



**INVESTIGATING BARRIERS TO EFFECTIVE COMMUNICATION IN  
THE LECTURING ENVIRONMENT  
AT CUT**

**EMMANUEL RASDIEN VOGT**

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Supervisor: Dr BG Fredericks, D.Tech. Language Practice

Co-supervisor: Dr N Lessing-Venter, PhD Language Studies

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## DECLARATION OF INDEPENDENT WORK

I, **EMMANUEL RASDIEN VOGT**, identity number \_\_\_\_\_ and student number \_\_\_\_\_, do hereby declare that this research project submitted to the Central University of Technology, Free State for the Degree **MASTER OF COMMUNICATION: LANGUAGE PRACTICE**, is my own independent work; and complies with the Code of Academic Integrity, as well as other relevant policies, procedures, rules, and regulations of the Central University of Technology, Free State; and has not been submitted before to any institution by myself or any other person in fulfilment (or partial fulfilment) of the requirements for the attainment of any qualification.



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**SIGNATURE OF STUDENT**

17 May 2022

**DATE**

*To*  
*my mom Lalla,*  
*my wife Karen,*  
*my children;*  
*Tashlyn and Joshua*

*We rise by lifting others*

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All respondents who participated in this study.

## Acronyms and Abbreviations

<b>CUT</b>	Central University of Technology, Free State
<b>FAL</b>	First additional Language
<b>HEIs</b>	Higher Education Institutions
<b>KMO</b>	Kaiser-Meyer Olkin
<b>LOTL</b>	Language of Teaching and Learning
<b>SPSS</b>	Statistical Package for the Social Sciences
<b>ZPD</b>	Zone of Proximal Development

## **ABSTRACT**

Effective communication in the lecturing environment plays an important role in assisting lecturers and students in achieving educational outcomes. However, the problematic nature of communication barriers could impede communication and lead to ineffective teaching and learning. Consequently, ineffective communication has a negative impact on student achievement. In contrast, effective communication could minimise miscommunication and lead to improved student performance. As such, this study investigated the barriers to effective communication in the lecturing environment. A quantitative approach, using an interpretive and explorative design, was used to investigate the extent to which communication barriers influence learners' performance in the classroom. Data was collected using questionnaires that were designed for lecturers and students, respectively. The study revealed that communication barriers do in fact influence students' performance adversely and that they are still prevalent in the lecturing environment. The researchers recommend that barriers should be reduced to improve learner performance.

**Keywords:** communication skills, communication barriers, teaching and learning

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# CHAPTER 1

## ORIENTATION

### 1.1 INTRODUCTION

Communication is an integral part of the teaching and learning process and its effectiveness is one of the factors that determine the degree to which the intended learning outcomes will be achieved (Schmitz, 2018:77). However, the process of communication is not always free from hindrances. How people convey information can have a significant impact on how that information is interpreted and can potentially create a barrier that prevents the participants from properly understanding one another.

According to Schick, Gordon and Haka (2012:171), when communication is effective, it shows good listening skills from both the sender and the receiver. They also mention that when this occurs, the parties involved are satisfied. Misunderstandings in the communication process can be avoided by delivering clear and accessible messages. To deliver clear and accessible messages, the parties involved in the communication process should comprehensively express messages and avoid ambiguous sentences and the overuse of technical terms (Glomo-Narzoles, 2013:407).

Teaching and learning require effective communication to achieve academic goals. Effective communication is an important component of teaching and learning and it is also a necessary prerequisite to enhance discourse between students and lecturers. When students understand their lecturers, it results in positive student outcomes and inevitably leads to effective teaching and learning. If communication between students and lecturers is not effective, educational objectives cannot be attained (Lam,

2019:515). Schmitz (2018:95) asserts that effective communication can only happen when the intended message is accurately interpreted by the receiver. For effective communication, one must speak plainly and politely – conveying one's message without causing any confusion or misinterpretation.

Regardless of the subject lecturers provide instruction in, barriers to effective communication can easily affect the process of teaching and learning. Communication barriers are obstacles that prevent participants from receiving and understanding the messages the sender intends to convey (Schick et al., 2012:157). Communication barriers such as ambiguous messages and the overuse of jargon negatively affect the communication process. To address these barriers, it is important to identify the root cause and to determine the best possible way of dealing with them. It is worth noting that students are susceptible to communication barriers in the lecturing environment (ibid).

Ramsden (2013:75) argues that it is important to understand where students are coming from. Understanding their educational and cultural background makes it easier to alleviate communication barriers. Olin-Scheller and Tengberg (2017:424) believe that while it may not be obvious, students cannot improve their communication skills when they keep on working with the same peers repeatedly. They suggest that students must change group members every time they have an opportunity to do so. Olin-Scheller and Tengberg (2017:425) argue that this can be a significant barrier to effective communication in the lecturing environment when students do not learn to adapt to different communication styles.

## 1.2 BACKGROUND TO THE STUDY

Lecturers have a challenging task of communicating effectively in the lecturing environment. However, for effective communication to take place, the students need to play their role by paying attention and asking when they do not understand the message conveyed by the lecturer (Probyn, 2018:447). The flow of sending and receiving messages between students and lecturers could be affected by barriers resulting in misunderstandings and erroneous interpretation of information.

Communication barriers can be defined as hindrances that prevent the flow of communication between participants in the communication process. In any classroom, lecturers serve as the senders during communication. They send information and instructions to students either verbally or non-verbally (Ramsden, 2013:80). Communication between students and lecturers aims to create a positive and conducive environment for discourse where both parties understand one another. However, communication can only be successful when it has achieved the intended purpose of conveying information between the lecturers and students without any barriers (Schmitz, 2018:107).

According to Neil (2019:94), characteristics of effective communication such as clarity, attention, consistency, and adequacy are inextricable – they always form part of effective communication. However, the message between the sender and receiver can be distorted, resulting in misunderstanding. Miscommunication inevitably becomes barriers which hinder communication. Lecturers and students cannot predict the possible occurrence of communication barriers, but participants can work together to alleviate potential communication barriers (ibid).

### **1.3 SIGNIFICANCE OF THE STUDY**

This study aims to help reduce communication barriers occurring in the lecturing environment. It endeavours to assist students in approaching unfamiliar course content. Moreover, this study aims to enhance communication in the lecturing environment.

The research will contribute to the existing body of knowledge on barriers to effective communication in the lecturing environment. It will also assist lecturers to design course content that considers First Additional Language speakers as well.

### **1.4 PROBLEM STATEMENT**

Too much emphasis has been placed on eloquence rather than the effect communication barriers have on teaching and learning. According to Mehan (2014:175), communication barriers are the root cause of poor performance in the academic context. The problematic nature of communication barriers makes it complicated for students and lecturers to communicate effectively. In addition, communication barriers would inevitably lead to poor academic performance. As such, this research investigates the causes of communication barriers in the lecturing environment and provides possible recommendations on how students and lecturers can alleviate these barriers and communicate effectively in the lecturing environment.

### **1.5 THESIS STATEMENT**

Communication barriers in the lecturing environment impede student academic performance. Student academic performance will improve, should there be effective communication during lecturing.

## **1.6 RESEARCH QUESTIONS**

The problem envisaged, which gave rise to the primary research question is:

- What communication barriers are more likely to occur during a lecturing session and how are they dealt with?
- To fully explore the primary research question, the following secondary questions need to be answered:
- What effects do communication barriers have on student academic performance?
- How do students approach course content that they are not familiar with?

## **1.7 AIMS OF THE STUDY**

The aim of this study is to determine the cause of communication barriers in the lecturing environment. The following objectives guided the research in an effort to realise this aim:

- To identify communication barriers that could occur in the lecturing environment and to suggest ways of approaching them;
- To determine the effects of communication barriers on student academic performance;
- To ascertain how students could approach course content that they are not familiar with.

## **1.8 RESEARCH DESIGN AND METHODOLOGY**

### **1.8.1 Research Design**

A research design is used to determine how to conduct research and which method to use (Bell and Waters, 2014:185). Creswell and Creswell, (2018:11) define a research design as a type of enquiry that gives direction for procedures in a study. Quantitative research focuses on gathering numerical data and generalising it across groups of people or to explain a particular phenomenon (Carriger, 2000:23). The research design also ensures that the researcher obtains evidence during the research process that will enable him or her to accurately answer the research questions of the study in question. In this study, the researcher used a quantitative research approach to investigate communication barriers in the lecturing environment.

## **1.9 RESEARCH METHODOLOGY**

The positivist paradigm was used to investigate communication barriers in the lecturing environment. Babbie and Mouton (2006:124) point out that a research paradigm provides different ways of observing human social life and inspires different ways of conducting research. Creswell et al.(2017:165) portray methodology as a coherent group of methods that harmonises one another with the capacity to deliver data and findings reflecting the research questions of the underlying study and suits the researcher's purpose. Leedy (1997:104) maintains that the quantitative approach is used to provide answers to questions about relationships among measured variables with the purpose of explaining, predicting, and controlling a phenomenon.

### **1.9.1 Descriptive Study**

Descriptive research is a quantitative research method that attempts to collect quantifiable information for statistical analysis from the population sample (Leedy, 1997:104) In this study, the researcher employed a quantitative research method to investigate communication barriers in the lecturing environment at the Central University of Technology, Free State.

### **1.9.2 Literature Review**

A literature review focuses on critically analysing a segment of a published body of knowledge through summary, classification, and comparison of prior research studies, reviews of literature, and theoretical articles (Cohen et al., 2017:131). A literature review was conducted by studying and analysing different resources to provide possible answers to the cause of communication barriers in the lecturing environment.

## **1.10 DATA COLLECTION METHODS**

The researcher used online questionnaires and a literature review to collect quantitative data. The questionnaires were designed in Google Forms, and the data collected assisted the researcher in obtaining first-hand information from the participants regarding communication barriers in the lecturing environment. In addition, the online approach was effective because the questionnaires for students and lecturers were user friendly, which also encouraged the participants to complete the questionnaires.

The literature review involves activities such as identifying, recording, understanding, meaning-making and transmitting information. In contrast, when the goal of the

literature review is to inform research, it represents an embedded study. A literature review on communication skills, communication barriers, and students' achievements were conducted to give answers to the research questions.

### **1.10.1 Population**

A population can be described as a group of individuals with common characteristics (Gall, Gall and Borg, 2005:45). Lecturers and students at the Central University of Technology, Free State, Bloemfontein campus were used as the population for this study.

### **1.10.2 Sampling**

According to Creswell et al. (2018:151), sampling is the process of selecting individuals or units from a larger population. A sample is representative when it allows the results of a sample to be generalised to the population. For the purpose of this study, the researcher used convenience sampling to collect data from students and lecturers at the Central University of Technology, Free State, Bloemfontein campus.

Convenience sampling relies on data collection from population members who are conveniently available to participate in the study. Convenience sampling is a type of sampling where the first available primary data source will be used. In other words, this sampling method involves getting participants wherever one can find them and typically wherever it is convenient (Saunders, Lewis and Thornhill, 2016:79).

### **1.11 RELIABILITY**

According to Marczyk, DeMatteo and Festinger (2016:55), reliability refers to “the degree of consistency in a study”. It refers to the extent to which measurements are repeatable in the overall results of the study. Cronbach’s alpha coefficient was used in the statistical analysis to determine the internal reliability. The Cronbach’s alpha coefficient calculation supported the internal reliability of the questionnaire for both lecturers and students. Therefore, a questionnaire was used to collect data for the study.

### **1.12 VALIDITY**

Validity refers to the merit of a study and how well it has been designed and the appropriateness and meaningfulness to a general population (Gliner and Morgan, 2000:191). Content and validity are achieved through professional judgments about the relevance and sampling of the contents of the test to a particular domain. It is concerned with judgment rather than measurement (Cohen, Manion and Morrion, 2011:131).

Construct validity is the extent to which the measurements used, often questionnaires, actually test the theory they are measuring. It should demonstrate that scores on a particular test do, in fact, predict the theoretical trait it says it does (Creswell et al., 2018:57). Face validity refers to the degree to which an instrument measures what it is supposed to measure (Maree and Pietersen, 2007:217). The instruments had to gather personal information, information about communication skills, and information about communication barriers in the lecturing environment.

The researcher's study promoter scrutinised the questionnaire to ensure that the questions elicit relevant information to answer the research questions and to address the research problem of the study (Creswell et al., 2017:131). In this study, the researcher has validated the research instrument by using face, content, and construct validity.

### **1.13 ANALYSIS OF RESULTS**

The quantitative data from the questionnaires were coded and captured on a computer for computation. Data generated from open-ended questions were categorised according to the research objectives and were used to reinforce the quantitative data. The researcher utilised the Statistical Package for the Social Sciences (SPSS). SPSS is used for complex quantitative statistical data analysis as a complete statistical package that is based on a point and click interface.

### **1.14 DEFINITION OF KEY TERMS**

#### **1.14.1 Effective communication**

Effective communication is about more than just exchanging information. It is about understanding the emotion and intentions behind the information. In addition, to convey meaningful information, one needs to also listen in a way that enables one to gain the full meaning of what is being said and that makes the other person feel heard and understood (Kritzinger, Bowler and Goliath, 2008:34).

#### **1.14.2 Communication barriers**

Communication barriers are hindrances that prevent participants engaged in communication from receiving and understanding the messages others use to convey

their information, ideas, and thoughts. Communication barriers interfere with or block the message you are trying to send (Rani, 2016:74).

### **1.14.3 Lecturing environment**

A lecturing environment refers to the diverse physical locations and contexts in which students learn. Students may learn in a wide variety of settings, such as outside-of-school locations and outdoor environments. The term is often used as a more accurate or preferred alternative to classroom, which has more limited and traditional connotations. It refers to any setting where teaching and learning takes place (Bates, 2015:125).

### **1.14.4 Teaching and learning**

Teaching can be defined as engagement with students to enable their understanding and application of knowledge, concepts, and processes. To teach is to engage students in learning; thus, teaching consists of getting students involved in the active construction of knowledge (Grasha, 2010:145).

### **1.14.5 Academic performance**

Academic performance is the measurement of student achievement across various academic subjects. Lecturers and education officials typically measure achievement using classroom performance, graduation rates and results from standardised tests. Academic performance is the knowledge gained which is assessed by lecturers (Zahedani, Rezaee, Yazdani, Bagheri and Nabeiei, 2016:132).

## 1.15 LIMITATIONS OF THE STUDY

The limitations of this study are that the subjectivity involved in self-rating has the potential to diminish the accuracy of the study. In addition, the researcher did not involve all first-year students in this study because of their different schedules. However, the researcher ensured that a large sample was included to ensure the validity and reliability of the results.

## 1.16 CHAPTER OUTLINE

This study is organised as follows:

**In chapter one**, the introduction, problem statement, and aims of the study are discussed.

**In chapter two**, a review of literature regarding the influence of perception on communication in the lecturing environment is presented.

**In chapter three**, the researcher discusses the research methodology of the study.

**In chapter four**, the researcher presents the data analysis and interpretation of the findings.

**In chapter five**, the researcher provides conclusions and makes recommendations.

## 1.17 OVERVIEW

In this chapter, the problems regarding communication barriers in the lecturing environment are highlighted. According to the literature, it is suggested that inadequate communication skills affects discourse in the lecturing environment resulting in poor student academic performance. Effective communication as a sign of adequate communication skills, contribute significantly to student academic

performance, and it also assists in alleviating communication barriers in the lecturing environment. The aim is to determine whether communication barriers are the primary reason for poor student academic performance. The problem gave rise to the primary research question:

- What communication barriers are more likely to occur during a lecturing session and how they are dealt with?

Secondary research questions were also formulated, which guided the researcher to fully explore the primary research question and to reach the aims of the study:

- To identify communication barriers that occur in the lecturing environment and to suggest ways to approaching them.

Based on the positivist paradigm, the researcher decided that quantitative research methods would be employed to conduct the empirical research. Students at the CUT were identified as the population. Convenience sampling was used and questionnaires were used to collect data from the participants in the sample regarding communication barriers in the learning environment.

## CHAPTER 2

### COMMUNICATION BARRIERS IN THE LECTURING ENVIRONMENT

#### 2.1 INTRODUCTION

This research endeavours to highlight the significance of communication in the lecturing environment, and how both students and lecturers can work together to alleviate these communication barriers. This chapter focuses on literature relevant to the study. Firstly, the theoretical framework of the study is presented. Secondly, a review of literature pertaining to communication barriers in the lecturing environment is discussed.

#### 2.2 THEORETICAL FRAMEWORK

This study is framed within a constructivist theoretical framework and a model of communication. The Theory of Constructivism by Vygotsky (1978) concerns itself with the achievements of developments whereas the model of communication by Vreken (1996) highlights the complexity of the classroom environment. Vreken's (1996) model of communication aims at explaining what causes communication barriers in the lecturing environment; whereas the Theory of Constructivism consists of the Broadbent Theory of Perception. The model of communication by Vreken (1996) plays an important role in classroom communication, and it also sheds light on classroom communication between students and lecturers; while the Theory of Perception by Kane, Lear and Dube (2016:8) will give a broader view of the psychological and metacognitive aspect of students in the lecturing environment. The model focuses on the lecturing environment and the theoretical framework deals with the cognitive aspect of learning and communication barriers that impede learning.

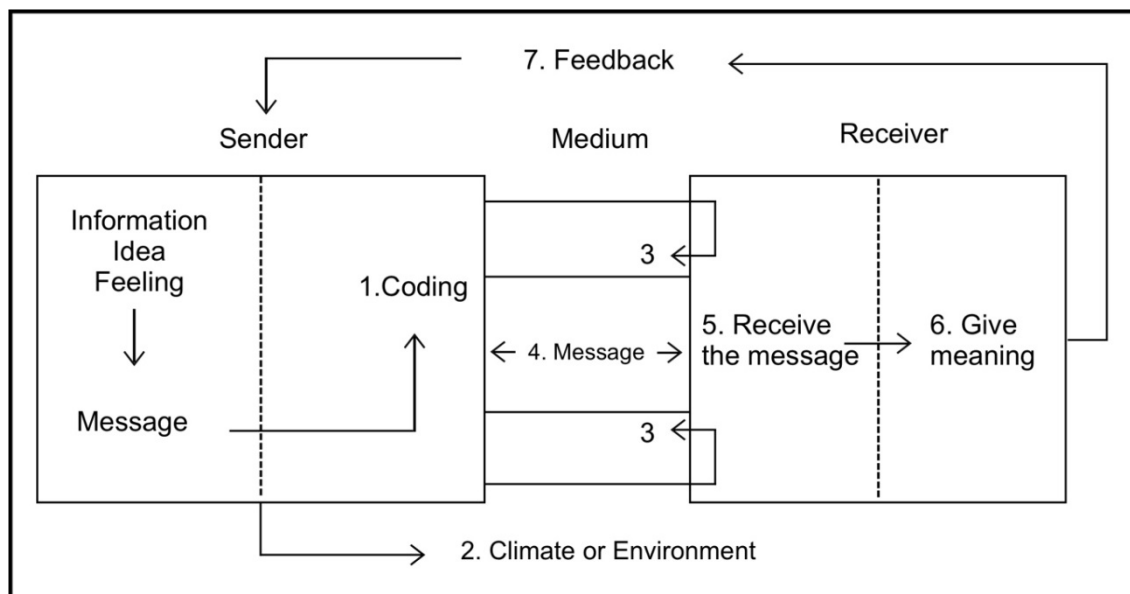
## 2.3 CONSTRUCTIVIST THEORY

The other part, which is inextricably linked to this study, is found within the social constructivist paradigm. It involves describing learning in the lecturing environment and is grounded in the proposition that learning outcomes are directly impacted by experiences and teaching (Vygotsky, 1978:79). These are developmental theories that prioritise and describe learning as utilising “the achievements of development instead of providing the impetus for altering its course.” (Vygotsky, 1978:81).

Vygotsky’s zone of proximal development is an important aspect of the theoretical paradigm of this study. It concerns itself with the distance between the actual developmental level and the potential developmental level. The actual developmental level characterises mental development, while the zone of proximal development characterises mental development (Vygotsky, 1978:83). As per the theoretical framework, the guidance within this ‘zone’ may include scaffolding, modelling, or direct instruction. This thesis suggests that the key to the success of any of these interpretations is the provision of opportunities and skills to explore all means available to solve problems (Ehrlinger and Shain, 2014:8). It proposes that drawing may reduce the gap and could be an important scaffold during writing. This positions drawing as part of an important symbol system, which students need to access and develop. From this perspective drawings are not merely a representation of existing knowledge, but also constitute a working through of knowledge soon to be acquired - a scaffold in the zone of proximal development (Ehrlinger and Shain, 2014:10). Although drawing has its own intrinsic value as an expressive and communicative symbol system, the primary aim of this study is to describe its value as a scaffold into non-narrative writing.

## 2.4 VREKEN'S CLASSROOM COMMUNICATION MODEL

In this section, the researcher discusses Vreken's communication model in detail. Effective teaching and learning depend on effective communication and involves the imparting of essential knowledge and skills in a formal or informal situation that will bring about behavioural change. The classroom communication model of Vreken (1996) highlights the complexity of the classroom environment. He emphasises all the important aspects of effective teaching and learning through communication in the classroom. It is an interactive communication model where the lecturers and students are actively participating in the communication process. The illustration below shows the seven facets of the classroom communication process, as indicated in Vreken's classroom communication model.



