

**REFLECTIONS ON CURRENT PRACTICES OF GROUP WORK LEARNING AT THE  
UNIVERSITY OF LIMPOPO, SOUTH AFRICA: TOWARDS A REFINED  
CONTEXTUAL APPROACH**

by

**MPHO CALPHONIA MODIPANE**

**DOCTOR OF PHILOSOPHY**

In

**CURRICULUM STUDIES**

In the

**FACULTY OF HUMANITIES**

(School of Education)

at the

**UNIVERSITY OF LIMPOPO**

**PROMOTER:** Prof. MJ Themane

**2020**

## DECLARATION

I hereby declare that the thesis entitled: “**REFLECTIONS ON CURRENT PRACTICES OF GROUP WORK LEARNING AT THE UNIVERSITY OF LIMPOPO, SOUTH AFRICA: TOWARDS A REFINED CONTEXTUAL APPROACH**” as submitted to the University of Limpopo, for the degree **Doctor of Philosophy in Curriculum Studies** is my original work in design and in execution. It has not been previously submitted by me for a degree at this or any other university. I also declare that I have acknowledged all the material used in the study.



20 MARCH 2020

---

**Signature**

---

**Date**

**Modipane MC**

## **DEDICATION**

I dedicate this study to my son, Tshepang Katlego and daughters Reneilwe Matshediso, Refilwe Ramaesela and Mahlogonolo Makgomu. *'I will always be thankful for the unconditional love you show me as your mother. Ke le rata kudu kudu. Ke a leboga Banareng!'*

## ACKNOWLEDGEMENTS

Glory be to the Father, the Son and the Holy Spirit. No words can thank the Lord.

I heartily thank my promoter, Professor Mahlapahlapana Johannes Themane, for the professional guidance he provided me with throughout this study. *‘Most importantly I thank you for the patience you showed throughout. The most important lesson you have taught me through this study is patience. Without your commitment and patience, I would definitely have not completed this study. I wish I knew exactly what to say to thank you enough. I just feel humbled. Ke a leoga Mothokwa!’*

I heartily thank all the colleagues from the four faculties of the University of Limpopo who agreed to participate in the study. *‘Without your participation the study could not have taken place. Thank you for willingly sharing your experiences with me.’*

I thank my family - my children, my sister and my niece for loving me no matter what. *‘I never at any point felt any pressure from you. You just loved me as I was and that gave me the strength to keep on working harder; to keep on walking, because all I wanted was to make you proud and to thank you for the unconditional love.’*

I am thankful to all my colleagues both in the School of Education and at the Center for Academic Excellence at the University of Limpopo. *‘All the interactions I had with you at different levels added value to this study. I learned so much from you and I greatly appreciate each one of your contributions.’*

I do not have words to express my gratitude to my friend and colleague Professor Ndileleni, P. Mudzielwana from UNIVEN. *‘Ndile my friend, I thank you for relentlessly and resolutely being on my case regarding this study. We started together and you are so far ahead and yet I could virtually feel your hand stretching out to pull me upwards. I know in my heart that you sincerely wanted to see me complete this study. You expressed this wish at every given opportunity - in every conversation we had – and you did not give up on me. I’m just glad I reached the finish line. Thank you my Friend.’*

I'm thankful to all my friends and acquaintances for their love and support in everything I do. *I know I disappointed some of you by taking so long to obtain this qualification. I know you are on my side though, and you wish me well even in your silence.*

To all my students, my anchor, my best source of knowledge and of learning. *'My interactions with you throughout the years inspired me to conduct this study. I will always be thankful to you for allowing me to be your teacher and also learn so much from you. I appreciate what I experienced with each one of you within and beyond the classroom. It was only through you that I could ever become a better teacher. I wish to acknowledge all my Masters students particularly Makobo Mogale, Millicent Mogoane and Phuti Ramputla. We travelled together most of this journey and working with you brought so much insight into my own study. Ke a le leboga bana ba thari e ntsho!!!'*

Without the support from the University of Limpopo, I would not have achieved half of all I have in this lifetime. I thank the University management for the support it provided me with throughout this study. The opportunities the university afforded me in the form of conference and workshop attendance assisted me to conceptualize this study and travel through it. I also thank the University of Limpopo for allowing me space to go and work on the study.

I would like to particularly thank the Research office of the University of Limpopo for the Writing retreats it organizes for staff members. I benefitted a lot from the retreats as I worked on this study.

Mr Lucas Seabi, the School of Education Librarian, *'Thank you so much for your support and efficiency. You were always prompt in your response when I requested for articles and other materials, and you still are. It was a great pleasure working with you. Ke a leboga!'*

Last but not least at all, I wish to heartily thank my colleague, Mr Wisani Collen Hlungwani for assisting me with the final alignment and technical aspects of my study. *Thank you for freely availing yourself to assist me whenever I needed your help. Nakhensa!*

## TABLE OF CONTENTS

DECLARATION.....	i
DEDICATION.....	ii
ACKNOWLEDGEMENTS.....	iii
LIST OF TABLES.....	x
LIST OF DIAGRAMS/REPRESENTATIONS.....	xi
ABSTRACT.....	xii
ACRONYMS.....	xiv
CHAPTER 1.....	1
BACKGROUND TO THE STUDY.....	1
1.1. INTRODUCTION.....	1
1.2. STATEMENT OF THE PROBLEM.....	5
1.3. AIM OF THE STUDY.....	7
1.3.1 Objectives of the study.....	7
1.4. SIGNIFICANCE OF THE PROPOSED STUDY.....	8
1.5. LIMITATIONS OF THE STUDY.....	9
1.6. ORGANISATION OF THE THESIS.....	9
1.7. SUMMARY OF CHAPTER.....	10
CHAPTER 2.....	11
CONCEPTUAL FRAMEWORK.....	11
2.1. INTRODUCTION.....	11
2.2 FOUNDATIONS OF GWL.....	12
2.3 MANIFESTATIONS OF GROUP WORK LEARNING.....	14
2.3.2 Collaborative learning (COL).....	17
2.3.3 Team-Based Learning (TBL).....	19
2.4 SIMILARITIES BETWEEN COOPERATIVE LEARNING, COLLABORATIVE.....	20
2.4.1 Similarities.....	20
2.4.2 Differences.....	21
2.5. ELEMENTS/ESSENTIALS OF GROUP WORK LEARNING.....	22
2.5.2 Face to face promotive interaction.....	24
2.5.3 Group formation and group size.....	24
2.5.4 Individual and group accountability.....	27

2.5.5 Teamwork/social/interpersonal skills .....	28
2.5.6 Group processing/group self-evaluation/reflections .....	28
2.5.7 Preparation of students for GWL.....	29
2.5.8 Challenges in GWL .....	29
2.6 CONSTRUCTIVISM AS A LEARNING THEORY .....	31
2.7. CONTEXT AS AN ESSENTIAL COMPONENT IN TEACHING AND LEARNIING.	33
2.8. REFLECTIVE PRACTICE .....	34
2.9 SUMMARY OF CHAPTER .....	36
CHAPTER 3.....	37
LITERATURE REVIEW.....	37
3.1 INTRODUCTION .....	37
3.2 GROUP WORK LEARNING PRACTICES IN HIGHER EDUCATION.....	38
3.2.1 Statement of intended learning/learning outcomes .....	38
3.2.2 The use of elements/essentials in GWL.....	39
3.2.3 Group formation and group size.....	41
3.2.4 Task instruction.....	43
3.2.5 Accountability in GWL.....	44
3.2.6 Possibilities for improvement in GWL .....	45
3.2.7 Challenges in GWL.....	45
3.3 SUMMARY OF CHAPTER.....	48
CHAPTER 4 .....	50
4.1 INTRODUCTION.....	50
4.2 RESEARCH PARADIGMS .....	50
4.2.1 Interpretive paradigm .....	52
4.3- RESEARCH APPROACH .....	54
4.3.1 Qualitative research approach.....	54
4.3.2 Research design.....	55
4.4- SITE AND PARTICIPANT SELECTION.....	56
4.4.1 Coding of participants .....	58
TABLE 4.1 FACULTIES, PILOT PARTICIPANTS, LECTURER PARTICIPANTS, STUDENT GROUP PARTICIPANTS AND THEIR CODES .....	58
4.5 DATA COLLECTION.....	59

4.5.1 Pilot study .....	60
4.5.2 Semi structured interviews .....	60
4.5.3 Observations.....	61
4.5.4 Informal conversations .....	62
4.6 DATA ANALYSIS .....	62
4.7 ETHICAL CONSIDERATIONS.....	65
4.8 TRUSTWORTHINESS.....	65
4.8.1 Credibility .....	66
4.8.2 Transferability .....	66
4.8.3 Dependability .....	67
4.8.4 Confirmability .....	67
4.9 SUMMARY OF CHAPTER.....	68
CHAPTER 5 .....	69
PRESENTATION OF THE FINDINGS .....	69
5.1 INTRODUCTION.....	69
5.2 DATA COLLECTION SITE AND PARTICIPANTS .....	69
5.3 MANAGEMENT OF DATA COLLECTED AND ANALYSIS.....	71
TABLE 5.1: Themes and sub-themes from semi-structured interviews.....	71
TABLE 5.2: Themes and sub-themes from observations .....	73
TABLE 5.3: Themes and sub-themes from informal conversations with the student groups.....	74
5.4 PRESENTATION OF FINDINGS .....	75
5.4.1 Findings from the semi-structured interviews .....	76
5.4.1.1 Intended/required learning .....	76
5.4.1.2 The use of elements/principles/ guidelines .....	78
5.4.1.3 Group formation and group size.....	79
5.4.1.4 Communication of task instruction .....	80
5.4.1.5 Measures taken for individual and group accountability.....	80
5.4.1.6 Need and possibilities for improvement .....	83
5.4.1.7 Challenges experienced .....	84
5.3.2 Findings from the observations of student groups.....	86
5.4.2.1 Intended/required learning .....	86

5.4.2.2	The use of elements/principles/ guidelines .....	87
5.4.2.3	Group formation and group size.....	87
5.4.2.4	Communication of task instruction .....	87
5.4.2.5	Measures for individual and group accountability .....	87
5.4.2.6	Roles fulfilled/Fulfilment of roles .....	88
5.4.2.7	The use of language .....	88
5.4.3	Findings from the informal conversations with the student groups .....	88
5.4.3.1	Intended/required learning .....	88
5.4.3.2	The use of elements/principles/ guidelines .....	89
5.4.3.3	Group formation and group size.....	89
5.4.3.4	Communication of task instruction .....	90
5.4.3.5	Measures for individual and group accountability .....	90
5.4.3.6	Roles fulfilled .....	91
5.4.3.7	Group relations .....	91
5.4.3.8	Perceptions of GWL.....	91
5.4.3.9	Challenges and lessons learnt.....	91
5.5	SUMMARY OF CHAPTER.....	94
	CHAPTER 6 .....	95
	SUMMARY OF FINDINGS, DISCUSSION, RECOMMENDATIONS, PROPOSED APPROACH TO GWL AND CONCLUSION.....	95
6.1	INTRODUCTION.....	95
6.2	SUMMARY OF THE FINDINGS (AND DISCUSSION).....	95
6.2.1	Intended/required learning.....	96
6.2.2	The use of or reference to elements/principles/guidelines of GWL.....	97
6.2.3	Group formation and group size.....	98
6.2.4	Communication of task instruction .....	99
6.2.5	Measures for individual and group accountability .....	100
6.2.6	Need and possibilities for improvement .....	101
6.2.7	Roles fulfilled (student groups) group leaders.....	102
6.2.8	The use of language (student groups) .....	102
6.2.9	Punctuality .....	103
6.2.10	Participation in group discussions.....	103

6.2.11 Challenges and lessons learnt.....	104
6.3 RECOMMENDATIONS .....	105
6.3.1 Intended/required learning .....	105
6.3.2 Use of elements/essentials .....	105
6.3.3 Group formation and group size.....	106
6.3.4 Communication of task instruction .....	106
6.3.5 Measures for individual and group accountability.....	106
6.3.6 Need and possibilities for improvement .....	108
6.3.7 Role allocation/Roles fulfilled .....	108
6.3.8 The use of language .....	108
6.3.9 Punctuality .....	109
6.3.10 Participation during group discussions.....	109
6.3.11 Challenges and lessons learnt.....	110
6.4 PROPOSED APPROACH.....	110
6.5 CONTRIBUTIONS OF THE STUDY .....	113
6.6 LIMITATIONS OF THE STUDY.....	115
6.7 RECOMMENDATIONS FOR FURTHER STUDIES .....	115
6.8 CONCLUDING REMARKS .....	115
REFERENCES.....	117
LIST OF APPENDICES.....	133

## **LIST OF TABLES**

<b>Table 4.1</b>	<b>Faculties, pilot participants, lecturer participants, student group participants and their codes .....</b>	<b>45</b>
<b>Table 5.1:</b>	<b>Summary of findings collected through semi-structured Interviews .....</b>	<b>56-57</b>
<b>Table 5.2:</b>	<b>Summary of data collected through observations.....</b>	<b>58</b>
<b>Table 5.3:</b>	<b>Summary of data collected through informal conversations with the student groups .....</b>	<b>59</b>

## LIST OF DIAGRAMS/REPRESENTATIONS

Representation 1: Elements of cooperative learning. Error! Bookmark not defined.	
Representation 2: Collaborative learning element/components .....	17
Representation 3: A TBL model(Michaelsen & Richards, 2005).....	19
Representation 4: Elements/Essentials of group work learning.....Error! Bookmark not defined.	
Representation 5: Tuckman’s model of group development (1978) .....	26
Representation 6: Gibb’s model of reflective practice (1988).....	35

## **ABSTRACT**

Group Work Learning (GWL) has, over the past thirty years, grown in popularity as a pedagogy in Higher Education across the world, and has widely been documented as a more effective pedagogy in comparison to individualistic learning. However, research studies also warn against the uninformed use of GWL and the negative results thereof. Within popular modes of GWL such as cooperative learning, team because their use has proven to yield success and positive results. It is within this context that the study sought to reflect on the practices of GWL at the University of Limpopo with the view to arrive at refined contextual approaches- approaches that would be reflective and context driven. The study adopted a qualitative research approach, which is anchored in the interpretive research paradigm, and employed a descriptive and exploratory case study design to address the existing knowledge gaps. Semi-structured interviews with eight lecturers from the four faculties at University of Limpopo, observations with eight student groups and informal conversations with the eight student groups were used to collect data for the study. The key findings of the study were as follows: 1) Practitioners in the study did not employ any particular elements, guidelines, principles, models or theories to underpin their use of GWL as a teaching and learning strategy and 2) Individual and group accountability, poor participation and group dynamics remained a challenge in the use of GWL. The additional sub-findings were: 1) The intended or required learning was clearly articulated but focused mainly on learning content and minimally on skills development, values and attitudes, 2) Group formation and group size varied from group to group depending on class size and did not consider context. 3) Practitioners thought there was a need for the improvement of GWL, 4) The study identified challenges and possibilities for improvement.

Based on these findings, I propose a guided, reflective and contextual approach to GWL that is cyclic in character, places the reflectiveness and context of the practices at the center of the process and in which the approach further connects the practices to all the other components that are key to GWL, namely: clear intended learning outcomes that are inclusive of skills, values and attitudes; clear task instruction; elements or guidelines underpinned by relevant group learning theories or models; as well as clear measures to

foster accountability. Group formation and group size based on a clear rationale, as well as continuous reflection on the process with a view to improving and refining the practices. Such an approach is likely to provide the student groups with some framework on how to learn together and complete their tasks/assignments and projects in a manner which is accountable.

**Key words: Reflection, GWL, practices, refined practices, contextual practices, cooperative learning, team-based learning, collaborative learning, qualitative research approach, case study design**

## **ACRONYMS**

CL	Cooperative Learning
COL	Collaborative Learning
ESL	English Second Language
GWL	Group Work Learning
HE	Higher Education
PBL	Problem-Based Learning
TBL	Team-based Learning

## CHAPTER 1

### BACKGROUND TO THE STUDY

#### 1.1. INTRODUCTION

Group Work Learning (GWL) in Higher Education (HE) has become a very popular pedagogy for various reasons, one of them being that it is preferred by students because it promotes active learning when students interact with their peers and share ideas (Prince, 2004; Tsay & Brady 2010; Gregory & Thorley, 2013; Thondlhana & Belluigi, 2014; Hennebry, 2018). According to Sharan (2010), an increasing number of governments seeking to modernize their country's education system, adapt cooperative learning (CL), which is a well-researched form of GWL as a major part of their educational policy. GWL, if properly implemented, prepares students for the workplace and has implications for their employability (Johnson & Johnson 2014; Riebe, Gerardi & Whitsed, 2016; Greetham & Ippolito, 2018). It also helps to address the challenges of large classes (van Rheede van Oudtshoorn & Hay; 2004; Otienoh, 2015) and has been found by numerous research studies to benefit students socially, psychologically and academically (Johnson, et al., 2013; Riebe et. al. 2016). In addition, different fields and disciplines which have used GWL in recent years found it to be an effective pedagogy. Examples are Language Education, including English Second Language learning (ESL) and English First Additional Language learning (EFL) (Alwahibee, 2018).

Research studies (Johnson, Johnson & Smith, 2013; Davidson & Richards 2014; Michaelsen, Sweet & Parmalee, 2009; Lange et al., 2016) on GWL, however, indicate that its success is highly dependent on how it is employed and recommend that practitioners should handle it with great care, particularly in applying recommended principles, elements or guidelines or essentials. It is also important to take cognizance of its complexity (van Rheede van Oudtshoorn & Hay, 2004; Montgomery, 2009; Raubenheimer & Nel, 2012; Hammar Chiriatic, 2014).

Practitioners in HE, particularly where GWL is used for the completion of academic tasks, assignments and projects by students, particularly outside the lecture period, seem not to follow the guidelines, principles, and elements provided by literature and numerous

research studies (Johnson, et al., 2013). Johnson, et al. (2013) argue for the use of GWL that is underpinned by sound theories. They further propose different models that could be used in the implementation of cooperative learning practices. The models they propose are guided by elements in the form of clear task instructions, promotion of mutual interdependence, individual accountability, face to face interaction, interpersonal skills and group processing (Michaelsen & Richards, 2009; Johnson & Johnson, 2014).

The use of GWL for the completion of academic tasks and projects in HE needs to be investigated because if it is poorly used, it could result in poor or inadequate learning among students and encourage social loafing, lack of accountability, conflict and possibly result in students who are inadequately prepared for workplace contexts where team work is required (Davidson & Major 2014; Le, Janssen & Wubbels, 2016; Riebe et al., 2016). I advocate for GWL that is guided and accounted for because it could reduce social loafing and increase accountability and individual learning (Johnson, et al. 2013). GWL also prepares students for the workplace where team work is encouraged and individual contributions to the common goal are greatly valued (van Rheede van Oudtshoorn & Hay, 2004; Riebe et al., 2016; le et al., 2016; Mamas, 2018). The problem with the current usage is that it is often not guided, and, as a result, allows room for social loafing and freeriding (Johnson & Johnson, 2014)

Numerous studies on group work learning, which manifests itself in the form of Cooperative Learning (CL) (Johnson, et al. 2013; Johnson & Johnson, 2014; Brame & Biel, 2015:), Collaborative Learning (COL) (Burke, 2011; Laal & Ghodsi, 2012; Nafziger, Meseke & Meseke, 2011; Davidson & Major, 2014; Lin, Wang & Chen, 2018; Greetham & Ippolito 2018), and Team-Based Learning (TBL) (Michaelsen & Richards, 2005; Michaelsen, Sweet & Parmalee, 2009; Park, Salihoglu-Yener & Fazio, 2018) have been conducted over the years, and in different contexts. Other names given to group work learning are collective learning, learning communities, peer teaching, peer learning, reciprocal learning, study circles and work groups (Michaelsen & Richards, 2005). In this study I will consider cooperative learning, collaborative learning and team-based learning as the main forms of group work because there is a plethora of research studies on them and they have more commonalities than differences among them. I will refer to them as

guided GWL because their application is informed by a set of common elements or principles (Michaelsen & Richards, 2005; Johnson, et al., 2013). I focus mainly on group work studies in HE conducted internationally and in South Africa across the disciplines. A review of research studies on GWL in HE reveals that such research has focused on the following areas: GWL in multi-cultural settings (Summers & Volet, 2008; Popov, Brinkman, Biemans, Mulder, Kuznetsov & Noroozi, 2012; Arumugam, Rafik, Mello & Dass, 2013; Ma & Njeru, 2016), assessment in group work (Nafziger, et al., 2011), student perceptions of group work (van Rheede van Oudtshoorn & Hay, 2004; Hammar Chiriatic, 2014), accountability in group work (Johnson & Johnson, 2009; Laal & Ghodsi 2012; Johnson, et al. 2013), GWL online (An, An & Kim, 2008; Brindley, Walti & Blaschke, 2009; Capdeferro & Romero, 2012), GWL in teacher education (Yavuzer & Dikici, 2006; Mthiyane, 2014) GWL in management and organisational research (Popov, Brinkman, Biemans, Mulder, Kuznetsov & Noroozi, 2012; Middlehurst, Cross & Jeannin, 2018) as well as group effectiveness and group performance (Burke, 2011; Alwahibee, 2018). However, there appears to be a dearth of literature that reports on how practitioners in HE provide guidelines to ensure accountability and meaningful learning. The manner in which group work learning is conducted often leaves room for confusion and for lack of accountability individuals and by the group members.

I found the studies by Raubenheimer and Nel (2012), and Thondlhana and Belluigi (2014) relevant to this study because they acknowledge that there are challenges in the use of GWL and that there is a need to consider particular elements or aspects when employing the GWL strategy amongst university students. Studies by Popov et al. (2012) and Hammar Chiriatic (2014) also bear relevance to this study. Popov et al. (2012) found that there were impeding factors to GWL among students learning in a multicultural setting. Similarly, Petersen and Petker (2017) found that there were frustrating learning experiences among teacher education students in the in-service learning course. These frustrations emanated from amongst others: group organisation, imbalance in the level of commitment, quality of individual contributions and lack of shared goals. The absence or presence of these relates to guiding elements or principles, which I argue should be used in GWL.

Although literature reveals that GWL as a pedagogy in HE has been widely researched from a plethora of perspectives (Johnson, Johnson & Smith, 2013), research on GWL practices within institutions of higher learning is still minimal. Furthermore, most of the research conducted on GWL in HE does not invite practitioners to reflect on their practices and share their views regarding how their current practices can be refined or improved. In addition to this gap, the differences in the contexts within which GWL is used has also been a neglected area in HE. Therefore, in this study, I sought to establish how group work is practiced at the University of Limpopo, particularly what the reflections of practitioners on their group work practices are and how practitioners think their practices could be improved or refined. I also intended to find out from the final year students what their experiences of group work practices were and how they perceived and experienced GWL during task completion.

Studies by Armien and Le Roux (2010), Le, Burke (2011) Thondlhana and Belluigi (2014); Le, et al. (2018) focused on the attitude and experiences of students towards group work. These studies found amongst other things, that many of the students preferred GWL. However, they also found that there were challenges such as social loafing and conflict in GWL and that aspects such as language use, the background and past experiences of the students also needed to be considered (Thondlhana & Belluigi, 2014). Studies such as these suggest that that it is imperative for practitioners to use GWL in a careful, informed manner for it to be a success. There seems to be a gap in the existing literature on GWL with regards to reflecting on how group work learning is practiced in HE, with regard to the use of elements/guidelines/ principles and how it can be improved as a pedagogy within different contexts. Such reflections would, in my view, assist in development of refined and contextual approaches to GWL.

