and this reflects how the teacher uses Microsoft Teams. This aligns with the lesson observation where the teacher would maximize the use of one tool as per its diverse affordances. The questions were aligned with the LOs that the activities sought to develop.

4.2.1. DATACOLLECTION – QUESTIONNAIRE

Learners selected the tools they perceived as helping them in enhancing their learning of IsiZulu LOs.

a) Narrative media form

The following graph presents data captured from **Question1: Which of the tools in the Microsoft Teams help you to complete a listening comprehension in IsiZulu? – LO1; LO4**

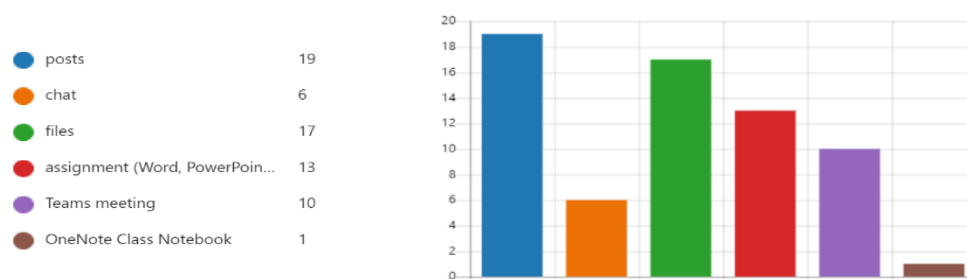


Figure 5: MS tools that help with the completion of a listening comprehension in IsiZulu

The data above indicate that the Post (29%), Files (26%), and Assignment tools (20%) have higher scores. The listening (audio, video, and PDF readers) texts are accessed in these tools by learners. These are narrative media that afford the linear presentations of explanations, demonstrations, and descriptions of the content (Laurillard, 2002 in Czerniewicz and Brown, 2005). It is evident that the other tools - Chat (9%) and the Teams meeting (15%) - that afford learners' interactions, collaboration, and responses to the listening activity (Kim, 2001) are generally not perceived as significant to their completion of the listening comprehension.

The following graph provides data captured from **Question 2: Which of these tools in Microsoft Teams assist you to do IsiZulu oral or speaking activities? - LO1 – 4.**

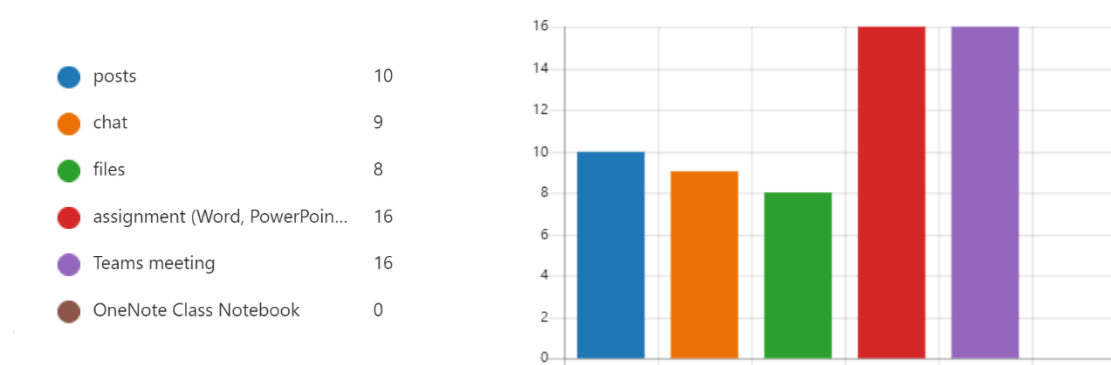


Figure 6: MS Teams tools that assist with IsiZulu oral or speaking activities

The Assignment tab (27%) allows learners to submit oral (prepared and unprepared speeches) and the Teams meeting (27%) allows learners to make their oral presentations. The two tools are therefore perceived as valuable as they afford learners submission of oral tasks and presentations where they articulate themselves (Martin and Tapp, 2019).

Although the Posts (17%), Chats (15%), and Files (14%) are lower in popularity, learners also use these tools to clarify their understanding of the activity. For instance, learners refer to the instructions presented on the Post, converse with the teacher or the other learners to clarify their understanding of the activity. These conversations occur on the Chat platform - where their understanding is enhanced in a manner that allows them to complete the activities under the Files tab. These tools allow the

learners to engage with the curriculum content as they access, articulate, and gain learning support from the teacher and peers.

The following graph provides data acquired from **Question 3: Which of these tools in Microsoft Teams assist you with understanding or learning IsiZulu grammar or language activity? – LO1; LO 4**

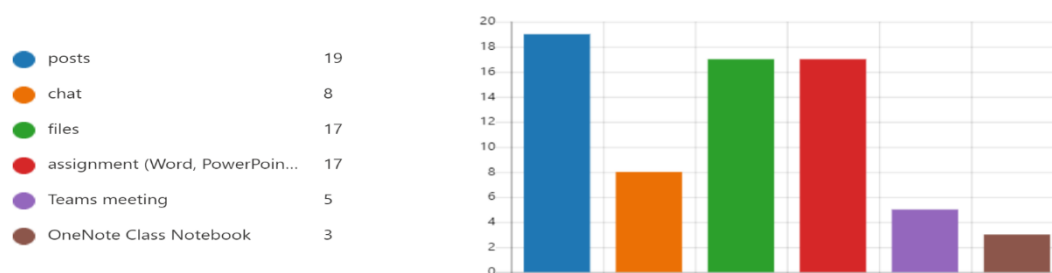


Figure 7: MS Teams tool that assists with understanding or learning IsiZulu grammar or language activity

The three tools that learners perceive as significant in helping them understand grammar are Posts (27%), Files (25%), and the Assignment tab (25%). These are used to present, explain, and describe IsiZulu language structure and conventions of content. From these tools, learners are able to access IsiZulu grammar themes, that are generally shared in the form of notes – Word, PDFs, and on other occasions, through audio or video materials which assist the teacher with elaborating the content. The interaction that is held between the learners and teachers in the Chat (12%) and Teams meeting (7%) elaborates or explains how language structures are used in context.

Learners seem to place more value in the narrative media that is used in this class to present content with explanations and descriptions (Jordan et al., 2008 in Martin & Tapp, 2019) for the different tasks. The interactive tools are viewed as secondary as they are used mainly to support the content provided through the media forms.

b) Interactive

The Interactive media form is valued for determining learner comprehension, encouraging discovery (Laurillard, 2002), and for immediate feedback (Ndlovu, 2015) learners receive and give during the classroom conversation.

The following graph provides data from **Question 4: Which of these tools in Microsoft Teams make it easy for you to interact with the teacher as you learn IsiZulu? – LO 1-4**

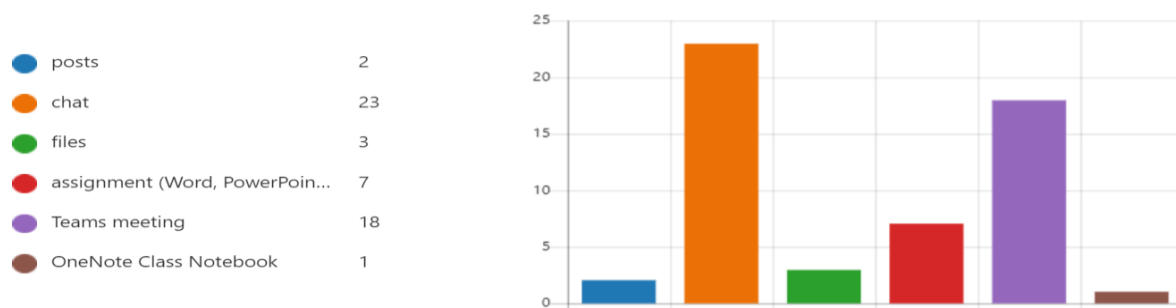


Figure 8: The MS Teams tools that make it easy for learners to interact with the teacher as they learn IsiZulu

Drawing from the data above, learners perceive the Chat tool (43%) and the Teams meeting platform (33%) as of more value in allowing them to interact and get feedback they need from the teacher to learn IsiZulu.

The Assignment tab (13%) allows learners to interact with the teacher as they ask for clarity and when the teacher gives feedback following the completion of an assessment. Although the Post (4%), Files (5%), and OneNote Class Notebook (2%) can be used by learners to reply or comment, the teacher mainly uses these tools to provide feedback.

The following graph provides data that is collected from **Question 5: Which of these tools in the Microsoft Teams make it easy for you to identify or see what is wrong or right in your answers in IsiZulu? – LO1-4**

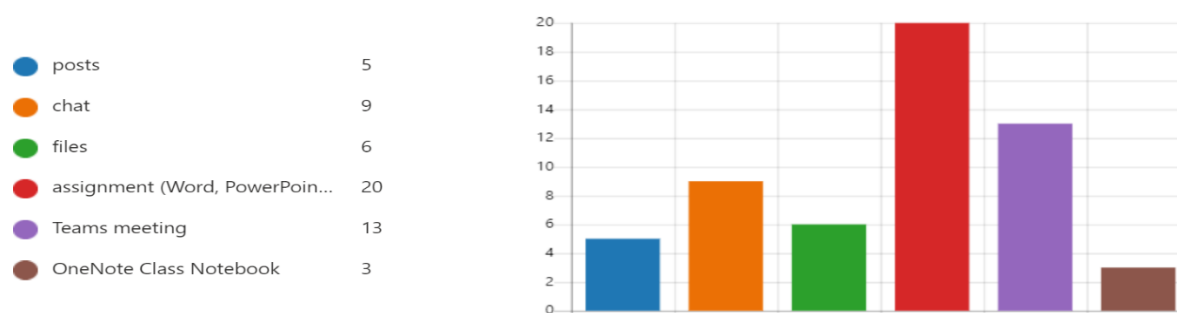


Figure 9: Tools in the MS Teams that make it easy for learners to identify or see what is wrong or right in their answers in IsiZulu

Drawing from the above most learners believe that the Assignment tab (36%) allows them to see what is wrong or right in their answers in Zulu from the teacher's feedback. This tool includes quizzes that give immediate feedback to individual learners. This tool is therefore valued for correcting learner misconceptions (Ndlovu, 2015).

Second in their perceptions is the Teams meeting (23%), and third, the Chat platform (16%) that allows them to see what is wrong or right. Drawing from the teacher's experience, he uses these tools to interact with learners as they reflect on work completed, to indicate where they need to improve, and to give them general feedback. Although the Files (11%), Posts (9%), and the OneNote Class Notebook (5%) tools are not popular for this question, they were used to embed and present the memorandum, demonstrations, or explanations to help revise or "amend the learner's misconceptions" (Ndlovu, 2015:100). Thus, feedback supports learning (Hyland & Hyland, 2006).

The following graph provides data from **Question 6: Which of these tools in Microsoft Teams make it easy for you to interact in the classroom using IsiZulu?**
- LO1-4

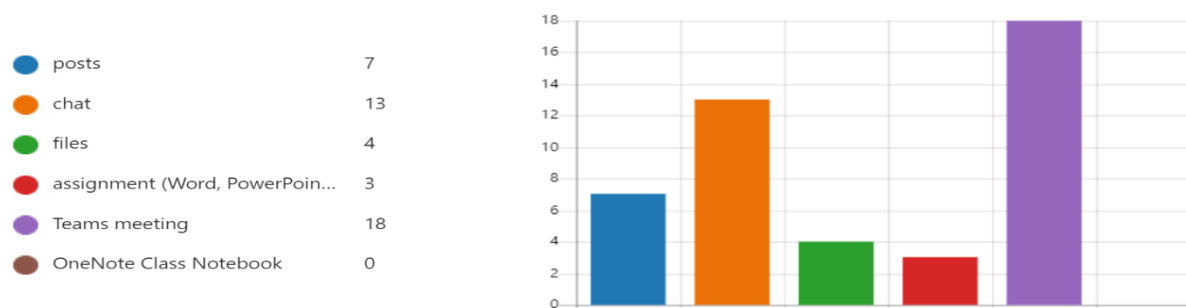


Figure 10: MS Teams tools that make it easy for learners to interact in the classroom using IsiZulu

The Teams meeting (40%) and the Chat platform (29%) allow interactions to take place during the learning process. It seems they prefer synchronous interaction on Teams through verbal and the Chat tool with written text. It is good to note that Teams platform affords learner communication in a second language whereas, in a face-to-face context, they would be shy to do so (Chuang, 2010 in Al-Nouh, 2015).

The Post section (15%) only allows the learner to reply using the target language, but the response may be delayed. This could be the reason why learners do not prefer Files (9%) and Assignments (7%) as they are only used for comments and replies to sections, that may be delayed and not useful in the instance of learning the language (Chin, 2017).