**Figure 2.1: Vreken's Classroom Communication Model**

### 2.4.1 Coding of a message

Coding of a message by lecturers takes place in two ways. Firstly, lecturers have to interpret the information, ideas, thoughts, feelings or instruction into a comprehensive

message so that it can be understandable for the students. It is imperative that lecturers accurately interpret the information that is encoded. Coding can be perceived as a planning process of how lecturers can make messages as clear as possible to their students (De Jong, Steinel, Florija, Schoonen and Hustijn, 2013:895).

The second step is to interpret messages into media so that it can be conveyed to receivers who are the students. During this stage, the message to be conveyed is ready to be sent (Vreken, 1996). For the purpose of this study, the medium will be English, as the medium of instruction at the Central University of Technology, Free State is English. If students can decode messages correctly, it indicates to lecturers how to plan methods and strategies of communication to enhance learning in the lecturing environment.

#### **2.4.2 Conducive environment to teaching and learning**

Vreken (1996) believes that the second facet of the lecturer's task is to create a conducive environment that encourages effective teaching and learning through effective classroom communication. He states that a positive psycho-sociological environment is important for effective teaching and learning. A tranquil teaching and learning environment can enhance good task-based participation, acceptance, and trust between students and lecturers. If lecturers are in control of their classes, it will enhance the acquisition of knowledge and skills.

#### **2.4.3 Message**

Conveying a clear message to students is very important (Krashen, 2002:21). Students must participate in classroom activities. Lecturers need to also communicate

in a friendly environment so that the students can receive the intended messages (Vreken, 1996).

However, how lecturers convey messages is imperative because it can influence the intention of the message (Vreken, 1996). A lecturer, as the communicator, uses language to communicate a message, and the students (receivers) indicate the success of the message by displaying how much they understood (Murphy, 1986:149).

#### **2.4.4 Decoding the message**

A well-structured message should be conveyed to students, and it should be clear and understandable to them (Krauss, 2002:8). The message should be interpreted by the students and meaning must be derived from the message.

Decoding can present possible abstraction to a message from a conveyed code (Vreken, 1996). For the purpose of students whose vernacular is not English, but a medium of instruction at CUT – English proficiency is a compulsory core module for students to improve their language skills.

#### **2.4.5 Receiving the message**

According to Vreken (1996), students receive messages which are conveyed by lecturers through all their senses. It is thus through the senses that messages reach the thoughts of students. However, students react and interpret the same message differently, this emanate from their communication skills and level of communication

apprehension, which will affect the way they respond to messages (Madileng, 2007:73).

The sender of non-verbal cues, whether it is the lecturer or a student, can use his or her face, eyes, body, or voice to get non-verbal messages across (Krauss, 2002:10). Vreken (1996) asserts that effective communication can only take place if both the senders and receivers of messages interpret messages in the same way. Both lecturers and students become ardent observers and receivers of messages and the contents of courses. (Vreken, 1996).

#### **2.4.6 Giving meaning**

For students to give meaning to messages which they receive, they should assimilate messages in their thoughts, interpret it, and attach meaning to it (Madileng, 2007:85). Giving meaning to messages enables students to recognise and recall it at a later stage and they will also be able to see the connection to which it is applied (Vreken, 1996). Thus, giving meaning is closely associated with decoding. The best way to test the understanding of the learning content is to engage in the subject matter. This can provide lecturers with a good indication of the success of the teaching process. Through classroom engagement, students' verbal and cognitive skills are tested that could enhance participation in the classroom.

#### **2.4.7 Feedback**

Feedback is one of the most important aspects to enhance teaching and learning in the lecturing environment. Lecturers need to give feedback that can motivate students' engagement so that they achieve their academic goals (Mentoor, 2015:45). Thorough

assessment feedback should be given to students, which will help to determine if they have achieved the lesson outcomes (Kritzinger, 2008:54). Feedback can take place either internally or externally.

Internal feedback entails listening and thinking about the feedback one receives while communicating. External feedback refers to the feedback that the lecturer receives through verbal or non-verbal responses from students in the classroom. Feedback is important for lecturers and students, and it could determine how successful the transfer and interpretation of messages were during communication activities. It also forms the basis of identifying inaccurate interpretations of the message and provides the lecturer with opportunities to make the necessary adjustments. Vreken's (1996) model displays all the aspects related to classroom communication during teaching and learning. To achieve effective communication in the classroom is challenging and depends on the context for engagement between students and lecturers (Mentoor, 2015:34).

## **2.5 COMMUNICATION**

The term 'communication' has a broader meaning. According to Schermerhorn (2020:115), communication is an interpersonal process of sending and receiving symbols that convey messages to be interpreted. Fashiku (2017:175), describes communication as the process of conveying a message from a source to a receiver, while Schmitz (2018:125) views it as an interactive process of conveying information. Communication is the process of conveying meaningful messages from one person to another or a group of people. Even though prior research has been conducted on

communication, particularly in the lecturing environment, it still remains a challenge for many lecturers and students.

## **2.6 SELECTED COMMUNICATION BARRIERS IN THE LECTURING ENVIRONMENT**

In this section, the researcher discusses communication barriers that could impede effective communication in the lecturing environment.

Communication barriers hamper effective communication and effective teaching and learning. There are multiple barriers to effective communication in the lecturing environment, for instance, diverse classrooms, presumptions, listening skills, and communication skills. According to Adelman and Taylor (2017:86), communication barriers in the lecturing environment should not be taken lightly, because these barriers can prevent effective teaching and learning. Therefore, neither the lecturer nor the student should infer, but rather strive to ensure that communication becomes effective. The researcher concurs with Adelman and Taylor (2017:86) in this regard.

### **2.6.1 Diversity in classrooms**

Lecturers are frequently faced with the difficult task of trying their best to communicate effectively in a diverse classroom. Classroom diversity imposes challenges to effective communication and could hamper the process of communication (Sabanci, Şahin and Özdemir, 2018:15). The authors further suggest that lecturers should not view communication in a superficial manner because it is central to effective teaching and learning. This may cause the process of effective teaching and learning to be

hampered by listening barriers. Listening, as a significant factor in the lecturing environment, requires undivided attention to grasp the essence of every lecture. Interpersonal communication between lecturers and students will indisputably improve if lecturers and students pay attention to non-verbal communication cues and keep their messages clear and concise (Galton, Hargreaves, Comber, Wall and Pell, 1999:24).

Learning to listen effectively helps to improve communication. Verderber et al., (2017:167) believe attention is focused on making students better speakers and writers rather than making them better listeners and readers. The assumption of students thinking that they know more about the discussion before lecturers elaborate could create a listening barrier. Listening barriers not only occur when students are not actively listening but also when they pre-judge the topic that is about to be discussed (Nesamvuni, 2010:89). Evans and Larson (2008:70) encourage lecturers to build their self-confidence and to conquer their fear and comfortably engage students in the lecturing environment.

Iglesias, Javier, Revuelta and Moreno (2016:830) argue that student access to course material affects their academic performance and could create communication barriers. This happens when students are expected to participate in discussions about course material that they do not have. Students who have access to course material should prepare well for lectures and participate in class discussions (Black, 2004:350).

## 2.6.2 Presumption

Presumption is a communication barrier that often occurs when students assume to understand the course content without discussing it with their lecturers. Even though presumption is a common barrier in the lecturing environment, students do not refrain from presuming, even when they have a chance to engage lecturers in matters of uncertainty concerning their academic work (Zara, Kavanagh, Johnson, 2012:12). According to Pal, Halder and Guha (2016:106), lecturers' communication skills play an important role not only in drawing the attention of students but also in overcoming communication barriers in the lecturing environment.

Moreover, Pal et al. (2019:108), emphasise that communication is a multifaceted task that requires participants to pay attention to details to overcome possible barriers when communicating. Iglesias et al. (2016:835), are of the view that not inadequate vocabulary not only discourages discourse, it also leads to linguistic barriers, which hamper the communication process. Linguistic barriers are the main obstacle to communication across different cultures. An understanding of linguistic barriers is important when communicating with people from different cultural and educational backgrounds to ensure effective communication.

Pal et al. (2019:111) place emphasis on the lecturer's self-perception. People use common knowledge to assume how personality and attitudes drive a person's actions; however, the self-perception theory proves that this is often not the case. In other words, it exemplifies that "our actions show who we are". We make sense of our own actions the way we interpret others' actions, and our actions are often influenced by our social encounters and not initiated by our own free will.

### **2.6.3 Poor listening skills**

Listening skills hinder students from getting the most out of their lessons, thus the lack of engagement between lecturers and students opens doors to ineffective teaching and learning (Schick et al., 2012:105; Iglesias et al., 2016:825).

During teaching and learning, students often assume that their frequent communication takes up the lecturer's time, whereas the lecturers assume that students are either not interested in participating or perhaps understand the lesson being discussed (Iglesias et al., 2016:830).

### **2.6.4 Physical barriers**

Physical barriers are described as structural obstructions in natural environments that impede effective communication between the sender and the receiver. Some of the physical barriers are noise, technological problems, and organisational environment. According to Schick (2012:161), communication barriers emanate from the failure to accurately interpret information between the sender and the receiver. She continues to argue that barriers such as noise and self-perception are more prevalent in the lecturing environment and they are often the root cause of barriers. Thiede, Griiffin, Wiley and Anderson (2010:342) encourage students not to be hesitant to engage lecturers should they not understand the discussion at hand.

### **2.6.5 Language barriers**

According to Elze and Podlesny (2014:34), communication barriers in the lecturing environment are common. Elze and Podlesny (2014:35) explain that the more diverse a lecturing environment is, the more prevalent communication barriers will be,

whereas Rani (2016:75) argues that language and presumptions are the two main communication barriers prevalent in the lecturing environment. Language barriers are more prevalent when participants in the communication process do not share the same vernacular or have the same level of eloquence in that particular language of communication (ibid). She further posits that informal language should be discouraged for the purposes of effective communication; because students' vocabulary and the way they construct sentences often differ from one to another. Nevertheless, such differences in the choice of words and communication style will potentially create a chance for assumptions and not the reality (Ramsden, 2013:156). The researcher shares the sentiments expressed by communication researchers in this section.

#### **2.6.6 Gestures**

According to Pal et al. (2019:106), lecturers' gestures also contribute to the effectiveness of their communication. They elaborate that lecturers need to be careful not to send unintended messages through non-verbal communication, which is more likely to become a communication barrier hampering lectures. Pal et al. (2019:108) further posit that one communication method which might work for a certain class of students may not necessarily work for the other. Therefore, lecturers need to understand and analyse students' communication styles and their levels of proficiency in the Language of Learning and Teaching (LOLT).

Gestures play a pivotal role in the way people think and constitute a pervasive element of human communication across cultures (Venter, 2019:4). For example, a thumbs-up sign is a gesture of agreement or approval, which is commonly used in South Africa; whereas in Thailand is a sign of condemnation. As such, it is more likely to become a

barrier in a culturally diverse lecturing environment and could hamper effective teaching and learning (Thiede et al., 2010:344).

### **2.6.7 Lecturer communication**

Effective communication in the lecturing environment can only be achieved when the intended message is not distorted by any barrier. Barriers to effective communication also occur when lecturers do not communicate in a concise manner, which, according to Govender (2004:108), is one of the most common barriers unintentionally caused by lecturers.

### **2.6.8 Jargon overuse**

Jargon is another barrier to effective communication. According to Schick et al. (2012:109), jargon refers to technical terms hardly used in everyday conversation. The use of jargon unconsciously implies that the lecturer wants to communicate to students that already understand the terminology. However, such an assumption creates an ideal opportunity for barriers and ineffective teaching and learning.

On the other hand, the overuse of jargon is more likely to become cliché – in this case, it is recommendable to keep your communication simple and to the point. Not only will this be effective, but it will improve students' academic performance (Schmitz, 2018:105).

### **2.6.9 Emotional barriers**

Students' emotional experiences impact their ability to learn and their engagement in the lecturing environment. However, emotional barriers such as anxiety, do not affect students in the same way. (Yilmaz, 2017:254). In order to deal with emotional barriers

in the educational setting, it is important to understand how students interact with learning content and the relationship between emotions and cognition. We often prefer not to disclose some of their emotional barriers, as some of those barriers emanate from their social lives (Yilmaz, 2017:258).

When emotional barriers are not properly addressed, students who lack confidence will be afraid to take educated guesses and could have emotional issues that are affecting their learning. There can be a number of emotional factors at play in a student's learning, including fear of embarrassment, doubt, and inadequacy, all of which can lead to self-sabotaging emotional states (Pekrun and Linnenbrink-Garcia, 2014:8).

#### **2.6.10 Self-perception**

Barry (2002:101), defines perception as “the process of attaching meaning by selecting, organising, and interpreting events, and activities”. According to Barry (2002:102), there is a reciprocal relationship between perception and communication because participants in various forms of communication communicate based on their perception. Therefore, understanding the role of perception in communication can encourage students and lecturers to communicate effectively.

Pal et al. (2019:111) believe that lecturers' self-perception influences classroom practice and communication skills. Consequently, communication skills in the lecturing environment play an important role in helping lecturers and students to overcome communication with various barriers. Unfortunately, some lecturers tend not to be conscious of communication breakdowns, which hamper effective teaching and

learning. Not only do communication barriers mainly affect students when lecturers do not clearly understand what students are asking, but this could also become a gap in the communication process. Schick et al. (2012:108) identified the most prevalent communication barriers in the lecturing environment.

These include jargon, emotional barriers, lack of paying attention, and differences in perception. Wood (2016:75) asserts that perception is at the heart of communication. Perception is important in understanding human behaviour because students perceive and approach situations differently. It is not adequate to merely focus on effective communication, because the information presented by the lecturer is often misunderstood by the students. Therefore, perception plays an important role during the communication process (Verderber et al., 2017:255). Students communicate based on their perceptions and tend to believe that their perceptions are true reflections of reality (Usha, 2017:71). However, perception varies from person to person. Students perceive the same situation differently.

According to Wood (2016:176), perception is the active process of selecting, organising, and interpreting situations and activities. This process does not only have an intrinsic meaning that is passively received, students actively work to make sense of different situations (Verderber, Sellnow and Verderber, 2017:53). Verderber et al. (2017:97) believe that perception plays a central role in communication and affects both transmission and feedback of information. The encoding and decoding of a message and the medium used greatly depend on the perceptions of the sender and receiver (ibid).

Usha (2017:73) states that; “in all probability, if we positively perceive ourselves, we can confidently work with others. However, if we negatively perceive ourselves, we might perform below our actual ability.” How the lecturer interacts with students in the lecturing environment will positively influence how they perform (Verderber et al., 2017:129). If students take into consideration the negative perception that the lecturers’ hold of them, they will likely perform poorly academically. Barry (2002:102) mentions that lecturers’ perceptions and attitudes are determined by presumptions and listening skills (ibid).

The lecturer’s perception is a result of that lecturer’s personal emotional and mental personality such as cultural and personal beliefs, values, biases, prejudices, and the assumptions that have been shaped by the lecturer’s personal experiences and conditioning (Verderber et al., 2017:67). The result is that differences between the backgrounds, prejudices, assumptions, and preferences of lecturers and the students will affect the communication style and the way of engaging and interacting in the lecturing environment. (Wood, 2016:75).

Soini, Pietarinen, and Pyhältö (2016:388), posit that perception can be selective when we see what we want to see and hear what we want to hear. Thus, the information a lecturer intends to impart to students could be affected by either psychological or linguistic factors. Psychological factors, such as misperception and emotions, could impede the communication process. For example, students could have personal problems that will affect their participation during a lecturing session. Linguistic differences between students and lecturers can also lead to a communication breakdown (ibid).

Students are not immune to perceptual biases, which, according to Soini et al. (2016:547), is confusing facts with inferences. Students may ignore parts of the message and perceive what they want to perceive and make incorrect interpretations. According to (Wood, 2016:53), students are constantly bombarded by physical and social stimuli in their classroom environment. Because they do not have the mental capacity to fully comprehend all this information, they selectively perceive subsets of environmental stimuli.

Furthermore, Thiede et al. (2010:336) posit that students with accurate perceptions concerning their progress in learning often use more effective study habits and perform better academically. Thiede et al. (2010:336) also assert that the degree to which students' perceptions are accurate depends on the topic being studied and the students' level of ability. Schmitz (2018:136) suggests that students' perceptions tend to be riddled with errors in different academic subjects (ibid).

### **2.6.11 Ambiguity**

Ambiguous words affect discourse between lecturers and students. Students can only properly participate in a lecture when they have a clear understanding of what is being discussed (Schmitz, 2018:154). This reiterates the significance of trying to use minimal jargon and to avoid the use of ambiguous words in the process of communication. This will minimise communication barriers and maximise effective communication (Venter, 2019:5).

### 2.6.12 Discourse

Discourse in the lecturing environment also helps to minimise barriers as students seek clarity on activities they might not clearly understand. Wood (2016:81) posits that communication barriers emanate from the misinterpretation of information between the sender and the receiver. He recommends that senders and receivers share a common responsibility, which is to understand the message they wish to communicate with each other.

According to Stacks and Salwen (2014:10), positive feedback encourages students to communicate in a lecturing environment. Interpersonal communication in the lecturing environment, as the most often used form of communication, requires feedback from the receiver. Stacks and Salwen (2014:8) aver that feedback is important as it helps senders and receivers involved in the communication process to convey accurate information. It establishes relations between lecturers and students. They also point out that lecturers with good communication skills help reduce barriers and encourage students to participate during lectures. According to Rani (2016:74), effective teaching and learning can also be hampered by the competence of the lecturer. If a lecturer does not have adequate knowledge of the subject he/she is teaching, it will significantly affect students' academic performance and effective communication. She further accentuates that lecturers should do self-introspection regarding their communication skills, and they should strive to educate themselves on the content of subjects to achieve good academic results. This is important, as the incorrect interpretation of information or feedback often tends to hinder the process of communication (ibid).

The importance of effective communication should not be underestimated. Effective communication is at the heart of any successful engagement between students and lecturers. Therefore, to achieve educational outcomes, lecturers and students should be conscious of the possibility of communication barriers interfering with teaching and learning and find ways to alleviate these communication barriers.

## **2.7 CLASSROOM COMMUNICATION**

Classroom communication is the verbal and non-verbal interaction between lecturers and students. The fundamental goal of classroom communication is not only for the lecturer to impart knowledge to the students, but also for the students to actively engage in classroom lessons (Mentoor, 2015:48). It is at the heart of shared understanding amongst lecturers and students. However, communication is a two-way process that involves senders and receivers, and it can only be effective if there is a dialogue between the sender and the receiver (Zahedani, Rezaee, Yazdani, Bagheri and Nabelei, 2016:132). She also mentions that effective classroom communication is imperative for effective teaching and learning (Wood, 2016:103). Therefore, the existing relationship between communication and communication competence is inevitably vital in the lecturing and social environments. Effective classroom communication assists students in having a broader understanding of pedagogical content and it shapes their thinking and reasoning capacity (Mentoor, 2015:89). Effective communication can only take place when the receiver comprehends the message the sender intended to convey (Skosana and Monyai, 2015:52).

Classroom communication is an ever-evolving and continuing process between lecturers and students (Schick et al., 2012:79). According to Mentoor (2015:28),

acquiring knowledge in the classroom forms part of classroom communication and it requires more than just learning and active participation. However, the occurrence of classroom communication does not happen only during lectures - it is a continuing process that provides students with an opportunity to enhance their communication skills (ibid). Skosana and Monyai (2015:53) emphasise that it is important for lecturers and students to comprehend that classroom communication and classroom instruction are inextricable and cannot be effective when lectures of poor quality are provided. You cannot have a satisfactory communication process with poor lessons; they have to complement each other.

Mentoor (2015:33) explains that there are six fundamental aspects of classroom communication which are: the transmitter (lecturer); channels; message; receiver; noise; and feedback. She further argues that lecturers, as the ones leading the class, need to nurture students' academic needs to improve their participation during lectures. According to Lynch (2016:83), classroom communication is not perfect, but it can be improved. She makes the point that effective communication is at the heart of classroom discourse, which lecturers can use as a tool to measure the effectiveness of classroom communication. In Kritzinger et al., (2008:83) study, they found that some communication barriers emanate from poor second language acquisition, which for the purpose of the study will be referred to as English in a South African context.

Skosana and Monyai (2013:53) define learning as a process where students acquire and construct meaning and experience filtered through their perceptions. They states that students learn through interaction in the lecturing environment. In addition, Skosana and Monyai (2013:55) posit that it is important to encourage students to

participate in oral communication in the classroom because it will help them to overcome their fear of participating actively during classroom discussions. Students need opportunities to express their views regarding classroom activities and share their understanding of course content through active classroom engagement. Lecturers will then be able to assess whether students understand course content through classroom communication and how communication contributes towards students' interaction during lectures. How lecturers communicate with students will affect the way students interact in the lecturing environment (Rashidi, Yamini and Shafiei, 2011:165).

Hamm and Mirenda (2006:137) prove through their study that teaching communication skills explicitly and implicitly by the lecturers enhance teaching and learning experiences. Demonstrating plays a pivotal role during classroom communication because students tend to learn much better from their lecturer's examples (Hamm and Mirenda, 2006:137). A lecturer's approach and motivation regarding effective classroom discourse reflect what is important because it determines the achievement of academic objectives (Tambunan, 2018:87). A knowledgeable lecturer anticipates how students will respond to a message. Therefore, it is imperative for students to use their communication skills because it will assist them to achieve educational outcomes (Mentoor, 2015:45). She further argues that verbal communication is an essential medium of transmitting messages. According to Stacks (2014:10), students verbally communicate better when they are calm. Students' self-esteem assists them to overcome communication apprehension in the lecturing environment (Rashidi, Yamini, 2017:255). McCroskey (2011:45), defines communication apprehension as the level of anxiety triggered by anticipating a communication process.