I hold the following assumptions regarding the use of group work learning in higher education:

- Task instructions in group work learning should be clear for the groups to complete the tasks in a meaningful manner
- Group work learning practices must be guided by relevant theories or models

- Group work learning must be provided with a structure in the form of guidelines drawn from the relevant theories or models
- Practitioners who use group work learning need to consistently reflect on its use for the purpose of improving it as a pedagogy.
- Context should be a driving force for the effect use of group work learning

Through this study, I hope to arrive at refined practices that are the result of the reflection on current practices of group work or and an informing framework on group work at an institution of higher learning. This seems to be the right time to conduct the research with this focus because more and more students are taught through group work. I am of the view that if group work is employed without reflecting on its use and providing some rationale, they may never get to know what its strengths and weaknesses are and how it could be improved for the enhancement of learning among students. They may also struggle to address issues such as group dynamics, social loafing or freeriding and accountability among others.

## **1.2. STATEMENT OF THE PROBLEM**

GWL is increasingly becoming a popular pedagogy in Higher Education (HE) (Nafziger, et al., 2011, Baloch & Brody, 2017) for the completion of academic tasks and projects and for classroom-based activities as well as activities beyond the classroom (Johnson, Johnson & Smith, 2013). It often serves as the most suitable alternative to the lecture method because it has been found to be a successful method that engages students and allows them to share ideas. It also prepares students for the workplace which often requires of its employees to work in teams (Armien & Le Roux, 2010; Fearon, Mc Laughlin & Eng, 2012; Mamas, 2018). Several research studies however, reveal that despite its reputation as an effective and successful pedagogy, GWL, if not properly guided and managed through the use of elements, principles or guidelines that promote accountability, it could lead to social loafing or freeriding (Hammar Chiriack, 2014; Hodges, 2017), poor learning (Johnson et al., 2013), conflict and frustration (Hertz-Lazarowitz, 2014). Social loafing or free riding refers to the tendency of some group members to put little or no effort on the task at hand when working with others compared to when they

work alone. This tendency defeats the purpose of working together in order to maximize performance and draw a variety of skills and knowledge from a broader base. Freeriding is slightly different from social loafing as it directly refers to instances where some group members are allocated the same grade as others when they contributed very little. This causes conflict within the group because it is unfair and misleading (Burdett, 2003), Poor learning refers to shallow learning that does not assist in the long-term acquisition and development of the knowledge and skills at the required level.

I became aware of the challenges of group work over the years with my own students and realized the need to strive towards using it from an informed, guided position (as recommended by several research studies). I was also fascinated by the inconsistency of scores or marks that I observed in my own classes between tasks done individually and those done by groups. Students often obtained higher scores for Group Work Learning tasks. I observed that some of the students, as individuals or in groups, came to report on members who did not contribute or did not cooperate within their groups. They also complained of members who wanted to earn marks for work they had not contributed to. This made me curious to find out what contributed to these challenges and experiences and how they could be addressed. Based on the challenges of group work revealed in the literature together with own experiences with students, I wanted to find out how GWL is generally conducted by practitioners in HE; particularly how they used or applied elements guidelines and principles and how they responded to other essential aspects of GWL. I wanted to understand, what made some GWL successful while in some cases it was unsuccessful. How practitioners communicate task instructions and how practitioners promoted both individual and group accountability.

In this study I reflect on GWL as used for the completion and preparation of tasks and activities such as assignments, projects, and preparation of presentations that are done by students outside the classroom and away from the lecturer that are assessed and contribute towards their term grades (Popov et al, 2012).

### **1.3. AIM OF THE STUDY**

The aim of the study was to examine group work learning practices carried out at the University of Limpopo, South Africa.

#### **1.3.1 Objectives of the study**

At the end of the study I was be able to:

- Determine what the intended or required learning was during the completion of tasks/assignments/activities.
- Describe the guidelines practitioners use to inform GWL
- Describe how practitioners at the University of Limpopo form groups and decide on group size.
- Determine how the practitioners in the study communicate the instructions for the GWL tasks/assignments/activities to their students.
- Explore how the practitioners promote or foster individual and group accountability among the students for the completion of academic group tasks.
- Determine the challenges experienced by practitioners in GWL and the possible ways of addressing them.
- Explain what the practitioners regard as areas that need to be improved in their practices of GWL.
- Describe how students complete the GWL tasks/assignments/activities given to them by their lecturers.
- Explore how students in different fields of learning interact during GWL sessions while completing their given tasks, and the lessons learnt from the experiences.

The following are the research questions for the study:

The primary research question for the study is:

How are group work learning practices carried out at the University of Limpopo?

The secondary questions are as follows:

- What was the required or intended learning during task completion?
- What are the guidelines used by practitioners to inform group work learning?
- How do practitioners form the groups and determine the group size?
- How do the practitioners in the study communicate the instructions for the GWL tasks/assignments/activities to their students?
- How do the practitioners promote or foster individual and group accountability among the students for the completion of academic group tasks?
- What challenges are experienced by practitioners in GWL and what are the possible ways of addressing them?
- What are the areas that practitioners think need to be improved in their GWL practices?
- How do students complete the GWL tasks/assignments/activities given to them by their lecturers?
- How do students in different fields of learning interact during GWL sessions and what are the lessons learnt from the experiences?

#### **1.4. SIGNIFICANCE OF THE PROPOSED STUDY**

Teaching, learning and assessment are listed among the key global issues that need to be addressed through curriculum-related research. This study falls within this category and seeks to reflect on GWL practices with a view to arriving at refined approaches in using group-work learning. Such an approach would benefit classroom practitioners in

HE given the growing popularity of GWL. Other researchers can also pursue related studies to further refine group work practices in HE. The study will contribute towards theory building in GWL and could also serve as a reflector for empirical studies. Furthermore, this study is significant because its findings might serve to refine current practices with a view to providing an institutional framework that would contribute to the refinement of GWL practices and consider the different contexts of GWL in HE. It will provide a contextual framework that can be adjusted by practitioners to suit different environments in which GWL is employed as a pedagogy. The findings of the study could also add to the body of knowledge in preparing students for the Fourth Industrial Revolution; which among other things requires collaborating with others. The findings may also contribute to theory development in group work learning for higher education institutions, which desperately need it especially in the era of decolonization and Africanisation of teaching and learning.

### **1.5. LIMITATIONS OF THE STUDY**

The following indicate the limitations of the study:

The study was a descriptive, exploratory case study and thus the findings thereof cannot be generalized.

The study drew a sample of 8 lecturers, 2 from each of the four faculties of the University of Limpopo and 8 groups of students engaged in group learning tasks in the different faculties. The findings regarding the practices are therefore to a large extent limited to the particular disciplines from which the sample was drawn.

### **1.6. ORGANISATION OF THE THESIS**

This thesis is organized as follows:

Chapter one introduces the research topic and provides the background to the study, the problem statement, aim and objectives of the study, significance of the study, limitations of the study and organization of the thesis.

Chapter two provides a conceptual framework for the study which consists of conceptual papers on GWL, the elements/essentials/guidelines of GWL and additional aspects of GWL identified from existing literature.

Chapter three provides a literature review on GWL in HE drawn from empirical studies.

Chapter four discusses the research the research methodology and research design used in the study.

Chapter five provides an analysis of the data collected and presents the findings of the study answering to the research questions

Chapter six provides a summary of the findings and draws conclusions to the study as well as recommendations for refined contextual practices and further research.

## **1.7. SUMMARY OF CHAPTER**

The aim of this chapter was to provide the reader with the background to the use of GWL as a pedagogy in HE. It also provides the problem statement, the aim and objectives of the study, the primary and secondary research questions of the study, the significance of the study as well as the limitations of the study. The chapter ends by providing the outline or organization of the thesis. The conceptual framework for the study is discussed in the next chapter.

## CHAPTER 2

### CONCEPTUAL FRAMEWORK

#### 2.1. INTRODUCTION

In chapter 1 I provided the background to the study including a brief overview of the literature on GWL in higher education. In this chapter I provide the conceptual framework that underpinned this study. The conceptual framework serves as a precursor to chapter 3, which provides a review of empirical studies. The chapter, further serves as a mirror that assisted me to reflect on and examine how practitioners at the University of Limpopo use GWL for the completion of academic tasks by their students and what key elements, principles, essentials, guidelines or tenets; they use to ensure that all their students acquired the intended knowledge and developed the appropriate skills and attitudes from the GWL experiences (Johnson & Johnson, 2014). While Imenda (2014) contends that theoretical frameworks and conceptual frameworks both serve as lenses, mirrors or spectacles through which the researcher navigates the study, Imenda (2014) also differentiates between the two. He argues that while in a theoretical framework, a researcher draws from a particular theory or tenets of that theory or theories, in a conceptual framework the researcher draws key tenets, elements, ideas or aspects from literature studies to develop a framework through which a particular study can be viewed or navigated through (Green, 2014). Regionel (2015) describes a conceptual framework as a researcher's synthesis of literature on how to explain a phenomenon.

In this case study I specifically drew from conceptual studies on group work learning in its different forms to explain how GWL could be implemented. I also drew from cooperative learning (Johnson & Johnson, 2009, 2014), collaborative learning (Panitz, 1999; Laal & Ghodsi, 2012) and team-based learning (Michaelsen, 1979), which are the three major manifestations of GWL. I particularly refer to the elements that frame the three manifestations and show how GWL can be implemented. I further included the theory of constructivism which underpins learner-centered pedagogies as well as additional tenets that emanated from the literature. The layout of the discussion is structured as follows: 1) The foundations of GWL, 2) The major manifestations of GWL, 3) The similarities

between the manifestations of GWL, 4) The elements/essentials/tenets/guidelines that are applicable to the study, and 5) The application of the guidelines to the study and 6) Constructivism as a learning theory, 7) Reflective practice and 8) Context as an essential component in GWL practices.

## **2.2 FOUNDATIONS OF GWL**

An understanding of the foundations of GWL is important for this study and for GWL practitioners in higher learning. It assists me in gaining a deeper understanding of the phenomenon I have set out to investigate.

According to Andrews (2001) Yusuf, Jusoh and Yusuf, (2019) GWL is founded on the premise that groups are a fundamental component of human experience, allowing people to develop complex and large-scale tasks and activities, which constitute significant sites of social interaction and education. Working in groups also provides a milieu where relationships can be formed and grow and where people are able to help and support each other (Andrews, 2001). Similarly, Johnson, Johnson and Frank (2003) describe humans as small group beings and maintain that they have always been and will remain as such. According to them, the ready availability of groups and the inevitability of belonging to them, make them one of the most fundamental factors in human life, to an extent that the loss of their effectiveness translates into the poor quality of human life.

Further evidence that group work is a fundamental characteristic of human existence, stems from the theories upon which it is founded. Social theorists like Allport, Watson, Shaw and Mead (Johnson et al., 2013) began establishing cooperative learning theory after establishing that group work was more effective as a pedagogy in terms of quantity, quality and productivity, in comparison to working individually (Johnson, et al., 2013). Sharan (2010) also indicates that researchers like May and Doob (1937) found that people who work together cooperatively and achieved shared goals tended to be more successful in the attainment of intended outcomes when compared to those who strived independently (Johnson & Johnson, 2014).

Taylor, 2004 on a different note illustrates how functioning in a cooperative manner is African in origin and characterizes the social practices of almost all the African

communities and cultures. Popov et al. (2012) found that that it characterizes communal communities as they discovered in their study that in a multicultural GWL setting, students who came from communal cultures tended to be more receptive to GWL as compared to those from individualistic competitive communities or cultures. Both, studies, however, do not explain the components of accountability and structure. In GWL.

The extensive work done by many scholars in GWL, with the Johnson brothers leading the pack on cooperative learning was influenced by the work of philosophers and psychologists such as John Dewey, a philosopher, psychologist and educational reformer who was a proponent of pragmatism, Kurt Lewin and Morton Deutsch in the 1930s and 1940s who were both social psychologists (Johnson et al., 2013). The influence of these philosophers, psychologists, sociologists and anthropologists is evident in how the current scholars of cooperative learning and other forms of GWL, take cognizance of group dynamics, conflict resolution and the social nature of GWL. This places GWL into the category of social family models of instruction which purport that group learning is a social activity which involves much more than just cognitive learning (Johnson et al., 2013). The question then is: how is this social activity managed? How are the challenges such as group dynamics and conflict resolution among others addressed during GWL activities?

Awareness of these aspects suggests the need for some structure in the form of elements, guidelines or principles to manage GWL. David Johnson and Roger Johnson were Deutsch's students and have continued to conduct research in cooperative learning (Johnson, et al., 2013). They consistently recommend the use of specific elements in cooperative learning. Collaborative learning and team-based learning are also guided by some essentials or elements. For the purpose of this study, I do not suggest that practitioners slavishly apply a set of elements or guidelines but rather that they have guidelines elements and principles that they develop or use to account for group learning in their contexts. Guidelines and principles that would assist their students to go through their group learning tasks in an effective and meaningful manner. The study also takes cognizance of the critique levelled at the use of structure in learning. Schwab (1969, p2), for example, on commenting about what he calls "a crisis of principle" in curriculum, warns against the use of principles in curriculum and argues that it has the potential to create

problems and leave problems unresolved. According to Schwab, practitioners across the fields should avoid following or applying principles in a slavish manner slavishly because they stifle creativity and become the focus of the practice. He further questions if the data required by the principles can be turned into knowledge which matches the complexity of the learning content or solutions used to address the challenges related to the initial inquiry.

While I note what Schwab (1969) says about principles and agree that they may not always yield the required results or serve to solve problems, I am of the view that the absence of principles could have the potential to bring more confusion and lack of direction. Conducting GWL loosely and haphazardly without any structure or guidance could lead to more chaos and conflict. GWL practitioners in HE, should, in my view, account for how they ensure that all students learn and acquire skills and attitudes required in their field of learning. They need reflect on and think about a) what they want the groups to learn, b) how they guide the process of learning c) how they communicate the task d) How they form groups, e) how they foster accountability and how they improve learning in groups. The discussion that follows will focus on the items mentioned above within the context of existing literature on GWL in the Higher Education sector globally.

### **2.3 MANIFESTATIONS OF GROUP WORK LEARNING**

Literature on GWL suggests that this form of pedagogy manifests itself in various forms such as pair work, peer assisted learning, small group learning, problem-based learning, cooperative learning, team-based learning and collaborative learning (Gross Davis, 2009; Johnson, et al., 2013). While most of the studies are on cooperative learning, collaborative learning and team-based learning, some researchers such as Davidson and Major (2014) regard problem-based learning as a major category as well. While some of these manifestations like cooperative learning and collaborative learning are often confused with others or loosely referred to by some researchers, there are researchers who seriously consider and acknowledge the similarities and differences between these manifestations as well as their meanings such as Panitz (1999). While this study acknowledges that there are various manifestations of GWL in HE, the focus will be on

three manifestations which are broadly documented: a) cooperative learning, b) collaborative learning and c) team-based learning.

This discussion is also used to show how the manifestations are sometimes loosely interpreted or used in the literature that exists. In addition, these manifestations are discussed with a view to illustrate the confusion that exists regarding how each one of them is conceptualized, how they are similar as well as how they are different as perceived by some scholars who have written extensively on forms of GWL (Davidson and Major 2014; Johnson, et al., 2013).

The complexity revealed within the literature regarding how GWL manifests itself is of great importance to this study as it is an indicator of how complex GWL is and that it also contextual. These manifestations are contextual forms of learning. This study then seeks to establish if practitioners who use GWL at the University of Limpopo consider its complexity as a pedagogy and most importantly how they implement it in a manner which renders it successful. This study also focuses on GWL that takes place independently away from the classroom. This then presents a different context from GWL that is conducted during the lecture, in the presence of the lecturer. I think the context of GWL in this study calls for a guided approach that will give form and structure to the process. Such guidance or structure could assist in dealing with group dynamics and most importantly the challenge of social loafing and free riding which often affects learning negatively. This challenge has been explained in chapter 1. In the next section I briefly discuss the three manifestations of Group Work Learning and the elements/essentials that characterize them.

### *Representation 1: Elements of cooperative learning*

	<b>Element</b>	<b>Characteristic</b>
<i>P</i>	<b>Positive Interdependence</b>	<ul style="list-style-type: none"><li>• Relationships</li><li>• Contribution of group members</li></ul>
<i>I</i>	<b>Individual Accountability</b>	<ul style="list-style-type: none"><li>• Individual participation</li><li>• Performance dependent on all group members</li></ul>
<i>G</i>	<b>Group Processing</b>	<ul style="list-style-type: none"><li>• Functioning</li><li>• Clear goals, processing events</li></ul>
<i>S</i>	<b>Social Skills</b>	<ul style="list-style-type: none"><li>• Communication</li><li>• Clarification, paraphrasing, praising</li></ul>
<i>F</i>	<b>Promotive Interaction</b>	<ul style="list-style-type: none"><li>• Encouragement</li><li>• Facilitated communication</li></ul>

#### **(Johnson & Johnson, 2009)**

In chapter 1 I introduced the concept of cooperative learning. Here I intend to further develop the idea to higher its scope and use in HE. Cooperative learning is a form of group learning founded by David Johnson and Roger Johnson in the 60s (Johnson et al. 2013; Johnson, et al., 2013). They have made a great and matchless contribution in the field of cooperative learning, which is doubtlessly a great form of pedagogy and a great field of research and study as well.

In this form of pedagogy students are encouraged to work in groups and teams. According to Johnson and Johnson (Johnson & Johnson 2009; Siltala, 2010; Johnson et al.,2013), cooperative learning is a form of GWL in which a group of students work together towards the achievement of a common goal guided by the following set of five elements which are the pillars of this form of learning: - individual accountability, positive interdependence, face-to-face promotive interaction, Group processing, and Interpersonal and Small group skills. According to the proponents of cooperative learning, these five essential components must be present for small group learning to be truly cooperative. In my view these elements encourage good practice. I think practitioners should have a set of elements that guide GWL that suit their own context. Opdecam and Everaert (2018) explain that the negative feelings about GWL could be the result of improper

implementation. They urge that practitioners identify necessary elements to refer to in the implementation of cooperative learning.

### 2.3.2 Collaborative learning (COL)

#### *Representation 2: Collaborative learning element/components*



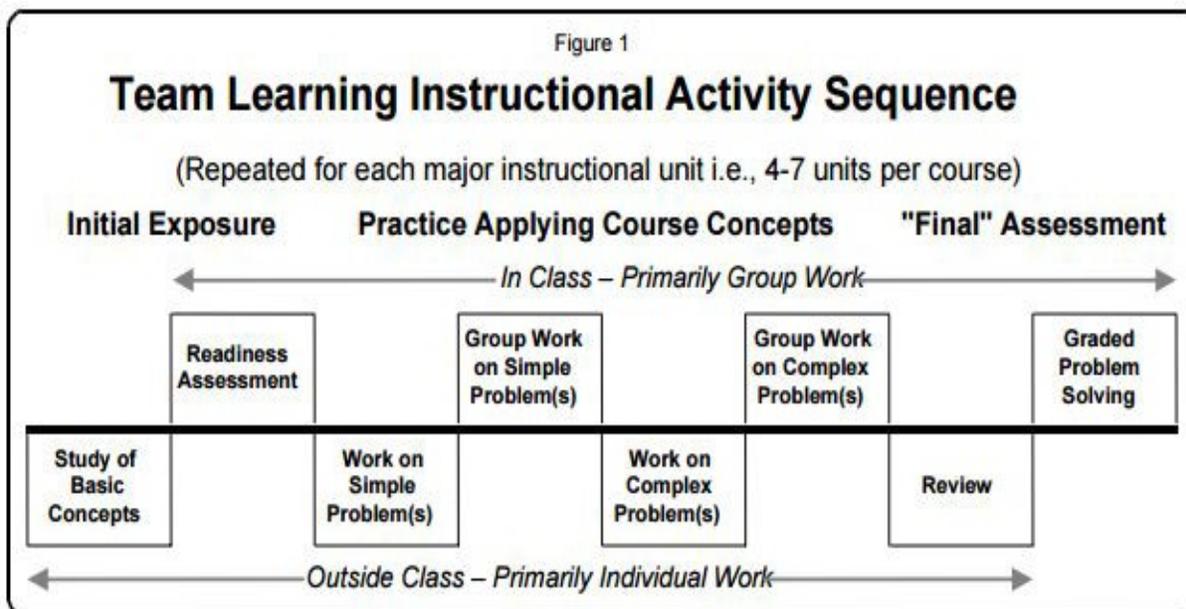
Collaborative learning as a pedagogy can be traced back to ancient civilizations. It was however replaced by other learning philosophies from the West and colonized East (Baker, 2015). Collaborative learning got a new lease of life during the second half of the 20<sup>th</sup> century when research revealed that students learned faster and retained more knowledge when they learned in partnership with others as compared to when they

learned as individuals who were passive recipients of knowledge (Banerjee, 1967, Barkley, Major, & Cross, 2014; King, 2016).

Collaborative learning was also influenced by Constructivism and the notion of social learning as purported by (Piaget 1967; Vygotsky, 1978). While it is not very clear what the elements of collaborative learning are, there are practitioners who refer to the same elements of cooperative learning as those of collaborative learning. Laal and Ghodsi (2012) for example refer to the following elements of cooperative learning as the elements that guide collaborative learning: clearly perceived positive interdependence, considerable interaction; individual accountability and personal responsibility; considerable interaction; social skills, and; group self-evaluating. Baker (2015, p453) also seems to regard cooperative learning and collaborative learning as very similar as he explains that *'not all group work is either cooperative or collaborative'*. In this study I regard both manifestations as very similar and while noting their differences, focus on their broad similarities as reflected in the representations I have provided. Both manifestations provide structure, guided by elements, use small learning groups, are founded on constructivism as a learning theory (which will later be discussed in this chapter), and are used in the formal classroom settings and beyond where students work together and learn independently. I also note that both are manifestations of GWL that have been extensively documented (Davidson & Richards, 2014).

### 2.3.3 Team-Based Learning (TBL)

*Representation 3: A TBL model/activity sequence (Michaelsen & Richards, 2005)*



Team-based learning is also described as a structured form of GWL that stresses student preparation out of class and application of knowledge and skills in class (Michaelsen and Richards, 2005; Riebe, Girardi & Whitsed, 2016). It is a much younger manifestation of GWL compared to cooperative learning and collaborative learning, is more consistent regarding the elements that guide and characterize it, which are, group and group formation, accountability, feedback and assignment design. These essential elements can be further explained as follows:

Team-based learning as a form of GWL was founded by, Larry Michaelsen in 1979 when he was confronted with a challenge of adapting to a class size that tripled from 40 to 120 students. He had been using a case-based Socratic teaching approach that involves facilitating problem-solving discussions, so he needed to come up with a teaching method that would engage his students and encourage them to prepare before they came to class despite the growing class size. Larry Michaelsen then devised a method he called team-

based learning. This approach is very close to the structure that TBL classrooms use today (Greetham & Ippolito, 2018). Judging by the three initial stages that are followed in team-based learning, and the four essential elements that guide it, which will subsequently be discussed, team-based learning seems to be much more structured and also classroom based when compared to cooperative learning and collaborative learning, which also accommodate learning in groups beyond the classroom setting (Michaelsen, Sweet & Parmalee, 2009)

Team-based learning, like cooperative learning and collaborative learning is guided by a set of three initial stages, which are, initial exposure, practice applying course concepts and final assessment. It is also guided by four essential elements, namely: group formation, group and individual accountability, team development and feedback (Michaelsen & Richards, 2005, Farland, Sicat, Franks, Pater, Medina & Persky, 2013)

## **2.4 SIMILARITIES BETWEEN COOPERATIVE LEARNING, COLLABORATIVE LEARNING AND TEAM-BASED LEARNING**

### **2.4.1 Similarities**

While the similarities between cooperative learning, collaborative learning and team-based learning are an area of interest in this study because of their relevance, the differences are acknowledged and very briefly discussed.