The interactive media form is valued for its immediacy proficiency (Laurillard, 2002 in Czerniewicz & Brown, 2005) in the event of learning the language as learners can receive feedback they need in the process of acquiring or developing language skills. It is for that reason that the Teams meeting, and the Chat platform are perceived as having affordances that help learners interact in the language and thus expose them to the language and its use in context.

c) Communicative

The Communicative media form allows learners to communicate with one another and with the teacher (Laurillard, 2002). The focus, therefore, is on how learners communicate in groups.

The following graph provides data from **Question 7: Which of these tools in Microsoft Teams do you use to communicate in your groups in IsiZulu? – LO1;3;4**

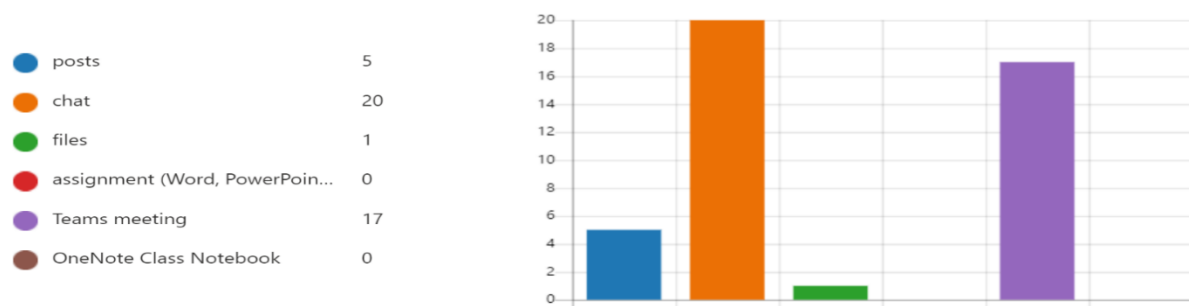


Figure 11: The tools in the MS Teams that learners use to communicate in groups in IsiZulu

Most learners prefer the Chat platform (47%) to communicate with one another and in groups. The Teams meeting platform (39%) also allows the class to interact in groups through this video conferencing tool as they participate in group tasks. The reason why learners prefer these tools could be the immediacy affordance that allows them to interact synchronously and improves their understanding and encourages interactions that expose learners to collaborative learning experiences that enrich their learning of the language. Some learners also included the Posts (12%) and Files (2%) that allow them to communicate in IsiZulu, but as indicated earlier, the properties in these platforms only allow for replies and comments.

The following graph provides data captured for the following question:

Question 8- Which of these tools in Microsoft Teams did you use to communicate with the class in IsiZulu? – LO 1-4

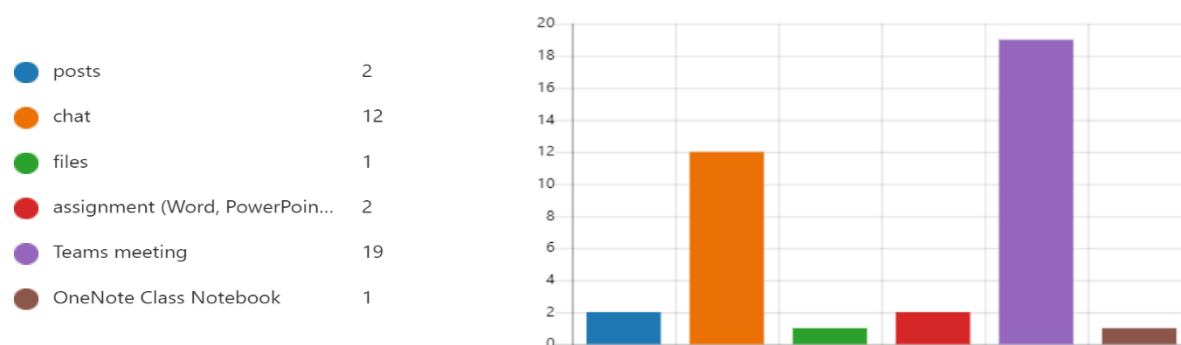


Figure 12: MS Teams tools that learners use to communicate with the class in IsiZulu

During the lesson, most of the learners communicated in IsiZulu through the Teams meeting (51%) and the Chat platform (32%). As this happens, learners clarify concepts or their way of communicating in the language is corrected (Martín-Monje et al., 2014). This synchronous preference could be reflecting the teacher's communicative approach that he uses to teach the language (Borg & Al-Busaidi, 2012 in Perveen, 2016). Learners used the target language, particularly, when the teacher facilitated the discussions as seen in Chuang's 2010 (in Al-Nouh, 2015) study. The Post (5%), Files (3%), Assignment (5%), and OneNote Class Notebook (3%) are not viewed by learners as significant during the class discussions.

The Teams meeting and the Chat platform are viewed by learners as having affordances that enable them to interact in the class and group discussions in IsiZulu. They are therefore able to collaborate as they figure out solutions to tasks and as they do, it is possible that they get to adapt their conceptions on the language conventions.

d) Adaptive

The Adaptive media form affords the presentation of instruction and materials that engage the learner with the task at hand and by so doing, it helps the learner to establish the required understanding of new concepts (Laurillard, 2002). It allows teachers to come up with strategies that can assist learners to 'master' the language, in the case of this study (Perveen, 2016).

The following graph provides the data captured on **Question 10: Which of these tools in Microsoft Teams helped you to practise speaking IsiZulu? - LO 1; LO 3; LO 4**

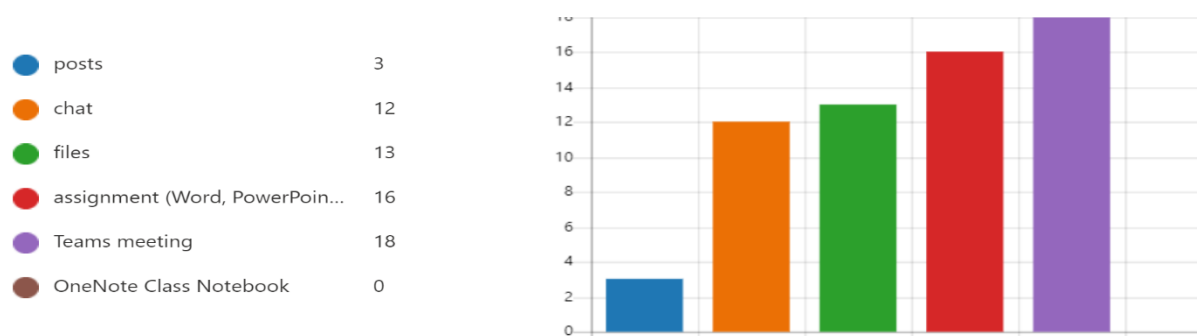


Figure 13: MS Teams tools that help learners to practise speaking IsiZulu

The data above indicate that most learners use the Teams meeting (29%), the Assignment tool (26%), the Files (21%), and the Chat platform (19%) to practise or engage with exercises that facilitate or develop their oral skills. For instance, the Teams meeting allows them to share their knowledge using the spoken target language. The File tab presents content to allow learner engagement with the audio-visual materials that seek to enhance their vocabulary, pronunciation, and fluency. The Assignment platform enables them to submit oral work in the form of audio or audio-visual files and enables them to engage with resources such as EdPuzzle which allows them to listen to audio-visual materials that seek to enhance their oral work. The Chat platform allows them to engage with their peers or with the teacher using the target language in written form.

All the above encourages learners to practise using the target language through their speaking and writing tasks. Engaging using the target language makes a significant

contribution to their development in the language and the acquisition of required language skills (Perveen, 2016).

The following graph provides the information on **Question 11: Which of these tools in Microsoft Teams helped you to understand and complete IsiZulu comprehension activities? - LO 1 - 4**

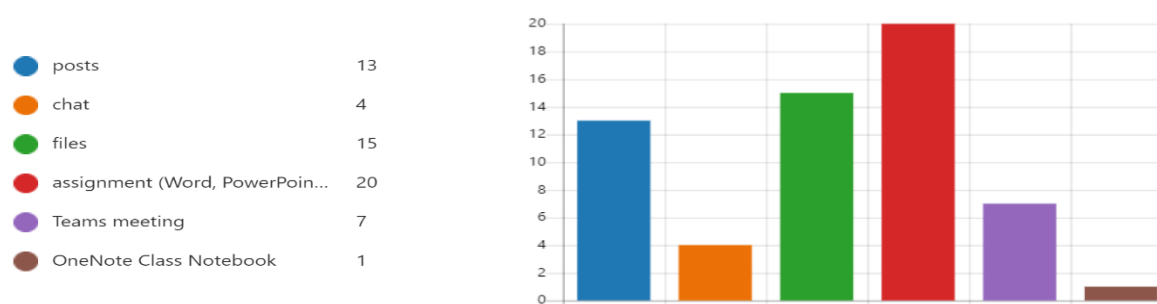


Figure 14: MS Teams tools that help learners to understand and complete IsiZulu comprehension activities

Most learners value the use of the Assignment (33%), Files (25%), Post tab (22%) for helping them understand and complete comprehension in IsiZulu. These three tools provide learners with deeper engagement with the language. In addition, they can demonstrate the extent to which they have grasped the language as they use the tools to share their productions or response to questions that assess their understanding of the language (Poston et al., in Rojabi, 2020).

Teams meeting platform (12%), the Chat platform (7%), and the OneNote Class Notebook (1%) are mostly used to support learning, where the teacher goes through the work (text or passage) with the learners in a face-to-face context and encourages them to assist in translating the text using the target language. Learners are also expected to practise things such as reading the text out aloud, engage with the questions, and ask for clarity where necessary. These practice moments are essential and determine learners' understanding and skill development (Andrade, 2000). As they practise, they adapt their understanding, and their proficiency is advanced. This is necessary in a FAL classroom where learners do not attempt comprehension passages in one take. They need to practise the above-mentioned strategies to

engage meaningfully with the task. Having to carry out comprehension activities in a face-to-face environment allows learners to articulate or utilize the content presented on the online platform. This is an example of blended learning.

The following graph provides information collected from **Question 12: Which of these tools in Microsoft Teams help you to understand and complete IsiZulu writing activities? – LO1; LO3; LO4**

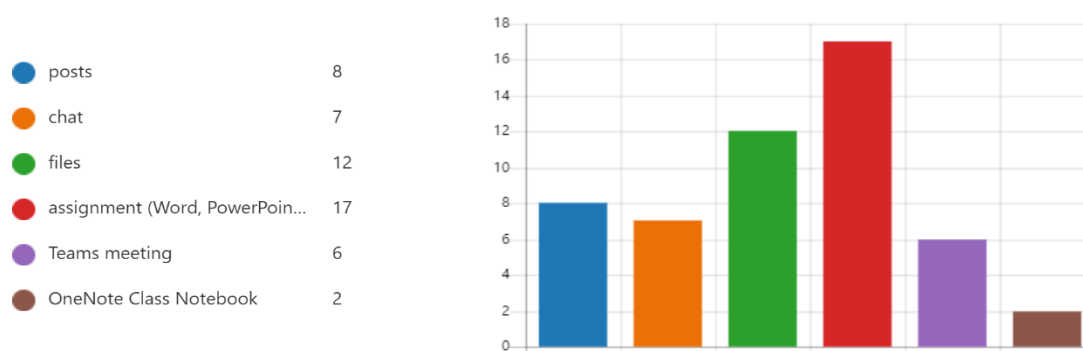


Figure 15: MS Teams tools that helped learners to understand and complete IsiZulu writing activities

The Assignment tab (33%) is perceived as contributing to learner understanding and completion of written tasks. This is where content is presented and instructions to create their writing activities is given and submitted.

The Files tab (23%) presents content that instructs them on how to create writing products (essays and the like); the Post (15%) provides guidelines and content that informs them about the writing process; the Chat (13%) and Meeting platforms (11%) allow the learners to interact, access, and comment on each other's work and interact with the teacher. A combination of these tools and processes creates a rich learning environment where learners are supported and exposed to the language through different modalities (Dorf, 2019 in Rojabi, 2020).