Lecturers should have adequate communication skills because it is essential for effective pedagogical communication. Mentoor (2015:67) points out that lecturers ask thought-provoking questions to stimulate dialogue among students during classroom communication. She also states that acknowledging the fundamental aspects of communication is essential to the classroom communication process. The importance of effective communication establishes a good understanding between the lecturer and students, and it also creates an environment conducive to learning. To understand classroom communication, students need to understand the content of communication, and some aspects of the process might need to be clarified to prevent miscommunication (Martirosyan, Hwang and Wanjohi, 2015:63).

## **2.8 COMMUNICATION STRATEGIES**

In this section, strategies to enhance communication are discussed.

Listening in the lecturing environment requires undivided attention to comprehend the learning content. Interpersonal communication between lecturers and students should improve students' listening skills and enable them to ask questions when they do not understand (Lunenborg, 2017:106). Learning to listen effectively helps to improve communication. Schick, Gordon and Haka (2012:85) believe more attention is focused on making students better speakers and writers rather than making them better listeners and readers. The assumption of students thinking that they know more about the discussion before lecturers elaborate could create a listening barrier. The researcher concurs with Lunenburg's (2010:7) views, because listening skills and comprehension are central to effective teaching and learning. It is advisable for

students to listen attentively and read to understand because in doing so, barriers will be reduced and communication would likely be more effective.

Perceptual barriers require not only students, but lectures as well, to pay attention to details (Ekron, 2015:105). He further suggests that lecturers focus on the positive and negative aspects of communication and prevent the erroneous interpretation of information. Iglesias et al. (2016:834) assert that effective communication in the lecturing environment potentially improves teaching and learning, but this can only be achieved if both students and lecturers take responsibility for the effectiveness of communication between themselves (ibid).

According to Glomo-Narzoles (2013:406), communication is both receptive and expressive and he recommends that lecturers should listen to students and vice versa to minimise communication barriers. Communication becomes receptive when a participant in the communication process receives a message from the sender; and communication becomes expressive when a recipient in the communication process sends a message during the communication process (ibid). It is noteworthy that active listening plays an important role in the communication process. According to Glomo-Narzoles (2013:408), communication skills are also an important aspect of communication. For instance, should a participant not articulate or perhaps stutter during the communication process, receivers may encounter difficulty comprehending the message (Pal, Halder and Guha, 2019:109).

According to Cehan (2002:55), inadequate communication skills cause leaning glitches that inevitably results in poor academic performance. This could impact

vocabulary and sentence structure. The main purpose of communication is to pursue knowledge. The researcher believes that communication skills are at the heart of teaching and learning. If a lecturer cannot communicate proficiently, students will not comprehend lectures and they will be hesitant to actively participate in the classroom, and this will inevitably affect students' academic performance.

## **2.9 EFFECTIVE TEACHING AND LEARNING**

Enhancing teaching and learning seems to be the predominant goal that most Higher Education Institutions (HEIs) want to attain. Effective teaching and learning in HEIs is pertinent to this study, and compels lecturers to be vigorous and to establish clear, coherent, and consistent goals for tertiary syllabi. Therefore, effective teaching and learning requires more effort than everyday teaching and learning practice. The effectiveness of teaching and learning depends on both lecturers and students as the main stakeholders. It also necessitates effective communication (Mentoor, 2015:51). To make the process of communication effective, lecturers need to identify and understand the needs of students and address those needs in an appropriate manner (Burns and Myhil, 2004:40). They further argue that the lecturing environment is the primary place where effective communication could enhance teaching and learning. To achieve effective communication, both stakeholders are required to cooperate instead of students expecting lecturers to impart knowledge to them without their active participation.

Zemsky and Massy (2004:87) posit that, even though the goal is to enhance teaching and learning at tertiary institutions, technology alone does not guarantee effective teaching and learning. The researcher concurs with Zemsky and Massy (2004:88)

because technological devices need human supervision and to instruct them on what task they need to perform. For example, machine translation will not be adequate without a human translator's assistance to retain the essence of the source text.

## **2.10 HOW STUDENTS' ACCURACY OF METACOGNITIVE PERCEPTION RELATES TO SUCCESS IN LEARNING**

The metacognitive strategy is a fundamental pillar of learning excellence and academic performance (Ibrahim, Baharun, Harun and Othman, 2017:214). According to Ibrahim et al. (2017:220), effective metacognitive skills help students to plan, organise, regulate, and calibrate their cognitive process and intellectual abilities. Metacognition is categorised into two components, namely metacognitive knowledge and metacognitive regulation. Metacognition refers to what students know about their own cognitive knowledge (Ibrahim et al., 2017:229). The knowledge of metacognition and metacognition strategies are not the only factors contributing to effective teaching and learning, motivation plays an important role in student achievement as well (Kaur, Saini and Vig, 2018:737). They further contend that motivated students often engage in metacognitive strategies by planning, monitoring, and constantly appraising their academic progress and performance.

Olin-Scheller and Tengberg (2017:422) believe that metacognition helps students to improve comprehension and interpretation of texts. Metacognitive thinking helps to pay attention to detail. In other words, it could also be perceived as a central point in the development of reading comprehension (ibid).

### **2.10.1 Importance and effectiveness of metacognition**

Braund, Coombs, Lester, MacGregor and Soleas (2017:74) believe that students with good metacognitive skills perform better academically than those with poor metacognitive skills. Metacognitive skills help students to identify their strong and weak points throughout the learning process. Thus, students with well-developed metacognitive skills undoubtedly have the ability to set and achieve academic goals and to excel in their studies. Their well-developed metacognitive skills compel them to deal with frequent challenges in a satisfying manner.

Lecturers have the opportunity to further develop students' metacognition because metacognitive skills are not intrinsic – they have to be developed. Metacognition strategies have proven to be effective across various disciplines as metacognitive skills are similar to cognitive strategies, which help students to regulate their learning (Braund et al., 2017:73). Metacognition has three types of knowledge: declarative, procedural, and conditional.

Declarative knowledge is the knowledge students have regarding strengths and weaknesses in the learning process. Procedural knowledge refers to perception and approach of course material. Finally, conditional knowledge refers to the interpretation of learning tasks and how students can appropriately and effectively apply strategies to understand course material (Braund et al., 2017:83).

### **2.10.2 Pedagogical understanding of metacognition**

Pedagogical understanding refers to lecturers' knowledge regarding effective lecturing and how to help students achieve their academic goals. Metacognition is the key to

comprehension and success in understanding course material, which will undeniably lead to good academic performance (Olin-Scheller and Tengberg, 2017:420). The researcher agrees that adequate pedagogical knowledge does play an important role in the day-to-day teaching and learning and that it also helps students to better grasp lectures; because, when a lecturer has adequate pedagogical knowledge, he/she can explain and answer questions regarding the lecture in a satisfactory manner.

For teaching and learning to be effective, students need to use their metacognitive skills. According to English, Hargreaves, Hislam, (2002:22), metacognitive perceptions within the educational context refer to students' views of their learning process and is a reflection on what they understood in their learning tasks. Ehrlinger and Shain (2014:145) assert that students' perception is often erroneous in many learning activities. Their accurate perception depends on the subject matter under discussion and their ability to engage with adequate pre-knowledge of the subject matter (ibid). However, Ehrlinger and Shain (2014:145) believe that to a certain degree, students hold accurate metacognitive perceptions – making a well-informed decision regarding their academic work, including time management. It is, however, still challenging for students to have an accurate comprehension of the quality of their understanding and learning.

Barry (2002:103) identifies three stages that occur almost simultaneously in the process of perception, which are selection, organisation, and interpretation. During the first stage, students select the stimuli from the environment they are in, then they organise that information and assign meaning to it (Broadbent, 2000:84). Perception can either be accurate or inaccurate. Accurate perception of course content is an

advantage to achieving academic excellence, whereas inaccurate perception will inevitably lead to poor academic performance (Elze and Podlesny, 2014:55). Perception varies from person to person, therefore sharing the same perception becomes somewhat impossible.

According to Nkhoma, Nkhoma, Mai and Thomas (2017:46), students' poor academic performance is affected by their negative perception towards either the subject or the lecturer. Students' negative perception has a behavioural outcome, and it negatively affects learning achievements. Prior research conducted by various scholars shows that differences in perception correlate with behavioural intentions, which undoubtedly becomes a choice (Nkhoma et al., 2017:47). They assert that learning is more affected by the perception of lecturing than by the lecturing method itself (ibid).

Ramsden (2013:105) concurs with Nkhoma et al. (2017:47) that positive perception is associated with an effective learning approach, whereas negative perception is associated with an ineffective leaning approach. Students' perception has an influential impact on determining how students regard learning the material and in choosing the study and learning approach to be followed to comprehend the content (Ferreira and Santoso, 2008:215). Despite the importance of students' perception, inadequate attention given to barriers in the lecturing environment would still be a hinderance to effective teaching and learning (Ramsden, 2013:148). As stated by Zara, Kavanagh and Morgan (2012:12), students' level of perception has been tested through the use of case studies between students with work experience and students without any work experience, the results of their study did not show any significant difference in perception.

To establish students' perception, they investigated whether perception towards the subjects was different after the introduction of a cooperative learning approach to replace the traditional lecture-based learning approach. They found that students' perceptions of introductory subjects were initially positive and that their positive attitudes towards the subject were less likely to subside where cooperative learning techniques were used than with traditional teaching approaches (Zara et al. 2012:11). Students' perception does not occur in void spaces but is dynamic and entwined with elements in the lecturing environment (Ferreira and Santoso, 2008:226).

On the other hand, Lunenburg (2017:8) is of the view that the only way students would share an accurate perception of a task discussed is to engage in discourse. According to Liem (2019:706), discourse helps to alleviate inaccurate perception, which would lead to a communication barrier. Students are frequently overloaded by physical and social stimuli in the environment (Broadbent, 2000:103). Since they do not have adequate mental capacity to fully understand all the changes in the environment, they are compelled to selectively perceive subsets of environmental stimuli (Barry, 2002:105). Although perception is primarily a cognitive and psychological process, how students perceive their course material will affect their academic performance.

Kaur, Saini and Vig (2018:739) believe that students with better metacognitive skills perform better as compared to students with poor metacognitive skills. The significant role of metacognition in successful learning compels lecturers to adequately understand and to regulate the cognitive process of students.

### 2.10.3 Using a range of pedagogies

Effective teaching focuses more on the learning needs of students, and students do not only learn or build their vocabulary by being exposed to learning opportunities, but by reading and writing as often as they interact with society and/or on social media platforms (Kaur, Saini and Vig, 2018:741). Teaching and learning as an interactive process allows students to learn on their own and from one another. It also encourages students to interact and to take responsibility for their own learning, which not only provides them with an opportunity to take charge of their learning in the lecturing environment, but it also enables them to confidently participate in learning tasks (Johnson, 2002:69).

Ralph (2013:75) highlights that Canadian universities have focused more attention on the research mission of higher education, which ultimately increases the importance of effective teaching and learning in university settings. The aim of his study was to determine the different experiences encountered by students in various contexts and their perception of effective teaching and learning. Through his research, Ralph (2013:89) identified four attributes of effective lectures and these include:

**Commitment to students:** Passionate lecturers work with enthusiasm and they are dedicated to intellectually and morally develop students. Committed lecturers effectively play their role in establishing good lecturer-student relationships while being professional as well.

**Knowledge of course content:** Adequate pedagogical knowledge helps improve the quality of education at different levels, namely: primary, secondary, and tertiary.

Researchers across various disciplines cannot stress the importance of research enough. They believe research is at the heart of effective pedagogical practice and lecturers should not take it lightly because research enhances the quality of education.

**Communication:** Effective communication is a fundamental aspect of a successful lecturer-student relationship. Lecturers use verbal and non-verbal communication skills to lecture effectively, receive and give feedback, and impart knowledge to students. Lecturers who possess good communication skills and adequate pedagogical knowledge know when students are not concentrating and do not understand, even if they claim to understand. Such knowledge can be inferred during classroom discourse.

**Collaboration:** Good lecturers know how to collaborate and to build relations, not only with their colleagues, but also with students.

Ralph (2013:186) argues that evaluating one's teaching practice is confined to faculty development programmes, but does not necessarily include students' perceptions and experiences. Harris (2018:15) conducted a study examining students' perceptions of effective teaching, and the results revealed that learning was the most important, whereas course difficulty was the least important factor. The researcher agrees with the above findings by Ralph and Harris. Students' experiences in the lecturing environment are not given adequate attention. How does one identify learning difficulties without self-introspection? Teaching and learning is, however, a task that requires both lecturers and students to actively participate and to ensure that there is no misunderstanding during teaching and learning activities (Hinnenkamp, 2003:45).

According to Jamshidnejad (2011:355), there are certain cognitive goals that lecturers should focus on to enhance teaching at tertiary level. He states that tertiary teaching should improve students' factual knowledge and their cognitive capacities (both in writing and reasoning), and that it should cultivate intellectual appreciation. The second goal, according to Jamshidnejad (2011:372), is the organisation of instruction because he believes that lectures and discussions should be well planned and organised, since it should enhance teaching and alleviate communication barriers in the lecturing environment.

Therefore, his third goal; clarity of expression, elaborates on effective communication in the lecturing environment, as he elucidates that effective teaching techniques should be used to explain concepts and principles of the subject matter in a course. However, Jamshidnejad (2011:360) also warns that there is often a gap between sophisticated knowledge from the discipline and the knowledge of students. The researcher suggests that the lecturers should identify the gap of knowledge and try to bridge this gap to achieve educational outcomes.

Delaney, Johnson, Johnson and Treslan (2017:34) point out that a lecturer's ability to effectively lecture shows that he/she has adequate pedagogical knowledge in that particular discipline. Students are willing to learn from lecturers who are up to date with current research and practice. The researcher agrees with Delaney et al. (2017:66) because education is evolving and it is preparing and equitably honouring the potential in students that will require rethinking the design of learning. Thus, it is

imperative for lecturers to actively be involved in research so that they can be on par with these developments in the HEIs.

Yang, Becerik-Gerber and Mino (2013:183) are of the view that students tend to do well academically when they are intrinsically motivated to achieve educational outcomes. They claim that there are four main factors that cause perceptions to vary amongst people, and these factors cause people to organise communication in various ways. Past experience, physiology, culture, and an individual's present emotional state contribute towards different perceptions of the same communication. Humans receive stimuli from their environment and will organise the information and thereafter interpret the information in different ways. (Yang et al., 2013:184).

Schick et al. (2012:89) point out that a perception gap is a barrier to communication. They further elaborate that a perception gap occurs when the intended message conveyed to a particular audience is misunderstood. They assert that thwarting good communication is just the tip of the iceberg. Subsequently, minor misinterpretations lead to large misunderstandings, which grow into erroneous miscommunication. Rani (2016:74) advises participants to listen attentively and pay attention to detail when communicating in order to overcome the perception gap.

Yang et al. (2013:178) state that classrooms should be designed to be the best learning environment to encourage academic excellence. Therefore, the relationship between the students and lecturers should be of such a nature that will help to reduce communication barriers. In this section, barriers to effective communication were discussed.

## **2.11 CONCLUSION**

This chapter provides the theoretical framework and identified the contextual gap that underpins this study. The first section identifies the contextual space in research on communication barriers in the lecturing environment, communication skills, and academic achievement. In order to obtain an understanding of communication and concepts relevant to this study, the researcher reviewed literature pertaining to communication barriers in the lecturing environment. The researcher also deliberated on different communication skills, effective teaching and learning, as well as academic achievements by using a pertinent classroom communication model by Vreken (1996) and the Theory of Constructivism by Vygotsky (1978).

In the following chapter, the research design is discussed. The methods that were used to gather statistical data - quantitative and qualitative research, are explained.

## CHAPTER 3

### RESEARCH DESIGN AND METHODOLOGY

#### 3.1 INTRODUCTION

This chapter describes the research methodology and data collection techniques used in this study. The research methodology focuses on the quantitative approach of the study. The method used to analyse and interpret results is discussed in this chapter. This is followed by explaining the population, the sample, and sampling procedures. The chapter also outlines the methods of data collection and the plan for data analysis. Lastly, issues related to reliability and validity are discussed.

#### 3.2 RESEARCH QUESTIONS

The following problem envisaged gave rise to the primary research question:

What communication barriers are more likely to occur during a lecturing session and how are they dealt with?

To fully explore the primary research question, the following secondary questions needed to be answered:

What effects do communication barriers have on student academic performance?

How do students approach course content that they are not familiar with?

### **3.3 AIMS OF THE STUDY**

The aim of this study is to determine the cause of communication barriers in the lecturing environment. The following objectives guided the research in an effort to realise this aim:

- To identify communication barriers that could occur in the lecturing environment and to suggest ways of approaching them;
- To determine the effects of communication barriers on student academic performance; and
- To ascertain how students could approach course content that they are not familiar with.

### **3.4 RESEARCH PARADIGM**

With regards to research in pursuit of understanding reality, Cohen, Manion and Morrison (2017:176) emphasise that ontological assumptions will inform epistemological assumptions, which in return give rise to the methodology, and the latter will influence the choice of instruments and data collection. This encapsulates the information of the researcher's philosophical view or paradigm, which directed this study. Babbie and Mouton (2006:124) point out that a paradigm provides different ways of observing human social life and inspires different ways of conducting research. According to Cohen et al. (2017:83), there are three major paradigms in social and education research, namely the positivist, interpretive, and critical theory paradigm. The researcher had to choose a paradigm that underlines this study in order to conceptualise a suitable framework for the research to be conducted.

The characteristics of the three paradigms are provided in the table below.

**Table 3.1: A summary of three educational research paradigms**

	Positivist	Interpretive	Critical theory
Ontology	Reality is objective	Reality is objective	Reality is objective
Epistemology	Reality can be known through rational proof and science is seen as the way of obtaining truth.	Reality can be known through interaction with individuals and interpretation of narratives.	Reality can be known through examining and interrogating social structures.
Interests	Technical prediction and control	Practical understanding and interpretation	Emancipating emancipation and freedom
Research agenda	Generalising from the specific	Interpreting the specific	Critiquing the specific
Focus	Macro-theory (Large groups) Quantitative	Micro-theory (Small groups)	Micro-theory and macro-theory
Methodology	Quantitative	Qualitative	Action research Ideology critique

Instruments	Experiments Questionnaires Surveys	Interviews Open-ended questionnaires	Interviews Case study
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This study was conducted from a positivist perspective. The aim of the study was to identify communication barriers in the lecturing environment, and to determine the effect of communication barriers on student academic performance.

The researcher views reality as objective, and therefore studied the reality objectively. The words “reality being studied” refer to the experience of both students and lecturers in the lecturing environment. The researcher did not interfere with the participants’ views and experiences of the lecturing environment. According to Cohen et al. (2017:77), the positivist approach is grounded in rational proof and assumes an objective reality, as in the case of this study.

The research design is quantitative in nature and the questionnaires were electronically distributed to a large group of students and lecturers. Cohen et al. (2017:90) confirm that quantitative research methods are synonymous with the positivist paradigm.

### **3.5 RESEARCH DESIGN**

A research design is used to determine how to conduct research and which method to use (Bell and Waters, 2014:185). Creswell and Creswell (2018:11) define a research design as a type of enquiry that gives direction for procedures in a study. The researcher designs a plan and structure of conducting research (Carriger,

2000:24). The research design also ensures that the researcher obtains evidence during the research process that will enable him or her to accurately answer the research questions of the study in question. The research methodology underpinning the positivist research paradigm is quantitative in nature. Quantitative data collection methods were used to collect data for the purpose of this study.

### **3.6 DATA COLLECTION METHOD**

Creswell and Creswell (2018:186) define data collection as the process of collecting and measuring information on variables of interest. It enables the researcher to answer research questions and to evaluate the outcomes. The researcher collected data from CUT students and lecturers at the Bloemfontein campus by using online questionnaires consisting of closed and open-ended questions. The online data collection process was convenient because the COVID-19 pandemic restricted social interaction, which made it impossible to collect data in any other way. Using Google Forms to collect data online came as a solution to collect data without having to meet the participants in person.

#### **3.6.1 Literature Review**

The researcher also used a literature review as a data collection tool. The literature review involves activities such as identifying, recording, understanding, meaning-making, and transmitting information. When the goal of the literature review is to inform primary research, then the literature review represents an embedded study, as was the case in this study.

### 3.6.2 Quantitative Approach

Quantitative research deals with numbers, logic, and an objective stance. It focuses on numeric and unchanging data and detailed, convergent reasoning rather than divergent reasoning (Creswell and Clark, 2011:75). According to Creswell et al. (2018:103), quantitative methods involve the process of collecting, analysing, and interpreting data and writing the results of a study in a manner consistent with a survey or experimental methods.

He further defines a survey as a design that provides a quantitative or numeric description of trends, attitudes, or opinions of a population by studying a sample of that population from which a generalisation is made. A cross-sectional approach was used, which implies that data were collected through a questionnaire and then analysed. A questionnaire is a viable method because of its cost effectiveness and it can be applied within a short period of time without compromising the validity and reliability of the research.