The key similarity between the three manifestations is the fact that they all provide a set of elements or essentials that they use to inform how GWL should unfold, when students work together on a task/assignment/activity within the classroom formal classroom setting or beyond. This bears relevance to the study because my main argument is that GWL at university level should be guided for it to yield positive results. I argue that students should be guided on how they should go about working on the task while interacting collaboratively and learning together.

The second similarity is that all three address the following key aspects which are important for GWL: Face-to-face promotive interaction, team-work/social/interpersonal

skills and individual and group accountability (Johnson & Johnson 2009; Johnson, et al.; Laal & Ghodsi, 2012; Michaelsen, Sweet and Parmalee, 2009; Sweet & Parmalee, 2012).

The third similarity between the three is that they all recommend that groups be formed strictly by the instructors and that the groups be quite small in size; 2-4, 5-7 at most.

#### **2.4.2 Differences**

While there is an argument amongst others that cooperative learning and collaborative learning are different (Panitz, 1999; Davidson & Richards, 2014), there are also those who virtually use them interchangeably or in an interrelated manner throughout (Davidson & Richards). The confusion around the meanings of collaborative learning and cooperative learning, are clearly acknowledged in the study by Davidson & Richards (2014) whereby they explore the similarities and differences between collaborative learning, cooperative learning and problem-based learning. I note that the elements they both use for guiding GWL are identical in some instances, like in the study by Laal and Ghodsi (2012).

The difference between these two manifestations and team-based learning is that team-based learning considers pre-class preparatory learning, which includes the assessment of individual work before the GWL activity as essential while the other two manifestations do not refer to it. Another key difference is that team-based learning considers feed from the lecturer as key, while the cooperative learning and collaborative learning consider group processing as a key element (Johnson & Johnson, 2014; Laal & Ghodsi, 2012). Group formation is also clearly stated as a key essential in team-based learning, while it is not pronounced in the other two manifestations. Team-based learning also seems to be purely classroom based while the other two are employable beyond the formal classroom setting as evidenced in several studies (Johnson, et al. 2013; Mthiyane, 2014; Laal & Ghodsi 2012).

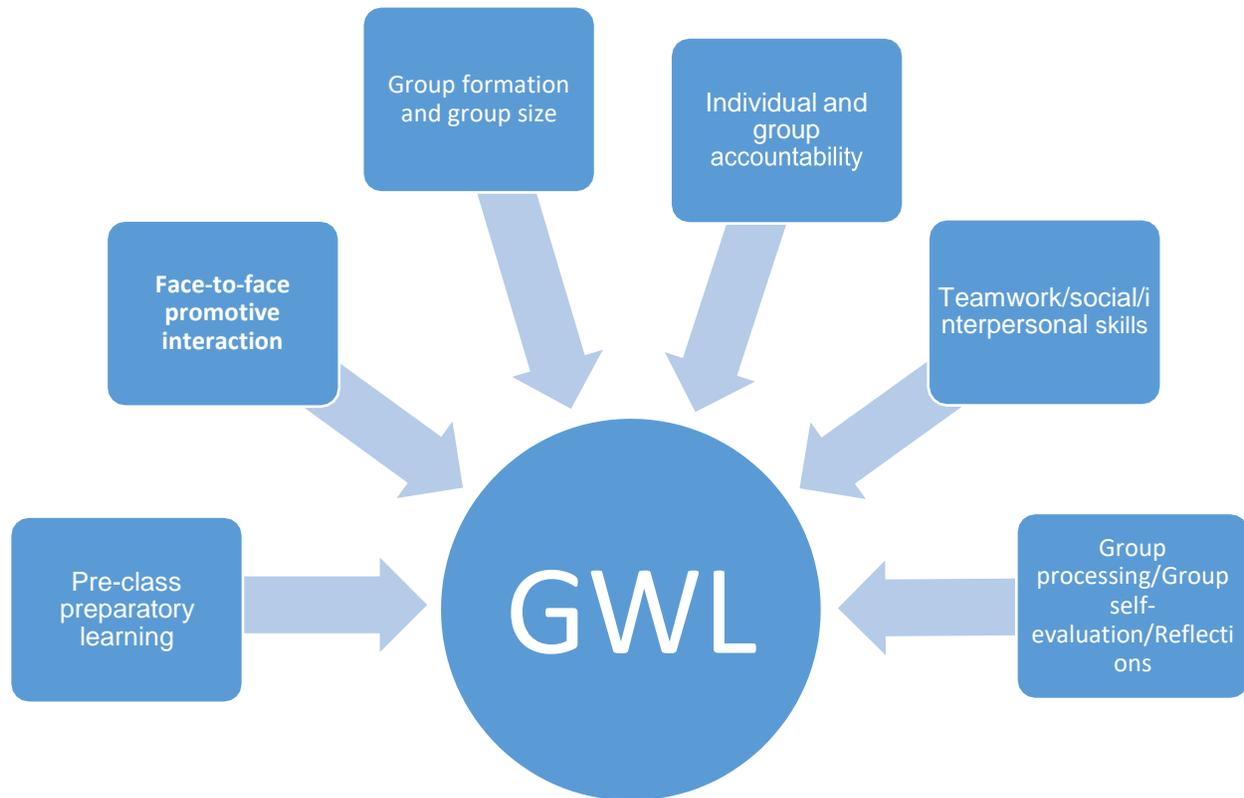
Based on the above analysis of the elements and essentials of the three manifestations of team-based learning, I identified and selected the following elements/essentials of GWL that I found to be relevant to serve as a major part of the conceptual framework for the study, and each one of them will be discussed in terms of its meaning and its

application and relevance to the study: 1) Pre-class preparatory learning that individual students engage in before working cooperatively or collaboratively with other group members 2) Face-to-face interaction/considerable interaction, 3) Group formation, 4) Individual and group accountability, 5) Social//interpersonal skills and 6) Group processing/reflections. In addition to these I draw the following elements mainly from conceptual studies: 1) Articulation of intended learning/outcomes 2) Communication of task instruction, 3) Preparation of students for group learning, A discussion of the elements and essentials drawn from the three manifestations of GWL, referred to above will be inclusive of information from conceptual studies which refer to the same elements or essentials.

## **2.5. ELEMENTS/ESSENTIALS OF GROUP WORK LEARNING**

There are basic elements and principles that constitute what GWL is. It is important to observe these elements as they somehow provide parameters what counts as GWL in the midst of the lack of a globally accepted definition. They are also important to consider as serve as criteria to judge what is GWL or is not. I have identified six (6) elements or essentials that are dominant in literature on GWL. I, however, acknowledge that there may be more, but for me this list seems comprehensive. Due to the limited scope of this thesis I will first provide a representation of the elements that constitute the conceptual framework labeled 2.4 and devote a brief commentary for each, mainly describing what the element is and explaining its relationship with GWL in higher education. These are elements that should basically be considered when GWL is used and should ideally informed some theory or model.

#### *Representation 4: Elements/Essentials of group work learning*



#### **2.5.1 Pre-class preparatory learning**

Pre-class preparatory learning is an element or essential peculiar to team-based learning (Michaelsen & Richards, 2005). It serves to ensure that students go through the learning task or materials individually first and try to make meaning out of it before their understanding is assessed and before they join the other group members to rework on the same task and negotiate meaning with the other team members (Sweet & Parmalee, 2012). This essential is of extreme importance to GWL and to my study because I strongly

believe that for GWL to be effective individual learning is essential as a foundation. I think students who work together on a task after having grappled with it alone, have some ideas to bring to the group discussion because they have constructed their own meaning before they are exposed to the meanings constructed by others. They don't function in a vacuum but rather have some substance to bring to the bigger group learning platform. In my view this is one important missing element in cooperative and collaborative learning which in my view, is also not deeply pursued in team-based learning.

### **2.5.2 Face to face promotive interaction**

Face-to-face promotive interaction means that students work together in a face to face mode towards the completion of a task or activity (Johnson et al, 2013). This encourages the students to share and help each other on specific topics and issues. There could be one or more students of a group who do not have a sound idea about some specific topic. But there could be a third student who understands the topic very well. This form of interaction serves to provide a platform for students to work together and work towards a common understanding of the task at hand (Johnson & Johnson, 2014). Practitioners need to foster positive interdependence, which will encourage students to interact with the understanding that they depend on each other for their success as a group. Without working face to face in it would be difficult for students to learn together and complete the task.

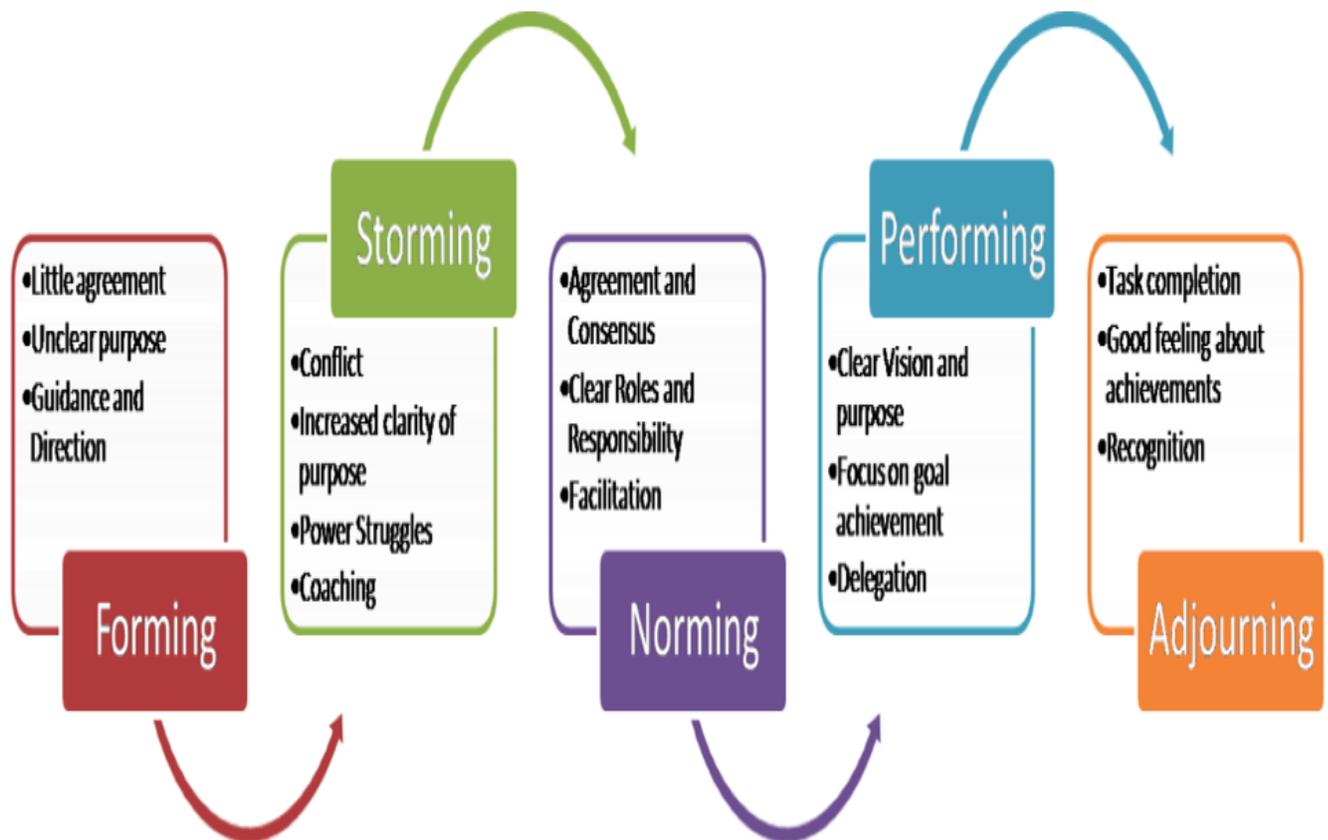
### **2.5.3 Group formation and group size**

TBL requires that the instructor oversee the formation of the groups so that he or she can manage three important variables. One is ensuring that the groups have adequate resources to draw from in completing their assignments and approximately the same level of those resources across groups. The second is avoiding membership coalitions are likely to interfere with the development of group cohesiveness. The third is ensuring that groups develop into learning groups. Literature on GWL suggests that thoughtful consideration should be put into how groups are formed because assigning the members of the group is pivotal to the success of the group (Burke, 2011). The decision whether the instructor forms the groups or the students themselves form their learning groups should be well thought through (Nafziger, et al., 2011). While some researchers and

practitioners, recommend that the instructors should form the groups because students will form friendship groups (Mamas, 2018), there are also studies that have found that there are sound reasons why students should be allowed to form their own groups and also that there are some advantages in students forming their own groups, such as proximity, language, accessibility and context (Armien & Le Roux 2010; Nafziger, et al. 2011). Some practitioners argue that the nature of the task could to a great extent determine whether the groups are formed by the instructor or the students and what the size of the group is (Criticos et al., 2014).

One might think that forming a group is simply about choosing to work with some of your friends. However, when you work together in a specific group activity your relationship with each other needs to become professional (Johnson, et al., 2013). Before this can be achieved, the group may go through certain stages as outlined by Tuckman (1978) in his model which illustrates the complexity of forming groups. This is a key aspect of GWL that practitioners need to be aware of. Tuckman (1978) in his model of group formation which consists of four stages illustrates how complex the process of forming learning groups is. According to Tuckman (1978) when students form learning groups they go through the phases of storming, forming, norming and performing. During the forming stage, they are likely to go through some struggle or conflict resolution before they finally form and settle into a group, after forming a group they then have to agree on how they will function or operate as a group and once they have agreed on a set of norms or principles they finally perform the task at hand. After the performance of the task, the group is likely to adjourn.

*Representation 5: Tuckman's model of group development (1978)*



*Fig 2: Team Development stages*

The dynamics of group size is also an important component of group work (Nafziger, et al., 2011). There are different interpretations and preferences with regard to what the appropriate group size is (Gross Davies, 1999; Criticos et.al. 2012). For some practitioners a small group is considered to consist of three or more people (Hammar Chiriac, 2014). Groups of two are called dyads and are not preferred by some because they are not big enough for members to deliberate in a creative manner and produce diverse ideas (Mamas, 2018). In general, it is suggested that groups of four or five members tend to work best (Johnson & Johnson, 2014). While larger groups tend to be

less popular because they decrease each member's opportunity to participate and often result in some members not actively contributing to the group, there are practitioners who argue that larger groups have the potential to generate a wider range of ideas to the group discussions (Nafziger et al., 2011, Mamas, 2018). The amount of time and the context of the activity also have a bearing on the group size. In situations where there is a shorter amount of time available to complete a group task, such as an in class collaborative learning exercise, it is suggested that smaller groups are more appropriate. The shorter amount of time available, the smaller the group should be (Johnson & Johnson, 2014; Hammar Chiriac, 2014). I align with the argument that group size should be determined by the nature of the task, the objectives of the task and the context within which the task is completed. I am of the view that just working in groups alone, without any elements, guidance or structure is not enough for students to benefit from the interaction. They need to be guided in terms of what the objectives of the task are, why the group formation, why the group size and how they should go about completing the group task or assignment.

#### **2.5.4 Individual and group accountability**

Individual accountability is a very important element in cooperative learning. It refers to the need for each group member to be accountable to the group in terms of their contribution towards the completion of the task. It remains a major challenge in the practice of GWL (Johnson & Johnson, 2009; 2014; De Hei et al., 2016). Individual accountability is also linked to task assessment. Practitioners need to indicate clearly if the assessment mark or grade is common, or if individual students within the group will be assessed separately (Nafziger, 2011). In both cases individual students need to be accountable to themselves and to the group because all students will be expected to achieve certain outcomes or objectives in their learning. To ensure that each member is strengthened, students are held individually accountable to do their share of the work. The performance of each student is assessed separately, and the results are given back to the individual and perhaps to the group. The group needs to know who needs more assistance in completing the assignment, and group members need to know that there is no room to "hitch-hike" or "free-ride" (le, et al., 2016)

### **2.5.5 Teamwork/social/interpersonal skills**

Interpersonal and small group skills refer to the social skills that each student in the group should have. It is necessary in order to have true and long-term success of the group. Contributing to the success of a cooperative effort requires teamwork skills (Michaelsen, Sweet & Parmalee, 2009; Richardson & Major, 2014). Students must have and use the needed leadership, decision-making, trust-building, communication, and conflict-management skills. These skills are taught just as purposefully and precisely as academic skills (De Hei et al. 2016). Considering that some of the students may have limited experience working in groups, it would be necessary to orientate them and equip them with GWL skills. This could be done by having discussions with them or teambuilding sessions where the importance of social relations are reinforced.

### **2.5.6 Group processing/group self-evaluation/reflections**

Group processing refers to the assessment and remarking of the capabilities and actions of each group. For example, instructor can take three or four students from a group and can make an outline of what had made the group successful (Johnson et al., 2013; Hammar-Chiriac, 2014).

Furthermore, the instructor can tell what points and factors can make the group even more successful in future. Group self-evaluating or group processing is crucial for team members to set group goals, periodically assess or reflect on what they are doing well as a team and identify changes they will make to function more effectively in the future interactions (De Hei et al.; Michaelsen, Davidson & Major, 2014).

Practitioners need to ensure that members of each cooperative learning group discuss how well they are achieving their goals and maintaining effective working relationships. Groups need to reflect by describing what member actions are helpful and unhelpful and make decisions about what to retain in their interaction and what to change or adapt. Such processing by the group enables learning groups to focus on group maintenance, facilitates the learning of collaborative skills, ensures that members receive feedback on their participation, and reminds students to practice collaborative skills consistently (Johnson & Johnson 2014).

### **2.5.7 Preparation of students for GWL**

Orientating students to how GWL works and providing them with some guidelines on how to interact with other group members is an important aspect of GWL (Criticos et al., 2012). Some of the students may have limited experience or may not have it at all. It could be challenging for practitioners to design and implement group work effectively, and even more difficult for students to foster the group process, especially if they do not have the required skills to participate effectively use of in GWL activities. Instructors cannot assume that students know how to work together. They need to provide some structure in their delegation of group tasks (Burke, 2011).

Instructors also need to reinforce listening skills and the proper methods to give and receive constructive criticism. These skills can be discussed in class and modeled during class activities as part of the orientation process. Some institutions use a variety of exercises that are structured to help students gain skills to work in groups (Le et al., 2016). Many of these skills are related to those referred to in the elements of cooperative learning as interpersonal or social skills. Orientating students to GWL by using activities, and developing skills helps to reinforce cohesion and group unity (Burke, 2011).

### **2.5.8 Challenges in GWL**

While many research studies reveal that there are several challenges experienced in GWL (Baloche & Brody, 2017; Johnson and Johnson 2009; Johnson, Johnson and Smith 2013; Johnson and Johnson, 2014). Several other studies offer solutions to such challenges (Burdett, 2003; Riebe, et al.; 2016; Swanson et al., 2019; De Hei et al., 2016). Among other things, they show that it is essential for practitioners to plan carefully for GWL, structure group learning activities guide and prepare students to work collaboratively and cooperatively in groups. According to them, there is also a need for the development of social and group skills required for effective GWL. Gross-Davis, (1999) Johnson & Johnson, (2014); Le et al. (2016), strongly recommend that group work practitioners must try to effect two objectives that complement each other. These according to them are the development of mutual systems and the provision of assistance to groups to enable them to attend to, and most importantly achieve their learning objectives. This means that group

work practitioners should focus on both individual and collective goals that the group intends to achieve (Michaelsen et al., 2009; Johnson & Johnson, 2014).

There is also a need for intervention and clarification for the groups to achieve the intended goals (Johnson & Johnson & Smith, 2013). Johnson & Johnson (2014), and Michaelsen et al, (2009), stress that for GWL to be effective, the groups need to be guided from the beginning and expectations must be made clear. Sarkisian (2010) also indicates that there is a need for periodical monitoring by the instructor or group work practitioner. The students need to know about the project and what it entails from the beginning of the term in order to allow for timeous planning. Gross Davis (1999) and Johnson and Johnson (2009) agree that it is of great essence to plan for GWL and prepare students for it, especially in a competitive academic environment where students had been rewarded for individual effort. Gross- Davis (1999) also argues that learning collaboratively does not come easily or naturally for all students. And that even students who have worked together informally in groups may never have thought deeply and carefully about the type of skills required to make groups achieve the intended goals or objectives. Gross Davis (1999) further argues that if faculty fails to provide specific guidelines or models for GWL students may struggle to get started with their group projects. If the group work activities and tasks are linked to the module objectives, the students will most likely be motivated to participate as they will see the relevance of their group assignment or project to the broader course or module objectives.

The need to promote interaction among students and between students and faculty and provide ongoing feedback are of utmost importance for the success of GWL (Smith, 1996; Gross Davis, 2009). Drury, Kay & Losberg (2006) in their study on student satisfaction in group work in undergraduate computer Science also found that it was important to support student learning of group skills. They also indicate that their study helped them to define strategies to improve the development of student skills in GWL. This study agrees with the notion that effective meaningful group work is group work that is informed by guidelines, principles or elements that are based on some theoretical base. I therefore found it necessary to provide a theoretical base for GWL by discussing constructivism as

a learning theory and relating it to GWL, context as an essential component in GWL and reflective practice in the sections that follow.

## **2.6 CONSTRUCTIVISM AS A LEARNING THEORY**

Earlier in this chapter I indicated that constructivism was identified as a foundation for student-centered pedagogies including forms of GWL such as cooperative learning. I therefore found it necessary to include it in this discussion.

Constructivism as a learning theory was founded by a scholar in the field of Psychology named Jean Piaget in (1896-1980). Later several other scholars such as, Dewey (1938), Vygotsky (1978), and Glasersfeld (1974) among others, also contributed to the development of the theory and brought in additional ways of describing and interpreting the theory from different angles (McLeod, 2019). Constructivism is closely related to the interpretive paradigm which informs this study and is synonymous to it in some instances.

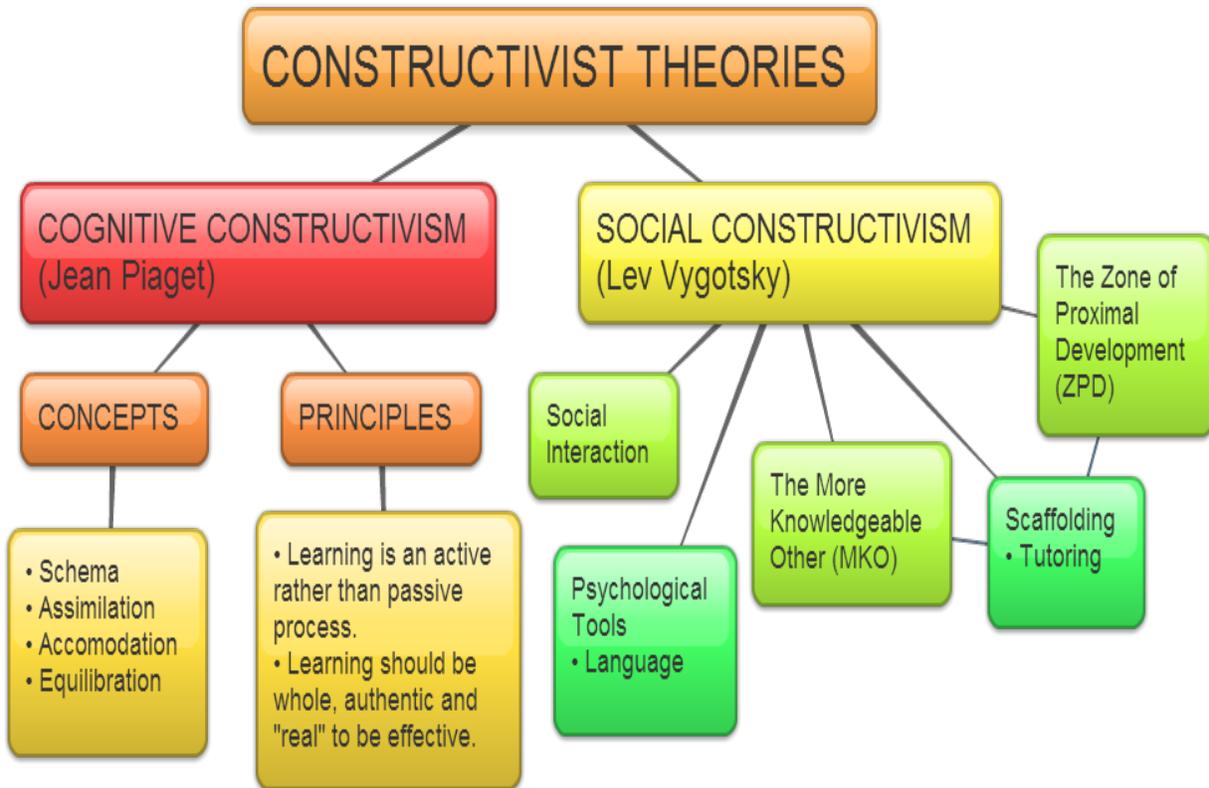
Constructivism regards context as important in the learning process and espouses that humans actively construct their own knowledge and reality is based on their experiences (McLeod, 2019). Meaning, according to constructivists is influenced by how prior knowledge interacts with new events (Elliot, Kratochwill, Littlefield & Travers, 2000). McLeod (2019) identifies the following three categories of constructivism: Piaget's original articulation of constructivism which is called cognitive constructivism, Vygotsky's version is social constructivism, and Glasersfeld's category is referred to as radical constructivism. According to Piaget (1938), cognitive constructivism refers to the process whereby learners construct a phenomenon based on their existing cognitive structures.