The following graph provides the information collected from **Question 13: Which of these tools in Microsoft Teams helped you to understand and complete IsiZulu grammar or language activities? – LO1; LO3; LO4**

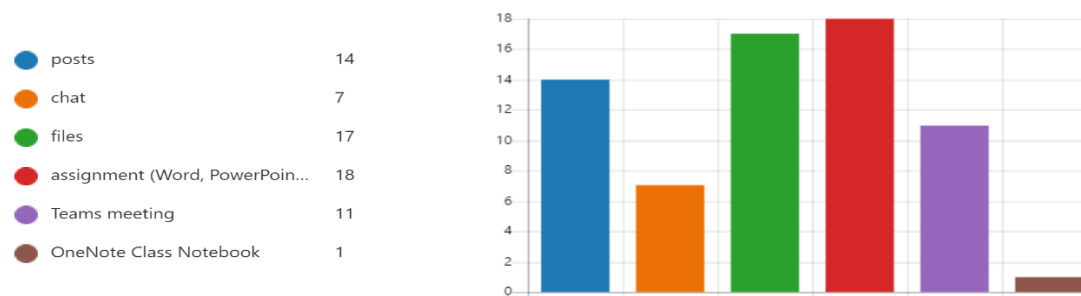


Figure 16: MS Teams tools that helped learners to understand and complete IsiZulu grammar or language activities

The data above demonstrate that learners prefer the Assignment (27%), Files (25%), Posts (21%), Teams meeting (16%), and the Chat platform (10%) and that these environments helped them understand and complete IsiZulu grammar or language activities. Under the Assignment tab, the learners engage with resources such as the MS Forms and Quizlet to practice grammar and language. The learners were also exposed to different links and worksheets embedded in the Files (under Class Materials) and the Posts platform which reinforced their understanding of grammar and language activities (Martin & Tapp, 2019).

This adaptive media form precedes the productive media form in the learning of IsiZulu as it provides learners with opportunities to practise writing accurately first before they present. At times learners went through practise phases (writing 1st and 2nd drafts) before the final draft.

e) Productive

The Productive media form helps learners articulate themselves (Laurillard, 2002) as they communicate and demonstrate their comprehension of the content and the skills they have acquired.

The following graph provides data in response to **Question 14: Which of these tools in the Microsoft Teams helped you to prepare for oral activities in IsiZulu? – LO1; LO3; LO4.**

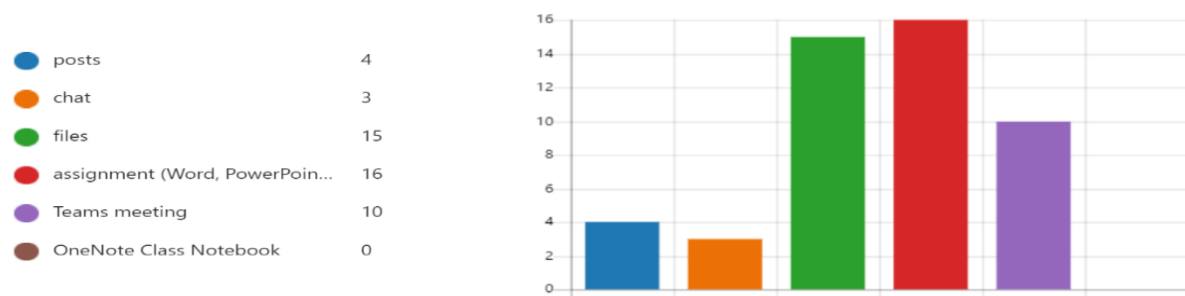


Figure 17: The MS Teams tools that helped learners to prepare for oral activities or presentations in IsiZulu

Most learners perceived the Assignment and Files as significant in preparing them for their oral activities. They could use the assignment features to submit videos they have created preparing and presenting an oral assessment. They could also present oral work through voice recordings and attach them to the MS Files platform. These tools were used mainly to submit what they had produced using different productive media like PowerPoint. Learners used the Teams meeting to practise their presentations or oral (speech) work and to discuss each other's work (Martin & Tapp, 2019). The Chat tool seems not to be linked with oral preparation and the reason could be that the class only used it for written interaction.

The response to this question may be located in the adaptive media form due to the practise element, but because it includes the creation of a video that may not be a once-off experience, the researcher has placed it here.

The following graph provides data from **Question 15: Which of these tools in Microsoft Teams helped you to prepare for reading in Zulu? – LO1 – 4.**

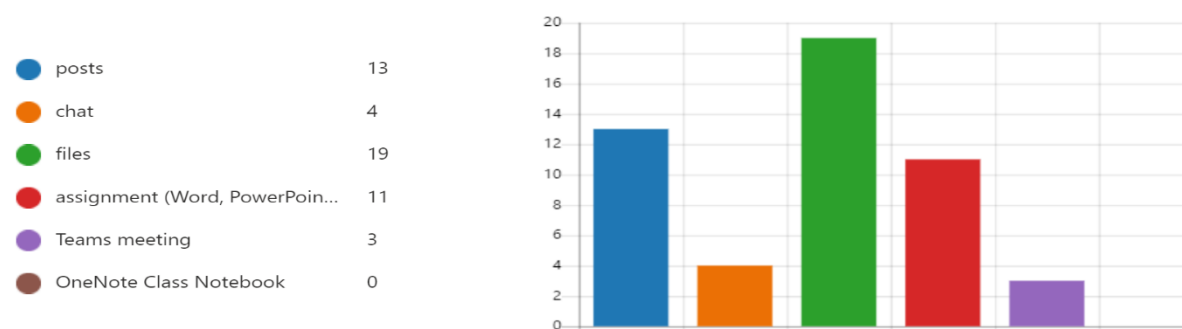


Figure 18: The MS Teams tools that help learners to prepare for reading IsiZulu

This question may be allocated under the narrative media form since learners engage with content and attend to the information as they are being read to (Laurillard in Czerniewicz & Brown, 2005). The activities here may be recordings of readings of short stories or passages that are prepared by the teacher. Learners, therefore, use the tools to attach their products (video of them reading out loud). During these activities, the Chat (8%) and the Teams Meeting tools (6%) are mostly used for interaction as learners make comments and ask (questions by typing) in preparation for reading.

The following graph provides data from **Question 16: Which of these tools in Microsoft Teams helped you to prepare for IsiZulu creative writing activities? – LO1; LO3; LO4**

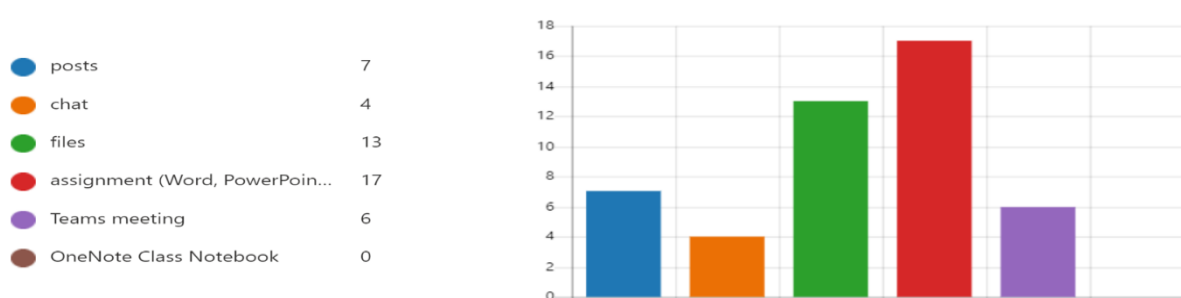


Figure 19: The MS Teams tools that helped learners to prepare for Zulu creative writing activities

These results indicate most of the learners preferred the Assignment portal (36%) for creative writing activities preparation. This platform allowed them to engage with the guidelines for creating Word documents or PowerPoint presentations. They also used resources that can be accessed from the tool to complete their written tasks. In addition, learners can attach their files under the Files tab (28%) and revisit or review their work since the platform has an AutoSave function. Learners write on the Post section (15%), and their posts determine how well they write.

Learners can post or share their written comments on the Chat platform (8%) using the chat function on the Teams meeting tool (13%) while the lesson is in progress. Their comments or written work serves as the building block of their written work. These processes, therefore, do not only allow the teacher to see the learner's written work but allow him to edit their work before the actual writing process. It allows the teacher to provide feedback on the strategies that the learners employ and execute in their writing pieces.

The productive media preferred by learners for developing their written and oral skills have affordances that do not only give them space to share their products but to prepare for the final product. The immediacy affordances from the interactive media are valued for orals and the adaptive media, for providing learners with practise opportunities before the final submission as they work from the productive media to articulate themselves.

In an effort to determine if Teams media was key in the learning of IsiZulu FAL, the following question was asked: **Question 9, Did the tools mentioned above assist you to understand or learn IsiZulu faster?**

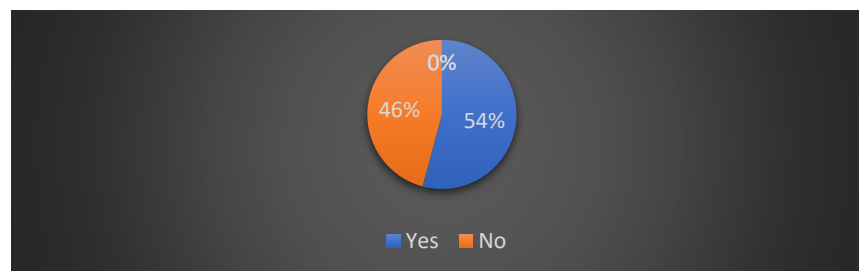


Figure 20: A pie chart that describes if the MS Teams tools allowed learners to understand or learn IsiZulu faster. LO1- 4

Thirteen learners who make 54% of the class said Yes, 'the tools in MS Teams assisted them to understand or learn IsiZulu faster' and only eleven learners (46%) said No. These results suggest that IsiZulu FAL teaching and learning should not only happen in Microsoft Teams but be integrated into face-to-face contexts. Learners benefit significantly if learning face-to-face is supplemented online (Al-Ani 2013; Hubackova & Semradova, 2016; Perveen, 2016) as is the case with this class.

4.2.2. SUMMARY OF FINDINGS

The findings indicate that most learners engage with tasks that seek to achieve the curriculum objective in the Assignment tool and they use the Chat and Meeting tool to communicate their ideas. Since this is the case, Question 4 had to be placed under the narrative media form and Question 6 under the communicative media form (**see Appendix 2**). Both these questions are shuffled to suit the justifications given.

The findings have made the teacher aware that in IsiZulu FAL, most activities happen in the communicative media form (**see Table 2**). The reason could be that IsiZulu relies on discussion and communication activities that foster understanding (Thorne, 2008 in Alshwiah, 2017) as they solicit support and guidance from the teacher and peers. Question 15, under the productive media form (**see Appendix 2**), has made the researcher aware that the media forms may overlap. A justification on why comprehensions are suitable for the adaptive media form is given through the content under Question 11 (**see pg. 49**).

Essentially, the instruction uses communication to inform learners about their misunderstanding (Laurillard's, 2002 in Czerniewicz & Brown 2005:5), thus Question 5 is moved to communicative (**see Appendix 2**). This is an important element of FAL practice and language development and skill acquisition.

The study reveals that multiple affordances can be found in a single media form used with some supporting or advancing the other. This will be discussed later in the sixth chapter. For instance, Chat, Post, and Assignment have affordances that give learners an opportunity to convey or share their thinking in written form (Martin & Tapp, 2019), and yet they can be used to prepare for the final product.

4.3. OBSERVATIONAL DATA

The following section presents data regarding the three lessons that helped with the collection of qualitative data. These lessons were observed and recorded. They followed a blended approach; the preferred strategy for language teaching using ICTs and are aimed to describe how the teacher (the researcher) under study uses MS Teams to promote the development of IsiZulu FAL skills. Laurillard's (2002) media forms were used to identify the affordances of MS Teams in this learning process by encouraging different learning experiences.

4.3.1. DATA COLLECTION – THE THREE LESSONS

Table 5 below presents the structure for the lesson that was deliberately aimed at making clear the media forms to be used in the development of the class's isiZulu FAL skills.

Table 5: The structure for lesson 1

<u>Lesson 1</u> GRADE: 7 Lesson TIME: 11:00am – 12:00am		
THEME: <i>AMALUNGA WOMNDENI</i> (MEMBERS OF THE FAMILY)	MEDIA FORMS: Narrative, Interactive, Communicative.	TOOLS: Post and Chat
RESOURCES AND INSTRUCTIONS: <i>Lalela i-Audio File: <u>Umnndeni wami</u> (LO1;3;4) = Audio /Listen to the Audio file: My family</i> <i>BukelaiVidiyo: Amalunga womndeni (LO1;3;4) = Video/ Watch the video: Members of the family</i>		

Post – LOs 1 and 3

Prior to the face-to-face lesson, information was posted on the Post channel on Microsoft Teams before the lesson (**see Image 1**). The Post channel allowed the teacher to *share* the curriculum content with the learners in a way that is easily accessible to learners and that accommodates different approaches to learning (Pretorius, 2018 in Martin & Tapp, 2019) as indicated in the image below.