According to Brink and Wood (1989:95), the characteristics of quantitative research are as follows:

- There is a single reality that can be defined by careful measurement;
- It examines and describes relationships and determines causality among variables;
- The researcher uses statistical analysis to scale down, to organise data, and to determine significant relationships;
- Reliability and validity of the instruments are important; and

- It gives an accurate account of the characteristics of particular individuals and situations.

Cassidy and Eachus (2000: 311) agree that quantitative research attempts to gain an understanding of the phenomenon under investigation so that researchers may use this understanding in order to make predictions about the real world, and thus develop techniques or procedures which allow a degree of control to be exerted over that phenomenon.

### **3.6.3 Variables**

A variable is a characteristic of a phenomenon that can be measured or classified (Field, 2013:76). Quantitative research focuses on explaining the relationship between variables. Therefore, understanding the purpose, operationalisation, and measurement of variables is a key part of quantitative research. In this study the following independent variables were identified: communication skills and communication barriers. The dependent variable was student academic achievement.

### **3.6.4 Measuring Instrument**

It is important for the researcher to construct an instrument to measure the numerical degrees of attributes in quantitative research. Quantitative research is based on measurement and is conducted in a systematic, controlled manner. This enable researchers to perform statistical tests, analyse differences between groups, and determine the effectiveness of treatments. In this study, a measuring instrument were deployed to determine the degree of communication barriers experienced by students in the lecturing environment at CUT.

### **3.6.4.1 Communication skills**

Questionnaires for both lecturers and students were designed to obtain information about their communication skills. Poor communication skills lead to communication barriers, and communication barriers negatively affect students' achievements. Participants were asked to rate their communication skills, this assisted the researcher in measuring their communication skills. A Cronbach's alpha reliability index of 0.72 is reported in this study.

## **3.7 QUESTIONNAIRE DESIGN**

Questionnaires are used in research to provide data on participants' views, beliefs, and perceptions (McMillan, 2008:156; Cohen et al., 2011:45). Creswell et al. (2012:90) recommend that when using a questionnaire for quantitative data collection, the researcher should use open-ended questions because participants are able to express themselves articulately and in this way, rich and relevant data can be obtained.

The design of the questionnaires for both students and lecturers is presented in different sections as they appear on the questionnaires, namely:

**SECTION A:** Demographic information;

**SECTION B:** Communication skills;

**SECTION C:** Barriers to effective communication;

**SECTION D:** Dealing with difficult course content.

## **3.8 STUDENT QUESTIONNAIRE DESIGN**

In this section, the design of the student questionnaire is presented.

### **3.8.1 Section A: Demographic Information**

This section deals with the personal information of participants. The students were requested to indicate their gender, age, and year of study. The demographic information of the participants also assisted the researcher in examining whether their age played any significant role in how they experience communication barriers in the lecturing environment.

According to Vogt and Johnson (2011:115), demography is a field of study in which the researcher examines the quantifiable statistics of a particular population. The personal information provides data regarding the participants of both students and lecturers as a representative sample of the population for generalisation purposes.

### **3.8.2 Section B: Communication Skills**

In this section, students were asked whether English is their first or second additional language, whether they are satisfied with communication between them and their lecturers, and how they deal with communication barriers. Teaching and learning is all about communication – it concerns itself with discourse. Effective communication is a prerequisite for effective teaching and learning. Therefore, lecturers and students should try by all means to communicate affectively and to alleviate any hindrances to the communication process (De Jager, 2012:78). The researcher was interested in knowing the level of English proficiency of the participants as the medium of instruction at CUT, and if it is also their first additional language.

### **3.8.3 Section C: Barriers to Effective Communication**

Students were asked to mention communication barriers that they encounter in the lecturing environment and how they deal with these communication barriers. Barriers in the lecturing environment could occur if verbal communication is not clear. Communication can only be effective if the students hear and understand the lecturers and interpret the message accurately (Mentoor, 2015:40).

### **3.8.4 Section D: Dealing with Difficult Course Content**

Students were asked what steps they take to understand complicated course content. The researcher wanted to establish how students deal with difficult or unfamiliar course content. The importance of asking how participants deal with course content assisted the researcher in answering the research questions.

## **3.9 LECTURER QUESTIONNAIRE DESIGN**

In this section, the design of the lecturer questionnaire is presented.

### **3.9.1 Section A: Demographical Information**

Lecturers were asked to provide their gender and designation to establish demographical profiles of the participants in the study. Demographic information is important because it provides an understanding of the characteristics of a population in a scientific study (Vogt and Johnson, 2011:116). Moreover, demographical information assists researchers in obtaining adequate knowledge about the size and composition of the population.

### **3.9.2 Section B: Communication Skills**

Lecturers were asked about their communication skills and how they deal with communication barriers in the lecturing environment. The researcher also wanted to know how lecturers' English accents affected verbal communication.

### **3.9.3 Section C: Barriers to Effective Communication**

Lecturers have the challenging task of striving to communicate effectively in the lecturing environment. If this task is not achieved, it creates barriers that hinder communication (Jureddi and Brahmaiah, 2016:43). In this section, lecturers were asked to mention what barriers hinder communication in the lecturing environment and how they deal with these barriers.

### **3.9.4 Section D: Dealing with Difficult Course Content**

Lecturers were asked what strategy they used to simplify complicated course content for students, and what factors they considered when preparing course content. The researcher wanted to establish how lectures dealt with difficult or unfamiliar course content. The importance of asking how lecturers deal with course content assisted the researcher in answering the research questions.

## **3.10 RELIABILITY**

Cohen et al. (2011:115) define reliability as a precision and accuracy of the instrument. According to Babbie (2014:155), reliability depends on the appropriateness of the tools, processes, and data. To ascertain the reliability of the questionnaire, the researcher used Cronbach's alpha reliability coefficient to determine the reliability measurement of the questionnaire.

Cronbach's alpha measures the internal consistency and the reliability of the questionnaire. Reliability relates to the precision and accuracy of the instrument. If used on a similar group of respondents in a similar context, the instrument should yield similar results (Cohen et al., 2011:117). Accurate and careful phrasing of each question to avoid ambiguity and leading respondents to a particular answer ensured the reliability of the tool. The respondents were informed of the purpose of the interview and of the need to respond truthfully.

Cronbach's alpha is a convenient test used to estimate the reliability, or internal consistency, of a composite score. Cronbach's alpha gives the researcher a simple way to measure whether or not a score is reliable. It is used under the assumption that one has multiple items measuring the same underlying construct (Cohen et al., 2011:78).

Theoretically, Cronbach's alpha results should give the researcher a number from 0 to 1, but the researcher can obtain negative numbers as well. A negative number shows that there is something wrong with the data. The general rule of thumb is that a Cronbach's alpha of 0.70 and above is good, 0.80 and above is better, and 0.90 and above is best. (Cohen et al., 2011:83).

**Table 3.2: Provides guidelines for interpreting the Cronbach's alpha reliability coefficient and was used in this study.**

Cronbach's alpha reliability coefficient	Reliability
$\alpha \geq 0.9$	High
$\alpha \geq 0.8$	Moderate
$\alpha \geq 0.7$	Low
$\alpha \geq 0.6$	Very low but acceptable
$\alpha < 0.6$	Unacceptable

**Table 3.3: Reliability Statistics**

Cronbach's Ipha	Number of items
0.72	40

Cronbach's alpha was used to test the internal consistency of the variables. The results in the table above indicate that the variables have great internal consistency with an alpha value of 0.72.

### **3.11 VALIDITY**

According to Maree and Pietersen (2007:65), there are various ways to determine the validity of a questionnaire and data collection. In this study, the researcher used face validity, content validity, and construct validity. Each type of validity is discussed in the following paragraphs.

### **3.11.1 Face Validity**

Face validity refers to the degree to which an instrument measures what it is supposed to measure. The instruments had to gather personal information, information about communication skills, and information about communication barriers in the lecturing environment. The researcher's study promoter scrutinised the questionnaire to ensure that the questionnaire elicits relevant data to answer the research questions and to address the research problem of the study. The statistician who analysed the data was also consulted in the design of the questionnaire.

### **3.11.2 Construct Validity**

Construct validity is the extent to which the measurements used, often questionnaires, actually test the theory they are measuring. Construct validity should demonstrate that scores on a particular test do, in fact, predict the theoretical trait it says it does (Creswell et al., 2018:57). In this study, measurements were carefully developed and aligned based on the Vreken's (1996) constructivist theory, which prioritises development and describes learning as utilising "the achievements of development instead of providing the impetus for altering its course".

### **3.11.3 Content and Construct Validity**

The researcher assesses the adequacy of the questionnaire to determine whether it has accurately measured the concepts it was supposed to measure. (Cohen et al., 2007:137). In this study, the researcher ensured face, content, and construct validity by using the questionnaire designed for this study. The communication skills of participants were tested to prove the validity and that it provided a reliable test of communication barriers in the lecturing environment.

## **3.12 POPULATION AND SAMPLING**

### **3.12.1 Population**

Cohen et al. (2017:356) describe a population as a group of individuals who share certain characteristics. The population for this study were students and lecturers from the Central University of Technology, Free State. The population consisted of all faculties, namely Engineering; Built Environmental and Information Technology; Health and Environmental Sciences; Humanities; and Management Sciences. The researcher used a larger population because a larger population provides more reliable results with greater precision.

### **3.12.2 Sampling**

According to Creswell et al. (2018:151), sampling is a process of selecting individuals or units from a larger population. A sample is representative when it allows the results of the sample to be generalised to the population.

At the time of the study, the researcher stayed in Bloemfontein and it was convenient and financially feasible for him to use students and lecturers at the Central University of Technology, Free State. Convenience sampling was used to obtain a representative sample for the study. Convenience sampling is one of the most convenient methods of sampling because participants are selected based on their availability (Sauders, Lewis and Thornhill, 2016:127). Even though the researcher distributed 80 questionnaires to students and 50 to lecturers, only 40 students and 13 lecturers participated in the study to establish the possible causes of communication barriers in the lecturing environment.

The researcher used the Kaiser-Meyer-Olkin Measure of Sampling Adequacy. The test was used to measure sampling adequacy for each variable in the model and for the complete model. The statistics are a measure of the proportion of variance among variables. The following indicates the sampling adequacy pertaining to this study.

**Table 3.4: Kaiser-Meyer-Olkin Measure of Sampling Adequacy**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	0.707
Bartlett's Test of Sphericity Approx. Chi-Square	2041,940
df	40
Sig.	0.000

The sampling adequacy and sphericity was tested by Kaiser-Meyer-Olkin Measure (KMO) of Sampling Adequacy and Bartlett's Test of Sphericity. The significance of the Bartlett's test shows that the data was suitable for the analysis. The KMO statistic of 0.707 exceeds the minimum requirement of 0.50 for overall sampling adequacy, suggesting that the sample is adequate for the analysis conducted. The above results indicate that all the variables in the analysis satisfy the criteria for suitability of the analysis.

### 3.13 ETHICAL CONSIDERATIONS

According to Creswell et al. (2018:90), ethical considerations have to be taken into account and must be reflected in any scientific research process. Ethical norms serve the goal for research and apply to individuals who conduct scientific research. Ethical norms can be used as a basis to promote the aims of research, such as knowledge, truth, and avoidance of errors in a study. Thus, it is important to adhere to ethical

aspects, as these promote essential values of collaborative work, such as trust, accountability, mutual respect, and fairness (Creswell et al., 2018:91).

The researcher should also adhere to informed consent, right to privacy, and honesty with professional colleagues as ethical aspects (Leedy, Ormod, Johnson and Barry, 2013:56). Moreover, the researcher should not deceive the public with inaccurate or false data.

Thus, in reporting the findings of the study, honesty is very important and the researcher should not mislead others about the nature of the findings. The researcher's integrity is very important as he or she should keep promises and agreements with participants (Resnik, 2011:404).

In order to fulfil ethical considerations, the researcher made it clear to respondents that their participation were voluntary. The researcher also informed respondents of the nature of the study and how it will be conducted, what purpose it would be used for, and about the activities involved in the study.

Respondents could also terminate their participation at any stage because their participation is voluntary. The researcher informed participants that their participation in the study would be strictly confidential and anonymous because this would also help to set them at ease (Leedy et al., 2013:85). The aforementioned has been adhered to in this study.

The researcher followed the necessary processes and procedures of obtaining research ethical clearance from The Faculty Research and Innovation Committee (FRIC). The importance of ethical clearance is to ensure that research is conducted responsibly and ethically. After the researcher was granted permission by the Central University of Technology, Free State to conduct research, the questionnaires were administered to the students and the lecturers via an online Google Forms link and data collection was done over four weeks.

### **3.14 ANALYSIS OF RESULTS**

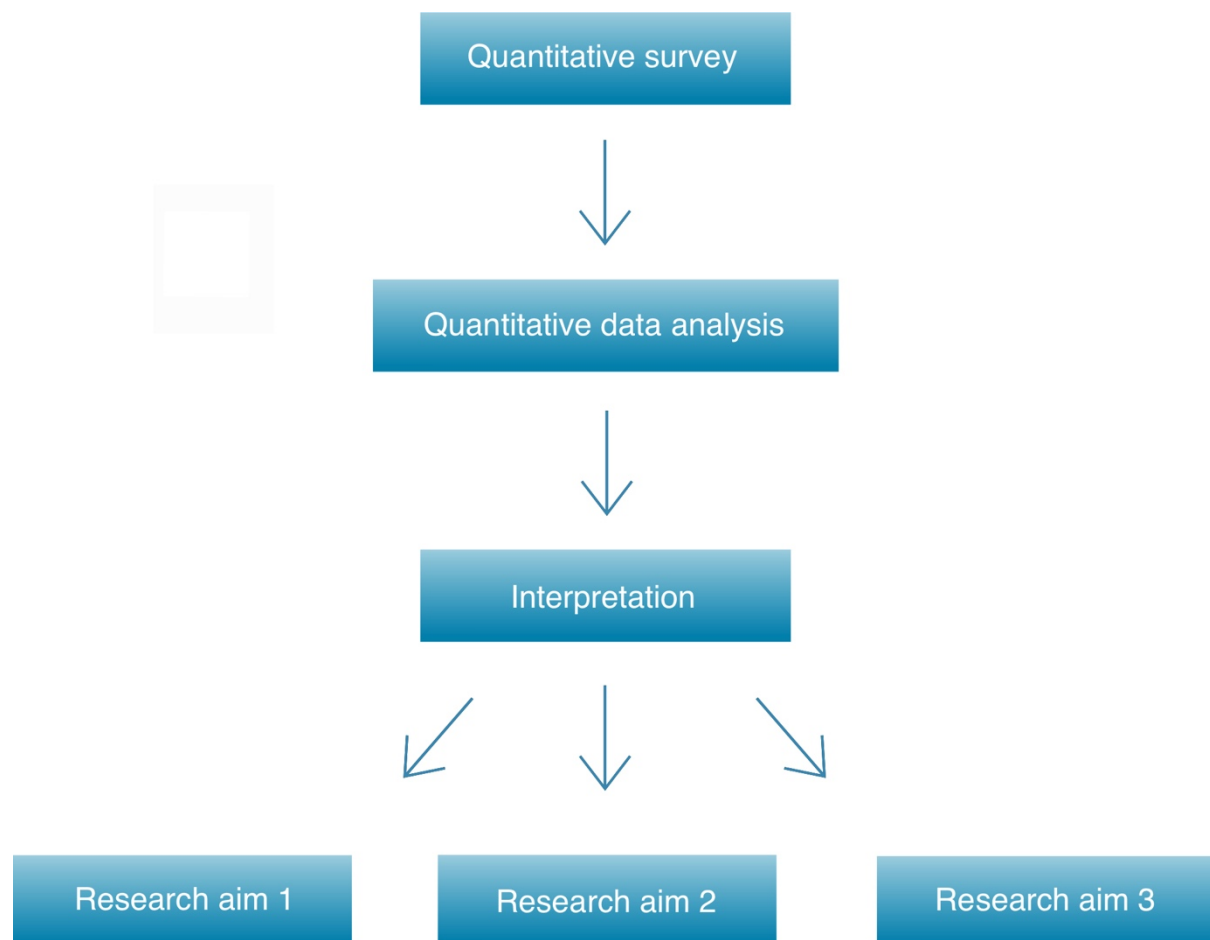
Data analysis involves identifying common patterns within the responses of participants and critically analysing them in order to achieve research aims and objectives (Neuman, 2014:192). According to Durrheim (1999:42), quantitative research involves the collection of data in the form of numbers and uses statistical data analysis. The researcher has adopted this data analysis procedure as proposed by Creswell and Creswell (2018:78) for the qualitative data. According to Creswell et al. (2018:189), the data analysis procedure provides the researcher with a clear 'direction' to following in executing a successful and accurate research data analysis.

For the purpose of this study, the researcher used the Statistical Package for Social Science (SPSS) to analyse quantitative data generated from both students and lecturers that have been placed in categories according to the research objectives.

The basis application of SPSS is to analyse scientific data related to social sciences. It assists in obtaining statistical information that researchers can easily interpret. SPSS

first stores and organises the provided data and then compiles the data set to produce the suitable output.

The following diagram is an illustration of how the researcher has analysed the quantitative data.



**Figure 3.1: Diagram for quantitative data analysis (Creswell and Creswell, 2018:78).**

### **3.14.1 Descriptive statistics**

For the researcher to answer the research questions, descriptive statistical procedures were applied to organise and summarise data in a meaningful way. Questionnaires were used as instruments to collect quantitative data.

### **3.14.2 Inferential statistics**

Inferential statistics allow the researcher to make inferences from the data obtained from the sample to a large population (Baxter and Babbie, 2003:45). Inferential statistics essentially measures differences among a population. According to Creswell et al. (2010:198), there are often instances where simply summarising and describing the data is not adequate. For the purpose of this study, inferential statistical procedures were utilised to make generalisations from the sample to describe communication barriers in the lecturing environment found in the population.

## **3.15 CONCLUSION**

This chapter deals with the methodology and design of the study. Data was collected by means of questionnaires from the lecturers and students and literature review pertaining to the study was discussed. Issues of reliability and validity pertaining to the data collection procedures are explained. Ethical considerations for the study are also addressed. In the next chapter, the interpretation of the research results is discussed.

## **CHAPTER 4**

# **PRESENTATION OF DATA ANALYSIS AND INTERPRETATION OF RESULTS**

### **4.1 INTRODUCTION**

In the previous chapter, the researcher provides details regarding the research methodology and data gathering strategies used in this study. This chapter addresses the quantitative analysis of the data obtained from the questionnaires. The findings are explained and graphic illustrations of the information are provided.

### **4.2 RESEARCH DESIGN**

A positivist research approach was used to investigate communication barriers in the lecturing environment. The study involved all four faculties at the Central University of Technology, Free State, namely: Humanities, Management Sciences, Health and Environmental Sciences and Engineering, Built Environment and Information Technology.

These four faculties differ in terms of the number of students and lecturers. Humanities having the highest number of students and Health and Environmental Sciences and Engineering the lowest.

### **4.3. DATA ANALYSIS**

Data analysis is the process of systematically applying statistical information to describe and illustrate, condense and recap, and evaluate data. According to Cohen

et al. (2017:106), various analytic procedures provide a way of drawing inductive inferences from data.

For the purpose of this study, descriptive and inferential data analysis was used. Descriptive analysis refers to statistically describing, aggregating, and presenting the constructs of interest (Cohen et al., 2017:67). Inferential analysis is concerned with estimating the characteristics of a population and to draw accurate and reliable inferences (Fraenkel and Wallen, 2008:87). The statistical and descriptive data from the questionnaires were exported from Google Forms to a Microsoft Excel Worksheet to prepare it for analysis. To initiate the analysis, all responses, comments, and notes were read. Thereafter, the percentage of the responses was calculated to determine whether the respondents agreed or disagreed with the statements on the questionnaire. The analysis of the completed questionnaires has been presented in different sections for both students and lecturers as they appear on the questionnaires, namely:

**SECTION A:** Personal information;

**SECTION B:** Communication skills;

**SECTION C:** Barriers to effective communication; and

**SECTION D:** Dealing with difficult course content.

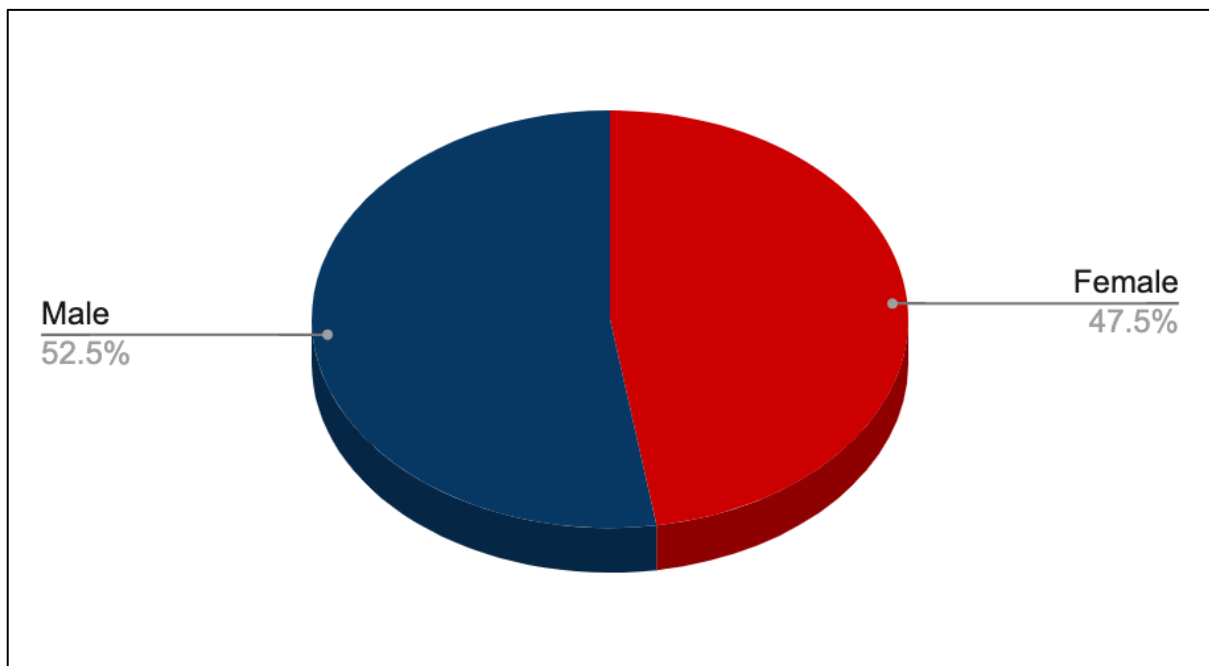
## 4.4 INTERPRETATION OF RESEARCH RESULTS FROM STUDENT QUESTIONNAIRES

In this section, findings from the student questionnaires are discussed.