Social constructivism purports that community is central in the meaning making process of learners. Thus, the social environment of learners has an influence on how they think and what they think. Dewey (1938) describes this process as a social activity; something that human beings do together as they interact which does not constitute an abstract concept. Radical constructivism holds that knowledge is constructed rather than seen through the senses. Glasersfeld (1974) argues that while learners' new knowledge is found on their existing prior knowledge, the knowledge created by individual learners

does not tell us anything about reality but rather just assists them as individuals to operate in their environments. According to this form of constructivism, knowledge is created, not discovered. As a result, the reality human-beings create is continually modified to suit or fit into the ontological reality but can never reflect it accurately.

All three forms of constructivism referred to above hold that reality is constructed by individuals and prior knowledge is fundamental to new learning. They only differ in terms of whether the knowledge is cognitively constructed, socially constructed as well as the extent to which that knowledge constructed reflects the ontological reality. What this study draws from the theory of constructivism is that individual students bring their own different understandings of processes or phenomena into the GWL settings which they then relate to new learning because of the prior knowledge that each one brings. They negotiate with each other to co-construct new meaning. This relates to what Tuckman (1985) refers to as the storming stage which precedes the forming stage during group work. The notion that knowledge is socially constructed points to the importance of context. Constructivist teaching methods put the responsibility on learners for learning to occur and regard the teachers' role as that of guide and mediator who helps them to manage their learning environment (Press, Khoja, Sana, Abid & Rehman, 2009; Shaikh, 2009). Väljataga & Laanpere (2010) found that in learner-centered approaches, teachers create learning environments that motivate them to take ownership of the learning process and arrive at best solutions they can derive. It calls for practitioners to ask themselves questions about who the student is, what prior existing knowledge the individual students bring into their groups and how it relates to the new content they have to learn together as they acquire new knowledge and develop the relevant skills values and attitudes during the completion of their learning tasks or activities.

**Representation 7: Cognitive constructivism and Social constructivism**



## 2.7. CONTEXT AS AN ESSENTIAL COMPONENT IN TEACHING AND LEARNIING

Context has, over the years, become as an essential component to consider in learning environments. The capacity of teachers to support student achievement in diverse contexts has become increasingly important in the developed world in recent times (Fenwick, 2013) It has been generally discussed in terms of how it influences learning and has been broadly described in relation to the social, cultural and economic environments of teaching and learning. Context in teaching and learning environments could refer to a number of things instrumental to learning such as the physical environment (Good, 1991), The emotional and psychological state of those in the learning environment, the cognitive development of those in the learning environment, the culture of the organization or individuals within the environment (Fenwick, 2013), as well as the

social component of those in the learning environment (McLeod, 2019). An understanding of the social context of learning, can assist practitioners and teachers in assigning learning experiences that foster positive social interactions (Ambady, 2018). Good (1991) also recognizes the subject matter being taught as an important part of context in learning. Ambady (2018), asserts that it is important for practitioners to take effective positive action in the classroom context to improve the learning outcomes for their students (Fenwick, 2013). While context has a huge bearing on different forms of learning, very little has been reported on context in relation to GWL. Similarly, very little has been documented on context of the learning context of the learning content, the context of the individual students, and the context of the groups formed for the purpose of GWL. Ambady (2018) also stresses the importance of constant reflection by practitioners as it will encourage them to view challenges in the learning environments from different angles.

## **2.8. REFLECTIVE PRACTICE**

Based on the fact that lecturer participants in this study were, through their responses, required to reflect on their practices of GWL and share them from their own perspective and based on their own experiences, I thought it necessary to include a discussion on reflective practice as an essential component to examine the GWL practices.

Donald Schön, who is regarded as a key proponent of reflective practice describes reflective practice as the ability to reflect on one's own actions to learn continuously. According to him, this process involves paying attention to practical essential values, models and theories that inform one's daily actions (Schön, 1983). Bolton (2010) asserts that a process of reflection results in developmental insight. Similarly, Cochran-Smith & Lytle (1999) are of the view that experience alone does not lead to learning and argue that deliberate reflection on experience is essential for learning. I agree with the views expressed above regarding the advantages of reflections and reflective practice in teaching learning scenarios. I note, however, that while reflecting and reflective practice are so essential in learning, there seems to be a dearth of studies that relate reflective practice directly to GWL as a pedagogy in higher education. Studies on reflective practice seem to be school-based or generic such as the study by Ambady (2018) that focuses on

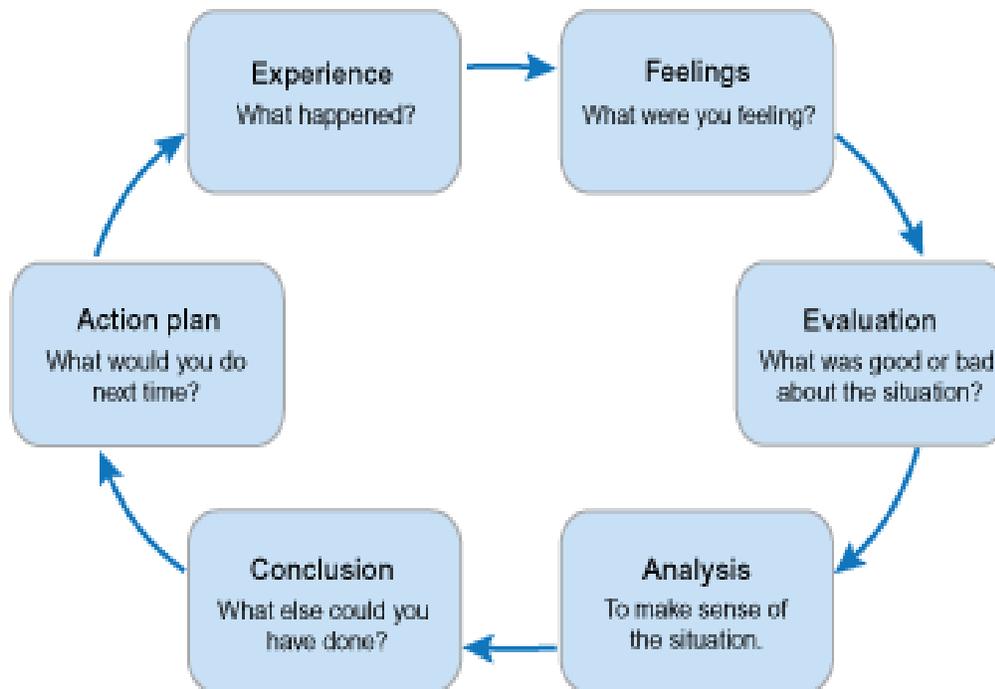
reflective practice in teaching and the study by Giri, Ambady and Paily (2018) which focuses on fostering intrapersonal intelligence amongst learners. In his book Schön (1983) also focuses on the reflective practitioner in the broad sense. Kolb and Kolb (2005) while focusing on learning styles and learning spaces and how they enhance experiential learning in higher education, also do not directly link reflective practice to GWL.

I think reflective practice can be of great value for GWL in higher education as it can assist practitioners to reflect on how they communicate their tasks, how they apply theory or guidelines in their practices, how they form groups, how they assess learning and how they model reflective practices for their students. Of utmost importance is that reflective practice has the potential to improve the GWL practices and student learning,

I refer to Gibbs' (1988) model of reflective practice in representation 2.5 below to illustrate the importance of reflecting on GWL practices. According to Gibb's model of (1988), reflection is sparked by an event that takes place in the learning space; an experience that leads to a reflection on how one feels about the experience. A reflection on one's feelings about what happened then leads to an evaluation of what was good or bad about the experience. After the evaluation follows an analysis whereby the practitioner will make sense of the situation and conclude on how else the situation could have been handled. From all these preceding stages, a new action plan can be derived which is likely to be more informed and improved or refined.

Reference to reflective practice also assists me to understand how practitioners feel and think about the happens as the student groups work together on their given tasks and how they respond to the challenges group members report and mainly how their experiences help them to adapt and improve their practices.

***Representation 6: Gibb's model of reflective practice (1988)***



## 2.9 SUMMARY OF CHAPTER

In this chapter I discussed the conceptual framework for the study. I presented the elements of cooperative learning and collaborative learning. I also presented the essential elements of team-based learning and other basic aspects to consider for the guidance of GWL, such as group formation, group size, clear task instruction, orientation of students to GWL and assessment. All these provide some guidelines or structure to ensure good practice in GWL. They assisted me in this study to look at how other practitioners conduct GWL in terms of using or referring to particular elements, guidelines or principles, Whether they articulated the intended learning clearly, how they communicated the task instructions, How the formed groups, what the group size was and why the groups were formed in a particular manner, how accountability was established and what challenges were experienced as well as how practitioners think their use of GWL could be improved. I ended the chapter by discussing constructivism, context and reflective practice to strengthen the theoretical base for GWL practices in HE. A review of literature on group work learning is provided in Chapter 3.

## CHAPTER 3

### LITERATURE REVIEW

#### 3.1 INTRODUCTION

In chapter 2, I discussed the conceptual framework as a pre-cursor to this chapter including the learning theory that undergirds GWL as a pedagogy. In chapter 3, I provide a review of literature drawn from empirical studies on the practices of GWL as a pedagogy in HE. The empirical literature reviewed in this chapter is drawn from studies that are on GWL in general, including studies on cooperative learning, collaborative learning, team-based learning and active learning and problem-based learning.

The review provided in this chapter focuses on the following key issues: 1) The use of elements/essentials in GWL, 2) Statement of intended learning/learning outcomes 3) Group formation and group size, 4) Task instruction, 5) Accountability in GWL 6) Possibilities for improvement in GWL and 7) and, Challenges in GWL studies on these three main forms of GWL and GWL generally, have been conducted across the world, and show the trends, models, best practices, challenges and dynamics of GWL (Johnson & Johnson, 2009; Johnson, et al., 2013; Johnson and Johnson 2014; Davidson & Major, 2014; Michaelsen and Richards, 2005; Michaelsen & Sweet 2009; An; Laal & Laal, 2012) It is this literature review that framed the problem and the methodology in this study.

I draw from journal articles, research reports, formal texts and curriculum documents and secondary sources for the review. My central argument in the discussion is that guided GWL, which is informed by some elements guidelines or principles or is set to meet certain criteria or conditions, is likely to yield positive learning experiences as compared to an unguided approach as it could open room for challenges such as freeriding, which refers to the tendency by one or more members in a group to earn marks without contributing to the completion of the task at hand (Hall & Buzwell, 2012) or social loafing, which is closely related to freeriding but differs slightly because social loafers are regarded as group members who have the potential to contribute meaningfully but simply reduce their effort knowing that it would be difficult for an external observer to detect what they are doing. There are however authors who do not differ between the two and

regard them as synonymous. Hall and Buzwell (2012) for example use both words in their title to mean the same thing. They state freeriding as problem in group projects, whereby some group members freely earn marks that others have worked hard for. This has been reported as one of the major on to say that there is a need to look beyond social loafing as a reason for non-contribution. In my view the two are different but lead to the same result because both earn marks that others have worked for without contributing. This has been reported as one of the main contributing factors to conflicts within the groups (Burdett, 2003; Hall & Buzwell 2012). Other group members who feel they did most of the task often become very disgruntled when they are graded the same (Burdett, 2003). Conflict refers to major disagreements and quarrels within the groups because of several other reasons such as language differences, cultural differences (Popov et al; 2012) and personality differences, dominance by some members (Tuckman, 1985; Thondlhana & Belluigi, 2014). While arguing for guided GWL, I do take cognizance of the warning against the overuse of structure and how it could stifle creativity (Schwabb, 1969). I regard guided GWL practices as those whereby student group will be given direction as to how to work on the task but how they think and what they think as they learn together cannot be controlled.

### **3.2 GROUP WORK LEARNING PRACTICES IN HIGHER EDUCATION**

GWL practices in HE refers to how practitioners carry out the pedagogy often informed by some elements or guidelines that are related to the nature of the task at hand and the intended learning outcomes or objectives. These guidelines are often derived from literature or formulated by the practitioner. There seems to be a need to think carefully about what informs GWL and what the intended learning outcomes in terms of knowledge, skills and attitudes are (Johnson, et al. 2013). In the section that follows I look at whether or not learning outcomes or objectives are articulated in the practices of GWL in HE, as well as how these are articulated.

#### **3.2.1 Statement of intended learning/learning outcomes**

All learning at different levels is guided by clear learning outcomes or objectives (Criticos et al., 2014). In reflecting on the practices of GWL it was necessary to establish whether

and how practitioners articulate these to their students as part of the guidance they provide in the application of GWL. In a study conducted by Middlehurst, Cross & Jeannin, (2018) on the professional development of administrators, the intended knowledge and skills are clearly stipulated. Similarly, another study on the dissemination of cognitive processing therapy to community-based agencies by LoSavio, Dillon, Murphy, Goetz, Houston & Resick, (2019), the training outcomes are clearly articulated. Several other studies do indicate what the intended learning is in their use of different forms of GWL (Park, Salihoglu-Yener & Fazio, 2018; Alwahibee, 2018; Hammar Chiriak 2014). Some studies however do not clearly indicate what the intended learning was in their GWL because the focus of the study is on perceptions or experiences (Hassanien, 2006, Hammar Chiriak, 2014). A study by Thondlhana & Belluigi (2014), for example, indeed shows that GWL constitutes terrains of learning but does not clearly show what the students were required to learn. I align myself with the practice that clearly articulates and communicates learning outcomes because they provide direction to all forms of learning and constitute an integral part of guided GWL. My view is that if students learn in groups and they do not know what they are required to learn, they may end up confusing things or being confused themselves. Clearly articulated outcomes will enable the student groups to notice if there are not achieving the outcomes intended for their learning.

### **3.2.2 The use of elements/essentials in GWL**

The manifestations of GWL that are used to inform this study, use elements/essentials to frame or structure GWL activities in their different forms. In reviewing empirical literature under this aspect, I reflect on whether practitioners consider such elements/principles that they apply in their studies, why they apply them and how they apply them. Johnson, et al. (2014) argue strongly for GWL that is informed and underpinned by theories and models. Similarly, McCrea, Neville, Rickard, Walsh & Williams (2016) emphasize the need for clear guidelines to be employed in the use of GWL. While many studies draw from the elements/essentials, there are some studies that seem to adopt a partially guided or unguided approach to their use of GWL. Alharbi, Athauda and Chiong (2018) assert that free collaboration, which they describe as an environment of GWL that is not systematically structured and is unguided remains one of the most cited problems in GWL.

research studies. Alharbi et al. (2018), further explain that in free collaboration settings of GWL, students often perform poorly and are unsuccessful in attaining the learning outcomes and achieving the objectives of teaching and learning. The study by Raubenheimer & Nel (2012) which reports on the experiences of unguided GWL and its results serves to support the assertion by Alharbi, et al. (2018). Mthiyane (2014), in exploring how student teachers in the PGCE programme apply cooperative learning, draws from the elements provided to assess the student teachers' skills and found that they could not apply them in their classroom settings. In this study reference is made to the use of cooperative learning but it is not clear how the teachers were guided to use it applying the elements. This could have led to their inability to use it in their classrooms. Park, et al, (2018) drew from the essentials of team-based learning to guide pre-doctoral teaching and learning in dental education and report on the success of their students. Hammar Chiriac, (2014), however, in exploring students' experiences of group work, does not draw on any particular framework for GWL but refers to some aspects such as group composition and what working as a group entail. She does however generate a set of principles to explore the study.

The study conducted by Raubenheimer & Nel (2012) in a five-year medical curriculum at the University of Free State reports on how the use of unguided GWL failed to yield the required results and compelled them to regroup and formulate guidelines as a faculty. The application of the guidelines resulted in the improved learning and interaction between the practitioners and the students. Middlehurst et al. (2018) also reveal how the use of the collaborative active learning approach resulted in improved professional development for university administrators. I strongly align with the view that GWL should be underpinned or guided for it to yield positive results. I do not advocate for a slavish strict adherence to a set of guidelines provided in the literature for GWL. I argue for a practice in GWL that is informed by some sound rationale guided by theories, models, elements or principles drawn from existing literature or formulated by practitioners. I am of the view that such guidance would be of assistance to both practitioners and students in HE. They will prompt practitioners and students to think deeper about their interaction and to understand why certain things happen the way they do. Understanding a theory or model that explains the process of forming groups and what it entails is likely to enable

practitioners to anticipate the challenges that emerge during the forming and storming stages, and as such, plan on how to address them.

Thumb-sucking or the random use of GWL in my view is likely to further contribute to challenges such as freeriding, conflict and negative experiences of GWL. In addition to the formulation, identification and application of a set of elements, principles, guidelines or essentials, such as those discussed in chapter two, group formation also comes through as an important aspect of GWL. The fact that some practitioners guide their practice by using elements/essentials, while others don't, has different implications for different sets of groups, depending also on the field of study. The guided approach is likely to give form and structure to students, particularly those who may need more support for their learning. If left in the GWL setting which is formless some student could get lost. In the section that follows, I discuss how practitioners in different studies address group formation and group size which are also essential in GWL.

### **3.2.3 Group formation and group size**

While some practitioners are particular about how the groups are formed and who forms them, there are those who are not depending on the approach they use. Team-based learning, for example is very particular about group formation (Davidson & Major, 2014), Cevik, Elzubeir, Abuzidan & Shaban, (2019) in their study on knowledge retention in emergency medicine formed the groups in accordance with the essentials for GWL. The student groups were formed in terms of gender, age and number of repeating students. They found that Team-based learning improved knowledge retention. Hammar Chiriac (2014) also uses facilitator formed groups to investigate students' experiences of group work, Hammar Chiriac argues that it is easier to make teacher selected groups to work as a group rather than just in a group. According to Hammar Chiriac, there is a difference between working in a group and working as a group. Working in a group is when different people just find themselves as part of group but may not necessarily be participating and cooperating with others as members of that group. They are just in that group. Working as a group seems to suggest that there is cooperation and interdependence among the group members. Some practitioners are of the view that group formation is informed by several factors such as the purpose of the learning activity and the context of such activity.

They are of the view that how groups are formed is dependent upon the context of learning and the learning objectives. In their study on GWL in mathematics among first year students, Armien and Le Roux (2010) allowed student elected groups because they were convenient for students even beyond the formal learning environment. They argue that practitioners need to also draw from student experiences and learn from them in order to improve GWL. Similarly, Nafziger, et al. (2011) similarly, argue that self-selected student groups are not always a bad choice and have their own advantages. I am of the view that group formation should be informed by certain factors and should always be related to the context within which the learning takes place and the purpose as stated by (Armien & Le Roux, 2010: Nafziger et al., 2011). I align with the thinking that students should be allowed to self-select in some cases because of factors such as proximity, language and synergy, particularly at university level where most of the activities and tasks are conducted beyond the classroom setting and where the group dynamics are much more complex.

Group size is also widely discussed as an important variable in GWL. Proponents and practitioners of cooperative learning, collaborative learning and team-based learning are once again in agreement that much smaller groups of 3-4 or maximum 6 are ideal for effective learning (Gross Davis 1999, Johnson, et al. 2014). Park, Salihoglu-Yener & Fazio, (2018) in their study on team-based learning pedagogy on pre-doctoral teaching and learning, used groups of 5-6 students each. Similarly, Middlehurst et al. used groups of 5-6 in their study on job-embedded professional development, they infused the jigsaw model into their student activities. They do not, however, explain why the group formation and the group size are used. Saputra, Joyoatmojo, Wardani, & Sangka (2019) used groups of 4-6 but also do not explain why the group size was used. Other practitioners, however, use slightly bigger groups that range from 5-7 and even 8-10 Gross-Davis (1999); Hammar Chiriatic, (2014) used groups of 4-8 members. I am of the view that the rationale for group size and group formation needs to be provided. I also argue for groups that are not too small or too big because if they are too small fewer ideas may be generated. In groups of 5-7 or 8-10, the possibilities for a wider range of ideas could be created. If the groups are too big, they become chaotic and challenges of dominance or freeriding could manifest themselves. I think whether the groups are student selected or

facilitator selected, and whether they are quite small or just less than 10, they should be formed based on sound reasons. Practitioners should be able to provide a rationale for how the groups are formed what their size is and why they are structured in a particular manner. That constitutes an aspect of reflective, informed GWL practice. In almost all the studies reviewed on this aspect, such a rationale is not provided.

### **3.2.4 Task instruction**

Closely related to the learning outcomes or objectives, and group formation is the task instruction. In GWL, the instructor must first and foremost, make certain that each student within each group understands the assignment or task as accurately as possible (Burke, 2011). Students should know and understand the objectives of the assignment, task or project, and the skills that need to be developed through group work task. Successful group work is easier if the students understand what is required of them and how the assignment relates to the course content and what the final intended product is The task will be articulated and communicated in ways that would assist the learning groups to understand the outcomes and objectives, how the task is intended to unfold in terms of the elements or principles provided. Task instruction is therefore one of the key considerations in GWL.

Task instructions should be clear and well understood for the effectiveness of the whole learning activity. Greetham and Ippolito (2018) in their study on preparing engineering students for working in team projects, provide them with clear task instructions in order to achieve the learning outcomes they explain what the intended learning is including the skills to be developed. Similarly, Park et al. (2018), issued clear instructions for their students in their application of team-based learning for pre-doctoral studies. Contrary to the two studies, the study conducted by Mamas (2018), in which peer relationships and group work dynamics were explored, revealed that the participants, among several other things called for clearer task instructions from the tutors as one of the key things. This implies that the participants did not readily understand what was required of them. The importance of clear task instructions in GWL, cannot be overemphasized. I think it is even more important in tasks completed by individuals because the different group members in each group need to have a common understanding of the task for them to respond to

it in a meaningful manner. I think practitioners need to ensure that the student groups understand what is required of them fully by communicating the task instruction in different modes. Clear task instruction is imperative for all forms of learning and more so for GWL because if different students in a group understand the task differently the process of completing the task is likely to be much more challenging, time-consuming or even chaotic. It is essential for practitioners to make sure that the task instruction is clear to all students and to it communicate well. I am of the view that if the task is poorly communicated that could affect the whole process of GWL.