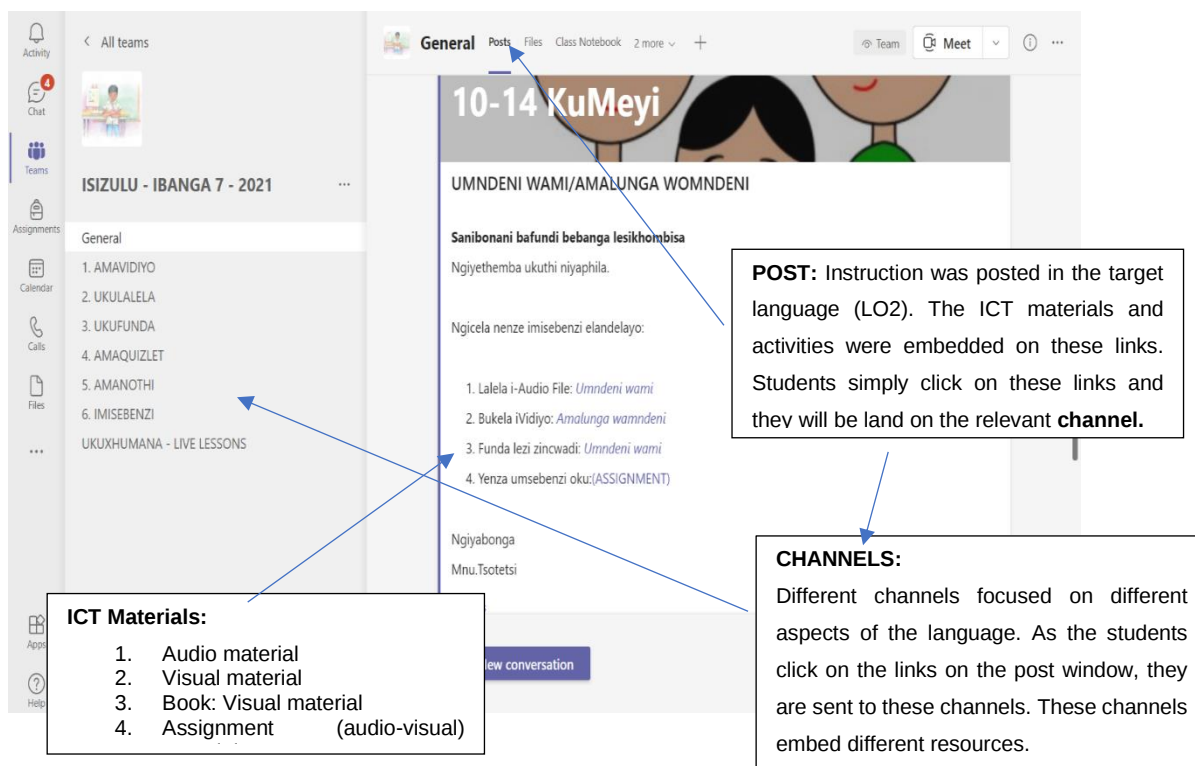
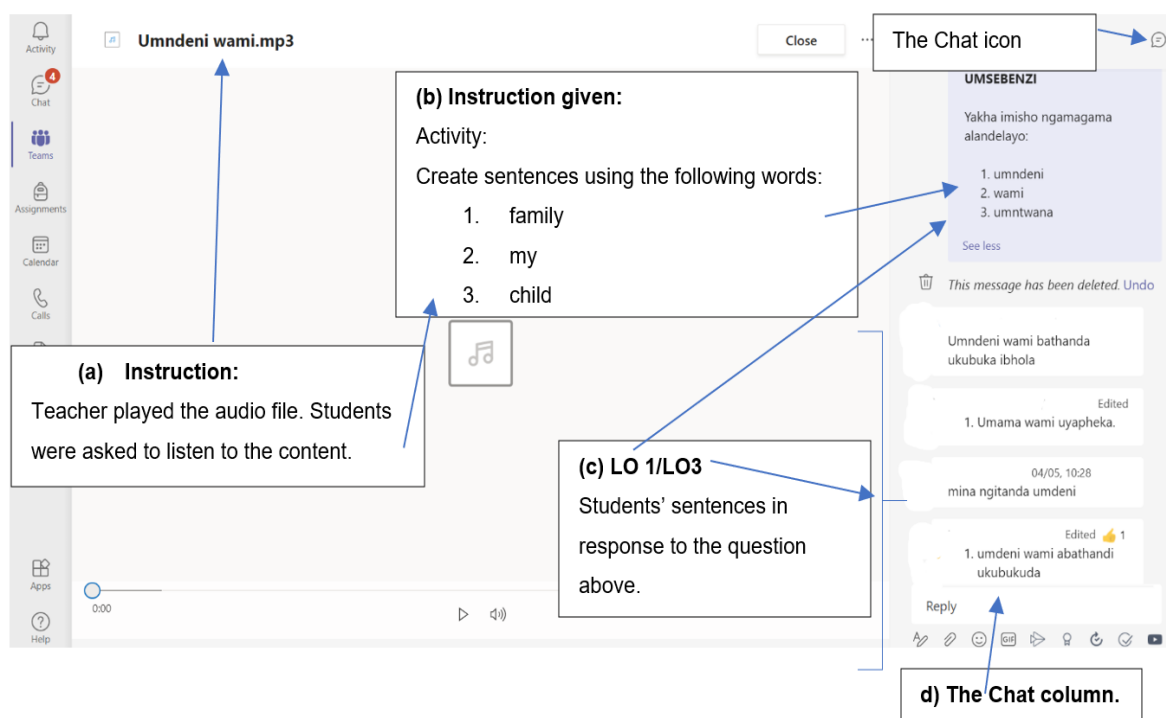


Image 2: The Microsoft Teams Post section.

Blended learning

In class (face-to-face), learners were asked to demonstrate their understanding of the audio-visual material about family (LO1; LO4) by creating their own sentences (LO3) in the Chat tab (online). Instruction was given in the target language and a discussion on any misunderstanding was encouraged.

Image 2: The Microsoft Teams Post section



Chat and Post – LO 1-4

In line with data from the questionnaire, **Figures 11 and 12**, indicate that the Chat and the Teams Meeting (as a communicative media form) allowed learners to *discuss* using the target language as they engaged with the content. **Image 2** illustrates this in the presentation of the content (LO1) through in the Post tool (as a narrative media) using the target language (Zhao, 2003) to expose them to the language conventions and thus, prepare them for creative writing (LO3,4). They wrote sentences according to the instruction on *UMSEBENZI* (Task) and the sentences were displayed in the Chat. As they used the words provided, the teacher established whether learners could apply their writing skills using new vocabulary (Maphumulo, 2012; White & Caminero, 1995).

The teacher interacted with the learners in the process and encouraged them to go through each other's work to allow collaborative work and peer assessment (Laurillard, 2002). The teacher used the Chat tool (as a communicative and Interactive media form) to initiate discussions that were conducted in the target languages as the learners worked on the given task (Chandra & Cassandra, 2018). The immediacy affordance of this tool allowed the teacher to edit posts and comment on learners' work

(Laurillard, 2002), in class, whilst using the target language. The Chat platform also allowed the learners to access one another's methodologies and review one another's work (Eriksson, 2020). This determined if learners applied the correct methodology according to the requirements of the task. However, the Chat platform does not allow for offline engagements and edits (Eriksson, 2020), participants need active internet access or data if they wish to engage in the learning process.

Conclusion

While the Post tool's affordances provided access to content using different texts in a non-linear way, the availability of the language spoken in an audio recording afforded them opportunities to immerse themselves in the language for as long as they wanted to. In addition, they could practice listening with understanding and to pronounce IsiZulu words. The Chat platform allowed for articulation, collaboration, and instant feedback from the class. The table below summarises the gains from the Teams in this lesson.

Table 6: A summary of the MS tools, affordances, and the approach for lesson 1

MS Tools	Media Form	Affordances	Development of FAL Skills	Approaches
Post	Narrative Adaptive	Non-linear – audio-visual/ text Diversity – access to the language	Listening and speaking-LO1 Writing and Presenting- LO3 Language Structures and Conventions - LO4	Blended Learning Communicative approach
Chat	Productive Communicative Interactive	Articulation – sentence creation Collaboration– discussion Immediacy– feedback from peers and teacher		

Table 7: The structure for lesson 2

<u>Lesson 2</u> GRADE: 7 Lesson TIME: 10:00am – 11:00am		
THEME: AMALUNGA WOMNDENI	MEDIA FORMS: Narrative, Interactive, Communicative	TOOLS: Post/Workbook
Resources and Instruction: <i>Funda le ncwadi: Mina nomndeni wami</i> - (LO1; 2; 4)/ Read this book: Me and My family		

Image 3: An image of a book that was presented



Source: <https://www.africanstorybook.org/>

Blended learning

The second lesson took place in class; in a face-to-face context but reference was made to the content online that the learners had access to. The teacher could use the target language to guide the learners in the classroom, through the task that was posted on MS Teams.

Post – LO1 and LO2; LO4

The book (that was in a PDF format) was posted before the lesson and was projected through the television in class to reinforce learners' listening and speaking (LO 1) and reading and viewing skills (LO 2). Learners could read on their own before the whole-class engagement, however, might have read without understanding as they lack

vocabulary skill. It is thus helpful to do so collectively, during the lesson (Huneidi & Schreurs, 2011).

Christ and Wang (2012) suggest that vocabulary development is informed by the learners' reading experiences. Although reading in the target language can inform essential language skills that contribute to understanding (Snow, 2002), understanding a body of words used in a particular context does not guarantee comprehension (Snow, 2002). It is, therefore, crucial to implement the communicative approach and combine reading with instruction. While reading aloud, the teacher can assess understanding by asking learners to translate certain words, phrases, or paragraphs (Snow, 2002). This process encourages teacher and learner interaction, meaningful reading experiences, and enhanced understanding.

I chose the book *Mina nomndeni wami* (Me and my family) for this lesson since the learners were now familiar with the vocabulary used in the book. This vocabulary was presented in the previous lesson, through the audio-visual materials that were attached to the MS Team Post platform. Christ and Wang (2012:282) assert that learners learn words that they hear “multiple times” and use them meaningfully in their learning experiences. Repeating words through text allows learners to “internalize sounds” and enables them to recall the words in future reading events (Christ & Wang, 2012:282; Snow, 2002; Gibson, 2008).

The book is authored in the target language and is about a young boy who had family members who happen to be animals. This book facilitated the learner's prior knowledge as it drew from previous themes (family members and animals) and encouraged learners to recall vocabulary to apply it to the current learning situation (Christ & Wang, 2012). Drawing from the learners' prior knowledge through posing questions allows the teacher “to scaffold learning and allows learners to make connections to construct meaning” (Flint, 2010 in Christ & Wang, 2012).

Learners were asked to observe the cover page of the book, and the teacher posed the question, “What do you see.” This instruction was given in IsiZulu – “*Ubonani?*” Learners were expected to look at the cover page and describe what they saw using the target language. The cover page illustrated the main character (the boy) and his family members (the animals). The learners responded accordingly. This is where the

teacher got a sense of the learners' current understanding, vocabulary, and use of language in visual literacy contexts.

As the book progresses, the boy familiarizes the reader with his family members using IsiZulu terms to describe the actual animals, *uMnumzane Fudu* which is directly translated as Mr. Tortoise. Learners posed language-related questions such as: What is the difference between *inkawu* (monkey) and *imfene* (baboon)? Learners engaged and responded to the questions. The teacher facilitated interactions and corrected misunderstandings. Interaction through the classroom conversation engaged the immediacy affordance that enhanced learner understanding as the book progressed (Hyland & Hyland, 2006). Equally important, learners also learnt from each other's experiences. This learning process verified that ICTs can encourage diversity (Conole & Dyke, 2005) as learners contributed based on their understanding of the book as a collective. After the teacher finished reading the whole book, individual learners were encouraged to read sections of the book aloud for the class and each learner's reading ability was assessed using a rubric. After all the learners read, the lesson ended.

Conclusion

Drawing from the learner's prior knowledge using images, including reading with instruction, allows discussions and learners to use the target language to respond to instructions advanced vocabulary. In this lesson, a Microsoft Teams tool (Post) was combined with instruction to encourage learner engagement. This process facilitated learners' oral or speaking proficiency (LO1) and reading and viewing skills (LO2) and the learner's vocabulary (LO4). **Table 8** summarises the benefits of the Teams tool that in this case were integrated with the classroom conversations.