### 4.4.1 Section A: Demographic Information

This section of the questionnaire provides insight into personal information of student participants. The personal information includes gender, age, year of study, level of study, and lastly, faculty of study.

#### 4.4.1.1 Student gender

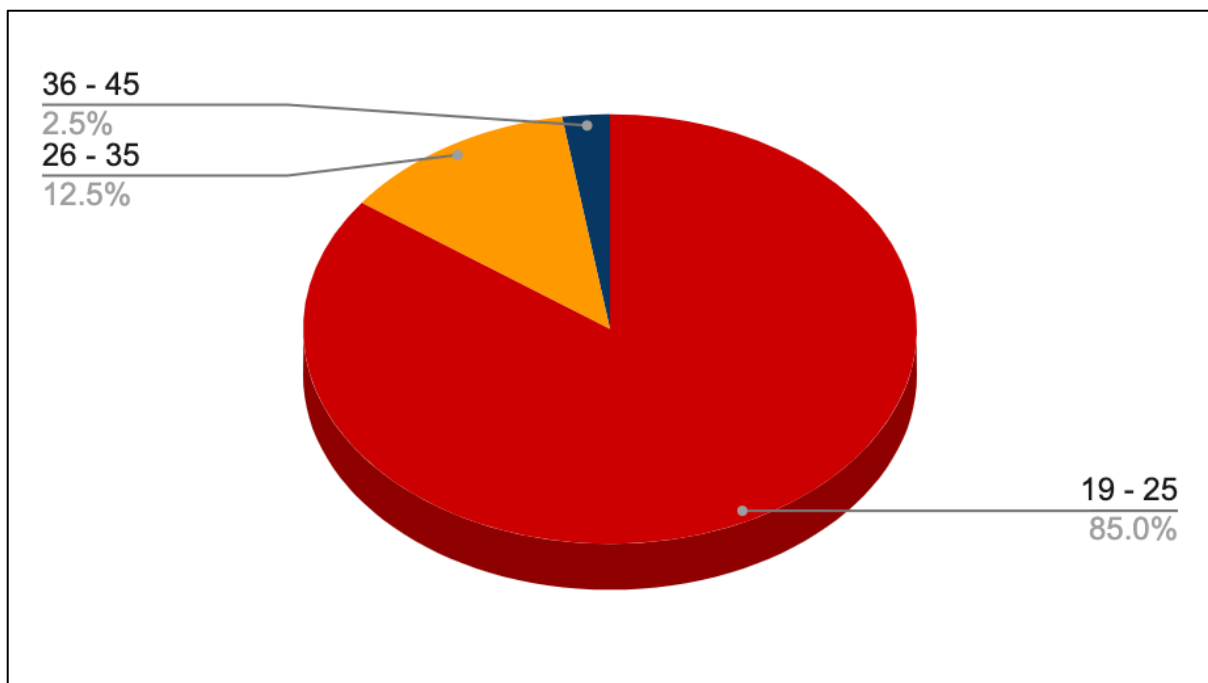


**Figure 4.1: Student gender**

The significance of gender was to identify how many males and females participated in the study and to assess their views. The data indicates that a total of 52.5% of participants were males and 47.5% were females. Figure 4.1 clearly shows that the

gender difference is not significant, even though more males participated than females. Even though the study utilised convenience sampling, the researcher was concerned with obtaining balanced samples, equal or nearly equal-sized subgroups. The other reason for obtaining a balanced sample of both male and female participants was to conduct a study that promotes gender equality and not to be gender biased. Heidari, Babor, De-Castro, Tort and Curno (2016:148) state that, although the exact male to female ratio is impossible to achieve when conducting research, it is advisable for researchers to strive towards obtaining a balanced sample consisting of both males and females. However, in the present study, such a sample was not obtained even though the researcher circulated the questionnaires twice to both students and lecturers.

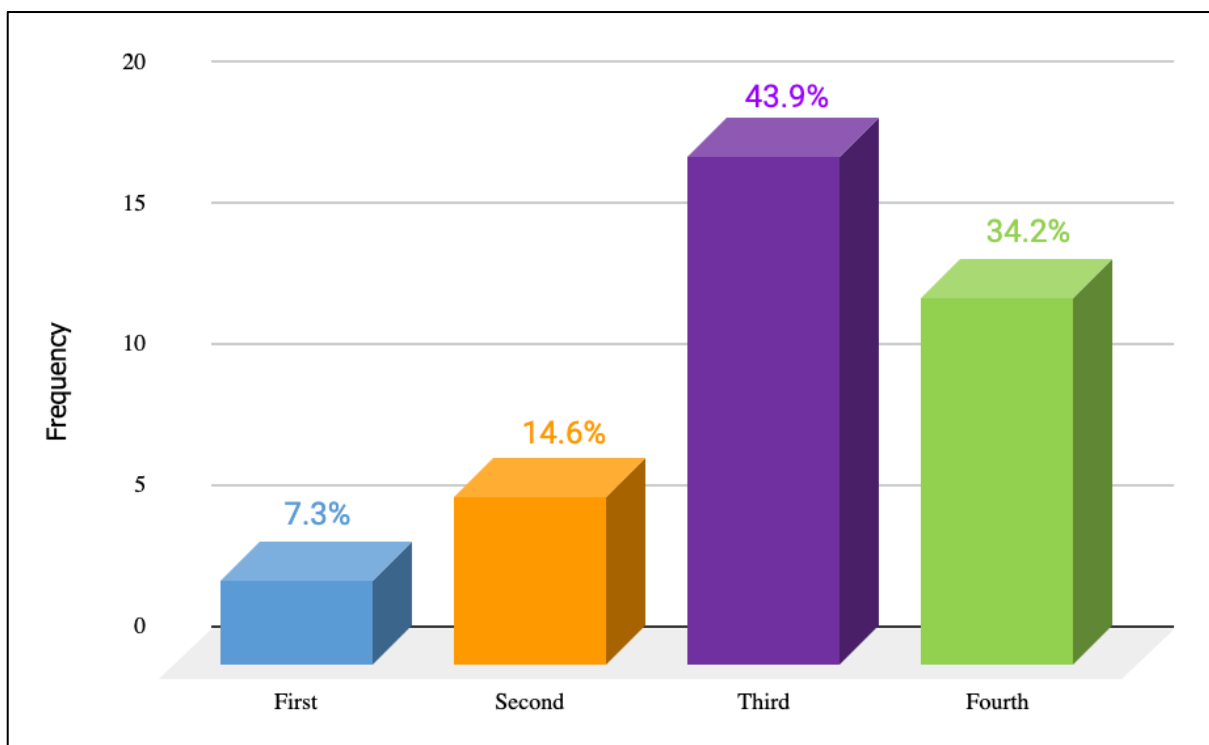
#### 4.4.1.2 Student age



**Figure 4.2: Student age**

Figure 4.2 reveals that 85% of the respondents were aged between 19-25 years; 26 - 35 years was the second largest age group, with 12.5%; and 36-45 years with the least at 2.5%, and there were no respondents aged between 46-55. This shows that views and experiences shared in this study regarding communication barriers in the lecturing environment were inclusive of respondents of various age groups.

#### 4.4.1.3 Level of study



**Figure 4.3: Level of study**

Figure 4.3 shows that most participants were senior students. Even though the researcher used convenience sampling, the aim was to have more senior students to participate, because they have more experience in the lecturing environment than first-year students and that was achieved as indicated in Figure 4.3. The researcher included participants from different academic levels to allow participants to share and

relate their experiences of communication barriers based on their experience at their level. This allowed the researcher to not only obtain rich data, but to also have a better understanding of the context in which participants experience communication barriers.

**Table 4.1: Faculty of study**

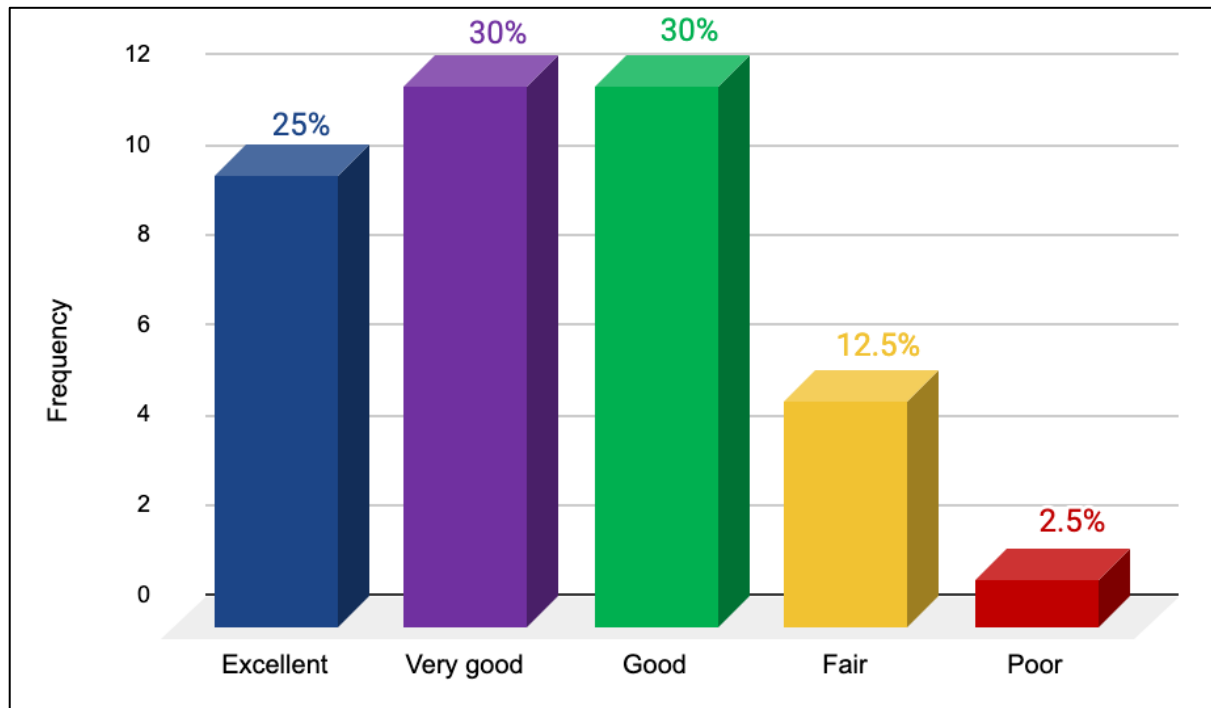
Faculties	Frequency	Percent	Valid Percent	Cumulative Percent
Humanities	7	17.5%	17.5%	17.5%
Management Sciences	5	12.5%	12.5%	30%
Health and Environmental Sciences	7	17.5%	17.5%	47.5%
Engineering, Built Environment and Information Technology	21	52.5%	52.5%	100%
Total	40	100%	100%	

Most of the participants were students from the Engineering, Built Environment and Information Technology Faculty with a total of 52.5% of followed by Health and Environmental Sciences and Humanities with a total of 17.5% respectively, and the last faculty, Management Sciences with a total of 12.5% participation.

#### 4.4.2 Section B: Communication Skills

This section of the questionnaire provides insight into student communication skills, student English proficiency, and student communication satisfaction.

##### 4.4.2.1 Student communication skills



**Figure 4.4: Student communication skills**

Most of the respondents were confident about their communication skills. As per the findings, the respondents indicated that their ability to receive, interpret, and share information is effective. Only 12.5% of respondents indicated that their communication skills were fair and 2.5% indicated that their communication skills were poor. This means that most respondents have a good comprehension of language used in the classroom.

Olin-Scheller and Tengberg (2017:420) believe that while it may not be obvious, students cannot improve their communication skills when they keep on working with the same peers repeatedly. They suggest that students must change group members every time they receive the opportunity to do so. Olin-Scheller and Tengberg (2017:421) argue that this can be a significant barrier to effective communication in the lecturing environment when students do not learn to adapt to different communication styles.

**Table 4.2: Provides information about students' English proficiency**

	Frequency	Percent	Valid Percent	Cumulative Percent
Home language	34	85%	85%	85%
First Additional Language (FAL)	6	15%	15%	100%
Total	40	100%	100%	

This section of the questionnaire gathered information on students' English proficiency and whether it is their mother tongue or First Additional Language (FAL). This information assisted the researcher in contextualising the findings and conceptualise appropriate recommendations to enable lecturers to improve working with students to alleviate communication barriers. Language is crucial in teaching and learning. The medium of instruction at CUT is English.

This affects their proficiency and their ability to participate in discourse, particularly in the lecturing environment. In total, 85% of students indicated that English is their First Additional Language (FAL), whereas the remaining 15% indicated that English is their Second Additional Language. Akinnaso (2016:258) argues that non-English speakers are more likely to encounter communication barriers when communicating in English, which negatively affects their self-esteem and academic performance.

**Table 4.3: Student communication satisfaction**

	Frequency	Percent	Valid Percent	Cumulative Percent
Very Satisfied	5	12.5%	12.5%	12.5%
Satisfied	10	25%	25%	37.5%
Neutral	21	52.5%	52.5%	90%
Dissatisfied	2	5%	5%	95%
Very dissatisfied	2	5%	5%	100%
Total	40	100%	100%	

It is important for lecturers and students to establish good relationships. The centre or driving force of such relationships will always be good communication between the two parties. The communication skills that students acquire from high school are fully transferable and essential across not only academics, but all aspects of life (Ekron, 2015:146). Students will always be satisfied with communication if lecturers spend sufficient time explaining to them what they do not understand and answering their questions succinctly.

Creating a safe environment where students feel comfortable to communicate their thoughts and ideas is one of the aspects that contribute to student communication satisfaction. The Central University of Technology, Free State's open door policy is an effort to encourage students to consult their lecturers as a way to improving communication between students and lecturers. Even though the respondents are confident about their communication skills, 52.5% rated their communication satisfaction as 'neutral' and not very satisfied' or 'satisfied'. This finding indicates that students believe that ineffective communication is caused by their lecturers and their approach to the presentation of course content. Despite this finding, it is not solely the lecturer's responsibility to create a conducive learning environment but that of the students too (Nesamvuni, 2010:109).

#### **4.4.3 Section C: Barriers to Effective Communication**

In this section, the researcher discusses communication barriers that occur in the lecturing environment. These communication barriers are identified by students.

##### **4.4.3.1 Language barriers**

Students often encounter language barriers in the lecturing environment. These barriers derive from the overuse of jargon in their course content and from their lecturers. Some students consult with their lecturers, some consult dictionaries and glossaries to assist them in improving their understanding. Similarly, de Jager (2012:78) has found that differences in languages are the most common barrier hindering the communication process between students and lecturers

In addition, it is problematic for many to eloquently communicate with one another without the interference of dialect (De Jager, 2012:89). Even though English is technically the same, the use of different dialects can negatively affect the intended meaning and lead to a misinterpretation of words.

#### **4.4.3.2 Psychological barriers**

According to Katageri and Kulkarni (2015:20), psychological barriers are mind-associated issues that hinder students from actively listening and engaging in their learning activities, and these barriers deprive students of the opportunity to learn in the lecturing environment. Katageri and Kulkarni (2015:24) argue that, even though students are in the lecturing environment, it does not mean that they are learning when they are having psychological barriers to deal with. The problematic nature of psychological barriers is that they cannot be seen or easily identifiable, and that makes them difficult to be solved. Some students are not comfortable asking questions in class and sometimes do not participate in oral communication activities. They would rather search on the internet than ask questions in class. These findings point to the importance of lecturers administering a personality test during the orientation period. This will allow lecturers to better understand their students (Katageri and Kulkarni, 2015:28).

As far as the findings indicate, there is only one department at the university that allows students to take a personality test at the beginning of their academic studies. The department claims that it makes it much easier for them to know how to group students during peer group activities and also to know who is likely to participate in oral communication (Mentoor, 2015:78).

#### **4.4.3.3 Accent and pronunciation**

Accent and pronunciation are central to effective communication in the lecturing environment because if students are not familiar with an accent and pronunciation of lecturers, it could hinder communication between themselves and their lecturers. A total of 25% of students from the four faculties are experiencing difficulty in understanding the accent and pronunciation of lecturers, particularly lecturers from African countries. Their English accent and pronunciation is influenced by their mother tongue, thus the accent and pronunciation differs (Urabe, 2006:275). Subsequently, this can be a communication barrier in the lecturing environment at the academic institution where this study was conducted.

#### **4.4.3.4 Cultural barriers**

Urabe (2006:274) defines cultural barriers as challenges that hinder the effectiveness of cross-cultural communication within an organisation. Different cultural groups think and react differently to the same situation and these differences tend to become barriers, which hinder teaching and learning in the lecturing environment (Urabe, 2006:275). According to Caffarella (2010:66), cultural barriers are complex and are based on the values and beliefs of a group of people. She argues that not much attention has been given to cultural barriers, especially in an educational environment.

The researcher is in agreement with Urabe (2006:277) that not much has been done to address cultural barriers. The researcher therefore suggests that CUT design an intercultural programme to afford students from different cultural backgrounds the opportunity to learn about one another's' cultures. Students mentioned that it is challenging for them to not only adapt to the higher educational environment but also

to adapt to cultural differences. These differences tend to become cultural barriers which negatively affect the communication between lecturers and students (Caffarella, 2010:62). According to Urabe (2006:277), cultural barriers result in miscommunication because misunderstandings between students and lecturers are also caused by cultural differences.

#### **4.4.3.5 Student disturbances during lectures**

A total of 35% of students tend to have some personal discussions during lectures and these discussions disturb the teaching and learning process. Mentoor (2015:79) recommends that the appropriate way of dealing with such disturbances is to ask students to keep quiet as it might lead to an uncontrollable class when students talk simultaneously.

Besides the barriers in the lecturing environment, lecturers are also faced with challenges pertaining to blended learning. The findings show that 80% of students attend online classes and 20% tend to encounter connectivity issues, depending on the area or their residence. As a solution to this challenge, lecturers could record their online classes and make those available to those who could not attend due to internet connection issues.

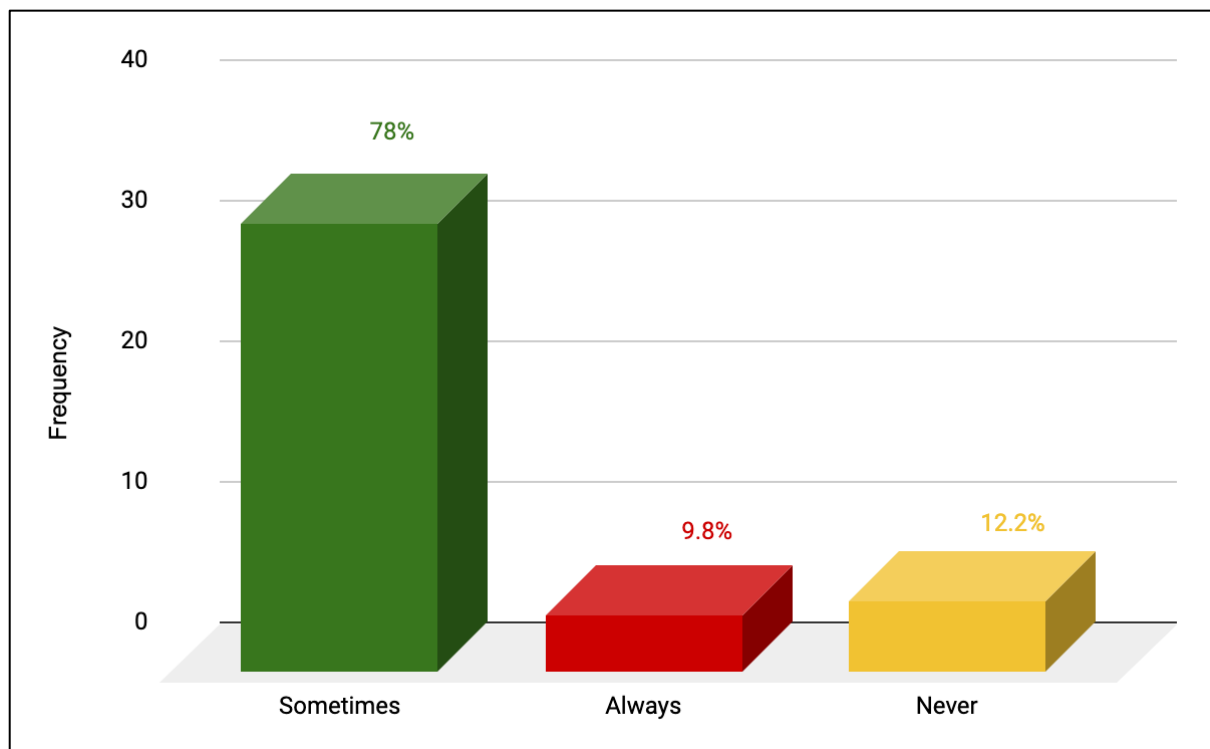
Barriers to effective communication can negatively impact the teaching and learning process. Therefore, to achieve educational outcomes, students and lecturers should work together to alleviate communication barriers. Alleviating communication barriers requires students and lecturers to reflect on their communication skills, to identify communication barriers in the lecturing environment, and to find a way of addressing

these barriers. The researcher suggests that lecturers adopt Vreken's classroom communication model (see Figure 2.1) to alleviate communication barriers in the lecturing environment.