### **3.2.5 Accountability in GWL**

Both individual and group accountability are often considered a key aspect or element of GWL. With all its strengths and benefits, GWL is still dependent upon the strengths, attributes of the individuals that constitute the group. Both the individuals and the group put together need to be accountable for their own learning and for the process for it to be successful (Johnson, et al. 2013). While most studies on team-based learning address accountability, other GWL studies do mention the importance of accountability but do not show clearly how such accountability is achieved or fostered. Park et al, (2018) for example, required of the students to first work individually on the questions before they did a readiness test and then only later started sharing their responses with other group members and working on their group submissions. Greetham & Ippolito (2018) also ensured that pre-reading by individual students was completed to promote subject mastery and enable students to discuss complex issues and develop collaborative behaviors. This prepared the individual students for the follow-up group interaction phase. Popov et al. (2012), in exploring the challenges perceived by students in a multicultural group learning setting, also gave the students who participated in the study elaborate tasks to work on individually first before their group interactions. On a different note, a study conducted by Hammar Chiriac (2014), which looked into the student experiences of group work, while considering other aspects of GWL, does not address accountability. Thondlhana & Belluigi (2014), on exploring group work as terrains of learning, do not explain how in the study accountability was addressed. Armien & Le Roux (2010) also do not mention accountability as an issue in how the students supported each other's

learning. Mamas (2018), also does not mention accountability as an important aspect in the application of GWL. Understandably some of the studies could be overlooking accountability because their focus is on perceptions and experiences (Mamas, 2018; Hammar Chiriac 2014).

### **3.2.6 Possibilities for improvement in GWL**

It is prudent for practitioners in HE to be reflective in their execution of any pedagogy, including GWL. The constant reflection on the use of GWL leads to its improvement and refines how it is guided. Studies on GWL that investigate perceptions and experiences of both students and practitioners often lead to reflections on how to refine or improve it as a pedagogy (De Jong, Cullity, Haig, Sharp, Spiers & Wren, 2011). A study by Mamas (2018), which explored peer relationships, friendships and group work dynamics in HE, found that there was a need for tutors or lecturers to monitor the progress of the learning groups, provide clearer instructions and expectations, provide support and also equally share the workload. The student participants thought that this could improve their learning. Armien & Le Roux (2010), argue that one way of improving GWL would be to draw from student experiences. They are of the view that student experiences of GWL in both formal and informal settings have the potential to improve GWL. Thondlhana & Belluigi (2014), view group work as terrains of learning and advice that factors such as background, ethnicity and student personalities be given attention to further improve GWL. Several other studies argue that preparing students for GWL is necessary and will improve how students learn (Criticos et al., 2014; Popov, et al. 2012; Petersen & Petker, 2017; Lin, 2018). I think that as part of reflective practice in GWL, practitioners should take cognizance of the areas that need improvement in their practice as this will assist them to provide relevant guidance to their students.

### **3.2.7 Challenges in GWL**

Like all other methods employed in teaching and learning, GWL has its own dynamics and challenges. (Mamas, 2018). Acknowledging all such dynamics and challenges enables practitioners to employ GWL in a more informed manner.

While GWL in HE has been widely reported as a successful pedagogy by many studies conducted across the world for different reasons, almost all such studies and others acknowledge that there are several challenges that practitioners and students experience in the use of this popular pedagogy (An, Kim & Kim 2012; Armien and Le Roux, 2010; Burdett, 2003; Capdeferro & Romero, 2012; Johnson & Johnson 2014; Popov et al., 2012).

Problems and challenges experienced and reported in the use of group work are amongst others: the negative perception of group work by some students (Burdett, 2003), under-preparedness by practitioners (Mthiyane, 2014) group dynamics (Popov, et al., 2012; Thondlhana & Belluigi, 2014), freeriding or loafing (Johnson and Johnson 2009; 2013; Michaelsen, Sweet and Parmalee, 2009) allocation of grades or scores to students perceived as free riders or social loafers (Burdett, 2003) and cultural differences such as students who come from communal societies versus those who come from individualistic backgrounds (Popov et al., 2012; Thondlhana & Belluigi, 2014). Such differences result in students responding differently to the task at hand.

In my view the solution to some of the problems and challenges raised in numerous studies seems to lie use of clear elements and essentials which would for, example, explain to the students what the ground rules are in terms what they accountable for, how many they are in each group, how they should form the group, and how they should talk to each other or treat each other. The orientation or preparation of groups for GWL is also of great importance. If students are not orientated to how GWL works, why it is important and how they should participate in it, chances are there will be a struggle for them to function coherently and achieve the outcomes intended through their learning. The study by Raubenheimer and Nel (2012) shows how the non-use of guidelines leads to ineffectiveness in group learning. This resulted in both faculty and students formulating guidelines for their practice and brought about improvement. This study shows the importance of using a guided approach to GWL. Notably, the guidelines they produced were not just sourced from other studies but were formulated to suit their unique context. I do not argue for the adoption of existing elements/essentials in a rigid manner that ignores context. I rather argue for the formulation or adoption of elements/essentials that

would provide some rationale for how GWL activities are conducted. Such elements could be formulated or provided by the practitioners in terms of what learning is required, what is the nature of the learning content, what skills are to be developed and what the context of learning is.

Armien and Le Roux (2010) in their study found that the students themselves can be used as a resource to inform GWL. They argue that many students have experienced group work in both formal classroom settings and outside the classroom, and have, over time gained experience on how to learn in their groups. Their view and approach is contrary to those of other practitioners like (Johnson et al, 2013; Michaelsen, Sweet & Parmalee, 2009) who strongly encourage the use of elements/essentials to guide the process. This study by Armien and Le Roux (2010) however, does not explain how possible challenges like social loafing and conflict would be addressed when students themselves are used as a resource during GWL. The students in this study however experienced both the formal version-where there was face to face interaction used in the classroom and informal version-where the students themselves decided to work in groups thus adhering to the use of the element of face to face interaction which is a key in all three forms of GWL. The students in this study reported that they benefitted from both. It is not clear whether in their experience of formal GWL these students were provided with any elements except face to face interaction.

Contrary to the study by Armien and Le Roux (2010), Raubenheimer and Nel (2012) in their study found that both practitioners and students failed in implementing group work the first time around and realized that they needed guidelines to inform how GWL was conducted. This comes through clearly in the following extract:

“After implementation of group work in the new five-year medical curriculum at the University of the Free State, it was realized that ineffective group dynamics and the inexperience of staff and students warranted clear and comprehensive guidelines for group work” (Raubenheimer & Nel, 2012 p82).

This finding is very important for this study. It serves to strengthen my view that there is a need for elements or guidelines to inform GWL. Thondlhana and Belluigi (2014) in their

study on group work as terrains of learning in HE, also found that, although students reported positive perceptions and experiences of group work, there was a need to pay attention to issues of background, ethnicity and personalities amongst others as these could obstruct or enable the desired student learning. This is in agreement with the findings of Popov et al. (2012) in their study on group work in multicultural settings, which found that students in their study reported challenges with regard to freeriding, insufficient English language skills and poor communication among group members. Popov et al. (2012) also found that different students from different ethnic groups who speak different languages, responded differently to group work activities.

The issues raised above on some of the dynamics of GWL suggest that there is a need for practitioners to think about how best to employ GWL in a more guided manner, taking into consideration all these important aspects. The best way to do deal with the challenges and dynamics of GWL in HE would be to provide a set of elements or guidelines that would directly or indirectly address the issues raised. Another important aspect to consider in this regard, would be the preparation of students for GWL (Criticos et al., 2014).

### **3.3 SUMMARY OF CHAPTER**

In this chapter I reviewed literature on the use of GWL with focus on its meanings, foundations and manifestations. I also discussed the perceptions and experiences of GWL in HE, the improvement of GWL as well as the evaluation of GWL, the challenges and the ways in which students can be prepared for meaningful engagement with GWL. There was a need for me to focus on these areas because they provided me with in-sight I needed in my investigation of how practitioners at The University of Limpopo used GWL for the completion of academic tasks. An understanding of the meanings, foundations and manifestations of GWL enables me to understand the phenomenon I am investigating.

Understanding the rationale for using GWL, perceptions and experiences of GWL as well as the improvement, evaluation, challenges and preparation of students for GWL was also necessary for this study. It allowed me to review what other practitioners in GWL

have done within context and with focus on specific aspects. In the next chapter, I will focus on the conceptual framework for GWL. For the conceptual framework, I will draw from the theory of social learning (Vygotsky, 1978), The Theory of Social interdependence. Johnson et al. (2013) and the elements of cooperative learning, collaborative learning and team-based learning as reflected in literature on these three major manifestations of GWL. This conceptual framework assisted in understanding and reflecting on how lecturers at the University of Limpopo who participated the study use GWL and how their practices can be refined, considering their contexts. Chapter 4, which follows, provides a discussion on the research methodology for the study.

## **CHAPTER 4**

### **RESEARCH METHODOLOGY**

#### **4.1 INTRODUCTION**

In the previous chapter I provided a literature review on GWL in HE. In this chapter I discuss the research methodology for the study by providing a description of the following components that constitute the research methodology for the study: 1) Paradigms and their role in research 2) Interpretivism as the paradigm within which this study is premised 3) The research methodology adopted for the study 4) The research design used for the study 5) Site and participant selection 6) Data collection methods 7) Ethical considerations 8) The establishment of trustworthiness and, 9) The limitations of the study.

Research studies are not conducted in isolation or in a vacuum. Research is a systematic process used to arrive at the truth about a phenomenon. It is framed or located within paradigms (Fox, 2001), and seen through a paradigmatic lens. It is also built through the specified approaches and techniques which constitute the research methodology. The research methodology describes how research is conducted (Terre Blanche & Durrheim, 2014). The researcher carries the responsibility to provide an explanation of 1) what school of thought they belong to regarding knowledge, 2) what paradigm they followed in their study and 3) how the research methods were used (Yazan, 2015; Silverman, 2014) and to explain why they were regarded as suitable for the study.

#### **4.2 RESEARCH PARADIGMS**

Paradigms are interpreted and described differently by different authorities which sometimes leads to some confusion and dilemmas (Terre Blanche and Durrheim, 2014) While some also describe them as theoretical frameworks, others describe them as philosophies whose epistemological and ontological positions guide research (Mackenzie & Knipe, 2006) There are also those like Khun (1962) who refer to paradigms as a collection of concepts and variables linked to particular research approaches (Bogdan &

Biklen 1998). Those such as Khun (1962) also maintain that in time paradigms are replaced by other paradigms that overturn them (Terre Blanche & Durrheim, 2014). Social scientists, however, do not view paradigms as frameworks that are always reflective of differing viewpoints and are selected and employed for their suitability for particular areas of research. They see them as frameworks that could have overlapping characteristics in places (Babbie, 2008; Creswell, 2013). I think that existing paradigms or frameworks that guide our thinking and our paths towards establishing the truth do overlap. I think it is not realistic to think that individuals can totally align to a single paradigm. Even those who are constructivist in orientation are further categorized, or categorize themselves into cognitivist, social or radical constructivists (Schulte, 1996)). So, they align with the thinking that knowledge and reality are constructed by individuals, but they do not agree on how that reality is constructed.

There are also numerous ways in which these paradigms are categorized. For example, there are those who refer to three major categories that evolved over time, which are: Positivism, Interpretivism and Constructivism (Terre Blanche & Durrheim, 2014). Some refer to positivism, post positivism and constructivism as key categories (Rule & John, 2011). Other scholars have additional categories to what are broadly regarded as the three main ones, such as feminism. While there are these different views, descriptions and categorizations of paradigms, it is important to note that there is a gradual turn towards some confluence of ideas among the paradigms. Denzin and Lincoln (2008). The turn towards focusing on the confluence of ideas between the existing paradigms, suggests that there are overlaps that are difficult to ignore between the paradigms. While noting the possibility of such confluences, I recognize the key elements of contrast between the positivist paradigm which argues for objectivity in methods used to arrive at the truth (Terre Blanche & Durrheim, 2014), and the interpretivist paradigm which recognizes multiple interpretations of reality (Than & Than, 2015), and draws from the lived experiences of the participants for such interpretations. In my view, a paradigm is a broad framework that guides our thinking when we conduct research. It explains how people construe reality, knowledge, the truth and what values they hold. It assists researchers to reflect on their own beliefs about reality and knowledge and try to locate themselves where they belong. It also guides researchers to identify the approach that

best suits their study. While I identify with interpretivism as a paradigm and also regard as suitable for my study, I realize that there are overlaps between the interpretive paradigm and other paradigms as noted by Denzin and Lincoln (2008).

#### **4.2.1 Interpretive paradigm**

Group work learning research is guided by constructivism which is closely related to the interpretive paradigm (McLeod. 2019). The choice of the paradigm is also guided by the context of researcher. For example, the community or institution in which the researcher is based, together with the factors related to the research problem, the environment of the research and the researcher (Baxter & Jack 2008). The research problem for this study, and the context of the researcher as well as the research environment influenced the choice of paradigm also influenced the research approach and design, all of which are aligned and related.

According to Terre Blanche and Durrheim (2014), interpretivism considers the experiences and background of the researcher and sees the researcher as part of the process. It allows researchers to reflect on their own biases regarding the issue under investigation. In this case I, as the researcher, had to reflect on my own biases as a university practitioner and a teacher educator in particular. (Creswell 2009; Silverman, 2014) also note that context is of great importance to interpretivist researchers and that the views and experiences of the participants are key in arriving at the truth. Than and Than (2015) also assert that the interpretivist paradigm mainly gives room for researchers to see the reality as perceived and experienced by their participants, and also assists researchers to interpret the understandings of individuals. It is against this background that I identify the interpretive paradigm as the one mainly suitable for my study because it assists me to arrive at the truth regarding how GWL practitioners conduct their craft and how best they think their practices can be refined. This paradigm consists mainly of characteristics that are suitable for the inquiry in my study According to this paradigm, 1) the natural and familiar environment of the participants should serve as the setting for the investigation, 2) the experiences of the participants should be recognized as their truth, 3) there are multiple realities because knowledge is constructed by individuals 4) The researcher becomes part of the research and has vested interest in the phenomenon

under investigation. As such the researcher has to reflect on his or own biases. While I align with the interpretive paradigm as a researcher, I think that there is a need to bring together those different nuances of reality into some structure. In this study, I recognize that lecturer participants and the student groups bring into the learning space different understandings of group work learning, but there learning outcomes that students must achieve which are common within the context of a specific field or subject. The need to achieve such outcomes requires of the students to arrive at some common ground despite their differences. This suggests that the meanings they bring together need to be negotiated among themselves.

For purposes of this study I adopted the interpretive paradigm which acknowledges the importance of the context of the study and that the reality to be studied, which consists of participants' subjective experiences of the external world (Terre Blanche & Durrheim, 2014). This paradigm leads the researcher to adopt an intersubjective or interactional epistemological stance towards such a reality (Terre Blanche & Durrheim, 2014). I also found this paradigm suitable because it guided the research methods used which are mainly qualitative in orientation. Creswell (2003, p182), asserts that "qualitative research is fundamentally interpretive..." meaning that it requires of the researcher to interpret the data gathered, and describe the participants and their setting as well as analyze the data for themes or categories. The interpretive paradigm enabled me to interact with other practitioners at the University of Limpopo regarding how they viewed their own reality of GWL as a pedagogy and to gain a deeper understanding of how they used GWL for their students' completion of academic tasks. The interpretive paradigm also allowed me as a researcher to interact with the student participants and observe how they completed their GWL tasks.

Most importantly for this study, it allowed me to enter the research space as a participant bringing my own experiences of GWL and acknowledging my own subjectivity regarding the pedagogy. Acknowledging my own subjectivity enabled me to listen more meaningfully to how other practitioners used the method and how they thought their own practices could be improved, while at the same time observing their use or non-use of a structure or set of elements in their practices. Interacting with the student groups also

allowed me to observe and come to grips with the multiple realities within which GWL manifested itself (Terre Blanche & Durrheim, 2014). While I argued for a structured approach to GWL, as purported by authorities in the field, I had to think of the application of a structure within the contexts and realities of the lecturers as well as the students at the University of Limpopo.

## **4.3- RESEARCH APPROACH**

### **4.3.1 Qualitative research approach**

In line with the interpretive paradigm, I adopted a qualitative research approach. This research methodology enabled me to reflect on, explore, observe, and describe how the current practices of group work in the four faculties at the University of Limpopo prevailed or occurred. Creswell (2013). Terre Blanche and Durrheim (2014) as well as Corbin & Strauss, (2015) describe qualitative research as an approach that requires researchers to see reality through the lived experiences of the participants. This approach to research, allowed me as researcher to visit the participants in their natural settings (Yin, 2002; Silverman, 2014). It also allowed me to use multiple methods that are both interactive and humanistic to collect data from the participants (Stake, 1995; Merriam, 1998; Denzin and Lincoln 2008; Terre Blanche & Durrheim, 2014). I was also able to refine my questions as the research proceeded. In line with the qualitative research methodology, I had to reflect on who the participants were in terms of their disciplines and profiles and I had to be sensitive to how I communicated with each one of them because that interaction played a role in shaping my study (Terre Blanche & Durrheim, 2014).

In line with the interpretive paradigm, I had to remember that I was a teacher educator who had been exposed to teaching and learning theories in my training and in my practice and I was interacting with practitioners who were specialists in their own disciplines, were also teaching students but may not have the teaching background that I had. This meant that I came into their space with my own understanding and experiences regarding GWL and I had to acknowledge my own biases and values which could be different from theirs. I had to realize that my views regarding GWL were basically inseparable from my

researcher-self (Creswell, 2009). I have already alluded to the fact that I placed the study within the interpretive paradigm which then led me to the adoption of a qualitative research approach. According to Silverman (2014), qualitative research often begins with a single case or a few individuals who are often chosen because of their convenience or interest. I used a descriptive and exploratory case study design as described by Merriam (1998) and Yin (2014). In the subsequent section I explain briefly how I recognize the divergence points and convergence points in case study methodology as presented by Stake (1995), Merriam (1998) and (Yin 2002, 2009 and 2014), who are regarded as foundational case study methodologists (Yazan, 2015). I also explain how I drew from other research methodologists who held a similar view regarding particular aspects of qualitative case study designs.

In line with the interpretive paradigm, qualitative researchers study phenomena in their contexts or natural settings and use observations, semi-structured or unstructured verbal interactions as well as document analysis which could be recorded for further analysis (Terre Blanche & Durrheim, 2014; Yin, 2014). I interacted with lecturers and student participants from the four faculties of the University of Limpopo in their familiar settings. Silverman (2014) further indicates that there is no single agreed upon method for the analyses of data collected through qualitative research methods. Terre Blanche Durrheim (2014) emphasize the importance of staying close to the data in interpretive data analysis. Silverman (2014) further argues that there are different ways to analyze qualitative data such as narrative analyses, discourse analysis or grounded theory. I discuss these in more detail in the section on data analysis.

#### **4.3.2 Research design**

A research design according to Terre Blanche and Durrheim (2014), refers to a plan or blueprint that gives direction to the study. Stake (1995), Merriam (1998) and Yin, (1994; 2002, 2014), advocate strongly for case study designs for qualitative studies. Yin (2002) describe a research design as a framework that has been created to find answers to research questions. While I take note that Stake (1995), Merriam (1998) and Yin (2002, 2009) differ in how they describe case study research, I also note that there are areas of agreement or convergence in their conceptualization of case study research (Yazan,

2015). Yazan, (2015) identifies areas of divergence, convergence and areas where their conceptualizations supplement each other. Yazan (2015) for example, observes that while Yin (2002) is very structured in his approach and has leanings that are positivistic in character, Merriam (1998) and Stake (1995) do not accommodate quantitative methods at all. They are purely qualitative in their approach, and most importantly, they declare their paradigmatic stance while Yin does not. For the purpose of this study, I drew from the points of convergence of all three and I also included the views of other research methodologists regarding the case study, which were relevant for my study. I took an eclectic approach which was consistently in alignment with the interpretive paradigm, qualitative research approach and case study design.

I used a descriptive and exploratory case study design (Yin, 2009; 2014), premised in the interpretive paradigm of qualitative research in which GWL practices at the University of Limpopo were reflected upon with a view to suggesting a refined and contextual approach. The descriptive and exploratory case study design was identified as suitable for the study because it allowed for the description of the practices guided by key the aim and objectives of the study, while also exploring how the practices unfolded. Yin (2009:2) describes case studies as a preferred method to answer how and why questions. Yin (2009; 2014) further explains that they are used to contribute to the researchers' knowledge of individuals and groups. Yin (2009) further alerts researchers of the misconception that there is a hierarchy of some sort in the use of case studies and that particular case studies were applied at a particular phase of a research study or for particular studies. In this study I reflected on the use of GWL by practitioners and provided rich descriptions of its use in the four faculties of the University of Limpopo as seen through the eyes and experiences of the practitioners (lecturers) and student participants. I also reflected on my own experiences (Cohen, Manion & Morrison, 2011). The lecturers and students formed sub-units of the case (Baxter & Jack, 2008; Yin, 1994; Yin 2014, Terre Blanche & Durrheim, 2014).

#### **4.4 SITE AND PARTICIPANT SELECTION**

This study based on reflections on current practices of GWL was conducted at the University of Limpopo which is situated in a semi-rural setting in the northern part of South

Africa. The university comprises four main faculties, has an enrolment of students who mainly come from the rural areas of the Limpopo Province and the Mpumalanga Provinces of South Africa. I purposively selected the University of Limpopo as a site for my study because I observed, daily, how students would gather in groups working on assignments and tasks. I noted how the group sizes ranged from those of about 4-6 groups to those of 10 - 15 groups or more. I became curious and interested to know how the practice was conducted and whether there were any theoretical underpinnings or principles that guided the practice. I also became interested in finding out how GWL practices could be refined and contextualized.

I purposively selected 8 lecturers (two from two schools in each of the four faculties of the University of Limpopo), who teach final year students and give their students GWL tasks or projects to complete and submit as part of their continuous assessment (Silverman, 2014). The faculties referred to are: 1) The faculty of Humanities, 2) the Faculty of management and Law 3) The Faculty of Health Sciences and 4) the Faculty of Agricultural and Mineral Sciences. Three of the lecturer participants were female while five of them were male. The first female participant is a lecturer in the Faculty of Humanities (Social Sciences) and has taught in HE for over thirty years. The second female participant was in the Faculty of Health Sciences (Nursing) and has taught for over ten years and the third was in the Health Sciences (Nutrition) and has taught in HE for over twenty years. The first male lecturer participant was based in the Faculty of Humanities (Media studies) and has taught in HE for over eight years, the second was in the Faculty of management and Law (Law) and has taught for 20 years in HE, the third was in the Faculty of Management and Law (Economics) has taught for 15 years in HE, the fourth was in the Faculty of Agriculture and Mineral Sciences (Computer Science) and has taught in HE for five years and the fifth male lecturer participant was based in the Faculty of Agriculture and Mineral Sciences and has taught in HE for 10 years. I regarded all of them as information rich participants as they would provide me with information regarding how they conducted GWL because they used it as a pedagogy in the teaching and learning of their students (Creswell, 2013).

I also regarded their student groups as information rich because they would have spent over two years or more as university students experiencing and engaging in GWL activities. I requested the 8 lecturers to connect me with their final year student groups through the group leaders. I used the University of Limpopo as a site for my study because it offered a variety of context within which the pedagogy was used within the same setting. I argue that different fields and disciplines have a bearing on the context within which any pedagogy can be employed and that the nature of the disciplines to a great extent determine which pedagogy to use and how to employ it in curriculum implementation (Carl, 2012). I therefore regarded the University of Limpopo as a broad environment within the context of its size and faculties to offer varied experiences of GWL within the university. In the section that follows I explain how and why the participants in the study were coded.