Table 8: A summary of the MS tools, affordances, and the approach for lesson 2

MS Tools	Media Forms	Affordances	Development of FAL Skills	Approaches
Post	Narrative	Linear > non-linear as a book -written and the picture was combined with instruction	Listening and Speaking - LO1	Blended learning Communicative
	Adaptive	Diversity – the picture enabled diverse interpretations as speaking was practiced	Reading and Viewing - LO2	
	Communicative	Collaboration – meaning-making accomplished as a class.	Writing and Presenting – LO3 Language Structures and Conversions - LO4	

Table 9: The structure for lesson 3

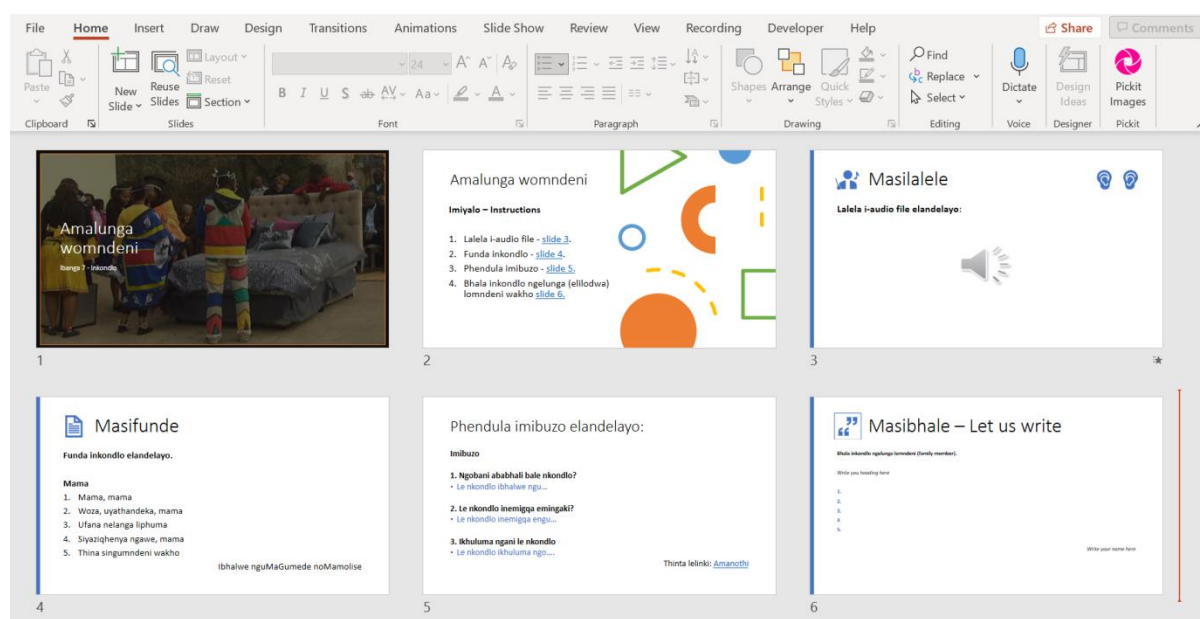
<u>Lesson 3</u>		
GRADE: 7 Lesson		
TIME: 11:00am – 12:00am		
THEME: AMALUNGA WOMNDENI	MEDIA FORMS: Narrative, Interactive, Communicative	TOOLS: Post/Microsoft Teams meeting/ Assignment tab
Resources and Instruction: Yenza umsebenzi oku:(ASSIGNMENT – PowerPoint presentation)/Complete the activity on the (ASSIGNMENT TAB) (LO 1-4)		

MS Meeting – LO1 - 4

The MS Team Meeting was scheduled under the General channel, and the meeting began after all those who opted to use devices logged in or signed in their MS Teams accounts/profiles while some observed my online presentation on the projector/television, in class. Online participants were encouraged to use the ‘raise hand tool’ and those who were in classroom were allowed to ask directly if they had questions. The reason behind having learners engage online and others in the classroom was owing to Covid regulations which allowed half the class to attend, and the rest could participate online.

A PowerPoint presentation titled *Amalunga womndeni wami* (My family members) was used to narrate curriculum content. This PowerPoint presentation was attached to the Post section and Class Materials folder accessible through the General tab. The target language was used to present the content.

Image 4: An image of the PowerPoint presentation that was used in Lesson 3



The PowerPoint presentation contains six slides (see Image 4). The slides were divided in the following manner:

Table 10: A summary of the content embedded in each slide.

Slide	1	2	3	4	5	6
Content	Introduction with the term <i>Amalunga womndeni</i> and an image (LO 1, 2).	Instructions regarding “learning paths” (LO1,2,4) (De Smet, et al., 2016:28).	An audio clip (LO 1, 4),	A written poem (LO 1, 2, 4),	A comprehension activity (that was going to be completed in class), (LO 2, 3, 4)	a slide reserved for the writing task (LO 3, 4).

De Smet et al. (2016:28) assert that organizing activities systematically (or through slides) allows learners to go through objects or resources that aim to “enhance, amplify, and/or guiding the cognitive processing of the learners”. Sequencing activities structurally invites different skills, improves the learners’ learning experience or understanding, and reinforces the attainment of the learning outcomes (De Smet et al., 2016). Learners were asked to participate during the presentation as their collective contributions would inform their writing activity (in slide six). They were also required to write two drafts which they received feedback on in the classroom before submitting their final drafts for assessment online (via the MS Teams Assignment tab). While the aim was to improve their oral skills (LO1) since the tools facilitate this skill

through its immediacy affordance, the writing process allows learners to convey their ideas through text (LO2-4) (White & Caminero, 1995) written in the target language.

Oral work

Learners in this class prefer to apply their oral skills in the classroom context compared to the web-based platform. This is in contrast with Chuang in (Al-Nouh, 2015) who indicated that even when learners are allowed to prepare (in advance) for their oral work, they are not confident to articulate themselves in front of their classmates. This class's experience demonstrates that anxiety decreases when given an opportunity to plan their oral work where they receive consistent and instant feedback in the process (Laurillard, 2002) as the communicative approach is applied. Immediacy offered by MS Teams' features are therefore essential (Chandra & Cassandra, 2018) in FAL teaching and learning environments.

In this third lesson, the web-based learning experience was extended to the classroom and by then, learners were comfortable articulating themselves in the target language. FAL core skills should be distributed or spread out through different learning environments/learning objects or paths (Thibaut et al., 2015). There are therefore benefits in this type of blended learning.

Written work

Learners were required to write a poem in IsiZulu on their family member as per the instruction on the image below. They wrote their drafts using the guidelines on the Post section and the content on the PowerPoint presentation. These were marked and feedback was given on Assignment. An Assignment under the Post - ISIZULU – IBANGA 7- 2021> General tab with the title, *Inkondlo* (poem/poetry) was created by the teacher. **Image 5** describes the instructions given for this task.

Image 5: The Assignment tab

The screenshot shows the Microsoft Teams interface for a class named 'ISIZULU - IBANGA 7 - 2021'. The 'Assignments' tab is selected, showing an assignment titled 'Inkondlo' due on 24 May 2021 at 23:59. The assignment is worth 10 points. The instructions are in Zulu, asking students to write a poem. A list of activities is provided: 1. Write a poem about one of your family members. 2. Write your poem on the PowerPoint presentation that follows (attached). 3. Use Ms. Gumede and Ms. Mamulise's poem as an example. The assignment is assigned to 'Ngijabonga Mmu.Tsotetsi'. There are three annotations: 1. 'The Rubric: This was used to guide the writing process by making explicit what needs to be included in the poem and which structure it should follow.' pointing to the 'Reference materials' section. 2. 'Instructions were written in the target language (LO2): Good day students Please complete the following activities: 1. Write a poem about one of your family members. 2. Write your poem on the PowerPoint presentation that follows (attached) 3. Use Ms. Gumede and Ms. Mamulise's poem as an example Thank you so much Mr. Tsotetsi' pointing to the instructions. 3. 'PowerPoint presentation: Students can manipulate this document to create their poems.' pointing to the 'Student work' section.

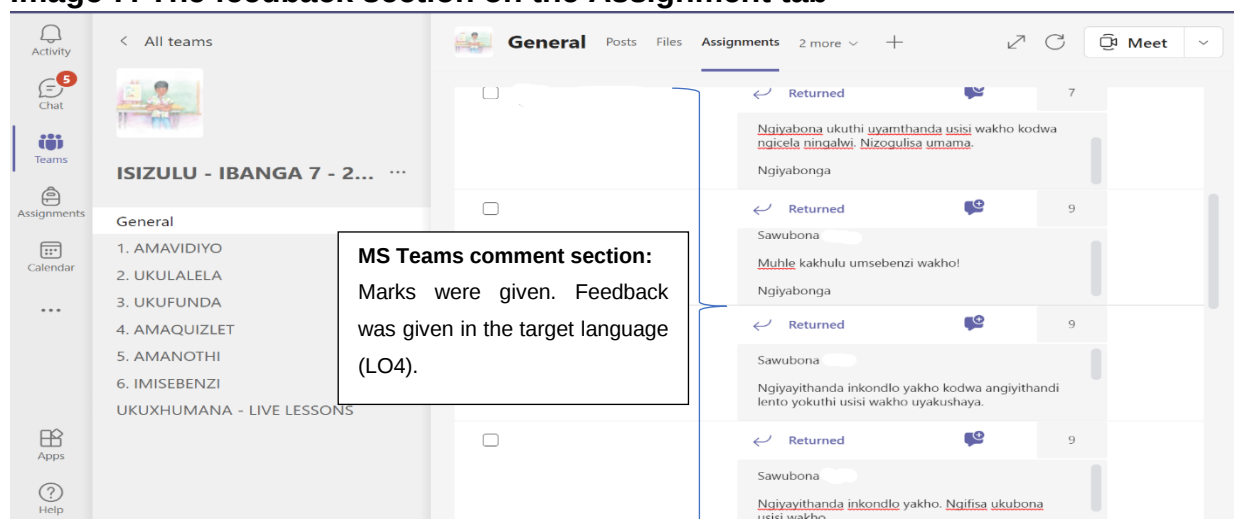
An editable PowerPoint presentation was attached for the learners to complete the task and a rubric was attached as Reference material; to guide learners on how their poems will be assessed. **Image 6** illustrates the poem that was written by the learners on the slide presentation provided.

Image 6: An example of a product (poem) created by a grade 7 learner

The screenshot shows a PowerPoint presentation titled 'Masibhale' (Let us write) by 'Amalunga womndeni.pptx'. The presentation is open in Microsoft Teams. The slide content is in Zulu and lists seven activities for writing a poem. There are three annotations: 1. 'The product (poem).' pointing to the title 'Masibhale'. 2. 'An icon indicating that two members (the teacher and the student) are working on the same document.' pointing to the 'Masibhale' icon. 3. 'Personalized feedback given to the student.' pointing to the 'Feedback' section on the right. The feedback text is: 'Ngijayithanda inkondlo yakho kodwa angiyithandi lento yokuthi usisi wakho uyakushaya. Ngijabonga ngokungitshela ukuthi nidlala kanjalo. Ngijaxolisa.' The presentation is on Slide 4 of 4.

Learners appear to appreciate feedback regarding their advancement through the Microsoft Teams, thus the final draft was completed in the MS Teams Assignment tab. In **Image 7**, the teacher gave the learners individual feedback regarding the poems they submitted on the Assignment tab. The assignment tab provided access to individual feedback.

Image 7: The feedback section on the Assignment tab



Conclusion

The focus of this lesson was to engage learners in activities that would lead them to applying language skills orally and in written text. The narrative, immediacy and access affordances enabled consistent reach of learners to instruction, content, and feedback they needed to prepare for the product which was the learning outcome. The following table describes the components that makeup lesson 3.

Table 11: A summary of the MS tools, affordances, and the approach for lesson 3

MS Tools	Media Forms	Affordances	Development of FAL Skills	Approaches
MS Teams Meeting	- Narrative - Interactive - Communicative	- Narrating content Access - Immediacy - feedback - Redescription of language structure	- Listening and Speaking - LO1 - Reading and Viewing - LO2 - Language Structures and Conversions - LO4	Blended learning Communicative Approach
Assignment tab	- Adaptive - Productive	- Diversity – practice through drafts - Knowledge construction		

The access affordance has been added to this table because it is operationalized in the narrative form that Ndlovu (2015) does not acknowledge in her tool and yet it is seen to play a significant role where learners are engaging with content online. One could also argue that the access affordance is operationalized in the other media forms as learners participate with each other through the content that is shared or made accessible to them.

4.3.2. CONCLUSION

This section presents the data captured from the questionnaire and highlighted the Microsoft tools that learners considered of value in developing specific language skills in Microsoft Teams. It also presented lessons by the teacher that elaborate on the benefits of Teams affordances in a blended learning environment. The two data sets disclose the teaching and learning benefits from using Teams that are discussed in the next chapter.

CHAPTER 5

5. DISCUSSION

5.1. INTRODUCTION

In this chapter the analytical tool (Ndlovu, 2015) is closely used to help understand how MS Teams affordances enhance FAL skills acquisition while utilizing the communicative approach and blended learning environment.

5.1.1. DISCUSSION OF THE FINDINGS

Although the learners find it difficult to use the target language in their speech, the data demonstrates that learners benefitted from both the face-to-face and online (Teams) learning environments. The following subsection focuses on the narrative form. It uses findings from both data sets to illustrate how Teams affordances promote the development of the IsiZulu FAL skills or enhance learning.

a) Narrative

The study demonstrated that all the Teams tools used in this subject can be used as narrative media depending on what the intentions of using them are. The summary of the learner responses to the questionnaire confirms this view.