#### 4.4.4 Section D: Dealing with Difficult Course Content

This section of the questionnaire was used to determine how students deal with difficult course content and differences in perception.

##### 4.4.4.1 How often students prepare for class



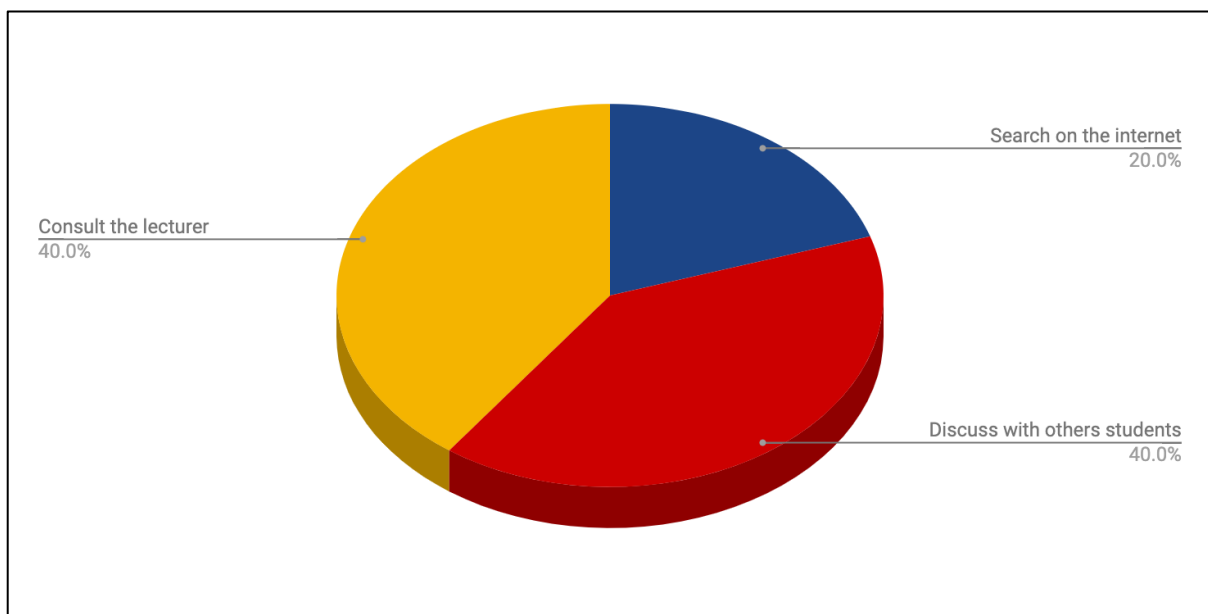
**Figure 4.5: How often students prepare for lectures**

Students are often encouraged by lecturers to prepare for class, but they tend to believe that important course content will be discussed during class. This belief derives from difficulties in reading comprehension when students find the contents difficult to

understand or they do not find the content interesting. The frequency for class preparation by the students shows that 78% of them sometimes prepare for class, while 12.2% never prepare for class, and 9.8% of students always prepare for class.

Preparing for class is a critical component of effective teaching and learning and requires effort from both lecturers and students. If lecturers and students prepare or class, it will enable students to discuss what they do not understand or what they found difficult when preparing for class. This practice enhances the teaching and learning process and yields good outcomes (Schmitz, 2015:79).

#### 4.4.4.2 Dealing with differences in perception



**Figure 4.6: Dealing with difference in perception**

Perception is the process of selecting, organising, and interpreting information that can be erroneous and would lead to misunderstandings during communication (Broadbent, 2000:130). The findings of this study indicate that 40% of students are

more comfortable and prefer discussing their misunderstandings amongst themselves; and 40% prefer consulting with their lecturers. Only 20% of the students prefer searching on the internet instead of consulting or discussing with their peers.

Broadbent (2000:145) advises students to consult their lecturers to ensure that they share the understanding of the course content. He further argues that students' poor academic performance could be attributed to their erroneous interpretation of course content. Lecturers and students have their own perceptions of course content. The differences between student and lecturer perception is often evident when they have solved complex learning lessons. It is important for both parties to reach a congruent perception, which will significantly contribute to optimal teaching and learning and will assist in improving and mastering learning outcomes.

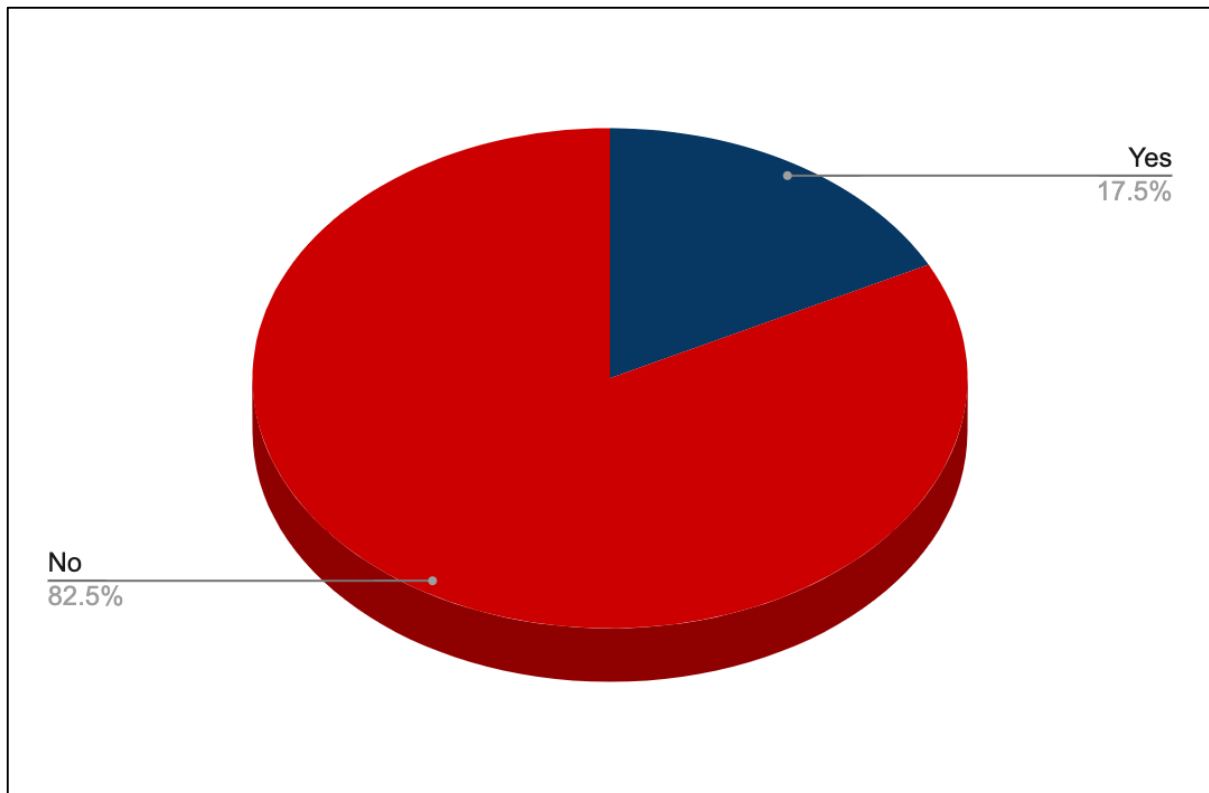
#### **4.4.4.3 Students consult lecturers for clarification**

A total of 70% of students prefer asking questions in class, while 30% prefer consulting their lecturers after class. There are also students who prefer communication via email and social media platforms, such as WhatsApp and Facebook, to ask for clarity on the content they do not understand. According to de Jager (2012: 17), students prefer to ask privately when they do not understand and when they do not have good language skills to convey their message (Mentoor, 2015:189). Consulting lecturers when not understanding course material is a step towards academic improvement. In order to engage, motivate, and lecture students at an optimal level, it is imperative for students to seek clarity when dealing with unfamiliar course content (De Jager, 2012: 134).

#### 4.4.4.4 Students refer to their study material

A total of 19% of students would ask their peers if they do not understand a learning activity. However, Nesamvuni (2010:180) argues that asking peers when not understanding is not advisable, because error in perception often occurs when students rely on one another's knowledge to improve understanding. However, this practice should not be discouraged. He advises students to consult each other but to be cautious. The researcher concurs with Nesamvuni (2010:110) because, in some cases, communication apprehension discourages students from consulting their lecturers and instead they would consult one another. In the interest of their academic performance, the researcher would encourage them to overcome their communication apprehension and learn to comfortably communicate with their lecturers.

#### 4.4.4.5 Personality test



**Figure 4.7: Personality test**

A personality test helps individuals to better understand their strengths and weaknesses. It also plays a role in social interactions; the more introspection you afford, the more we can educate ourselves about our negative qualities and how we can improve these qualities. The importance of knowing yourself better helps one to know whether you are an introvert or an extrovert, as this affects your oral participation because introverts rarely participate in class oral communication activities but extroverts are quite comfortable communicating orally in most cases (Cehan, 2002:15).

Cehan (2002:57) encourages lecturers to administer a personality test to their students during their orientation period, because this will help lecturers to understand the personality attributes associated with students. Only 17.1% of the respondents took a personality test, while 80.5% have not taken the test before, and 2.4% do not know what a personality test is. A personality test is completed to yield a description of an individual's distinct personality traits. It also provides guidance to lecturers about the teaching strategies that will be most effective for their students (Hogan, Desonto and Solano, 1977: 257).

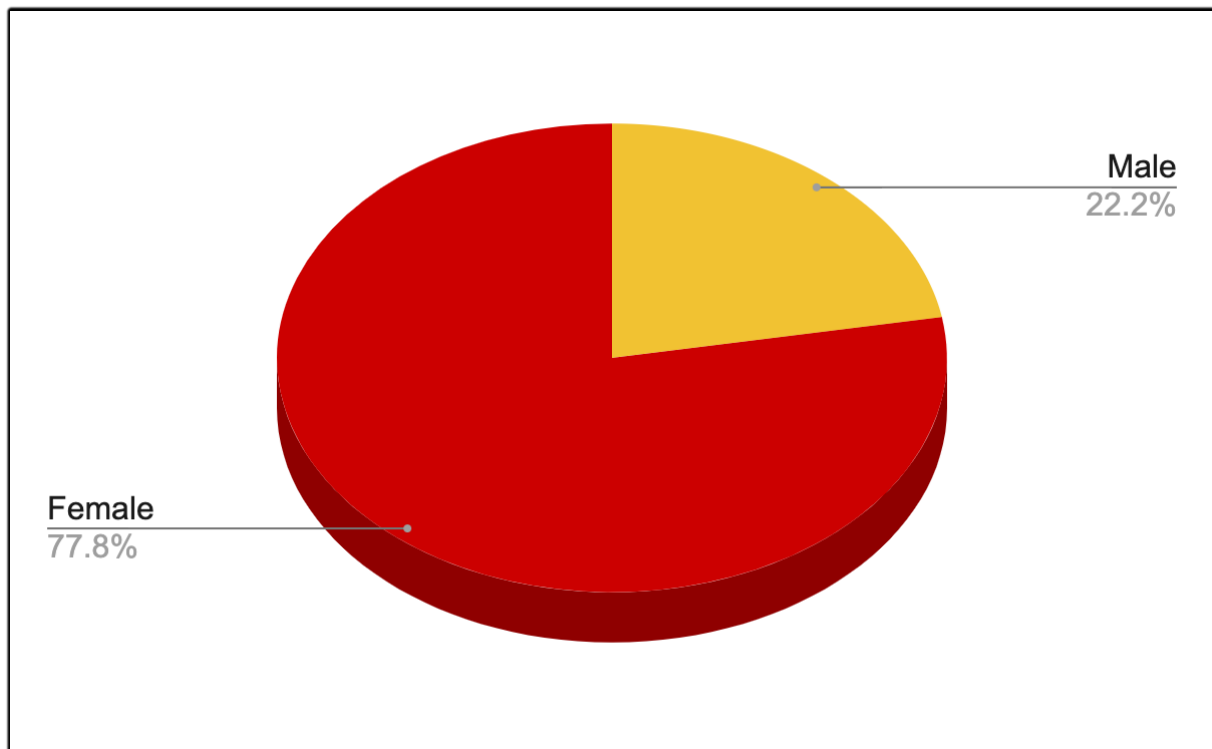
#### **4.5. INTERPRETATION OF RESULTS OF LECTURER QUESTIONNAIRES**

In the following section the results of the lecturer questionnaires are discussed.

#### 4.5.1 Section A: Demographic Information

This section of the questionnaire provides insight into personal information of lecturer participants. The personal information includes gender, age, years of lecturing experience, and lastly, the faculty in which they lecture.

##### 4.5.1.1 Lecturer gender



**Figure 4.8: Lecturer gender**

The researcher wanted to determine the gender of the lecturers. A total of 77.8% female and 22.2% male lecturers participated in this study. The research strived to achieve an equal male to female ratio however, more females than males participated in the study. In addition, the researcher used convenience sampling to collect data. Even though the questionnaire was circulated to most of the lecturers via email and

social media, such as WhatsApp and Telegram, only 22.2% of the respondents were males.

Watkins, Zimmerman and Poling. (2014:145) state that, although the exact male to female ratio is impossible to achieve when conducting research, it is advisable for researchers to strive towards obtaining a balanced sample consisting of both males and females. The researcher circulated the questionnaires to 50 lecturers, both male and female. However, female lecturers' participation surpassed male lecturers' participation.

#### 4.5.1.2 Lecturer age

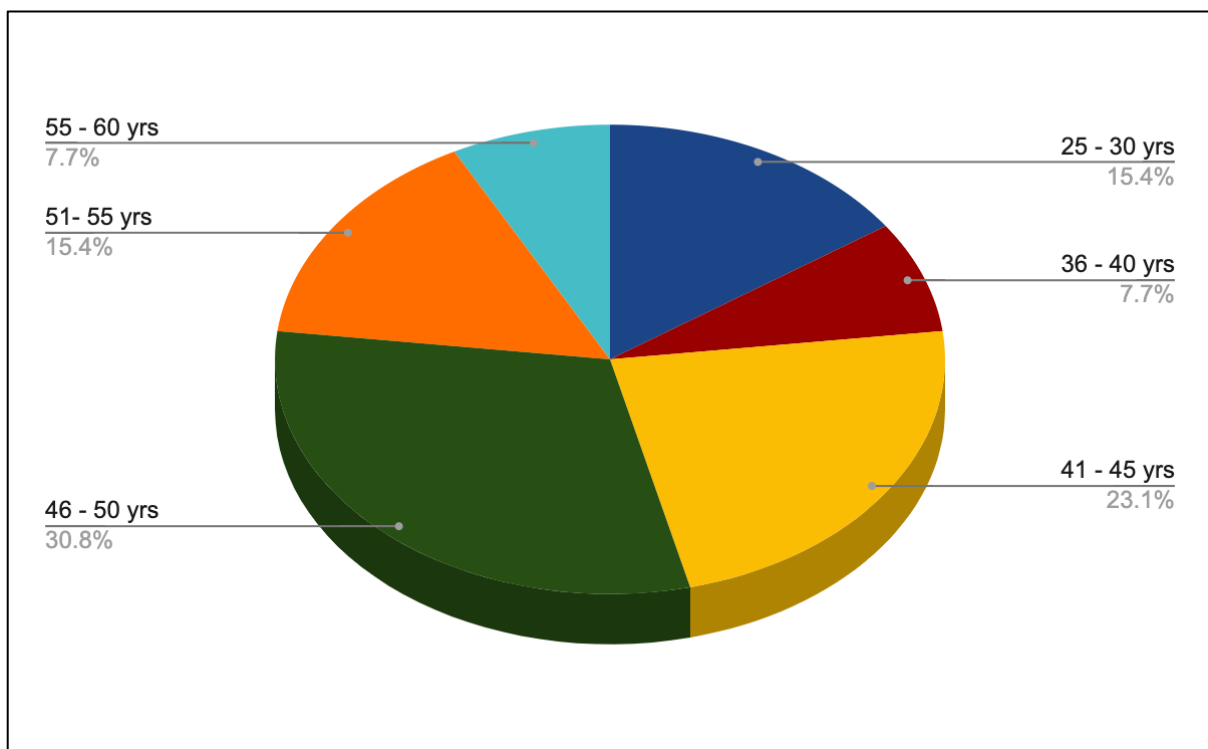
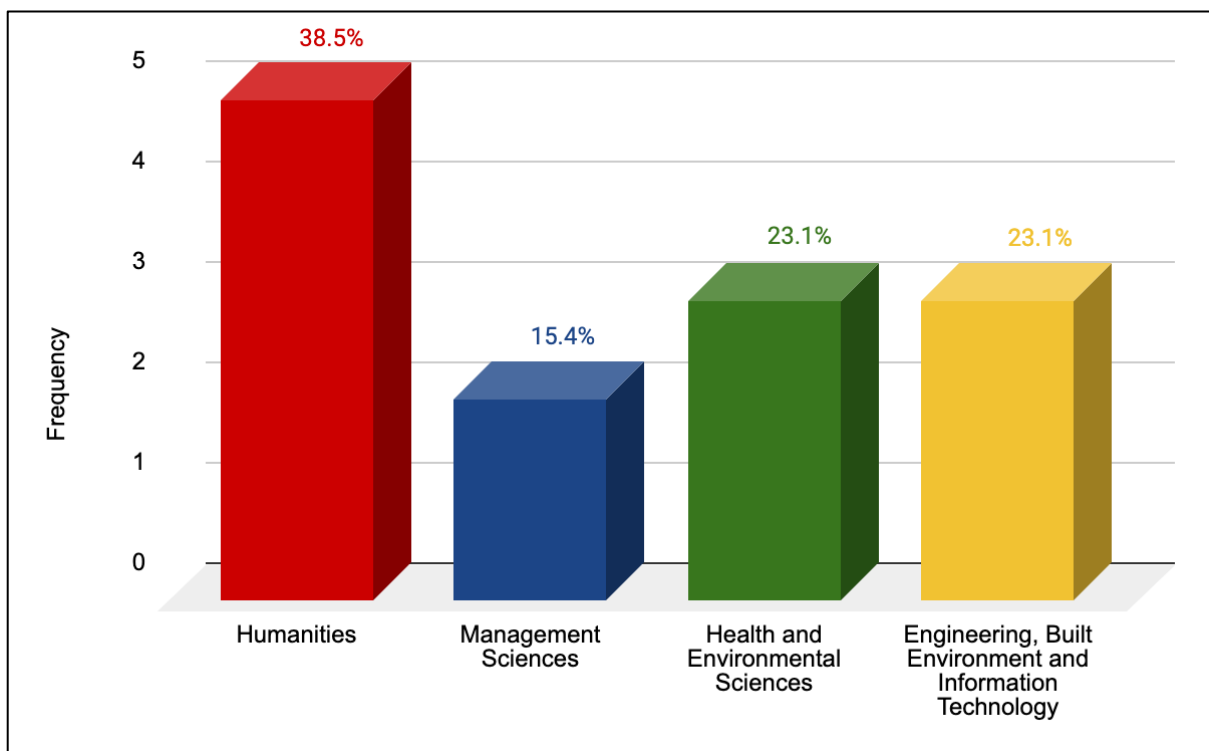


Figure 4.9: Lecturer age

Age is essential data for profiling the participants' demographic information. This could assist the researcher when analysing the data to identify if there is any correlation between age and subsequent opinions and behavioural traits (Vogt and Johnson, 2011:85). The data from figure 4.9 reveals that the study has included lecturers from all ages: 15.4% are between 25–30 years; 7.7% between 36–40 years; 23.1% between 41–45 years; 30.8% between 46–50 years; 15.4% between 51–55 years; and 7.7% between 55–60 years. This means that experiences and views shared regarding communication barriers in the lecturing environment include lecturer participants from all age groups.