#### 4.4.1 Coding of participants

I allocated codes to each one of the 8 lecturers and their student groups (Creswell, 2009; Silverman, 2014). For example, the first lecturer participant in the Faculty of humanities was coded as HUL1 (Humanities Lecturer 1) and her group as HUG1 (Humanities Group 1). I did this for the purpose of ensuring the anonymity of the actual participants as promised in the letter of request. Table 4.4.1 below shows the layout of the faculties at the University of Limpopo, as well as the participant codes for the lecturers and their student groups.

**TABLE 4.1 FACULTIES, PILOT PARTICIPANTS, LECTURER PARTICIPANTS, STUDENT GROUP PARTICIPANTS AND THEIR CODES**

<b>Faculty</b>	<b>Lecturer participant code</b>	<b>Student group code</b>
Humanities	HULB (Pilot participant)	HUGB (Pilot student group)
Humanities	HUL1 HUL2	HUG1 HUG2

Management and Law	MLL1	MLG1
	MLL2	MLG2
Health Sciences	HSL1	HSG1
	HSL2	HSG2
Science and Agriculture	SAL1	SAG1
	SAL2	SAG2

**4.5 DATA COLLECTION**

In accordance with, and guided by the interpretivist paradigm, I noted that data collection was a key phase and is described as the process of collecting information from study participants in their daily situations and settings that are as familiar to them (Merriam, 1998; Yin, 2014), and also that the data collected is meant to assist the researcher to answer the research questions and to draw valid conclusions from the research conducted (Terre Blanche & Durrheim, 2014).

Yin (2014, 113) recommends that a case study should be conducted in the real world setting of the case as this creates the opportunity for direct observations which constitute a source of evidence in case study research (Yin, 2014). Denzin & Lincoln (2008) concur that the experiences and perceptions of the participants with regard to their reality is a key feature of qualitative research within the interpretive paradigm and advise that such experiences have to be explored or observed in the natural, familiar setting or environment of the participants.

Data for the study were collected through, individual in-depth interviews, observations and informal conversations with the student participants (Terre Blanche & Durrheim, 2014). During data collection, I interacted with the lecturers in their offices, observed and held conversations with the student groups in their chosen and preferred spaces for group meetings and discussions. These constituted the natural settings which were familiar to

all the participants (Creswell, 2013). In these natural settings, the students and the lecturers shared their meanings, experiences and the interpretations of their group work practices and interactions.

#### **4.5.1 Pilot study**

Pilot studies are small scale studies often conducted by researchers for the purpose of improving aspects of an intended large-scale study. Such studies assist researchers in refining research questions, identifying methods best suited for their research project and also estimating the time and resources required (Yin, 2014: 96).

In preparation for the process of data collection, I conducted a pilot study within the school of education, with lecturer participant coded as HULB and a student group of fourth year Education studies coded as HUGB to put the process to the test and determine the effectiveness of the gadget I used to collect data, reflect on my own readiness to interact with the participants and to gauge the duration of the interviews and the observations (Creswell 2003). I did this also to refine and improve my data collection instruments (Terre Blanche & Durrheim, 2014).

I wrote field notes guided by the observation schedule/protocol (Miles & Huberman, 1994; Henn et al. 2009) and based on the informal conversations I made with the student groups during the observations.

The semi-structured interviews I conducted were also guided by a schedule (Henn et al., 2009; Creswell, 2013), which I refined after conducting the pilot study.

#### **4.5.2 Semi structured interviews**

Terre Blanche & Durrheim (2002:128) describe an interview as a more natural form of interaction with people, which falls well into the interpretive paradigm. They indicate that interviews can be structured, unstructured or semi-structured and regard the semi-structured interview as the most popular type of interviews which were guided by an interview schedule. I used individual semi-structured interviews (Henn et al. 2009; Creswell, 2013; Yin, 2014). Silverman (2014), similarly, describes semi-structured

interviews as those during which participants are asked open-ended about a specific issue event or experience guided by an interview schedule which contains questions. This is one of the data collection methods used in qualitative research. The semi-structured interviews I conducted were guided by a schedule (Henn et al., 2009) I conducted semi-structured individual interviews with each one of the 8 lecturers selected for the study. The interviews were recorded on an audio tape recorder and later transcribed (See Appendix E p140). I arranged to meet with the groups through written letters to their lecturers who allowed me to visit them during their group deliberations on the task given to them at the time, in order to observe how they interacted and deliberated (Arthur, Waring, Coe, & Hedge 2013). I also held informal conversations with the student groups and wrote field notes based on our conversations (Creswell 2013; Silverman, 2014). This was done to derive data from a broad interactive terrain.

### **4.5.3 Observations**

Observations are one of the key data gathering methods used in both quantitative and qualitative research (Creswell, 2013; Yin 2014). Terre Blanche & Durrheim (2014), describe observations as processes that take place while things are happening and thus get the researcher even closer to the action. Terre Blanche and Durrheim (2014) further distinguish between descriptive, focused and selective observations. Merriam (1998) stresses the importance of making careful observations during data collection. I observed the elements as guided by the observation schedule and the same as those in the interview schedule and described them. Guided by the observation schedule, I focused on 1) what the topic under discussion was 2) How the instruction for the task was packaged 3) Whether there was reference to any elements guidelines or principles during the discussions 4) The group size 5) Leadership during the interaction 6) The language used 7) Whether there were measures that fostered individual accountability and 7) How the group members related during the deliberations. I then followed up my observations with informal conversations based on some of my observations to get more clarity. The similarity in the observation schedules for the semi-structured interviews and the observations, explains why the two sets of data yielded similar findings. The additional data from the informal conversations is accounted for in the section that follows.

#### **4.5.4 Informal conversations**

Informal conversations or interviews are mostly used in ethnographic research where the interviewer forms a closer relationship with the participants and allows for a more relaxed and friendly atmosphere (Spradley, 1979; Sorrel & Redmond, 1995; Thomson & Trigwell, 2016). Such interviews do not take away the steering role during the interaction but allow for the flow of information. In this study, I used them to complement the observations I made with the student groups. These observations were prompted by some of my observations. I needed to reach the students and find out from them, amongst other things, how the process of GWL was conducted, how they interacted during the GWL experiences, what roles they fulfilled, how they related and what lessons they learnt from each other during such interactions. There are certain things that I needed to ascertain and confirm. I held the informal conversations with each one of the 8 student groups. These conversations were not uniform across the groups they depended on what I had observed in each group and what I needed clarity on.

During the informal conversations, I asked the student groups mainly about 1) What their task was all about 2) How the instructions for the task had been communicated to them 3) what their group size was and how their group had been formed 4) How the group leader was chosen 5) What measures were in place to ensure and foster individual accountability 6) How they thought and felt about GWL and 7) what lessons they had learnt from working with others and learning in groups. These informal conversations helped me to gain clarity and a deeper understanding of some of my observations.

#### **4.6 DATA ANALYSIS**

Consistent with the guiding paradigm, I used interpretive data analysis as an overarching frame or umbrella to analyze the data collected (Terre Blanche & Durrheim 2014,). Creswell (2013) and Silverman (2014), contend that there are various forms of qualitative analysis such as phenomenology, grounded theory and thematic content analysis. Merriam (1998) provides step by step guidelines to following during the process of data analysis. For purposes of this study I employed thematic content analysis for the three sets of data collected. I followed the steps outlined by O'connor and Gibson (2003) for the analysis of the semi-structured interviews and the informal conversations, because it

enabled me to listen to the recordings and later go through the transcripts several times and try to understand the meanings and understanding of each one of the eight lecturers regarding how they used group work for the academic tasks and activities undertaken by their students (Reissmann, 2008). The steps purported by O' Connor and Gibson (2003) are outlined as follows: 1) Organization of the data, 2) Organization of ideas and concepts, 3) building of overarching themes in the data, 4) ensuring credibility and dependability, 5) finding possible and plausible explanations for the findings and 6) an overview of the final steps. The steps in the model are inclusive of the guidelines provided by (Merriam, 1998) except for her emphasis on literature review as part of the process.

Before organizing the data, I first listened to the recorded interviews repeatedly until I got meaning out of them, and a general idea of what the participants were saying regarding to each one of the pertinent questions on the interview schedule. I then transcribed the interviews verbatim. In organizing the data, I revisited the interview schedule and identified and differentiated between the questions that I was trying to answer and those that I had included as important for the study but were not pertinent to the aim of the study. I then arranged the summarized pieces of data that were related to the questions on the interview schedule into a table for display. The responses to each question were put together in the same column and were linked to the participant codes. This enabled me to have a holistic view of the essential data that I had collected. I also identified ideas that emerged from the data that related to future research considerations but were not essential for the study. Examples are the challenges experienced by the practitioners regarding GWL and the attitude of the student participants towards GWL. This first stage also involved data reduction because I summarized the essential data before putting it into the relevant columns. In the second step which involves finding and organizing ideas and concepts, I identified the recurring ideas and salient themes which emerged as responses for each question. I made note of the recurring ideas and arranged them into key ideas. I then coded and categorized the ideas and concepts. Step three involved building overarching themes in the data. I identified associated that had associated themes and collapsed them into over-arching themes for each question (Creswell, 2009). During step 4, which entails ensuring reliability and validity in the data analysis and findings, which in this study I refer to as credibility and dependability (Lincoln & Guba,

2000), I checked for credibility by sending back the summarized transcripts to the lecturer participants for verification.

I also sent the summarized transcripts to an external decoder for an independent separate analysis from mine. I then revisited my own analysis and viewed it against the external analysis (O'Connor & Gibson 2003: 75). I did not check for the dependability of the data because I could not ensure that there would be consistency in the findings if I was to collect data from these participants again. If there was a change of conditions or there was exposure to new experiences, there would possibly be a change in how they responded to the same questions. In step 5 I tried to find plausible explanations of the findings. I first made a summary of my findings and themes and then tried to 1) compare my findings to my expectations based on existing literature (), 2) tried to establish whether there were any surprises in the findings and 3) established what the similarities and differences were in the findings between my study and what was reported in the literature from similar studies. I had to revisit literature including the most current studies to compare my findings. I also revisited my notes from the interviews, observations and informal conversations. I had to also think about what the implications of my findings were.

Data collected from observations was analyzed through domain analysis. The data collected was analyzed in terms of the domains that I had set to guide the observations (Arthur et al., 2013). The domains I set are the following: 1) guidelines provided/used, 2) group size and group formation, 3) instruction instrument, 4) accountability measures set, 5) roles allocated or fulfilled 6) communication used and group processing or reflections.

Data from the informal conversations was analyzed through content analyses (Creswell, 2013). I reviewed the field notes and revisited the observation schedule to verify some of the information. As indicated under the section on data collection, the items on the guiding schedules for both sets of data were the same. Data collected through semi-structured interviews was stored in the form of written transcripts in data collected through observations and informal a file, and as audio tapes, while conversations has been stored in the form of field notes in a file. The section that follows discusses the ethical considerations for the study.

## **4.7 ETHICAL CONSIDERATIONS**

Punch (2005) states that research involves collecting data from people about people, and therefore researchers have the responsibility to protect their research participants and carry out their research activities with sensitivity and in an ethical manner. On a similar note, Hesse-Bieber and Leavey, (2006) advice that researchers anticipate ethical issues that may come up during their research studies. Creswell (2009) identifies ethical issues across a broad spectrum. Creswell illustrates that there are ethical issues to consider regarding the following: 1) The research problem itself 2) The purpose and research questions 3) Data collection 4) Data analysis and interpretation, and 4) The writing and dissemination of the research.

In order to respond to the need for ethical considerations, I first sought permission in writing from the ethical committee of the University of Limpopo (Appendix A p140: Project No TREC/20/2016: PG), the research office, faculties, schools, departments, lecturers and students (through their lecturers) to conduct the research and interact with the participants. All the participants in the study were provided with a detailed written explanation on what the study entailed. I scheduled appointments for the interviews and observations well in advance at times determined by the participants. The names of the students and lecturers are left out, and they were ensured of confidentiality. The participants were assured of their anonymity in writing. Written consent was sought and granted by the participants I also sought permission from the participants to record the interviews and I gave summaries of the transcripts to the participants to verify.

## **4.8 TRUSTWORTHINESS**

Trustworthiness refers to the validity of the findings (Creswell, 2013: Silverman, 2014) It is also equated to or regarded as synonymous to credibility in some texts and is as important in qualitative research as it is in all other forms of scientific research (Silverman, 2014). Guided by the interpretive paradigm. In this study I used trustworthiness as the umbrella concept for all the quality criteria recommended by Lincoln and Guba (2000.) It adds to the plausibility of the study and helps me as the researcher to persuade the reader to consider the study and pay attention to it (Lincoln & Guba, 1985, Silverman, 2014).

Trustworthiness seeks to make the data believable and convincing to the reader (Silverman, 2014). Trustworthiness within the interpretive paradigm can be established through quality criteria such as credibility, transferability, dependability and confirmability (Denzin & Lincoln, 1998; Lincoln & Guba, 2000). In this study I used different methods to fulfil some of the quality criteria. I selected the relevant criteria and excluded the ones that did not apply to the study.

#### **4.8.1 Credibility**

Credibility as mentioned above is, in some cases referred to as trustworthiness. It seeks to establish that the results of a systematic inquiry are believable, plausible, persuasive and convincing to the reader (Silverman, 2006; 2014). Creswell (2009; 2013) stresses the importance of proposal writers and researchers to ensure that their findings were accurate and credible. I, as a researcher was familiar with the environment and interacted with the lecturer participants. I established a relationship of trust with the participants who were also my colleagues from different faculties (Lincoln & Guba 1985). In order to uphold credibility in this study, I: 1) engaged with the participants over time and set the tone for the study before the data was collected. 2) sent back copies of the transcripts to the lecturer participants to reflect on them and check whether they were a true reflection of what was said during the interviews See Appendix G p142).

The participants were provided with a form on which they could confirm, refute or adjust the content on the transcripts.3) returned to some of the participants to seek clarity on some of the issues such as the rationale for a particular group size, 4) considered alternative interpretations that emerged from the data and 5) included all the aspects, both positive and negative revealed in the analysis.

#### **4.8.2 Transferability**

Transferability entails the extent to which the research can be transferred to other contexts (Creswell, 2013). Creswell (2013), however, alludes to the fact that to uphold transferability in qualitative research is limited as this form of research does not seek to generalize the findings. Some discussions in qualitative research literature seem to

suggest that there are some ways in which the findings can be transferable (Yin, 2009). According to Yin (2014), results derived from qualitative case studies can be generalized to some wider theory (Creswell, 2009). This includes instances where additional cases are studied and the findings are generalized to new cases (Creswell, 2009). Creswell (2009) further stresses that in such cases, the qualitative procedures followed should be well documented, detailed and follow the research protocol of the research context or the research methods used in the study. I think that practices of GWL can be explored or examined in other similar contexts using the same methods without seeking generalizability because this is a qualitative descriptive case study that focuses on the practices of GWL at the University of Limpopo in particular, and is guided by the interpretive paradigm (Terre Blanche & Durrheim, 2014).

#### **4.8.3 Dependability**

Dependability is reliability in quantitative research. It refers to the extent to which a research study can be repeated by other researchers and arrive at the same results. It is highly unlikely that if this study was replicated in another context, it would yield the same results, because the contexts could differ in some ways. The experiences of the practitioners could, for example, be different in different contexts. Consistency in the findings could therefore not be guaranteed. I however took measures to ensure that the findings were largely dependable within the context of this study.

I established dependability of the data in this study for the sake of this study, in order to ensure that what I found from my analysis as a researcher was found by an external researcher. I did this by sending the transcripts from the interviews and observations to an external decoder for analysis. The findings from the analysis of the external decoder were used to look for gaps in my own analysis (Creswell, 2013).

#### **4.8.4 Confirmability**

Confirmability refers to the extent to which the researcher findings are neutral, the extent to which the data is dependable and can be confirmed, as well as the degree to which findings are based on the responses of the participants and not on the biasness and

personal views and motivations of the researcher (Lincoln & Guba, 2000; Sinkovics, Pentz & Ghauri, 2005; Creswell, 2009).

Confirmability was upheld by sending the interview transcripts to the lecturer participants in the study for review. They were requested to sign a form which allowed them to respond to the transcribed content.

A summary of the sets of analysis that each served to answer the research question, derived from the in-depth interviews, observations and informal conversations are also included in the study as an appendix (Terre Blanche & Durrheim, 2014).

#### **4.9 SUMMARY OF CHAPTER**

In this chapter, I provided a description of paradigms and their role in research. I then described the interpretive paradigm as the paradigm that informed my study. In line with the interpretive paradigm, I showed how the qualitative research methodology was used and how it guided the design for the study. Within the context of the design I discussed how the site and participants for the study were selected, how data was collected and analyzed. I also explained how the quality criteria that ensured trustworthiness were upheld and how ethical considerations for the study were addressed. In the chapter that follows (Chapter 5), the findings of the study are presented.

## **CHAPTER 5**

### **PRESENTATION OF THE FINDINGS**

#### **5.1 INTRODUCTION**

In chapter 4, I described how the interpretive paradigm guided the study. I proceeded to discuss the research approach and research design of the study. I also illustrated how: 1) data was collected from 8 sampled university practitioners through semi-structured interviews; 2) the student groups that are aligned to each of the 8 practitioners were observed during their group work interactions; 3) the informal conversations that were held with the student groups to gain clarity on the observations were conducted; and 4) the data was analyzed. In this chapter I present the findings from the semi-structured interviews, observations and informal conversations collected from the sampled practitioners and student groups drawn from four (4) faculties of the University of Limpopo. Raw data collected from the participants were transcribed, coded, analysed and interpreted following the steps outlined by (O'Connor & Gibson, 2003). The practitioners who were participants in the study and the student groups which were observed, and with whom informal conversations were held regarding the conducting of GWL, were allocated codes to label them for ethical reasons. The presentation of this chapter is thus as follows: 1) Presentation of themes and sub-themes for each set of data in the form of tables, followed by the detailed presentation of the findings 2) A table showing practitioners and student groups that participated in the study 3 4) presentation of the findings, 5) Data analysis discussion and interpretation of the findings.

#### **5.2 DATA COLLECTION SITE AND PARTICIPANTS**

Data for the study was collected from the four faculties of the University of Limpopo which is one of the 26 universities in the country. 2 lecturer participants were purposively selected from each of the Faculties, and 8 student groups were also purposively selected through the 8 lecturer participants.

Semi-structured individual interviews were conducted with each one of the 8 lecturers, and observations were made during the group meetings where the student groups were

working on group tasks, activities or assignments given to them by the lecturer participants. Informal conversations with the student groups followed the observations. An interview schedule and observation schedule were used to guide the interviews and the observations. The informal conversations that followed the observations were guided by the observations made as guided by the observation schedule.

The following were the research questions for the study:

The primary research question for the study is:

How are group work learning practices carried out at the University of Limpopo?

The secondary questions are as follows

- What was the required or intended learning during task completion?
- What are the guidelines used by practitioners to inform group work learning?
- How do practitioners form the groups and determine the group size?
- How do the practitioners in the study communicate the instructions for the GWL tasks/assignments/activities to their students?
- How do the practitioners promote or foster individual and group accountability among the students for the completion of academic group tasks?
- What challenges are experienced by practitioners in GWL and what are the possible ways of addressing them?
- What are the areas that practitioners think need to be improved in their GWL practices?
- How do students complete the GWL tasks/assignments/activities given to them by their lecturers?
- How do students in different fields of learning interact during GWL sessions and what are the lessons learnt from the experiences?

### 5.3 MANAGEMENT OF DATA COLLECTED AND ANALYSIS

This section describes how the data I collected, guided by the interview and observation schedules, as well as through informal conversations were classified. I created tables to depict the themes and sub-themes that emerged, as guided by the schedules. The themes are presented in summary form as reflected in tables 5.1, 5.2 and 5.3. The themes and sub-themes are then subsequently presented and discussed in detail in the sections that follow. I first present the table, followed by the detailed discussion that is guided by the summary provided on the tables. See table 4.1 in chapter 4 for the summary of the participants and their codes. These codes are used during the discussion to support the findings.

The summary of the data collected from the lecturer participants through semi-structured interviews (Themes and sub-themes) is reflected on the tables numbered 5.1, 5.2 and 5.3 below.

**TABLE 5.1: Themes and sub-themes from semi-structured interviews**

Themes	Sub-themes
1. Intended/required learning	<ul style="list-style-type: none"> <li>- Content knowledge</li> <li>- Skills</li> <li>- Values and attitudes</li> </ul>
2. The use of elements/principles/guidelines	<ul style="list-style-type: none"> <li>- Non-use of guidelines/elements/principles related to group work theory</li> <li>- Guidelines/elements/principles drawn from the discipline under study</li> <li>- Guidelines/elements/principles drawn from in-service experiences and staff development</li> </ul>
3. Group formation and group size	<ul style="list-style-type: none"> <li>- Lecturer selected/formed groups</li> </ul>

	<ul style="list-style-type: none"> <li>- Student selected groups</li> <li>- Range of group sizes</li> </ul>
4. Communication of task instruction	<ul style="list-style-type: none"> <li>- Verbal and written instructions</li> <li>- Instructions through group leaders</li> <li>- Electronic media (Emails)</li> <li>- Black board</li> <li>- Social media (WhatsApp messages)</li> </ul>
5. Measures for individual and group accountability	<ul style="list-style-type: none"> <li>- No clear accountability measures</li> <li>- Instructions</li> <li>- Consultations</li> <li>- Use of instruments</li> <li>- Communication with group leaders</li> </ul>
6. Need and possibilities for improvement	<ul style="list-style-type: none"> <li>- Increased knowledge on GWL</li> <li>- Guidance on working in groups</li> <li>- Group size &amp; group formation</li> <li>- Review of instruments</li> <li>- Attendance</li> <li>- Individual and group accountability</li> <li>- Monitoring and support</li> <li>- Presentations</li> <li>- Assessment</li> <li>- Reduction of numbers</li> </ul>
7. Challenges experienced	<ul style="list-style-type: none"> <li>- Group dynamics</li> <li>- Time-related issues</li> <li>- Attendance</li> <li>- Participation</li> <li>- Accountability</li> <li>- Accessibility of venues</li> <li>- Availability of reading materials</li> </ul>

	<ul style="list-style-type: none"> <li>- Big class numbers</li> <li>- Attitudes</li> <li>- Admin related challenges</li> <li>- Late registrations</li> <li>- Language proficiency and language expression</li> </ul>
--	--

**TABLE 5.2: Themes and sub-themes from observations**

Themes	Sub-themes
Intended/required learning	<ul style="list-style-type: none"> <li>- Content knowledge</li> <li>- Skills</li> <li>- Values and attitudes</li> </ul>
Element/principles/guidelines followed	<ul style="list-style-type: none"> <li>- No guidelines</li> <li>- Self-generated guidelines</li> </ul>
Group formation and group size	<ul style="list-style-type: none"> <li>- Lecturer selected groups</li> <li>- Student selected groups</li> <li>- Varying group sizes</li> </ul>
Communication of task instruction	<ul style="list-style-type: none"> <li>- Verbal and written instructions</li> <li>- Instructions through group leaders</li> <li>- Electronic media</li> <li>- Social media</li> </ul>
Individual and group accountability	<ul style="list-style-type: none"> <li>- No clear guidelines provided for accountability</li> <li>- Self-generated guidelines</li> </ul>
Roles fulfilled	<ul style="list-style-type: none"> <li>- Group leadership</li> <li>- Division of aspects</li> </ul>
The use of language	<ul style="list-style-type: none"> <li>- 1 African language and English</li> <li>- More than 1 African language and English</li> </ul>

Punctuality	- In up to 6 groups there was late coming
-------------	---

**TABLE 5.3: Themes and sub-themes from informal conversations with the student groups**

Themes	Sub-themes
Intended learning	<ul style="list-style-type: none"> <li>- Content knowledge</li> <li>- Skills</li> </ul>
elements/principles/ guidelines/followed	<ul style="list-style-type: none"> <li>- No clear guidelines</li> <li>- Group generated guidelines</li> </ul>
Group formation and group size	<ul style="list-style-type: none"> <li>- Lecturer selected/formed groups</li> <li>- Student selected groups</li> <li>- Range of group sizes</li> </ul>
Communication of task instruction	<ul style="list-style-type: none"> <li>- Verbal and written instructions</li> <li>- Instructions through group leaders</li> <li>- Electronic media</li> <li>- Social media</li> </ul>
Individual and group accountability	<ul style="list-style-type: none"> <li>- No clear guidelines</li> <li>- Group generated guidelines</li> </ul>
Roles fulfilled	<ul style="list-style-type: none"> <li>- Group leadership/coordination</li> <li>- Shared aspects of work</li> </ul>
Group relations	<ul style="list-style-type: none"> <li>- Good relations</li> <li>- Group dynamics</li> </ul>
Perceptions of GWL	<ul style="list-style-type: none"> <li>- Positive perceptions</li> <li>- Negative perceptions</li> </ul>

Challenges and lessons learnt	<p>Challenges:</p> <ul style="list-style-type: none"> <li>- Attitude towards group work</li> <li>- Poor communication</li> <li>- Time for meetings</li> <li>- Punctuality and time management</li> <li>- Access to venues</li> <li>- Assessment</li> <li>- Personality differences</li> <li>- Cooperation</li> </ul> <p>Lessons Learnt:</p> <ul style="list-style-type: none"> <li>- Knowledge</li> <li>- Skills</li> <li>- Values and attitudes</li> </ul>
-------------------------------	---

#### 5.4 PRESENTATION OF FINDINGS

The study aimed mainly at examining how group work learning was practiced at the University of Limpopo, South Africa, and how such practices could be refined

The following were the objectives of the study:

- Description of intended learning during the GWL task/assignment
- Identification of the elements, principles or guidelines that practitioners use to inform their use of GWL.
- Description of how practitioners form the groups and decided on group size.
- Establishing how practitioners communicate the GWL tasks/assignments/activities to their students.
- Description of how the practitioners promote or foster individual and group accountability among the students for the completion of academic group tasks.
- Explanation of how the practitioners think the current GWL practices can be improved.