The lesson observations demonstrated that, see **Figure 21**: Posts (19%), Files (20%), Assignment (20%), and the OneNote Class Notebook (10%) were preferred for activities as illustrated in figure 21 below. The activities relate to registering content, while the Chat platform and Teams are useful for instant feedback.

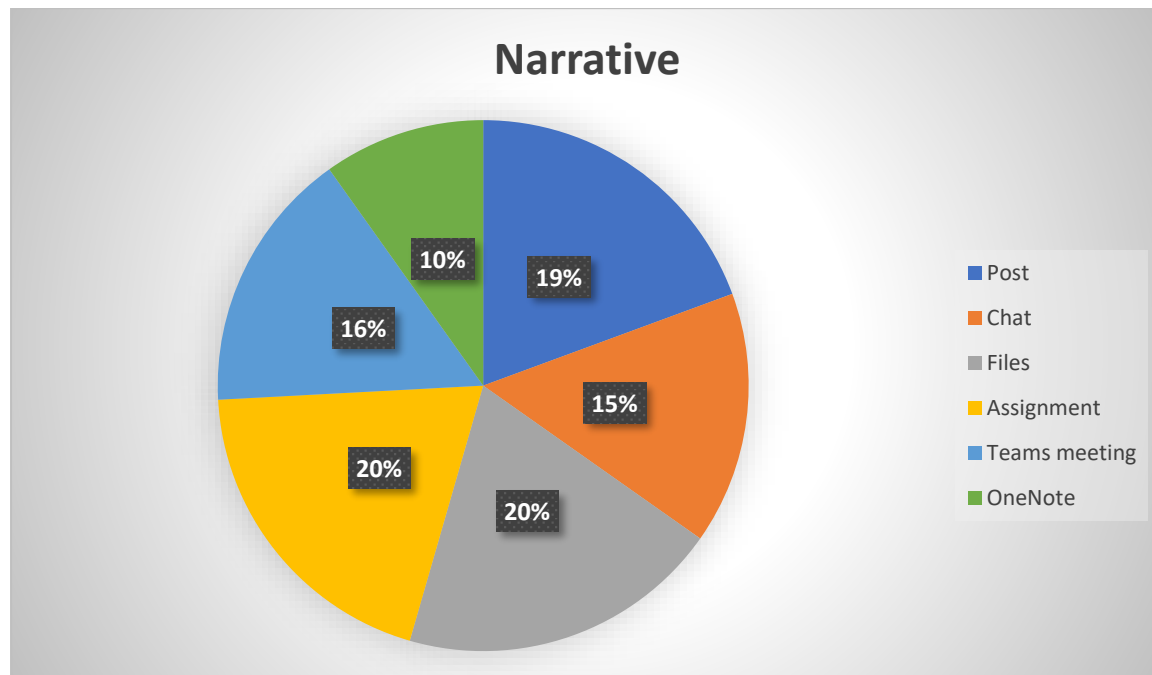


Figure 21: The overall summary of the tools that encourage the narrative media form

Lesson 3, **pg. 63** demonstrates why the Assignment tool is preferred by learners for this media form as it affords non-linearity where multimedia can be used to present content in different text forms. The Assignment tab is known for embedding tools that allow learners to engage with instruction and allow the teacher to present content that develops new knowledge (Krašna & Pesek, 2020). The tool affords the presentation of content in a structured way, and this enables learner engagement with content and the assessment of understanding (Ngoc & Phung, 2021:109). On the other hand, the Files and Posts tools provide access to publishing narrated and attachments of content that help with understanding and giving information on the completion of activities (Krašna & Pesek, 2020).

The Teams meeting (16%) and the Chat platform (15%) more or less have the same score. Generally, learners use these platforms for communication purposes, where they collaborate with other learners and establish their understanding of the content presented. Ngoc and Phung's (2021) study found that the Chat platform allowed learners to share their understanding of the content before the completion of the activity. The Chat tool in lesson 1 (**as seen in Image 2, pg. 58**) and the MS Teams meeting in lesson 3 (**pg. 63**) were used to allow the learner to work collaboratively or exchange knowledge in real-time. These learning processes are better placed under the communicative media and the adaptive media form as collaborative and diversity is encouraged (Laurillard, 2002 in Czerniewicz & Brown 2005) as they practise speaking and writing in the target language.

Both data sets indicate minimum use of OneNote Class Notebook (10%). This is a multimedia web-based learning platform as a note-taking tool (Alabay, 2018) or for information storage. This function is not frequently used in this class and this could be due to its affordance that does not promote interaction that is necessary in the communicative approach adopted by the teacher.

There is evidence that MS Teams tools that may be considered as narrative media forms have affordances from other media forms. The teaching approach (communicative approach) could be contributing to this flexibility in the use of the tools due to its demand for interaction in the learning process.

b) Communicative

MS Teams tools that are recognized by learners as useful technology for communication are the Chat and Teams Meeting as shown in **Figure 22**.

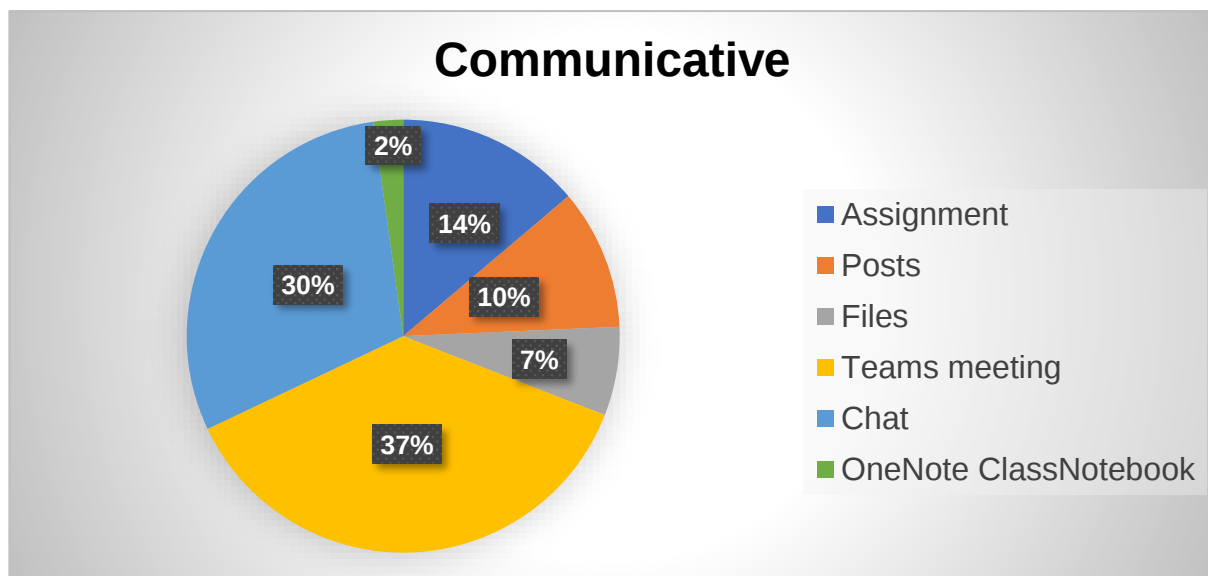


Figure 22: The overall summary of the tools that encourage the communicative media form

Learner responses to the questionnaire confirm the earlier observation in this chapter that the use of media forms and their affordances depend on the intentions of the instruction.

The lesson observation demonstrated that a lot of interaction as communication happens in these tools. It is through these tools that learners engage and instruction and multimedia in face-to-face and online initiate and facilitates these engagements (Neo et al., 2013). Previous studies indicated that these tools maintain the relationship between instruction and learning, where the teacher supports learning by providing feedback to support learner's cooperation and discussions (Neo et al., 2013).

As expected, the Assignment tool (14%) and the rest scored low for communication. The Post (10%), Files (7%), and OneNote ClassNote (2%) are used to present content that informs collaboration as indicated in the previous paragraph. Be that as it may, it is important to note that communication may also occur through team "Posts for group communication as primary communication channel" (Krašna & Pesek, 2020:699). However, in this class lesson observation, the tool together with the other two tools was mostly used by the teacher to provide access to content.

In conclusion, the Teams meeting (37%), and the Chat platform (30%) affords learners opportunities to collaborate as they communicate their ideas using the target language (Neo et al., 2013). While these tools are used as communicative media forms, the significance of the role played by the rest of the tools cannot be ignored as they operate as an ensemble (Dron, 2012).

c) *Adaptive*

This media form allows the presentation of materials that engage the learner with the task at hand (Laurillard, 2002). More importantly, it enables the teacher to give feedback that will encourage the learners to improve or apply the correct strategies when engaging with the task (Laurillard, 2002). The following graph indicates the overall findings regarding the learners' experience with the adaptive media forms.

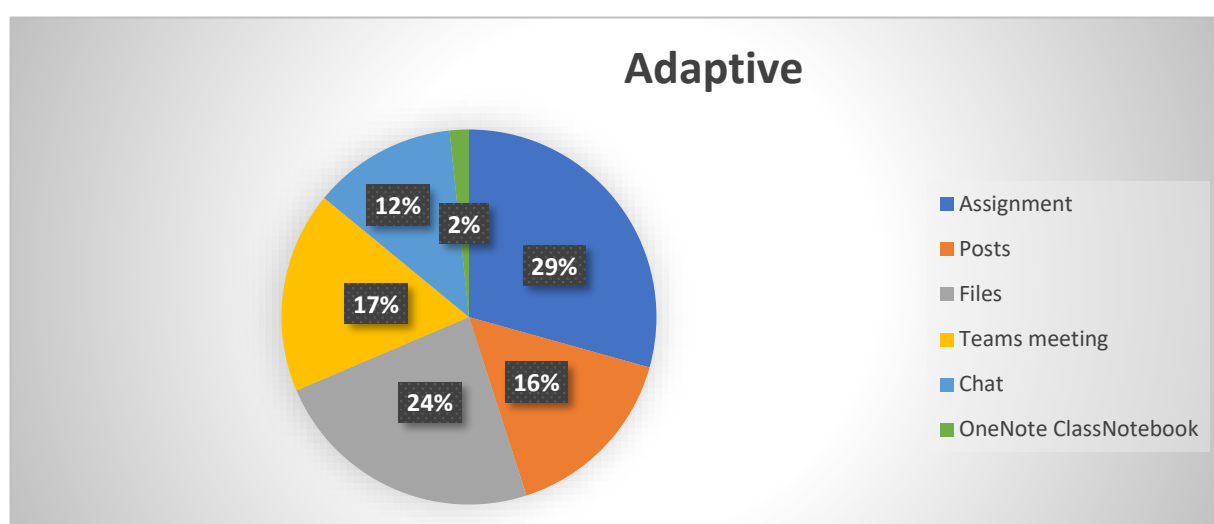


Figure 23: The overall summary of the tools that encourage the adaptive media form

The Assignment (29%) and the Files tab (24%) were scored more as adaptive media forms. These tools embed multimedia that encourages learners to engage with the task and employ the correct strategies to complete the task.

In the lesson observations, worksheets, and other resources (Word, PPT, pdf, and videos) that focus on developing language skills like listening and Speaking (LO1), Reading and Viewing (LO2) Writing and Presenting (LO3), and Language Structures

and Conventions (LO4) were accessed through these two tools. The Assignment tab allows the teacher to prepare assignments or activities and set the due dates to ensure that the learners stay on the task, it also supports teacher immediacy (Krašna & Pesek, 2020; Laurillard, 2002). In this regard, the Assignment tool allows; (1) the publishing or assigning of the tasks that encourage the learner to apply their knowledge; (2) feedback will assist learners to apply the correct strategies to improve their work (Krašna & Pesek, 2020). This does not only allow learners to learn new knowledge but enables them to acquire language conventions as they engage with the feedback (Ndlovu, 2015:100).

The findings also indicate that the learners engaged with the task through the Teams meeting (17%) and the Chat platform (12%). These tools are also essential because firstly, they enabled the learner to share their knowledge regarding the accessed content individually and collaboratively via Team's Meeting. This is where the teacher shared the guidelines or instruction assisted learners to engage with the task given. General feedback may be given through MS Teams meeting or directly to the individual through the chat platform. In this sense, it is evident that these tools encourage the adaptive media form.

In summary, the Assignment and Files tools and their affordances help learners access and engage with the task and get feedback from the teacher and this strengthens the development and acquisition of all the core FAL skills as they are able to adapt to the correct target language structure. The communication media forms become platforms where preparation for the tasks to be submitted is done by learners as they interact with each other and the teacher.

d) Productive

The following tools were preferred by learners as indicated in **Figure 24**: Files, Assignment, Posts, and Teams meeting, for presenting IsiZulu content that help learners to prepare for oral, reading, and writing activities.