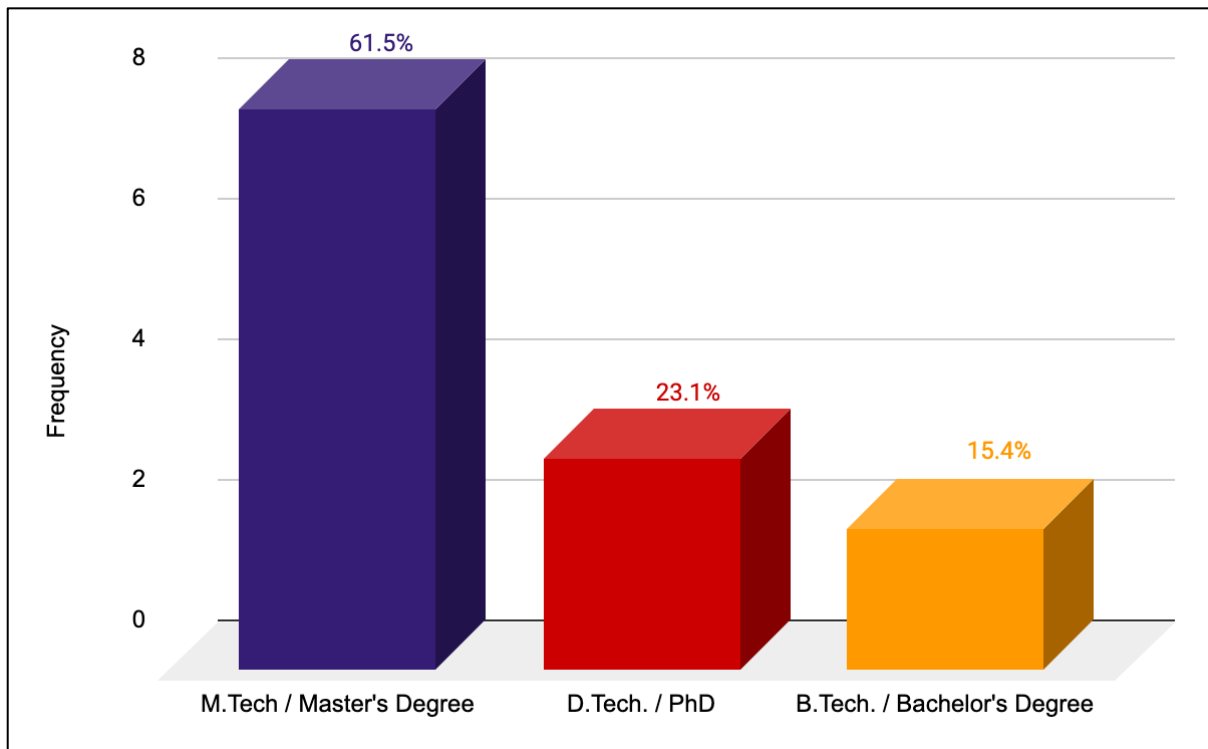
#### 4.5.1.3 Faculty of lecturers



**Figure 4.10: Faculty of lecturers**

Lecturers from all faculties participated in the study. The Faculty of Humanities had the greatest number of participants at 38.5%; followed by the Faculty of Management Sciences with 15.5%; the Faculty of Health and Environmental Sciences at 23.1%; and the Faculty of Engineering and Information Technology had 23.1% lecturers participating in the study. This allowed the researcher to find sufficient and impartial information about the participants' views and experiences. According to Vogt and Johnson (2011:78), a larger sample size is an important consideration for research because it provides the researcher with accurate information. Sample size is a crucial consideration for quality scientific research. A larger sample size allows researchers to determine the average value of data and to avoid errors that could result from testing a small number of atypical samples (Vogt and Johnson, 2011:80). The first circulation of lecturer questionnaires did not yield a satisfactory sample. Therefore, the researcher had to circulate the questionnaire twice to obtain more participants. Obtaining a larger sample size is an important consideration in research because it provides more accurate and meaningful data of that sample (Cohen et al., 2017:77).

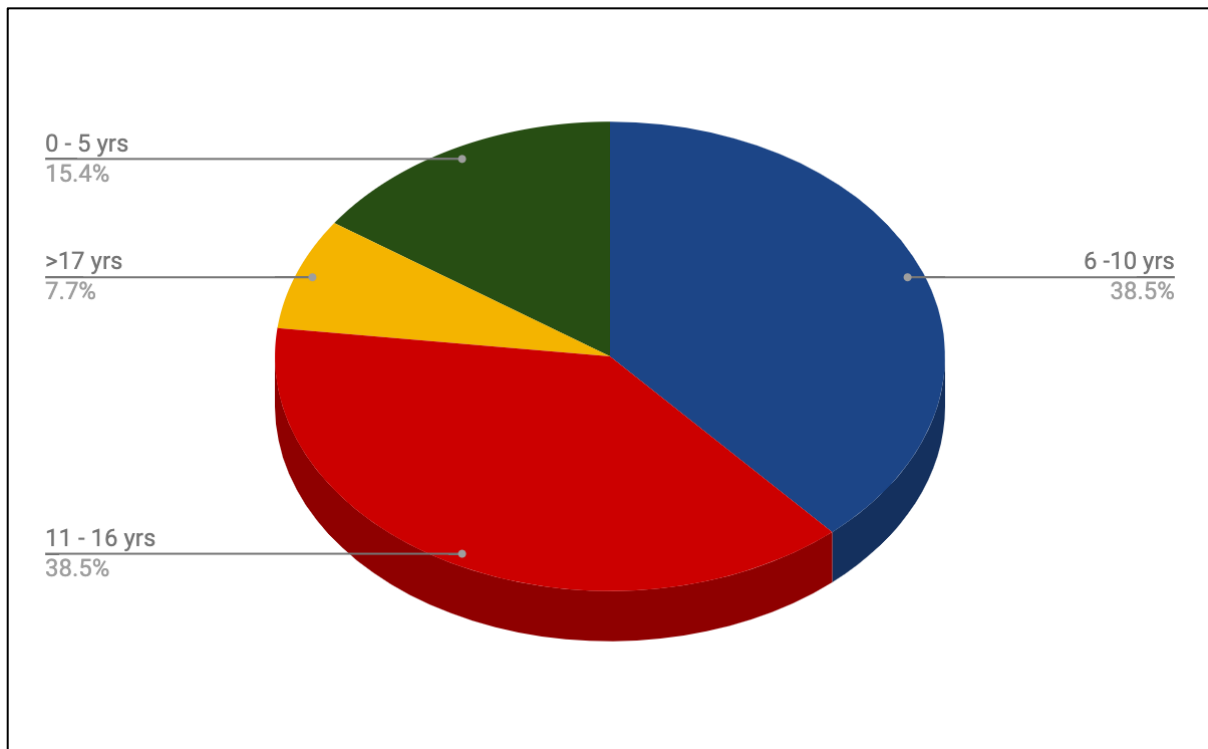
#### 4.5.1.4 Lecturer formal qualifications



**Figure 4.11: Lecturer formal qualifications**

Figure 4.11 shows the formal qualifications of lecturers. As per the findings, 61.5% of lecturers had M.Tech/Master's degrees and 23.1% had D.Tech./PhDs, while 15.4% have B.Tech./Bachelor's degrees. According to Sokoli and Koren (2017:446), the higher the qualifications of lecturers, the better the quality of education will be, and this will also lead to improved student academic performance. The researcher shares the same sentiments of Sokoli and Koren (2017:446). Rice (2003:56) believes that qualified lecturers who have adequate pedagogical knowledge vastly contribute to outstanding student achievement.

#### 4.5.1.5 Lecturing experience



**Figure 4.12: Lecturing experience**

Figure 4.12 reveals that 38.5% of lecturers have 11-16 years of experience. Figure 4.12 in general reveals that the majority of lecturers are adequately experienced with extensive pedagogical knowledge. According to Sokoli and Koren (2017:447), experience is one key factor that determines how lecturers are conversant within a specific area of study. This implies that lecturers ought to at least have a Master's degree in a certain field with adequate experience to provide quality teaching.

#### 4.5.2 Section B: Communication Skills

This section provides insight into lecturers' communication skills, English proficiency regarding the medium of instruction at CUT, and communication satisfaction between the lecturers and students.

#### **4.5.2.1 Lecturers' English proficiency**

English proficiency is still problematic amongst lecturers at tertiary level. The problematic nature of English proficiency negatively affects student' mastery of English. Given the complexity of teaching and learning contexts where barriers are more likely to impede communication, answering the questions about how to address the issue of English proficiency has always been a challenge (Chiwome and Thondhlana, 1992:240). According to Chiwome and Thondhlana (1992:248), despite the complexity of lecturing students in English, which is their second language and the medium of instruction at the CUT, students still prefer to be lectured in is English. Students mentioned that, even though many of their lecturers are not English lecturers, their English proficiency is adequate for the subjects they are teaching. Moreover, English lecturers are competent and they have adequate pedagogical knowledge of the discipline (ibid).

#### **4.5.2.2 Miscommunication between lecturers and students**

A total of 34.1% of students prefer consulting their lecturers when they need clarity on some content that was discussed in class, while 34.1% prefer discussing course content with other students. A further 29.3% of students prefer using the internet and, 2.4% students prefer consulting their lecturers and also discussing academic work with their peers.

On the other hand, some lecturers believe students who are not verbally participating are either not interested in the topic of discussion or are not interested in learning at all. This observation negatively affects students' academic performance. Lecturers are concerned that students prefer to communicate via social media, but not necessarily

face-to-face. Verderber et al. (2017:155) suggest that lecturers should build a relationship with students and create a supportive environment that encourages for teaching and learning.

### **4.5.3 Section C: Barriers to Effective Communication**

In this section, the researcher discusses communication barriers. These communication barriers are identified by lecturers.

#### **4.5.3.1 Student listening skills**

A student's ability to actively listen in class has a positive impact on the communication skills of that student (Guerrero-Castro, 2012:36). Active listening means giving undivided attention to the speaker and trying to accurately understand and interpret the message being sent. Active listening involves encouraging positive engagement between lecturers and students (ibid). Gutiérrez and Tomás (2019:733) advise lecturers not to neglect teaching students the importance of active listening as much as they strive to achieve effective communication in the lecturing environment. They further encourage lecturers to include active listening as part of their curriculum because they believe this will assist students with disorders that act as barriers to active listening and focus, like Attention-Deficit Hyperactivity Disorder (ADHD).

#### **4.5.3.2 Cultural barriers**

One of the most common cultural barriers is the tendency to immediately evaluate and judge someone's actions, and to do so through their own cultural values lenses. Urabe (2006:278) believes that cultural barriers are deeply embedded in classrooms. She further mentions that where there is diversity, cultural barriers are likely to occur. Du

Plessis and Bisschoff (2007:250) define diversity as everything that makes people different from each other. This includes factors such as race, gender, socio-economic status, cultural differences, and religious beliefs.

The lecturers believe that conscientising students about cultural barriers and encouraging them to learn about one another's cultures assists in alleviating cultural barriers. Students who are from diverse schools have a better understanding of other cultures and find it easier to adapt at universities.

#### **4.5.3.3 Social barriers**

Social barriers to communication include the social psychological phenomenon of conformity, a process in which the norms, values, and behaviours of an individual begin to follow those of a wider group (Cafferella, 2021:68). Students do not feel comfortable sharing their social issues with lecturers. In the interest of developing students, it is important to know what the students are experiencing and their living conditions at home.

#### **4.5.3.4 Accent and pronunciation**

Lecturers mentioned that it is sometimes difficult to understand what students are saying because of their accents and pronunciation of certain words. Their accents and pronunciations are influenced by their mother tongues and their cultural backgrounds and also contributes to the mispronunciation of certain words.

#### **4.5.3.5 Communication apprehension**

One of the concerns of public speaking might be how to deal with nervousness. Students are often hesitant to participate in oral communication because of

communication apprehension (Mentoor, 2015:47). McCroskey (2011:56) defines communication apprehension as an individual's fear of what might go wrong when communicating.

A total of 23.3% of students mentioned that they are hesitant to engage in oral communication because they are anxious that their comments or questions might be irrelevant or incorrect. Lecturers also mentioned they always encourage students to participate in oral communication, as this could help them to overcome communication apprehension and to communicate confidently.

#### **4.5.3.6 Ambiguity and overuse of jargon**

When students are introduced to a new discipline at university, it is something they have to adapt to because this is more in-depth than at high school. Depending on the quality of education they have received in high school, some students go to universities with a limited vocabulary. They might be learning in a second language, or simply not had educational backgrounds that promoted vocabulary development (De Jager, 2012:136). Most introductory courses like English proficiency are often not efficiently designed, and its outcomes do not contribute remarkably to vocabulary development (Mentoor, 2015:59). Ambiguity can confuse students' common utterances. Some ambiguous words and sentences often require precise clarification from the speaker. These ambiguous words and sentences should be avoided or examples should be provided to clarify meaning. Lecturers are able to reiterate some content that may have structural ambiguity so that students are able to understand (Mentoor, 2015:63). It is not only ambiguity in course content that could cause barriers, but overuse of jargon too.

Verderber et al. (2017:155) define jargon as technical terms used in a profession that are often difficult for others to understand. For example, the court has broad discretion to grant or to deny permission to act as ‘amicus curiae’. ‘Amicus curiae is an example of jargon and refers to an impartial advisor to a court of law in a particular case. Avoiding the use of technical terms helps reduce confusion and misunderstanding when discussing learning content of lecturers and it improves the chances of effective communication (De Jager, 2012:116).

Jargon can be overused when students or lecturers want to appear more knowledgeable about a topic (Verderber et al., 2017:155). According to Schick et al. (2012:105), there is nothing wrong with using jargon when required to, but overusing it creates barriers and has a negative effect on the message the lecturer wishes to convey. It is better to be understood than to spend time talking to students who do not understand what you are saying. Lecturers pointed out that they prefer to paraphrase certain course content in the interest of effective teaching and learning, as well as communication. They also mentioned that students should not be hesitant to ask for an explanation when they do not understand the words used by lecturers.

#### **4.5.4 Section D: Dealing with Difficult Course Content**

This section of the questionnaire focuses on determining how lecturers address difficult course content and difference in perception.

#### **4.5.4.1 Factors lecturers consider when preparing course content**

A total of 73% of lecturers indicated that they consider the academic level of the students when they prepare course content. They focus on simplifying technical terms. The main reason for doing this is to achieve the educational goals of effective teaching and learning. Lecturers mentioned that this approach to course content preparation yields good results and improves students' academic performance. According to Nesamvuni (2010:89), preparing for learning activities helps students to improve their understanding of course content and this improves classroom discourse.

#### **4.5.4.2 Dealing with differences in perception**

Some lecturers would make students understand that perception varies, especially in a diverse lecturing environment, but it is important to reach a common understanding of course content. Lecturers would also treat each perception on its own merit. Perception assists students in making sense of the information presented to them by selecting, organising, and interpreting (Schmitz, 2018:65). Lecturers mentioned they consider students' cultural and educational backgrounds because these are factors that contribute to how students perceive information, and it also makes them feel welcome, respected, and valued when lecturers understand them beyond the classroom context.

#### **4.5.4.3 Student consultation**

Students often consult with lecturers when they do not understand something and need clarity. This finding amplifies the importance of students taking personality tests, because the test aims at assisting students to improve their understanding of

themselves. For example, introverts are reserved and hardly participate in some of the learning activities (Hogan, Desoto and Solano, 1977:257).

#### **4.5.4.4 Addressing academic problems**

According to 50% of the lecturers, students encounter intercultural barriers and lecturers often explain these to them and they can work together to alleviate these barriers. Lecturers also mentioned that they will have a short session on cultural difference awareness so that students could learn and better understand one another's culture (Urabe, 2006:274).

#### **4.5.4.5 The methods lecturers use to successfully prepare and deliver lectures**

A total of 94% of lecturers mentioned that the most effective method is to prepare for class, simplify jargon, and ask students to also prepare for class. Preparation helps lecturers and students to have successful teaching and learning sessions. Successful lectures require hard work from lecturers and students. Lecturers also prefer using accompanying PowerPoint presentations with audio-visuals, so that students learn and remember when they are lectured. Using audio-visuals helps to support educational content and facilitate learning. A total of 60% of students have no prior experience of using certain technological equipment like computers. The students who are not computer literate were at disadvantaged schools, whereas students from private schools are better equipped than their counterparts (Du Plessis and Bisschoff, 2007:251). This directly impacts the teaching and learning process and the lecturers are compelled to modify their course content to accommodate students with no prior experience of using certain educational equipment.

#### **4.5.4.6 Demonstration and outcomes of excellent listening skills**

Lecturers often advise students to always project their voices when talking to avoid listening barriers. Listening is defined by Mentoor (2015:80) as the ability to accurately receive and interpret a message during the communication process. She defines it as the key to effective communication. She argues that effective communication cannot take place if listening is not effective – they are inseparable. 94% of lecturers believe that students learn effectively with audio-visuals. Lecturers showed students a film and requested them to watch it attentively because they would need to analyse it thereafter, and they did quite well in that task.

#### **4.5.4.7 How lecturers monitor student performance**

Lecturers mentioned that over-crowded classrooms make it difficult to monitor student performance and their academic needs. These lecturers believe that achieving academic goals does not necessarily mean placing academic performance first, but the needs of students during the learning process. Some students need assistance to learn in the lecturing environment, and if that is done efficiently, it will result in effective teaching and learning.

Monitoring student academic performance by perusing their marks is not such an efficient approach because it focuses more on the outcomes of learning and not on improving the learning process (De Jager, 2012:105). Lecturers mentioned that to achieve effective teaching and learning, it is important to know the academic needs of students, as this enables lecturers to assist some students during the learning process.

The findings show that some students perform better in certain tasks and this is in line with what the lecturers also mentioned about assisting students in the process of learning instead of being oblivious to the barriers that could impede the learning process. According to Mentoor (2015:98), lecturers discourage using recorded marks to monitor academic performance and encourage assisting students in the learning process before focusing on the outcomes of the learning process.

#### **4.6 CONCLUSION**

This chapter focuses on the analysis and interpretation of the quantitative data. The data that was collected and analysed using questionnaires for both students and lecturers consists of four sections namely: personal information, communication skills, communication barriers, and dealing with difficult course content.

This chapter provided the researcher with a general view regarding the relationship between communication barriers, effective communication, and students' achievements at the Central University of Technology, Free State (Bloemfontein Campus). Chapter five is devoted to the overall findings of the study and presents the conclusions and recommendations as well.

## CHAPTER 5

### CONCLUSION AND RECOMMENDATIONS

#### 5.1 INTRODUCTION

The aim of the study was to investigate to what degree communication barriers in the lecturing environment affect the teaching and learning process and student achievement. In this chapter, the researcher reflects on whether the research aims are reached by reporting on the findings made in the study. Conclusions are drawn from the findings regarding the effect communication barriers have on the teaching and learning process. Recommendations are based on the findings and conclusions.

#### 5.2 AIMS OF THE STUDY

##### 5.2.1 Barriers in the Lecturing Environment and How to Alleviate Them

The first aim was to identify communication barriers that could occur in the lecturing environment and to suggest ways of alleviating these barriers

The initial proposition which guided this study was that inadequate communicative competence is the primary cause of communication barriers in the lecturing environment. The study indicates that students' oral proficiency is problematic and, to their pragmatic knowledge, this contributes immensely to the occurrence of communication barriers. Similarly, de Jager (2012:67) concurs that students' communicative competence and communication apprehension contributes to communication barriers in the classroom. Mentoor (2015:84) believes that communication apprehension does not only hinder communication but could

contribute to ineffective teaching and learning when students choose not to participate in classroom discourse.

Mentoor (2015:89) and de Jager (2012:110) have found that supportive relationships between students and lecturers have a positive impact on student engagement, participation, and students' achievements. When students are motivated and supported, they are more comfortable to express their ideas, engage in discussion in the lecturing environment, and they will ask when they need help. Communication can be used to build a supportive learning environment for lecturers to better understand the students.

### **5.2.2 The effects of communication barriers on students' academic performance**

The second aim was to determine the effects of communication barriers on student academic performance. The study established that communication barriers in the lecturing environment negatively impact students' academic performance. Students' academic performance greatly depends on effective communication, and if communication is not effective, communication barriers occur, hindering not only the communication process but also teaching and learning in the lecturing environment. Communication barriers also emanate from communication apprehension when students are anxious to participate in oral communication. Furthermore, it has been proven by Mentoor (2015:87) that supportive lecturer and student relationships have a positive impact on student classroom participation and, ultimately, student academic achievements.

It was therefore concluded that circumventing communication barriers and striving to achieve effective communication would inevitably improve student academic performance.

### **5.2.3 How should students approach difficult course content?**

The third aim was to ascertain how students should approach difficult course content. Barriers identified in this study relate to an occurrence where fundamental content had not been mastered and would not be easy to rectify later. The lack of content knowledge and poor execution thereof led lecturers to choose unsuitable content, often too difficult or too easy for the academic level of students. This emphasises the fact that academic preparation plays a vital role in successfully executing efficient learning activities (Nkhoma et al., 2017:47).

Students should attentively read and try to understand, and if they do not understand, they should highlight the part of the content they did not understand. Thereafter, they should consult with their lecturer. The lecturer can then provide clarity to a student who has pre-knowledge. As some students indicated in the findings, they would search on the internet when they do not understand certain course content. The approach of reading first, searching online, and thereafter consulting with a lecturer would be effective – this will possibly alleviate misunderstanding of course content.