- Description of how students complete the group asks/assignments/activities given to them
- Exploration of what students thought about GWL and the lessons they learnt from their experiences Based during GWL sessions.

Guided by the aim of the study and the objectives of the study referred to above, in this chapter I present the findings of the study. The findings drawn from the semi-structured interviews with the lecturer practitioners, the observations made with the student groups and the informal conversations with the student groups are presented separately but confluences are indicated where applicable.

#### **5.4.1 Findings from the semi-structured interviews**

The findings from the semi-structured interviews based on the data collected from 8 lecturers, 2 from each one of the four faculties at the University of Limpopo are presented as guided by the interview schedule depicted on table 5.2.1. Each finding is discussed separately.

##### **5.4.1.1 Intended/required learning**

The study found that the intended or required learning was explicit across all the lecturer participants and combined content knowledge, skills and values implied in almost all the cases. It also found that there was a difference regarding the allocation of tasks and assignments that the students were required to work on in their groups. In three of the eight cases, different groups were given different topics to work on and learn about, while in 5 of the groups all the groups worked on a common topic.

The study also revealed that the theoretical and discipline related intended learning content and skills were more explicit as compared to values and attitudes. While some of the participants consciously included content knowledge and skills as intended learning, they referred to different learning content and skills according to their different fields or areas of knowledge. The eight different lecturer participants required their students to learn different things that were specific and relevant to their contexts.

HULB explained that:

*“I want them to learn about mock conventions, murals and montages...I want them to learn to implement teaching methods that are not commonly used...and eh, that accommodate different students. I also want them to learn to work together and interact freely...they should eh, research about issues and be individually responsible. I think I also want them to practice and develop teaching skills and do things like developing posters...I want to encourage creativity as they complete the task...”*

Similarly, HUL1 had combined knowledge skills and attitudes in the required learning but had allocated different topics to different student groups.

HUL1 said:

*“I wanted them to do preparations on different things. Some had to learn how to write a business plan, what its purpose is, social entrepreneur, different types of management... at the same time, they learn more about self-study because they have to do things on their own...they also learn team work, presentation skills, negotiating their point of view, because as they are working on their final document and their final presentation, that would be their presentation and one of them has to defend their own points...so we enhance their communication skills. In another field and context, MLL1 similarly described what the students were required to learn as follows:*

*“I wanted them to learn about legal principles as guided by the Law commission. They must write a research report. I also want them to learn interpersonal skills...I wanted them to learn the principles but within a more practical manner...to apply the principles to real life situations...”*

Hul2, in describing what the student groups were required to learn said:

*“I want them to learn about global media versus local media. I want them to contextualize global media...and media control. Engagement is very important in this exercise because global media dynamics compel for people to discuss issues from different perspectives...so, all these philosophies are easily discussed when students debate among themselves from different perspectives. It helps them to learn broadly and not be*

*myopic about theories... they go beyond just reciting them, they learn to apply theories to contexts. They should be able to say we need this approach for Africa because..."*

In another context and field of learning the MLL2 explained the intended learning as follows:

*"I want them to investigate on investments...to learn more about investments. I want them to consider themselves as group consultants and gather data on trade and investments over ten years. They must plot and generate a graph on the data they shall have gathered...."*

As a fundamental requirement of teaching and learning, it was clear what each lecturer participant wanted the students to learn in their groups. Each participant reported with certainty what it was that they wanted the students to learn. Participant HUL1...This is a signal of curriculum practice because learning content in any learning context constitutes one of the core components of curriculum (Carl, 2014). For the objectives of any learning interaction to be achieved, the learning content serves as a vehicle for the achievement of such objectives or outcomes (Criticos et al. 2012). In any teaching learning environment, it should always be clear what the intended learning is. This includes GWL. Teachers and lecturers should clearly articulate the intended learning to their learners or students (Johnson & Johnson 2009). Failure to articulate and express the intended or required learning succinctly, could result in confusion or learning that is not focused and is therefore without direction.

#### **5.4.1.2 The use of elements/principles/ guidelines**

Regarding the use of elements/principles/guidelines to conduct GWL, all the lecturer participants in the study except SAL1, reported that they did not refer to any specific guidelines directly related to GWL. They explained that they did not use them or refer to them but rather borrowed from those embedded in the discipline or were learnt through experience.

*"I have no specific guidelines in terms of working in groups...they piggyback"(HUL1).*

*“I have no specific models or guidelines to draw from, I use Bloom’s taxonomy and broad theories to inform how the groups work. I just rely on my own experiences”*(HUL2).

While some did not refer to any at all some sourced from their discipline related guidelines or remotely from broad theories of learning. Out of all the 8 lecturer participants, only 1 said that he used group work elements or guidelines as proposed by the literature and authorities.,

*“I have learned some models like the jigsaw model, I sometimes follow those principles. I allocate roles, form them into groups by counting...for example, up to five...I sometimes allow them to group themselves especially in cases where the semester mark is not affected”* (SAL1).

Some of the other participants indicated that they just relied on their own experiences or drew from their own disciplines to guide or inform how they conducted GWL whereby their student groups were alone in groups to complete the tasks or assignments.

*“No, I don’t use any guidelines, I only use the Law Commission as the guiding document. Actually, these are students I taught last year in their second year...I tell them you were where last year. So, you understood the dynamics of group work* (MLL1)

*No not really, I use a random approach. I encourage them and they elect a group leader. There are no theories or principles of group work that I apply”* (SAL2).

Literature on cooperative learning (Johnson, et al. 2013;), team-based learning (Michaelsen & Sweet 2008) and collaborative learning (Laal & Ghodsi, 2011) as well as other studies on GWL and group work (Burdett, 2003; Richardson & Major 2014), strongly recommend the use of some elements guidelines or principles to strengthen GWL and promote or foster accountability and mutual interdependence among the groups.

#### **5.4.1.3 Group formation and group size**

Out of the 8 participants, 3 indicated that they formed the groups themselves while 5 explained that they allowed the students to self-select. The three participants who formed the student groups explained that it was important for students to understand that in the

real world or in the workplace they may not be allowed to choose who to work with in a team. They also said that friendship groups were problematic so they formed the groups to avoid them. The participants who allowed students to form their own groups said it was important for students to self-select because there were other factors that informed why they preferred to work with particular people. One of the participants expressed the view that students should be given the freedom to choose and to decide because that would make them responsible.

*“I divide the students into groups of 4 each...we, as lecturers form the groups” (SAL2).*

*“I divide them into groups of 5-6 so that they are more manageable” (HSL1).*

*“The groups were given the liberty to group themselves into groups of 10. I think it gives a better sense of organization and encourages maturity...it makes life easier for the students, logistically” (HULB).*

*“We allow the students to group themselves. We prefer to have groups of not more than ten, but sometimes because of the big classes we have to double the size” (HUL2).*

The group size ranged from 4 to 10. The group size tended to relate to the context of learning, Participants with smaller class sizes tended to have smaller groups, while those with larger classes used the group size of 7/8-10.

#### **5.4.1.4 Communication of task instruction**

In all the cases the participants reported that they had given clear task instructions using more than one mode of communication. The vehicles of communication included the verbal, non-verbal and electronic, course outline, verbal explanations in class, through blackboard. The observations I made with the groups, as well as the informal conversations confirmed this finding

#### **5.4.1.5 Measures taken for individual and group accountability**

The participants reported on varied measures that they put in place to foster accountability in the groups as they completed the group task or assignment. Some used

one or two accountability measures while others referred to a combination of two or more methods employed to foster accountability. The study found that individual and group accountability were fostered in different ways by the different participants with minimal commonality. The measures for accountability reported were the following: consultations, presentations, layered assessment, instruments, attendance registers, self-study or pre-reading, and communication with group leaders.

With regard to the use of consultations, HSL1 and MLL1 said:

*“I use consultations with the groups, they also make presentations as a group and I observe them and ask questions to any of the group members...”* (HSL1)

*“I do spot checks like calling a group to come and see me. I also try to find out from groups if there are concerns. I ask them if they have challenges and I allow for regular consultations in class.”* (MLL1).

How presentations were conducted, and questions were answered was also reported as a measure used to foster accountability by two participants:

*“I choose at any time who can or should present from the group. The group must ensure that each member is ready for the presentations...I can just choose any particular number”* (SAL1).

*“They must all answer. On the day of the presentations I can choose anyone to answer questions.”* (MLL2)

Self-study and pre-reading were also used for accountability by two of the participants who said:

*“I encourage a lot of self-study in the beginning...”* (HUL1)

*“I also demand prior reading before the task is done, they have to bring a written research activity. I also require them to submit an attendance list and I have a schedule for group visits.”* (HUL2).

Two of the participants indicated that they used different instruments to foster accountability. These included an assessment instrument that was layered in which marks for individuals and for the group were reflected separately on the same instrument. The students understood that their individual efforts combined with the group efforts constituted their final grading. She used a rubric to assess the group performance during presentations.

*"...I use instruments that help them to rate themselves (self-rating), I use an instrument for self- assessment "I also discuss the instruments that they will be using and the ones I will be using to assess them. I also use a mark from the student as an individual ...I then allow the group to confirm or negate the assessment by the individual student... You often do not get what you want..."*

Similarly, SAL2 also layered the assessment of the group during the presentations:

*"I also allocate two sets of marks: one for the group and one for the individual. The group mark is based on the document they submit, and the individual mark is based on the presentations. We engage with the students individually during presentations and we encourage good work. We use templates for assessment and we sometimes detect that there are those who did not take part "*

Attendance registers were also used to foster accountability as indicated in the statements by two of the participants, HUL 2 explained the use of attendance registers as follows:

*"I think they marked the register first. It has dates on which they must meet. It has a column for marking them present or absent. This attendance register is submitted together with their task or assignment. They know that attendance is important and has a bearing on their assessment. The group leader monitors the attendance. The use of this instrument encourages attendance. It does however not monitor punctuality...some may come late while some may leave earlier."*

Similarly, SAL2 also referred to the importance of attendance registers as an accountability measure:

*"Attendance registers are very important and upon submission of the deliverables, they need to come and present their work."*

I noted that the measures used to foster accountability in GWL were often different among the participants with a few similarities as shown in the presentations above. There were often differences in what the participants regarded as effective measures to hold the student groups and the individuals within the groups accountable. This could be influenced by the teaching background of the participants, or their views regarding how students should respond to accountability as an expectation during their learning.

#### **5.4.1.6 Need and possibilities for improvement**

All the lecturer participants indicated that there was a need to improve how they conducted group work learning and that there were possibilities for improvement. They also identified the following as areas that they thought needed improvement: Monitoring; individual accountability; a review of instruments used; group presentations and group formation. The improvement of attendance, language proficiency, skills development, assessment and individual accountability were also identified as areas of concern. Notably, the areas identified for improvement and the possible ways to improve such areas, mostly differed from participant to participant.

With regard to the need for monitoring and the review of instruments, as well as group presentations and group formation, the participants, amongst other things said:

*“I think I need to develop a monitoring instrument...I think I need to create time and space to monitor the process.”*(HULB)

*“I think the instrument I use for assessment itself can be reviewed and needs to be improved on a regular basis. I also think the use of videos to record the meetings could assist...”* (HUL1)

Individual accountability was also mentioned as an aspect that needed improvement by some of the participants. SAL2 explained as follows:

*“Individual accountability needs to be improved and we also need to reduce the numbers...”*

This is reiterated in this statement by MLL2:

*“Assigning groups to topics...they work on things alone first and then discuss in their groups”*

The need for addressing individual accountability as a key aspect in GWL comes out more in the next section when participants describe the challenges they experience in their use of this pedagogy.

HUL2 also had this to say about presentations and group formation:

*“Each group should present, not selected groups...I think the group size can also be revisited, I may think of using smaller groups...I need to find a way of improving the language proficiency of the students...their command of language is not always at the required level...I think I also have to find a way of managing the attendance better...maybe have a register manager...”*

Similarly, HSL2 said:

*“I think I should give them more topics, increase the time for presentations and add more topics for presentations because some important areas are sometimes left out because of time.”*

While HUL2 and HSL1 referred to group presentations as areas they needed to improve, some of the participants identified group formation as an area to improve. SAL1 for example said:

*“I think I should read more about dividing students”*

Regarding areas that needed improvement in using GWL, the participants referred to different areas of focus.

#### **5.4.1.7 Challenges experienced**

Several challenges were reported by the lecturer-participants. The main challenges reported were accountability or lack thereof, lack of commitment, poor participation, group dynamics and poor or irregular attendance. Punctuality, language proficiency and class size were also reported as challenges.

Regarding accountability or lack of accountability as a challenge, some of the participants agreed with each other and reported as follows:

*"I left most of the accountability in the hands of the students. Individual accountability is not really taken care of. There are also a few complaints from some students"* (HUB)

*"Lack of accountability by some of the group members...Sometimes the work is shallow with no details and little depth..."* (HSL2)

*"Individual accountability needs to be improved and we also need to reduce the numbers..."* (SAL2).

Some of the participants also reported on poor participation which is related to accountability as follows:

*"We sometimes detect that some of the students did not participate well in the groups."* (SAL2)

*"Students who don't do their part...that is a challenge..."* (SAL1)

*"Students who cannot express themselves well and students who are poor participants."*(MLL2)

*"They do not necessarily all participate well...They don't all pull the same weight...there are general conflicts: (HUL1).*

Group dynamics were also identified as a major challenge as it manifested itself in the different forms reflected in the statements that follow:

*"Group dynamics-students who would have participated in a particular group would want to change to another group because they feel uncomfortable in a group because of ethnicism. For example a student would say: 'I'm the only one who is not Pedi in the group'*

*There are also issues related to xenophobia, some students report that they have been ostracized by a particular ethnic group...one of the ethnic groups like...and ...are more receptive of foreign nationals or international students than others...Interestingly, for me gender has never been reported as a challenge or problem....."(HUL2)*

*There are some challenges, ...some students default...there are power issues at times...group dynamics...and even ethnic divisions in a few instances. Some students make others feel like they are the black sheep...and some cover up for others... (HUL1)*

*"Personal vendettas...especially women...girls. There was a case where in this group, they hated this girl so much last year"* (MLL1)

*“At some point I had to reconsider the students’ perspective because they tend not to be reliable...sometimes students who are passive are allocated more marks while students who are more eloquent ...some with a model C background would get a lower score from their peers, students often do not like such students...”* (HUB)

The challenges reported by the participants were several and were a clear indication that there were problems regarding group work learning among students. Some of the challenges were related to logistical factors beyond the students’ control. If students stayed away from Campus, that could affect their participation and contribution to the task. Some of the students may appear to lack commitment, while in fact they felt limited in terms of their knowledge and skills, and as such refrained from participating.

### **5.3.2 Findings from the observations of student groups**

Data from the observations was also framed by a set of criteria referred to above on table 5.2.2 that were similar to the items/questions that appear on the interview schedule as reflected on table 5.2.1. These are presented under the sub-headings shown below. Informal conversations were also used to supplement the observations made and to clarify certain issues that could not be understood through observations alone. For example, making sense of the task that was given to them and how the task instructions were communicated, how the group leaders were chosen and how the group members established accountability, as well as what challenges they experienced and how they addressed them.

#### **5.4.2.1 Intended/required learning**

Through the group observations, I found that the discussions held by the student groups and the work they were doing towards the completion of their given academic tasks or assignments were all aligned with what the lecturer participants had reported as the group learning tasks given to the student groups. There were no contradictions regarding the information provided by the lecturer participants and what was discussed in the groups. The only slight challenge reported was that in one of the groups some of the group members had dissimilar understandings of the task and had to go and consult with the

lecturer for clarification. These were used to identify differences and similarities in the findings collected and thus make them credible.

#### **5.4.2.2 The use of elements/principles/ guidelines**

Based on the observations, there were no elements, principles or guidelines provided for the students to follow during the completion of the assignment or task given to them. The only visible guidelines were the ones pertaining to the task content and the group size and in some cases group formation. There were no guidelines that informed accountability, roles to fulfil and language use. It was observed that the student groups in some groups formulated their own measures for individual and group accountability and for the fulfilment of roles.

#### **5.4.2.3 Group formation and group size**

Group size and group formation was in agreement with what was reported by the lecturer participants in all the cases. Some of the groups was formed by the lecturers while some were student selected groups. The groups were formed of numbers that ranged from 4 as the smallest number (SAG1) and 15 as the largest number in groups HSG2 and HUG2.

#### **5.4.2.4 Communication of task instruction**

The task instructions were communicated clearly in all the groups. This was evident during the discussions as the groups deliberated on their tasks and in some cases consolidated it. The instructions were communicated through verbal, written and electronic forms, and this was later confirmed during the informal conversations with the student groups.

#### **5.4.2.5 Measures for individual and group accountability**

The observations did not show any measures in place for group and individual accountability. The student groups devised their own means to hold the group and each other accountable. These included sharing sections of the task and allocating each other roles and keeping an attendance register for their meetings. This was clarified during the informal conversations.

#### **5.4.2.6 Roles fulfilled/Fulfilment of roles**

Allocation of roles to fulfil was observably not guided. Like indicated in the item above, the student groups allocated the group and each other roles as a measure to encourage accountability. In the informal conversations, they explained the roles they allocated each other and fulfilled.

#### **5.4.2.7 The use of language**

In all the groups, English was the language mostly used for communication during the discussions, however there was a lot of code switching. The ethnic mix seemed to determine which African languages were used together with English. Sepedi was mostly used followed by Xitsonga. There was very little use of other languages when the students' code switched.

### **5.4.3 Findings from the informal conversations with the student groups**

Like I explained earlier in this chapter, the informal conversations with the student groups were used to bring more clarity to the observations made. This applied to all the items on the observation schedule as reflected on the Table 5.2.2. These conversations however also revealed other information that was not strictly in line with the items on the schedule. These were two items mainly related to how the students perceived GWL and what they had learnt from each other during their interactions. In the section that follows, I present the findings from the informal conversations as guided by the items that appeared on the observation schedule as well as their perceptions of GWL, the challenges they experienced and the lessons they learnt from working and learning together in their groups on the particular tasks that had been given to them.

#### **5.4.3.1 Intended/required learning**

All the student groups explained clearly what they were required to learn in their groups and broke it down into parts. They were able to elaborate on what they were working on in their groups and on how they understood the tasks or assignments given to them by their lecturers. It is only in one case where the students explained that when they started working on the task, they did not have a common understanding of what the task exactly

required of them and had to go back to their lecturer and seek clarification. This, despite the fact that the lecturer had given them a written instruction and had explained the task in class. In this particular class, different groups had been assigned different topics to work on and that could probably why this particular group had not clearly understood what their task entailed.

#### **5.4.3.2 The use of elements/principles/ guidelines.**

The provision of guidance and direction to learning activities is an important aspect in all learning contexts because whatever is learnt has to align with the aims and objectives or outcomes of course or module. The principles of the pedagogy used also have to be considered (Criticos et al., 2012). This applies to group work as well. In order to increase efficiency in group work, there is a need to employ it from an informed position. Practitioners need to understand why some group work experiences turn out successful while others do not (Hammar Chiriac, 2014). Elements, guidelines or principles that inform group interaction would help to improve the deliberations and minimize some of the challenges.

All the student groups indicated that they were not provided with elements or guidelines to follow during the completion of their tasks and that they agreed among themselves how they would divide the task and other responsibilities related to their learning. Basically, they were only guided on the intended learning. They were not clearly guided on how the task was supposed to unfold and how the group and the individuals had to account for their role in the fulfilment of the task or assignment. The student groups themselves generated their own set of operational guidelines. This is revealed during the informal conversations.

#### **5.4.3.3 Group formation and group size**

With regard to group formation and group size, some of the students indicated that they had been formed by the lecturers while some had been asked to group themselves. In all the cases however, the group size which ranged from a group of four (4) members being the smallest to a group of fifteen (15) members being the biggest group were determined

by the lecturers. This was in agreement with what the lecturer participants had indicated during the interviews

#### **5.4.3.4 Communication of task instruction**

On how the task or assignment was communicated to them, the students revealed that different methods were used to communicate the task. These were written, reflected in the course outline, sent through the emails or on blackboard. There was a group however, in which members initially understood the instructions differently and had to consult the lecturer to seek further clarification.

#### **5.4.3.5 Measures for individual and group accountability**

On the whole, there were no clear accountability measures for individuals within their groups or the groups as a whole. The students derived different ways to hold each other accountable for their learning of the task at hand. These measures differed from group to group. In some of the groups they mainly divided the task among themselves in preparation for the discussions. This meant that areas of the task were either given to individual members or sub-groups to go and study and prepare for the discussions and the final submission. In MLG1 the students explained that *they asked each other questions regarding the content of the task and submitted their research drafts and had to explain what was allocated to them to the group*. In this group, those who did not do their part and did not attend group meetings regularly were excluded from the submission.

In MLG2 the students explained that they each completed the assignment individually first before they met for discussions as a group. This, according to them ensured that everyone had done the work and could contribute to the discussion. They had no measure to ensure that each group member learnt all the sections of the task. One student from HUG1 simply explained that: *“We don’t all learn all the sections”*. (This could mean that there are areas that are not fully learnt by some of the individuals by the end of the task and could have long term negative implications on their knowledge or mastery of that section of work). The measures for accountability differed from group to group and were mainly generated by the students themselves.

#### **5.4.3.6 Roles fulfilled**

Based on the observation that there were group leaders in almost all the groups, I asked the groups how they chose their leaders. I found that five of the eight group leaders had volunteered because no one else in the group wanted to lead.

#### **5.4.3.7 Group relations**

The student groups reported that they had good relations except for group HSG1 where one of the group members was not cooperating with the other group members. This group member, according to the other members, did not attend sessions and they had decided to exclude her from their submission. This group also reported that some members arrived late for the meetings and there were also clashes regarding the times allocated for their meetings. This brought conflict within the group.