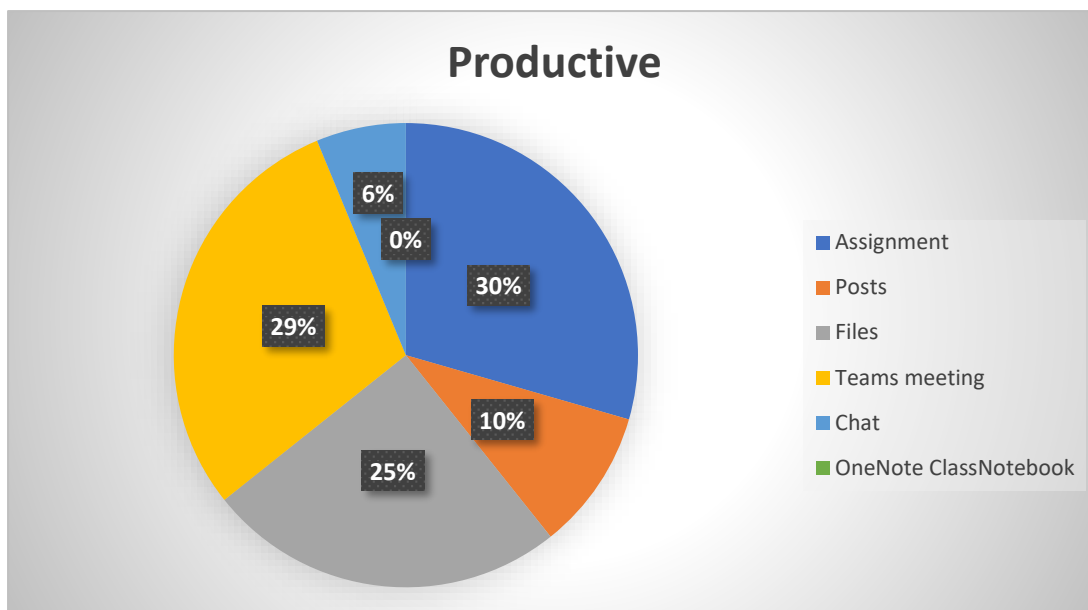


Figure 24: The overall summary of the tools that encourage the productive media form

In the lesson observation, the Assignment (30%) and Files (25%) tools were used to attach and access downloadable multimedia that present or communicate content that assists learners to prepare for oral, reading, and writing activities. The File tool helps “publish files to a common space that may be organized in folders” (Krašna & Pesek, 2020: 699), making it easy to structure topics and activities on Teams. The teacher presented the lessons in the Teams meeting tool and shared the screen to present multimedia resources (including the content embedded in the File tool). This process encourages learners to engage in conversation with each other and with the teacher.

Teams can now integrate “MS Forms that enable teachers to prepare quizzes, questions that may be published through different files” (Krašna & Pesek, 2020: 700) and tools like Quizlet, Wakelet, or FlipGrid that enable learners to engage with or prepare content that they can present and submit on Assignments.

Although MS Teams tools can support communication and collaboration, these processes do not occur automatically. Guidance from the teacher is important as he integrates the tools with their affordances into the learning process. The tools are used to provide learners with feedback that helps concretize their understanding of the language so that they can apply it (Lenhart et al., 2007, 2010 in Thibaut et al., 2015)

when they produce or present content in IsiZulu. In the lesson observed, the instruction on the web-based learning platform was complemented with the classroom learning experience. This demonstrated that for blended learning to be properly implemented, the FAL core skills should be distributed or spread out through different learning environments/learning objects or paths (Thibaut et al., 2015) as all LOs were developed. This is to be expected when the communicative approach is used.

In conclusion, while the productive media is designed to articulate new knowledge created by learners, this does not happen to the exclusion of the other affordances that provide access to the content; immediacy as learners interact; collaboration as learners communicate with each other and the teacher; diversity as opportunities for practice are created in these tools.

5.1.2. CONCLUSION

The analytical tool (Ndlovu, 2015) has been used to make explicit Microsoft affordances, and their pedagogical benefits (development or enhancement of isiZulu FAL skills). The use of media forms to describe each MS Teams affordances had been aimed at compartmentalizing the benefits of tools to specific IsiZulu FAL skills. However, it became evident that this is not easy when the communicative approach is used as it demands that different affordances be engaged in the development of the different IsiZulu FAL skills. This is evident in the conclusions that were made after the discussion of each media form and its affordances in developing the desired skills.

Secondly, while learners' selection of the tools they preferred for the development of specific skills suggested the main tools, the lesson observation provided justifications for the decisions made. Where tools were scored low, they were used to support or work towards the main learning outcome.

Thirdly, this study seems to bring up the 'access' affordance especially for online learner engagement. While Ndlovu's (2015) analytical tool did not include this affordance as identified by Conole and Dyke (2004), both the learner and lesson observations demonstrated how some of Teams affordances are valued for providing access to content. In addition, blended learning is only possible if learners have access

to well-organized online content that Teams tools' affordances made possible. The face-to-face experience becomes an opportunity for the learners and the teacher to interact as described in the Conversational Framework (see Figure 1, pg. 20). The phases that are applied during these interactions are; Discursive, Interactive, Adaptive, and Reflective processes as indicated by Laurillard (2002).

Lastly, the engagement of different Teams affordances in any learning experience demands the teacher's guidance. It is the teacher who should establish what teaching approaches to use and maximize the utilization of all affordances within each tool for the benefit of the language skills development.

Table 12 describes the summary of the Learning Outcomes that were operationalized by the specific MS Teams affordance and tools according to the data gathered in Chapter 4 and the discussion in this chapter.

Table 12: The Learning Outcomes that are operationalized by the specific MS Teams affordances.

Affordances	MS Teams tools	Learning Outcomes (LO)			
		LO1	LO2	L03	L04
Non-linear	Assignment; Chat; Teams meeting; Post		*		*
Immediacy	Post	*	*	*	*
Collaboration	Teams meeting; Chat	*	*		
Diversity	Assignment; File	*	*	*	
Articulation	Assignment; Files; Teams meeting	*	*	*	*

The next chapter will reflect as it consolidates these findings in the form of a model that can be considered for use by IsiZulu FAL teachers in their use of MS Teams.

CHAPTER 6

6. REFLECTION

This chapter reflects on the discussion in Chapter 5. It reflects on how the teacher (the researcher) created a meaningful learning environment using Microsoft Teams affordances. A model that shows the essential components needed when using MS Teams to promote the development of IsiZulu FAL skills for learners is described.

6.1. THE CURRICULUM POLICY STATEMENT

The Curriculum Policy Statement informs and guides FAL teaching and learning and requires the teacher to convey subject content, encourage learners' engagement with the activities that should help achieve the core skills; that facilitate prior knowledge, encourage collaboration in the classroom, and use the relevant resources that support the learners understanding and skill development (DoE, 2012; Walker, 1990 in Du Plessis, 2005). This study has demonstrated that the diverse ICT affordances from MS Teams can help in the application of the communicative approach advocated for by this policy and to achieve the Learning Outcomes (LOs). The careful and seamless infusion of the affordances guided by the teacher makes it easy to develop IsiZulu FAL skills as learners interact with the content, the technology, the teacher, and their peers.

6.2. THE MS TEAMS AFFORDANCES

The findings of the study indicated that the affordances that were adopted from Conole and Dyke's (2004) ICT affordances and Laurillard's (2002) by Ndlovu (2015) benefited the learning of IsiZulu FAL. The teacher was able to give students access to the curriculum content online and encourage different learning experiences (Conole & Dyke, 2005) while utilizing the target language through the communicative approach to encourage learner engagement and understanding (Maphumulo, 2012). The affordances allowed the content to be presented in various ways and this encouraged learners to activate and build on their prior knowledge as they engaged in the lessons (Laurillard, 2002).

6.3. THE COMMUNICATIVE APPROACH

Bailey (1993 in Watson & Watson 2007) asserts that the link between FAL skills and ICT affordances may be achieved through MS Teams (ICT) and have the potential to support the process of education as it ties the core curriculum objectives/skills to the lessons. These lessons are facilitated by the communicative approach which is essential in conveying curriculum content using tasks that are presented using the target language. The use of the target language encourages understanding (Maphumulo, 2012) and allows learners to activate and build on their prior knowledge as they engage in the lessons (Laurillard, 2002). Of course, some learners may experience difficulties in using the target language, and teachers also experience pressure from the CAPS policy as it requires them to produce learners with FAL proficiencies (Savignon & Wang, 2003). Thus, it is necessary for the teacher to employ a blended learning approach that emphasizes elaboration - a key tenet in guided practice (Mayer, 2004) coupled with immediacy or feedback (Ketabia & Ketabi, 2014; Phung, 2021; Pal & Vanijja, 2020; Laurillard, 2002) to enhance FAL skill development.

6.4. BLENDED LEARNING

Blended Learning facilitates interaction and encourages learner participation, and by so doing, it stimulates prior knowledge essential for knowledge construction (Al-Huneidi & Schreurs, 2011). Prior knowledge supports joint discussions or collaborative opportunities (Al-Huneidi & Schreurs, 2011) encouraged by the learning environment (face-to-face or online) that presents curriculum content using the target language. Thus, shared learning experiences using ICTs promote learning (Conole & Dyke, 2005). The teaching of FAL using the MS Teams relies on access to the content, learner involvement (prior knowledge) and teacher elaboration, immediacy/continuous feedback, and instruction.

6.5. GUIDED PRACTICE

Guided practice makes explicit the teacher's role when using ICTs (Mayer, 2004). Elaboration which operates in guided practice is essential as it maintains teacher and learning communication: discursive, adaptive, interactive, and reflective as the conversation takes place (Laurillard, 2002), that related the learner's previous understanding with current knowledge (Al-Ani, 2013; Mayer, 2004; Weinstein, 1977). It allowed the teacher to apply the communicative approach as he provided guidance – elaboration and continuous feedback (Laurillard, 2002; Larson et al., 2008), which encouraged learners to “re-distribute concepts” or modify their current understanding (Ndlovu, 2015) and led to deeper understanding.

The above suggests that, in this study, teacher and learner engagements were maintained through teacher guidance and learner engagement through activation of their prior knowledge. This connection is well reflected in Laurillard's (2002) conversational framework as she contends that educational media and its affordances should support learners and teacher discussion. The teacher should set up an environment that encourages learners' prior knowledge essential for adapting to the tasks that are tied to the learning outcomes (as seen in all the lessons presented in the study). Teacher immediate feedback (online and offline) allowed students to interact meaningfully with the tasks (in all the tasks presented in this study) and essentially, reflect on and establish if learner's actions were consistent with the feedback provided (Laurillard, 2002) (as seen through the written drafts which led to the final submission in lesson 3).

Teacher immediate feedback promotes learner participation and collaboration which assist with the construction of knowledge (Christopher & Gorham in 1995 in Roberts & Friedman, 2013) and the acquisition of the FAL LOs.

Figure 25 is a model that this study has developed based on the analysis of data for this study. The framework makes explicit how IsiZulu FAL skills can be developed with MS Teams affordances with the guidance of the teacher.