## **5.3 RECOMMENDATIONS**

The following are communication barriers as identified in this study. This is the researcher's contribution to the existing scientific body of knowledge on how to alleviate communication barriers in the lecturing environment.

<b>Communication barriers</b>	<b>Explanation</b>	<b>Recommendation</b>
<p><b>5.3.1</b></p> <p><b>Communication skills</b></p>	<p>Communication skills are the ability to effectively send and receive messages between participants during communication. The term often applies to a participant's faculty of exchanging information effectively with another person or group, in a verbal or written way (Pal et al., 2016:110).</p>	<ul style="list-style-type: none"> <li>• The lecturers should identify communication skills and should endeavour to enhance communication skills to alleviate communication barriers.</li> <li>• Lecturers should identify students with inadequate communication skills and work on developing their communication skills.</li> <li>• The Departments should adopt an inclusive communication model like Vreken's (1996) communication model as this will accommodate students with different needs and personalities.</li> </ul>

<p><b>5.3.2</b></p> <p><b>Communication apprehension</b></p>	<p>Communication apprehension is the fear of participation in public oral communication. The fear may have developed from various sources, such as shyness, generalised anxiety disorder, or traumatic experience. Communication apprehension has been defined as an “individual level of fear or anxiety associated with either real or anticipated communication with another person or persons” (McCroskey, 2011).</p>	<ul style="list-style-type: none"> <li>• Students should communicate in English to minimise their complexity and apprehension of communicating in English.</li> <li>• Lecturers should refrain from communicating with students in their mother tongue unless it is English. This will assist students to confidently communicate in English.</li> <li>• Students should prepare and organise their ideas. Being prepared for oral communication means knowing the main points of your message, even when you are anxious.</li> <li>• Students should practice in conditions similar to what they would face when speaking to a large audience.</li> </ul>
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		<p>This will help reduce anxiety and increase the likelihood of confidently participating in oral communication.</p>
<p><b>5.3.3 English proficiency</b></p>	<p>English proficiency is the ability of students to use English to communicate meaning in spoken and written contexts. It refers to the ability participants have in a communication process to effectively communicate with one other. (Martirosyan, Hwang &amp; Wanjohi, 2015:50).</p>	<ul style="list-style-type: none"> <li>• Students should participate in English literacy classes to improve their English proficiency.</li> <li>• Developmental English proficiency programmes should be offered for lecturers to improve their English proficiency.</li> </ul>
<p><b>5.3.4 Listening barriers</b></p>	<p>A listening barrier is anything that is physically or philologically hindering you from recognising, understanding, and accurately interpreting the message that you are receiving (Nichols, 1995:69).</p>	<ul style="list-style-type: none"> <li>• Students should listen attentively and ask questions to clarify misunderstandings.</li> <li>• Students should not listen to respond but listen to understand.</li> <li>• Lecturers should develop empathy with students to assess whether they</li> </ul>

		<p>understand what they are being taught.</p> <ul style="list-style-type: none"> <li>• Lecturers should demonstrate their listening skills by paraphrasing what the students are asking.</li> </ul>
<p><b>5.3.5 Accent and pronunciation</b></p>	<p>Accent is defined as a distinctive way of pronouncing words in a certain language, especially one associated with a particular country (Urabe, 2006:274).</p>	<ul style="list-style-type: none"> <li>• CUT should design a program that will allow foreign students and lecturers to learn the South African English accent and pronunciation.</li> <li>• Foreign students should engage with South African students in class and beyond, as this will assist them in adapting to the South African English accent and pronunciation.</li> <li>• Foreign Lectures should also interact with their South</li> </ul>

		African colleagues at work and beyond to help them learn the South African English accent and pronunciation.
<b>5.3.6 Ambiguity</b>	Ambiguity arises when the sender and the receiver of the message assume different meanings to the same words, phrases, and sentences or use different words to convey the same meaning (Jureddi & Brahmaiah, 2016:94).	<ul style="list-style-type: none"> <li>• Students should be clear and concise and also use consistent terms. Students should avoid sentences that have more than one meaning.</li> <li>• Lecturers should be clear and concise.</li> <li>• Lecturers should explain identified ambiguity in course content.</li> </ul>
<b>5.3.7 Jargon</b>	Jargon is one of the most common communication barriers – and one that could be easily avoided. Jargon is defined as technical terms which people use in a particular profession (Olin-Scheller and Tengberg, 2017:426).	<ul style="list-style-type: none"> <li>• Students should use simple words and phrases instead of jargon when communicating.</li> <li>• Lecturers should make use of a glossary to explain jargon so that students can understand.</li> </ul>

<p><b>5.3.8 Cultural barriers</b></p>	<p>Cultural barriers are situations that are grounded in cultural factors that obstruct teaching and learning (Urabe, 2006:274).</p>	<ul style="list-style-type: none"> <li>• Students and lecturers should work together to learn, acknowledge, and promote cultural differences that could alleviate cultural barriers. Encouraging students to research and share information about their ethnic backgrounds would also assist in overcoming cultural barriers.</li> </ul>

<p><b>5.3.9 Dealing with difficult course content</b></p>	<p>Curriculum content simply means the totality of what is to be taught in an institution of learning. The content component of the teaching and learning situation refers to the important facts, principles, and concepts to be taught. It can be in the form of knowledge, skills, attitude, and values that students are exposed to (Probyn, 2018:457).</p>	<p>Students should regularly inform the lecturers when they do not understand course content and mention the barriers they encounter so that both students and lecturers can work towards improved communication. By doing so, they will be alleviating communication barriers too.</p> <p>Students should also conduct their own research when struggling with course content in order to fill the knowledge gaps. Once the knowledge gaps have been filled, students should strive to explain the subject using their improved understanding.</p> <p>Students and lecturers need to be allowed to work out methods and strategies to improve relationships among themselves.</p>
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<p><b>5.3.10 Social barriers</b></p>	<p>Social barriers refer to differences and inequalities associated with different types of peoples in society. Barriers can occur because of people's genders, ethnicities, races, religions, or socioeconomic status (Pipas and Jaradat, 2011:334).</p>	<p>Lecturers should pay attention to indicators of social barriers.</p>
<p><b>5.3.11 Addressing academic problems</b></p>	<p>An academic problem refers to a specific problem that a student is having with learning. This can be a learning style difference, a learning disability, or a learning challenge that requires an intervention of some sort (Liem, 2019:707).</p>	<p>Students should learn to manage their time. Time management helps to reduce academic stress. Students should share their experiences with their lecturers so that the lecturers could assist them to overcome the academic problems. Students should associate with peers who are motivated and hardworking, this will help them to stay better focused on their academics.</p>

<p><b>5.3.12 Lecturing methodology</b></p>	<p>Lecturing methodology is a chosen method used to achieve educational outcomes. Lecturing methodology is defined by the lecturer of a given subject. It is designed in such a way that students acquire the knowledge and skills for which the subject was included in the curriculum (Helgevold, 2016:320).</p>	<p>Lecturers should not only tell students what to do, but they should show them how to do it.</p> <p>Experiential learning: Lecturers should create experiences for students to see the concepts in action.</p> <p>Lesson objective transparency: Lecturers should clearly state their lesson goals rather than letting students figure out what they should do.</p>
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#### 5.4 LIMITATIONS OF THE STUDY

Time lack of financial resources presented limitations towards the completion of the study. The data collection process was limited to two months through the use of the electronic questionnaire. The time constraint affected the number of completed questionnaires received.

- At the time of the study, the world was going through the COVID-19 pandemic, which immensely affected fieldwork. According to the World Health Organisation (WHO), COVID-19 is a disease caused by a new strain of coronavirus. The COVID-19 virus is a virus linked to Severe Acute Respiratory Syndrome (SARS) and some

types of common cold. The researcher intended to conduct focus group interviews but later had to resort to using an electronic questionnaire for data collection purposes because of COVID-19 restrictions, which prohibited group gatherings.

- Even though the online questionnaires were a good alternative, it resulted in a low response rate because some of the participants, particularly student participants, encountered weak internet connectivity problems and could not participate in the study.
- Mixed Method – the researcher could not conduct group interviews as intended to. Social gatherings were prohibited at the time fieldwork had to be completed.

## **5.5 FUTURE RESEARCH**

The following research topics were identified as areas of interest for future studies:

- The role of the lecturers regarding communication adequacy could be investigated. Even though active and self-regulated learning are advocated for communication skills, the lecturers play a pivotal role in structuring and facilitating the learning experience in the lecturing environment.
- Discourse was highlighted as an important characteristic of communication in the lecturing environment. A possible future study could investigate the development of discourse towards enhancing communication competence in verbal and written form.

- Online teaching and learning as a strategy to circumvent COVID-19 related challenges.
- Developing a communication model to overcome blended teaching and learning barriers at a university of technology.

## 5.6 SUMMARY OF CHAPTERS

The researcher investigated communication barriers in the lecturing environment and how these barriers affect student achievement and the teaching and learning process.

The following are concise overviews of the chapters:

**Chapter 1:** The researcher explained the importance of effective communication in the lecturing environment. The lecturing environment was identified as the place where communication barriers occur and negatively affect students' academic performance. Therefore, the relationship between communication barriers and students' academic performance was also investigated.

The primary research question of the study was:

*What communication barriers are more likely to occur during a lecturing session and how are they dealt with?*

To fully explore the primary research question, the following secondary questions needed to be answered:

What effects do communication barriers have on students' academic performance?

How do students approach course content that they are not familiar with?

**Chapter 2:** Selected communication barriers in the lecturing environment are discussed. The researcher found Vygotsky's (1978) theoretical framework suitable for this study. Vygotsky (1978) believes that learning could lead to development if it occurs within a student's Zone of Proximal Development (ZPD). Vreken's (1996) classroom communication model (see Figure 2.1) was identified as a suitable classroom communication model to alleviate communication barriers in the lecturing environment.

**Chapter 3:** The researcher accounted for how the phenomenon of communication barriers in the lecturing environment was investigated. The research design is a quantitative design and the instrument for data collection was electronic questionnaires, which were administered to both lecturers and students. The population consisted of lecturers and students from all faculties at CUT (Bloemfontein campus). The sampling method namely: convenience sampling was discussed in the study. The data analysis procedures were discussed and lastly, the ethical considerations were also taken into account.

**Chapter 4:** The data collected from lecturers and students were analysed and interpreted to address the research aims, namely:

*What communication barriers are more likely to occur during a lecturing session and how are they dealt with?*

To fully explore the primary research question, the following secondary questions needed to be answered:

What effects do communication barriers have on student academic performance?

How do students approach course content that they are not familiar with?

Descriptive and inferential statistics were used to determine the relationship between communication skills and student achievements. The findings of the study were discussed and the statistical analysis and interpretation of the results were presented.

**Chapter 5:** In this chapter, the research aims, conclusions, and recommendations are discussed to determine to what extent communication barriers in the lecturing environment affect student achievement. The researcher provides answers to the research questions in this concluding chapter by revisiting and summarising.

## **5.7 CONCLUSIONS**

It is evident that the aims of this study have been met. The analysis of the data has allowed the researcher to draw valuable conclusions and make pertinent recommendations. Even though several studies have been conducted to investigate the impact of communication barriers on students' academic achievements. In this study, communication barriers such as inadequate English proficiency, poor listening skills, foreign accent and pronunciation, cultural barriers, overuse of jargon, and ambiguity are identified as the most prevalent communication barriers in the lecturing environment. By alleviating these communication barriers, students' academic performance will improve and the failure rates will decline.

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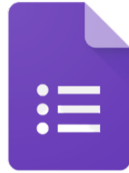
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## **Appendix 1: Student Questionnaire**



Google Forms

**The questionnaire was designed and completed electronically through Google  
Forms**

**EMMANUEL RASDIEN VOGT**

**CENTRAL UNIVERSITY OF TECHNOLOGY, FREE STATE**

**Student Questionnaire**

**INVESTIGATING BARRIERS TO EFFECTIVE COMMUNICATION IN THE  
LECTURING ENVIRONMENT AT CUT**

**2021**

## STUDENT QUESTIONNAIRE

### INSTRUCTIONS

#### QUESTIONNAIRE TO STUDENTS CONCERNING BARRIERS TO EFFECTIVE COMMUNICATION IN THE LECTURING ENVIRONMENT AT CUT.

**The questionnaire is compiled in FOUR sections:**

**SECTION A:** Demographic information;

**SECTION B:** Communication skills;

**SECTION C:** Barriers to effective communication;

**SECTION D:** Dealing with difficult course content.

#### **General Information:**

1. This questionnaire consist of 6 pages. To complete this questionnaire will not take you more than 30 minutes.
2. The purpose of the research is to investigate barriers to effective communication in the lecturing environment.
3. It is important that you answer all the questions as honestly as possible.
4. Your participation is valuable for this research. Participation is completely voluntary, and all information obtained will be kept confidential.
5. No personal identifiable information will be associated with your responses to any report of this data.
6. Please click on the provided link to complete the questionnaire. After completion, click on the send button below the questionnaire.

Thanks for your participation!

## SECTION A: DEMOGRAPHIC INFORMATION

1. Gender?

- Male
- Female

2. Age?

- 19–25
- 26–35
- 36–45
- 46–55

3. Year of study?

- First
- Second
- Third
- Fourth

4. In which Faculty do you study?

- Humanities
- Management Sciences
- Health and Environmental Sciences
- Engineering, Built Environment and Information Technology

## SECTION B: COMMUNICATION SKILLS

5. Is English your first additional language?

- Yes, it is my first additional language
- No, it is my second additional language

6. How would you rate your communication skills?

- Excellent
- Very Good
- Good
- Fair
- Poor

7. Are you satisfied with the communication between you and your lecturers?

- Very Satisfied
- Satisfied
- Neutral
- Dissatisfied
- Very Dissatisfied

## SECTION C: BARRIERS TO EFFECTIVE COMMUNICATION

8. How do you resolve verbal miscommunication between you and the lecturer?

---

9. Which communication barriers do you most frequently encounter and how do you address them?

---

10. Are you satisfied with the communication between you and your lecturers?

- Very Satisfied
- Satisfied
- Neutral
- Dissatisfied
- Very Dissatisfied

11. Do you feel comfortable communicating in the classroom? Elaborate:

---

12. Do your lecturer's communication skills affect your classroom participation?

Elaborate:

---

## SECTION D: DEALING WITH DIFFICULT COURSE CONTENT

13. If you don't understand a course's content, what steps do you take to understand it?

- Consult the lecturer
- Discuss it with other students
- Search on the internet

14. If your perception of a lesson differs from that of your lecturer, how do you deal with it?

- Consult the lecturer
- Discuss it with other students
- Search on the internet

15. Do you prepare for lectures?

- Always
- Sometimes
- Never

16. What are the factors that create differences in perception between you and your lecturer?

---

17. Have you ever done a Personality Test?

- Yes
- No

## **Appendix 2: Lecturer Questionnaire**



Google Forms

**The questionnaire was designed and completed electronically through Google  
Forms**

**EMMANUEL RASDIEN VOGT**

**CENTRAL UNIVERSITY OF TECHNOLOGY, FREE STATE**

**Lecturer Questionnaire**

**INVESTIGATING BARRIERS TO EFFECTIVE COMMUNICATION IN THE  
LECTURING ENVIRONMENT AT CUT**

**2021**

## LECTURER QUESTIONNAIRE

### INSTRUCTIONS

### QUESTIONNAIRE TO LECTURERS CONCERNING BARRIERS TO EFFECTIVE COMMUNICATION IN THE LECTURING ENVIRONMENT AT CUT.

The questionnaire is compiled in **FOUR** sections:

- **SECTION A:** Demographic information;
- **SECTION B:** Communication skills;
- **SECTION C:** Barriers to effective communication;
- **SECTION D:** Dealing with difficult course content.

#### General Information:

1. This questionnaire consist of 6 pages. To complete this questionnaire will not take you more than 30 minutes.
2. The purpose of the research is to investigate barriers to effective communication in the lecturing environment.
3. It is important that you answer all the questions as honestly as possible.
4. Your participation is valuable for this research. Participation in completely voluntary and all information obtained will be kept confidential.
5. No personal identifiable information will be associated with your responses to any report of this data.
6. Please click on the provided link to complete the questionnaire. After completion, click on the send button below the questionnaire.

Thanks for your participation!

## SECTION A: DEMOGRAPHIC INFORMATION

1. Gender?

- Male
- Female

2. Age?

- 25–30 yrs.
- 31–35 yrs.
- 36–40 yrs.
- 41–45 yrs.
- 46–50 yrs.
- 51–55 yrs.

3. Formal Qualification?

- B.Tech. / Bachelor's Degree
- M.Tech. / Master's Degree
- D.Tech. / PhD

4. Lecturing experience?

- 0–5 years
- 6–10 years
- 11–16 years
- > 17 years

5. In which faculty are you lecturing?

- Humanities
- Management Sciences
- Health and Environmental Sciences
- Engineering, Built Environment and Information Technology

## SECTION B: COMMUNICATION SKILLS

6. Is English your first additional language?

- Yes, it is my first additional language
- No, it is my second additional language

7. How would you rate your communication skills?

- Excellent
- Very Good
- Good
- Fair
- Poor

8. Are you satisfied with the communication between you and the students?

Elaborate:

---

## SECTION C: BARRIERS TO EFFECTIVE COMMUNICATION

9. Which communication barriers do you most frequently encounter?

---

10. If you encounter ambiguity and overuse of jargon in your course content, what approach do you take for the students to comprehend?

---

11. Provide an example of a time when you were able to demonstrate excellent listening skills. What was the situation and outcome?

---

## SECTION D: DEALING WITH DIFFICULT COURSE CONTENT

12. How to do deal with differences in perception?

---

13. Share an experience in which you successfully prepared and/or delivered a lecture to students. What lecturing methods made you successful?

---

14. What is the common reason for student's consultation?

---

15. What factors do you consider when preparing course content?

---

16. Share an experience in which your understanding of a problem helped students to better respond to the problem?

---

## Appendix 3: Letter of Request to Conduct Research at CUT

22 Jimmy Kennedy Street  
Heidedal  
Bloemfontein  
9301  
29 October 2020

The Institutional Planning and Quality Enhancement (CUT)  
01 Park Road  
Willows  
Bloemfontein  
9301

Dear Sir/Madam

### **REQUEST FOR PERMISSION TO CONDUCT RESEARCH AT CUT**

I herewith wish to apply for permission to conduct research at the Central University of Technology, Free State. I am currently busy with a Master's in Language Practice and my research topic is: Investigating barriers to Effective Communication in the Lecturing Environment at CUT.

My study focuses on improving communication in the lecturing environment. The data from the questionnaires will be used for the purpose of this study. Your responses will help the researcher to determine prevalent communication barriers and how to possibly alleviate them.

Participation in this questionnaire is completely voluntary and all of your responses will be kept confidential. No personally identifiable information will be associated with your responses to any reports of these data.

Yours Faithfully  
Emmanuel Vogt

## Appendix 4: Permission to Conduct Research at CUT



### ■ INSTITUTIONAL PLANNING AND QUALITY ENHANCEMENT

**MR. EMMANUEL VOGT**

**209002336@STUD.CUT.AC.ZA**

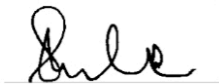
**PERMISSION FOR MR EMMANUEL VOGT TO CONDUCT HIS RESEARCH STUDY AT CUT ENTITLED  
“INVESTIGATING BARRIERS TO EFFECTIVE COMMUNICATION IN THE LECTURING ENVIRONMENT  
AT CUT”**

Dear Mr Vogt

This is to confirm that you have been granted permission to conduct research at the Central University of Technology for your Master research entitled “investigating barriers to effective communication in the lecturing environment at CUT”

The conditions of the conditional permission are:

- The research will not interrupt any of the official activities at The Central University of Technology;
- You will supply us with the copy of your report;
- The cost of all related activities will be covered by yourself;
- Recruitment of participants is the sole responsibility of yourself;
- Voluntary nature of the potential participants decision to consent to participate should be strictly observed;
- You should not disclose a potential participant’s decision to participate or otherwise to any other party;
- Permission does not compel, in any sense, participation of staff members or students in your research ;



---

Senior Director: Institutional Planning and Quality Enhancement

Mr I.Mokhele

03/09/2021

## Appendix 5: Ethical Clearance



Central University of  
Technology, Free State

**FACULTY OF HUMANITIES**

**FACULTY RESEARCH AND INNOVATION  
COMMITTEE (FRIC)**

To: The Research Project Promoters  
(Dr Fredericks))

### **OUTCOMES OF FRIC APPLICATIONS (REF: FRIC 21/03)**

**Dear Promoter**

The application for the approval of research proposal (LS263 form) for student **Emmanuel Vogt** was presented at the FRIC meeting, which was held on Friday 26 March 2021, and was discussed as follows:

**5 (a) MR EMMANUEL VOGT \_ Language Practice (Dr Fredricks)**

**Title: Investigating Barriers to Effective Communication in the Lecturing Environment at CUT**

**RESOLUTION: FRIC 03/21/03**

The FHUM FRIC approved the LS263 for student **Emmanuel Vogt**.

Kind regards,

Signature:



**Dr Modise, M A**

Assistant Dean: Research, Innovation, & Engagement:  
Faculty of Humanities  
Chairperson of the FRIC

***N.B:*** This letter is issued for ethical clearance purposes and it should only serve as evidence of the approval of the submission from the FHUM FRIC Committee.