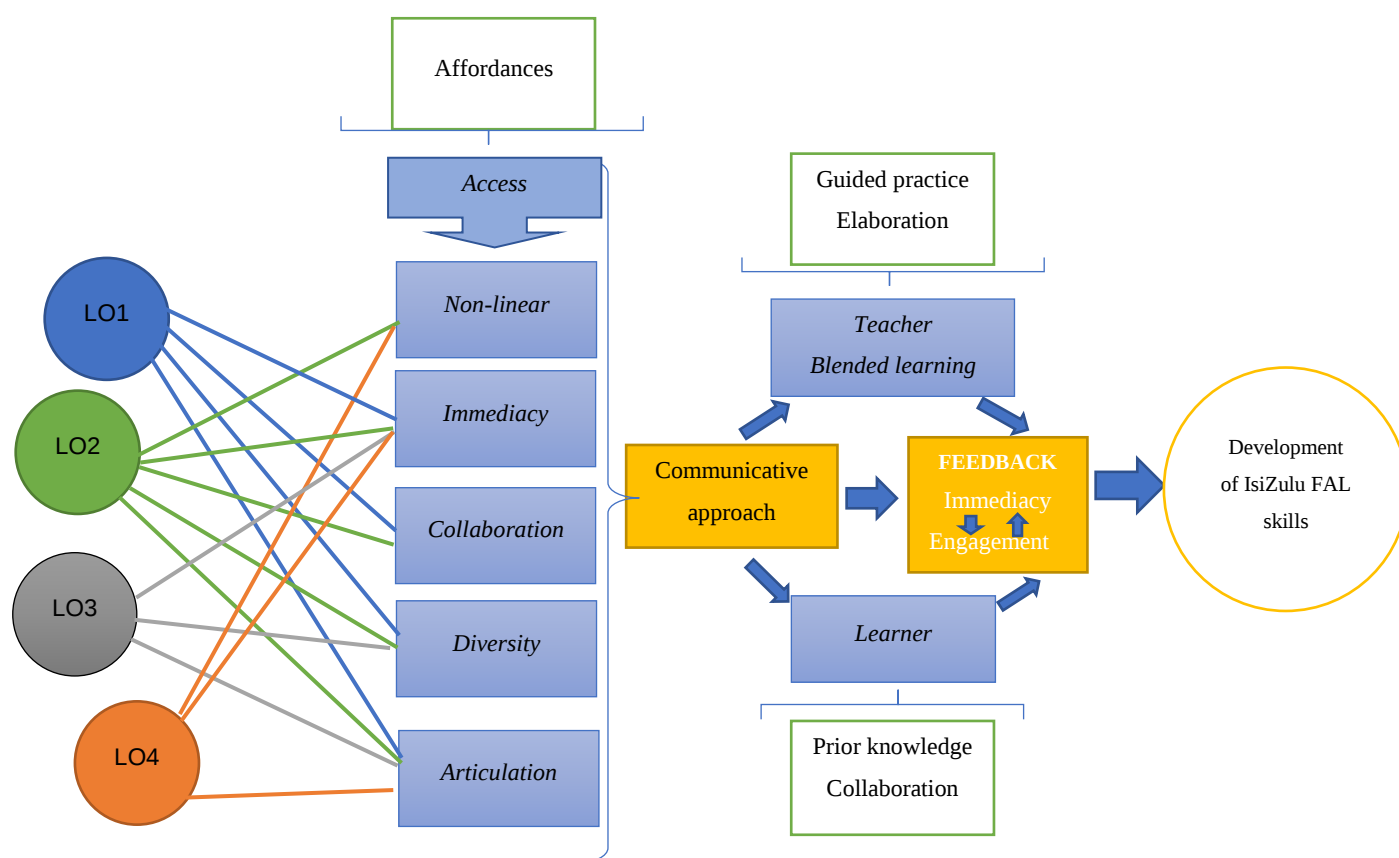


FIGURE 25: Development of IsiZulu FAL with MS Teams Affordances Framework

6.2. CONCLUSION

This chapter has described a reflection based on the discussion in Chapter 5. The chapter has reflected that the implementation of a guided practice that features elaboration and immediacy/continuous feedback, facilitated by blended learning and the communicative approach is essential in enhancing the development of the FAL skills. A model has been developed to establish a framework of how the teacher guided the learner's development of IsiZulu FAL skills. This model may be used to advance the teaching and learning of any FAL using any ICT that may have similar affordances. In the case of other disciplines, the teacher can change the approach to that which informs the learning of the subject for the achievement of the outcomes.

CHAPTER 7

7. CONCLUSION

7.1. INTRODUCTION

This chapter consolidates the findings of the study. It presents the conclusions drawn from the findings and shows how they contribute to the existing body of knowledge regarding the advancement of teaching and learning of IsiZulu First Additional Language (Second Language) with Information Communication Technologies (ICTs) and makes practical recommendations for further studies.

7.2. SUMMARY AND RESEARCH QUESTIONS

The employment of MS Teams affordances in the IsiZulu FAL teaching and learning environment promotes skill development. According to the data from participants of the study, the MS Teams affordances encouraged participation which is essential for FAL learning. The study indicated that IsiZulu FAL outcomes/skills were seamlessly and effectively implemented in the learning environment when using MS Teams.

The use of the questionnaire, the observations derived from the three lessons presented in the classroom, and the evaluation of these lessons using the analytical tool to understand how the MS Teams promotes IsiZulu FAL skills development while utilizing the communicative approach and blended environment assisted the teacher to establish the possible responses to the research questions as follows:

- **What are Grade 7 learners' perceptions on the significance of the MS Teams Affordances in the development of their IsiZulu FAL skills?**

The way students responded to the questionnaire reflected how the teacher uses MS Teams in the sense that they were able to depict the main tools that were used for developing the Learning Outcomes. Most of the students were able to establish that they are using the communicative media form to communicate or engage using the target language and thus develop the desired language skills. This knowledge helped

the teacher to draw attention to what he does in his preparation and reflection on his teaching.

The researcher wanted to know the Grade 7 learner's perceptions on the significance of MS Teams affordances in the development of their IsiZulu FAL skill. **Table 13** demonstrates the findings; the learner's perceptions on the significance of MS Teams affordances in the development of their IsiZulu FAL skills.

Table 13: The learner's experiences and the MS Teams affordances.

AFFORDANCES	Non-linear	Immediacy	Collaboration	Diversity	Articulation
LEARNER EXPERIENCE	Learners engage with the content on the Post tab.	Learners interact with one another and with the teacher through the Chat platform and in a face-to-face context. Immediacy plays a significant role as it enhances their understanding.	Learners communicate and collaborate through MS Teams Meetings. Shared to deepen their understanding.	Learners engage with tasks, complete activities, and get feedback.	Learners articulate their understanding using the feature provided by the MS Teams tools.

The above resulted in learners believing that the Microsoft affordances enhanced the development of their IsiZulu FAL skills. This study, therefore, suggests that media is essential in presenting subject content in different forms using the MS Teams affordances to create different learning experiences (Laurillard, 2002; Conole & Dyke, 2015). However, media only cannot encourage effective learning (Mayer, 2004) or the learner's acquisition of the FAL skills. This guided practice is essential in maintaining learner engagement (see Figure 25).

- **How can MS Teams affordances be used to enhance the development of the Grade 7 IsiZulu FAL skills?**

The researcher was able to articulate and document what he does as he develops the language skills using MS Teams. As the researcher presented the lessons using MS Teams tools, the researcher discovered that a tool could have more affordances that encourage different learner engagement such as face-to-face communication (discursive), text messaging through chats, comments, and replies (interactive), and encouraged learner participation as he provided them with feedback (adaptive)

(Laurillard, 2002) via Microsoft Teams Meeting tool. The teacher used different tools to tap into different learning experiences (Conole & Dyke, 2005) to encourage the achievement of the LO's.

7.3. CONTRIBUTION TO THE FINDINGS

Drawing from the analytical tool (**see Table 2: The Analytical tool, pg. 32**) that was used to conduct the study, the researcher realized that Ndlovu (2015) has a linear way of identifying media forms and their pedagogical value which is contrary to this report. This study demonstrated the value of specific MS Teams affordances that may be operationalized by the teacher using the communicative approach in a blended learning context to enhance the development of the different FAL learning outcomes. The researcher has indicated that it is an intricate exercise to operationalise MS Teams affordances using the communicative approach and this complexity is illustrated in the model (**see Figure 25, pg. 81**) that the researcher has developed and illustrated in the previous chapter. More essentially, the researcher made explicit how guided practice that employs the communicative approach coupled with the MS Teams tool, its media forms, and affordances encourage teacher and learner engagement to promote FAL skills development. While Ndlovu's (2015) tool serves as a generic framework, each discipline can use it to develop its own framework based on its structure to help make explicit how ICTs can be used to achieve their learning outcomes.

The researcher has realized that Ndlovu's (2015) analytical tool (**pg. 32**) does not make explicit how the teacher uses guided practice when using ICTs to enhance learning and this is the gap that this study has engaged with. Again, the researcher has realized that Ndlovu (2015) excluded the access affordance since her study focused on how ICTs encourage teaching and learning in a face-to-face environment.

7.4. FINDINGS

It is through critical reflection that this study was able to help the teacher (researcher) understand or make explicit how IsiZulu FAL teachers can use MS Teams affordances to enhance the acquisition of the IsiZulu FAL learning outcomes. As the researcher reflected on the findings, he realized the importance of the teacher's guidance of the learning experience as he uses different affordances from the different tools in order to assist learners to achieve FAL outcomes.

The access affordance maintains the connections between the teacher, the task, and the learners. It is the pre-requisite for learner engagement with instruction and the tasks. For instance, learners needed to access the instruction prior to interacting with the content on the Post, communicate with the teacher and the other learners through the Chat or the Meeting tab, and engage with the task or activity in the Assignment tab.

7.5. RECOMMENDATIONS

When teachers intend to use ICTs to encourage the FAL skills, they should acknowledge the teaching philosophy, the teaching approach that should be used for the subject, and following this, they need to look for different characteristics or affordances that may support their teaching philosophy and approach that will support the teaching of the subject and encourage the development of the intended FAL skills. As the teacher thinks about engaging the students in the online context, they need to acknowledge that each tool has different affordances; they need to think about where particular affordances may be used together to achieve the learning outcomes (i.e., Post allows accessibility to the curriculum content and allows students to engage with the audio-visual material). This indicates that tools affordances can be maximized to encourage different learning experiences.

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APPENDIX 1: ETHICAL CLEARANCE

WITSSCHOOLOF EDUCATION



SCHOOLOF EDUCATION ETHICS CSCOMMITTEE

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

CLEARANCE CERTIFICATE

PROTOCOL NUMBER: 2020ECE002M

PROJECT TITLE

Exploring Moodle affordances in promoting the development of IsiZulu First Additional Language skills for Grade 7 students.

INVESTIGATOR

POTSOT SOTETSI

SCHOOL/DEPARTMENT OF INVESTIGATOR

WITSSCHOOLOF EDUCATION

DATE CONSIDERED

20 July 2020

DECISION OF THE COMMITTEE

Approved unconditionally

EXPIRY DATE

Date of submission of the project report

cc: Supervisor: Dr Nokulunga Ndlovu

ISSUE DATE OF CERTIFICATE

27 July 2020

CHAIRPERSON


(Dr Paul Goldschagg)

DECLARATION OF INVESTIGATOR

To be completed in duplicate and **ONE COPY** emailed to the Ethics Office:
Matsie.Mabeta@wits.ac.za.

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

Signature

Date

PLEASE QUOTE THE PROTOCOL NUMBER ON ALL ENQUIRIES

APPENDIX 2: QUESTIONNAIRE TEMPLATE FOR DATA COLLECTION

Media Forms	Affordances	Evidence	Pedagogical value	Learning Outcome	Questionnaire
Narrative	Non-linear	Multimodality	Apprehending structure/connections	Listening and Speaking (LO1). Reading and Viewing (LO2) Writing and Presenting (LO3) Language Structures and Conversions (LO4)	Question1: Which of the tools in the Microsoft Teams help you to complete a listening comprehension in IsiZulu? – LO1; LO4. Question 2: Which of these tools in Microsoft Teams assist you to do IsiZulu oral or speaking activities? - LO1 – 4. Question 3: Which of these tools in Microsoft Teams assist you with understanding or learning IsiZulu grammar or language activity? – LO1; LO 4. Question 4: Which of these tools in Microsoft Teams make it easy for you to interact with the teacher as you learn IsiZulu? – LO 1-4
Interactive	Immediacy	Immediate feedback	Exploration: misconceptions amended		
Communicative	Collaboration	Discussion	Re-descriptions of concepts	Listening and Speaking (LO1). Reading and Viewing (LO2)	Question 5: Which of these tools in the Microsoft Teams make it easy for you to identify or see what is wrong or right in your answers in IsiZulu? – LO1-4.

				Writing and Presenting (LO3) Language Structures and Conversions (LO4)	Question 6: Which of these tools in Microsoft Teams make it easy for you to interact in the classroom using IsiZulu? - LO1-4. Question 7: Which of these tools in Microsoft Teams do you use to communicate in your groups in IsiZulu? – LO1;3;4, Question 8: Which of these tools in Microsoft Teams did you use to communicate with the class in IsiZulu? – LO 1-4
Adaptive	Diversity	Reproduction	Practice	Listening and Speaking (LO1). Reading and Viewing (LO2) Writing and Presenting (LO3) Language Structures and Conversions (LO4)	Question 10: Which of these tools in Microsoft Teams helped you to practise speaking Zulu? - LO 1; LO3; LO4. Question 11: Which of these tools in Microsoft Teams helped you to understand and complete Zulu comprehension activities? - LO 1 – 4. Question 12: Which of these tools in Microsoft Teams help you to understand and complete IsiZulu writing activities? – LO1; LO 3; LO4. Question 13: Which of these tools in Microsoft Teams helped you to understand and complete IsiZulu grammar or language activities? – LO1; LO 3; LO 4
Productive	Articulation	Products	Knowledge construction	Listening and Speaking (LO1).	Question 14: Which of these tools in the Microsoft Teams helped you to prepare for oral activities in IsiZulu? – LO 1; LO 3; LO4.

				Reading and Viewing (LO2) Writing and Presenting (LO3) Language Structures and Conversions (LO4);	Question 15: Which of these tools in Microsoft Teams helped you to prepare for reading in Zulu? – LO1 – 4. Question 16: Which of these tools in Microsoft Teams helped you to prepare for IsiZulu creative writing activities? – LO1; LO3; LO4.
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