#### **5.4.3.8 Perceptions of GWL**

As I held the informal conversations with the student groups, I also realized that while most of them perceived GWL positively, there were a few who perceived it negatively. Those who perceived it positively provided different reasons why they liked it. They mainly liked it because it allowed them to share ideas, to be sociable, to work as a team, to improve their communication skills to generate more ideas and to look at the whole task among other things. Some of the students who did not like group work cited the following as reasons:

#### **5.4.3.9 Challenges and lessons learnt**

With regard to challenges experienced, all the student groups, while admitting to the advantages of learning together in their groups also admitted that there were numerous challenges that they experienced during their GWL sessions. Some of these pertained to the technicalities of meeting while others were directly related to the task itself. Different groups reported different challenges some of which were generic while others were peculiar to groups. The most common ones were the following: late coming to meetings, clashes during meeting times, poor participation and lack of accountability measures. Those that were peculiar to some groups were: poor communication, lack of commitment,

accessibility to venues, and conflict among group members. One challenge that stood out mentioned by one group was assessment. Some group members in this group felt it was unfair that they were allocated a common mark while their contributions were not the same.

Late coming to the group meetings by some members in numerous of the groups except for two groups, was a challenge that affected the groups negatively and could not be easily controlled because some of the members were from attending classes, or standing in queues to complete some forms that related to important issues such as student finance or securing accommodation. This made it difficult for the group leaders and other group members to address the problem because they could not differentiate between genuine cases and those that were not. Late coming affected the group interaction because those who arrived late remained behind in discussions depending on how late they were. The meeting times were not always suitable for all members and clashed with other activities.

A student from HSG2 explained the challenge of late coming as follows:

*“Late coming is a challenge, we have even tried to come up with some disciplinary measures...”*

One student from MLG1 lamented:

*“I had another group meeting to attend before this one and I’m the group leader...I could not just leave”*

Another student from HUG1 explained that:

*“I was waiting in the queue at S block, I needed to submit my forms, I had been waiting in the queue for almost two hours...I had to submit the forms ...There was nothing I could do...I sent a message ...”*

*While the* group observations revealed late coming as a serious challenge, they also showed that there were, at times, genuine reasons why some group members could not always make it on time for the meetings. This revealed some of the realities of the context

within which GWL was conducted. There was therefore an agreement between what I observed and what the students reported on. This finding is consistent with what was found in a study conducted by...

Poor participation during discussions was also reported by some of the student groups. This is an example of a challenge directly related to the task completion and to learning.

One of the students from HUG1 explained that: *“One of the main challenges is poor communication within the group, we also struggle to find time to meet which is convenient for all of us...sometimes there are clashes...”* Some group members indirectly insinuated that there was a challenge of poor participation and lack of commitment during task completion for example, one of the students from MLG1 commented that:

*“We cannot depend on those who are not serious”*

*Another student from SAG2 indicated very clearly that: “Those who do not prepare for the task and attend meetings regularly are not included when we submit, each one of us has to do their part of the work as we prepare.”* This seems to suggest that there is awareness of the possibility for social loafing or freeriding.

In one of the groups a challenge that related to inclusivity was raised.

One of the group members stated that: *“The venue arranged is not always convenient for all of us, some of our group members find it difficult...they have special needs and the ramps are not there in some buildings...”* This is logistical issue that is likely to disadvantage some of the group members and ultimately marginalize them as the task is complete”. This is one of the indicators that GWL is a complex activity and arranging for it involves giving attention to detail, lest some group members are left out or disadvantaged.

Assessment is a key element in all forms of learning and should be properly addressed (Nafziger et al., 2011; Criticos et al., 2014). In all the groups except one group MLG1, the issue of assessment was mentioned as a challenge. One of the students indicated that: *“assessment was not properly discussed and in class...and the contributions we make are not the same....”* In that same group other students indicated that there was a rubric

that was given to them and was discussed in class. While the students in the group were giving contradicting responses regarding assessment, they did think of it as an important aspect of their learning. I noted that assessment was very minimally mentioned in the study. This could mean that it was not foregrounded as an important aspect while it was very central to the whole process.

### Lessons learnt from GWL

The students referred to a plethora of lessons learnt from their GWL sessions. These were mostly positive with a few that were negative and could be divided into those that were intra-personal, interpersonal and directly task related. One student from MLG1 said

*“I have learnt to work with others.”*

Another student from HUG 1 said,

*“I have gained confidence and I learnt that I should be matured when dealing with issues... and that I should give myself time....I have also learnt that my perspective is not the only perspective and that I should not judge a book by its cover”*

A student from SAG1, on a similar note to the others said:

*“I have learnt to be sociable...I have learnt about respect...respect on others opinions...that paying attention and listening to others is important...eh. I have learnt about patience and tolerance...I have learnt that it is ok to make mistakes”*

With regard to interpersonal issues some of the students had this to say:

*“You have to adapt to the people you work with...as people are different, but you should not let people turn you into what they want you to be... I have also learnt that as a member you belong...and as an individual you understand better when working with others...”*

## **5.5 SUMMARY OF CHAPTER**

In this chapter I presented the findings of the study based on the data collected from 8 semi-structured interviews conducted with 8 lecturers, 2 from each of the four faculties of

the University of Limpopo, observations made of 8 student groups that were linked to the 8 lecturers and the informal conversations with the 8 groups. I showed how GWL was practiced as guided by the aim and objectives of the study. Chapter 6, which follows, provides a summary of the findings, discussion, recommendations, the proposed approach to GWL and the conclusions.

## **CHAPTER 6**

### **SUMMARY OF FINDINGS, DISCUSSION, RECOMMENDATIONS, PROPOSED APPROACH TO GWL AND CONCLUSION**

#### **6.1 INTRODUCTION**

In this chapter I provide a summary of the findings and discussions that have been presented in chapter 5. I consolidate the findings from the semi-structured interviews conducted with the 8 lecturer participants, the observations made with the groups during the group meetings and discussions as well as the informal conversations held with the groups to clarify the observations made. In the discussion I relate the findings to other studies to establish similarities, differences and new findings if any. I further propose an approach to group work learning within the context of the study. I end the chapter by reflecting on the contributions made by the study, the limitations of the study and recommendations for further studies.

#### **6.2 SUMMARY OF THE FINDINGS (AND DISCUSSION)**

The study aimed at reflecting on the practices of GWL at the University of Limpopo, with a view to identifying ways to contextualize and refine such practices informed by the findings. The study was guided by the interpretive paradigm, followed a qualitative research approach and adopted a descriptive case study design. Semi-structured interviews, observations and informal conversations were used as data collection methods. The study came up with the following three overall findings: One, that practitioners did not use any elements/essentials to inform their practices. Two, that the measures used for individual accountability had loopholes such as poor participation and group dynamics such as friendship or personal differences, which remained a major

challenge. Three, that while key areas of GWL as practiced at the University of Limpopo needed refinement, I found that there were some elements of good practice that prevailed in some areas of the practice such as articulation of intended learning, communication of task instruction and, to a great extent, group formation and group size. However, these depended on given the contexts within which the GWL practices took place.

Data collected, focused on the main research question which was: *What are the practices of GWL at the University of Limpopo and how can they be contextualized and refined for the completion of academic tasks/assignments/projects?*

The following Themes emerged from the data as guided and framed by the interview schedule and observation schedule:

- Intended/required learning
- The use of or reference to elements/principles/guidelines of GWL
- Group formation and group size
- Communication of task instruction
- Measures for individual and group accountability
- Need and possibilities for improvement
- Roles fulfilled (student groups)
- The use of language (student groups)
- Punctuality
- Participation in group discussions
- Challenges and lessons learnt

In the following section I consolidate the findings from the three sets of data into one summary. I also add the aspects that came out from the observations and informal conversations that were not included in the schedules, namely: roles fulfilled, the use of language and punctuality/time related issues.

### **6.2.1 Intended/required learning**

The intended or required learnings were clear from all the participants, skills in a few cases. This differed from participant to participant with similarities in some instances. The

focus was mainly on academic content knowledge in almost all the cases with skills remotely or indirectly implied in some of the cases. The observations of groups and the informal conversations confirmed what was said by the lecturer participants in the semi-structured interviews. All the lecturer participants were clear with what they wanted the student groups to work on and to learn, but this focused on academic learning, with little attention given to skills. This finding is consistent with the finding by Le, Janssen and Wubbels (2016). Le et al., found that most of the learning was academic and theoretical and low on the development of academic skills. They relate this finding to the how the learning goals were structured. De Hei et al. (2016) also found that one of the challenges experienced by students in group work learning were as a result of poor collaborative skills.

The training of practitioners and the culture of the institution could be contributing factors towards the tendency to focus more on academic content knowledge. How the programmes are articulated with focus on content knowledge could be an additional factor.

### **6.2.2 The use of or reference to elements/principles/guidelines of GWL**

Contrary to the use of elements/guidelines and principles recommended in the conceptual frame work and in several studies, all but one of the lecturer participants indicated that they did not use or refer to any elements /principles/guidelines on GWL which provided an informed structure to how the learning unfolded. They indicated that they borrowed from principles in the discipline, piggy-backed from other disciplines, thumb-sucked or relied on their own experiences as lecturers. While one participant referred to very broad theories, one referred to co-operative learning but did not show which elements were used and how they were used. Raubenheimer and Nel (2012) in their study report how their use of group work learning was ineffective because it was unguided. They had to regroup and develop guidelines for the pedagogy to yield positive results. Similarly, De Hei et al. (2016) and Le et al. (2016) report that the provision of a structure for group work learning is essential for its success. In the study by le et al., both the students and instructors reported lack of clear guidelines or structure as a contributory factor to some of the challenges experienced during group work learning.

The one use of elements/guidelines and principles for GWL, could result from the fact that the participants in the study are anchored in different fields and all of them except the one in the pilot study, were not trained as teachers. They relied on the content knowledge of their field. They may have disregarded the need for using GWL in an informed manner. Large classes in some of the cases could have made the practitioners to resort to giving their student a GWL learning task or assignment, while it was not their preferred pedagogy

### **6.2.3 Group formation and group size**

In line with the theory of group formation by Tuckman (1978) it is essential for practitioners to think deeply about how the groups were formed, because group formation is a complex process that develops from phase to phase. According to Tuckman, group formation is a basic consideration when using group work learning. Criticos et al. (2014) also recommend that groups should be formed in relation to the nature of the task and could be formed by the instructor (Greetham & Ippolito, 2018; Saputra, Joyoatmojo, Wardani, Sangka, 2019), were self-selected (Armien & Le Roux, 2010) or comprised of both formats (Nafziger et al., 2011; Hammar Chiriatic, 2014). Notably, while TBL practitioners like Michaelsen, Sweet and Parmalee (2009) strictly adhere to formation of groups by practitioners, other practitioners like Nafziger et al. (2011) and Hammar Chiriatic (2014) found that both methods of group formation had strengths and weaknesses and that what really mattered was how the group members in the group worked together.

Nafziger et al. (2011), found that group formation did not impact on group performance. Contrary to studies that strongly recommend groups formed by the instructors, Armien and Le Roux (2010) used self-selected groups and found that they allowed students to meet and work beyond the formal learning settings. Armien & Le Roux (2010) found that there were even student initiated groups beyond the groups formed with the lecturers and that students found such groups most beneficial for their learning because they could code switch to their mother tongue during discussions and could also arrange to meet at convenient times. Popov et al. (2012), note that there are advantages and disadvantages in both homogeneous and heterogeneous groups as well as in lecturer selected groups and self-selected groups. In this study I found that participants used both methods to form groups. Those who formed the groups themselves seemed to be those with smaller class

sizes and the group sizes were also small, ranging from 4 to 6 members. Some of them explained that smaller groups were more effective and minimized social loafing. Participants with large class sizes seemed to all opt for self-selected groups which were also larger in size ranging from 8-10 members per group. Some of them argued that larger groups allowed for a range of ideas. In agreement with this argument, Chen & Kuo (2019, 94), assert that, *“having adequate members in the learning groups supports good collaborative interactions among members and is fundamental to ensuring satisfactory learning performance”*.

The observations made regarding group size, agreed with what the lecturer participants had reported, and the informal conversations confirmed how each group was formed. Decisions on group formation and group size may have been influenced by class size, or by the preferences of the practitioners. It could be informed by the need to encourage students to learn how to work with others as a preparatory measure for their future employment

#### **6.2.4 Communication of task instruction**

Task instructions were communicated well with lecturers using two to three modes of communication. The participants reported that they communicated the task instructions in the course outline, on typed hand-outs and discussed them in class on the power point presentations and further posted them on blackboard and through the emails. It was only in one case where the student group members understood the task differently and had to consult with the lecturer for clarification. It was a single isolated case and the students went back to the lecturer to seek clarification. While Johnson and Johnson (2014) and Nafziger, et al. (2011) emphasize the importance of clear task instruction. While some studies are silent on how the task was communicated and its importance, (Armien & Le Roux, 2010; Popov et al., 2012; de Hei, et al., 2016, le et al., 2016). There are studies that found clear task instruction to be key in GWL. These include the study by Nafziger et al. (2011), and Mamas (2018). What is clear though is that even in studies where task instruction is not highlighted as an issue for consideration, the practitioners did

communicate their instructions through discussions with the groups or in written form (Armien & Le Roux, 2010; Hammar Chiriac, 2014; Le et al., 2016).

The use of multiple modes for communicating the task instruction could emanate from the past experiences of the practitioners. The class size or the language and communication problem may also have contributed to the need to ensure that the task reached the students and they understood it.

### **6.2.5 Measures for individual and group accountability**

While the study by De Hei et al. (2016, p39) reports that '*collaborative interaction between students does not automatically develop and continue during group work learning activities. Therefore, some kind of structuring is needed in support of the process, ensuring positive interdependence and individual accountability*'. The measures used for individual and group accountability in this study, were not stringent enough and allowed for loopholes. It is only one participant, who reported that she layered her assessment for accountability and produced the instruments she used to assess the individual and the group during their presentations. She explained that she then divided the two sets of marks by two.

The other participants reported that they used briefings and consultations before the task was completed, required pre-reading from the individual group members, attendance registers, random visits and communication with the group leaders. All of these seem to leave loopholes which still allowed for freeriding and social loafing. There were no clear methods or strategies on how, for example, the lecturer would establish whether the individual pre-reading was done or how the briefing or consultations ensured that individual students did their part of the task and contributed meaningfully to the larger product.

The use of attendance registers also had limitations, because regular attendance or presence did not translate into accountability in terms of task completion, or meaningful contribution. This finding indicates that how accountability measures were put in place by the lecturers had loopholes which still allowed for some students do nothing or very little while others took almost full responsibility for the task. That there are loopholes in the

measures used for accountability, is reflected in the challenges reported by both lecturer and student group participants. Poor or lack of accountability is reported as one of the major challenges and areas that need to be improved. This, arguably, could be because the measures used were ineffective.

Another factor that shows that the measures put in place were not considered to be tight enough by the student groups, lies in the fact that they generated their own accountability measures. They shared aspects of the task among the members and presented to the groups to contribute to the larger task. Two of the groups also indicated that they allocated roles such as those of scribe, collection of information, typing of the project and consolidation of the whole task to members. This finding is aligned to the finding by Petersen and Petker (2017), whereby the student groups, came with their own rules for accountability such as penalties for late coming and failure to complete assigned tasks.

The creativity and initiatives taken by the students is not a bad thing at all, as it reflects learning and innovativeness on their side. However, it could be an indicator that they had not been guided on how to be accountable as individuals in their groups and had to find their own ways of fostering accountability. The measures they used also left room for social loafing and for a null curriculum, because some of the students only focused on the areas allocated to them and were likely to end up with limited knowledge or skills regarding the mastery of the total learning for the task.

#### **6.2.6 Need and possibilities for improvement**

All the lecturer participants reported that they thought there was a need for improving how they conducted GWL for task/assignment/project completion. They each referred to different aspects with accountability as the key aspect in 6 of the 8 cases. They all acknowledged that group and individual accountability remained a major challenge. The other aspects mentioned were the following: how instructions were issued, consultations, the use of instruments, monitoring and communication with group leaders. Studies (Burdett, 2003; Mentz & Goosen, 2007; Popov et al., Thondlhana & Belluigi, 2014; Riebe

et al., 2016), identified challenges in the practices of GWL and proposed solutions. I found some similarities in the following: in order to address accountability, which is directly related to individual accountability, Riebe et al. (2016) suggest the use of team contracts and the layering of assessments or grading. In order to deter or minimize social loafing or freeriding which is related to accountability, Maden and Perry (2011), identified the use of behavioral contracts between the students whereby team norms would be established and discussed. Riebe et al., however, note that most of the recommended measures were not discussed in terms of their actual implementation.

### **6.2.7 Roles fulfilled (student groups) group leaders**

During the observations and informal conversations, it was revealed that 6 of the 8 group leaders had volunteered because no one in their groups was willing to serve as a group leader. There was a clear reluctance to serve as group leaders. It is under the challenges and lessons learnt that possible reasons for such reluctance are revealed. In two of the groups the group leaders had been chosen by the groups and had apparently served as group leaders before. The other roles of scribe, typist, and consolidator of information were allocated to different members in the group. The question is if these roles are allocated to different members in the groups, what measures are taken to ensure that everyone in the group learnt everything intended for them to learn. Role allocation has been identified as important in structuring group work in other studies and has been reported as an enabling factor if properly done (Johnson & Johnson, 2009; De Hei et al., 2016)

### **6.2.8 The use of language (student groups)**

It was observed that during the discussions where the student groups were bringing things together, discussing and reporting on their findings and understandings of issues pertaining to the task. In almost all the groups, the students used English which was the language of learning in all the cases together with one or two more African languages such as Northern Sotho, Tshivenda, Tsonga or Seswati. The languages used could be reflective of the composition of the groups. It appeared that the students in each group understood all the languages that were used in that group. Consistent with the finding by

Armien and Le Roux, (2010). The use of the African languages could serve to enable a better understanding of what was learnt. While also limiting their proficiency in the language of learning. Another challenge could also be the accuracy of translating it into the language of learning which was English. The use of the African languages could also be an indicator that practitioners need to look at the cultures and languages of the students, as noted by Thondlhana & Belluigi (2014) in their study on group work as terrains of learning.

### **6.2.9 Punctuality**

The observations revealed that in 6 of the 8 group there was late coming by members. This ranged from some members arriving 5 minutes to 20 minutes late. During the informal conversations, it was revealed that some of them had reported to the group leaders or the whole group through WhatsApp, indicating that they would arrive late for one reason or the other, but some just arrived and joined the group discussions. This late-coming implied that some of the students missed important aspects of the discussion and as such of the learning and understanding of some aspects. Other studies also reported on punctuality as a challenge (Hassanien, 2006; Hammar Chiriatic, 2014). Students in the study by Hammar Chiriatic (2014) found punctuality as a hampering factor to group work learning effectiveness. Similarly, both students and instructors in the study by Le, et al., found that punctuality and attendance were impeding factors to group effectiveness. In a study by Petersen and Petker (2017), one of the student participants, stated that the late arrival of some group members was a great frustration because it brought their project plan and time frames out of alignment with each other.

### **6.2.10 Participation in group discussions**

The participation of students was reported and observed as one of the challenges that were revealed in the study. During the discussions there were no ways of fostering communication by all the member in groups. In some groups group members participated more inclusively because they had been allocated sections of the task to work on by the groups, so they had to report on what they had done and what their understanding of those sections or areas of work was. Where such allocations were not made, some of the

students literally listened to the deliberations and did not contribute anything. All they needed were some little notes and their presence to earn grades from what the other active members had done and deliberated on. This meant that there were students who literally earned marks when they had worked on the task/assignment/project, contributed to its completion and most importantly learnt from the process. This had implications for the intended/required learning and probably for the long-term conceptualization and understanding of what was to be learnt in line with the course/module learning outcomes. This finding is similar to that of other studies and translates into the prevalence of social loafing or freeriding (Popov et al., 2012; Hammar Chiriac, 2014; de Hei, et al. 2016; Le et al., 2016).

#### **6.2.11 Challenges and lessons learnt**

Findings from the semi-structured interviews, observations and informal conversations, revealed that there were numerous challenges during GWL at the University of Limpopo. The key challenges reported by the lecturer participants centered on, accountability, participation, group dynamics. Additional challenges reported were, availability of materials, class size, perceptions and attitudes, admin related matters and language proficiency and language use. Similar findings were made in other studies regarding some of the challenges reported by the lecturer participants. Hammar Chiriac (2014), found that one of the characteristics of groups that were not working well was lack of accountability and poor participation. Students reported that the contributions made to complete were not the same, and that some members virtually contributed nothing towards the completion of the task. Regarding group dynamics, Popov et al., (2012), Mamas, (2019), found that group dynamics such as dominance of some members and cultural differences affected how the groups worked together. The problem of language proficiency as an impeding factor is also reported in the study by Popov et al., (2012). While Petersen & Petker (2017), reported on the problem of language and culture as a barrier, they also found that addressing such barriers by the groups brought them closer as they continued to work together. The challenges from the observations and informal conversations with the student groups, were around attitudes and perceptions of GWL, poor communication, punctuality and time related matters, access to venues,

assessment, group dynamics and participation and cooperation. Lessons learnt from the experiences of GWL by students related to social relations, dealing with group dynamics, intrapersonal relations, interpersonal relations, confidence and self-perception. Other studies made similar findings regarding some of the challenges referred to in this study. Examples are, poor communication and punctuality (Hammar Chiriac, 2014; Petersen & Petker, 2017); Assessment (Burdett, 2003; Fellenz, 2006; Mamas, 2019) and group dynamics (Thondlhana & Belluigi, 2014; Arumugam et al., 2013).

### **6.3 RECOMMENDATIONS**

The recommendations that I make for the study in this section are based on the findings. Each one of the recommendations that follow will be linked to a specific finding.

#### **6.3.1 Intended/required learning**

Based on the finding that most of the intended learning was clear and relevant for each field or discipline, but focused mainly on academic content knowledge, I recommend as follows: Practitioners need to reflect on the learning outcomes and identify the skills required for that particular area of learning. While academic content knowledge is important, developing skills related to the discipline and those related to the process of working with others should also be developed. Skills to be developed should be as clearly articulated in the intended learning as much as the academic content knowledge is. Where possible, the values and attitudes to be developed during the GWL experience should also be clearly explained.

#### **6.3.2 Use of elements/essentials**

According to the conceptual framework, particularly within the context of cooperative learning, collaborative learning and team-based learning, it is of great essence that practitioners refer to some elements/essentials when they use GWL. Johnson, Johnson & Smith (2013), who are leading scholars in CL, strongly recommend that GWL practices should be underpinned by sound theories and guided by clear elements. Based on the finding that only one of the 8 participants referred to the use of GWL related models, I

recommend that practitioners acquaint themselves with GWL elements/essentials and the theories that underpin them and the rationality behind them. This will assist them to make informed decisions regarding the formulation of such elements/essentials that suit their contexts and disciplines. I do not recommend a rigid adherence to existing elements but am of the view that practitioners can formulate context specific relevant guidelines that will assist in addressing the challenges such as lack of accountability, low participation and conflict in the groups.

### **6.3.3 Group formation and group size**

Regarding group formation and group size, which is one of the most widely discussed aspects of GWL in existing literature, I recommend that practitioners decide on whether to use self-selected groups or lecturer selected groups, based on number of factors such as: the intended learning outcome, the nature of the task and the class size. In smaller classes, practitioners can decide on the group mix and can also use much smaller groups of 2-4 members, while in much larger classes, practitioners can use groups of 8-10. Groups exceeding 10 could be chaotic and could allow more room for freeriding and social loafing.

### **6.3.4 Communication of task instruction**

I found that task instructions were clearly communicated in two or more modes by all the participants and this allowed for all the students to access the information. I also found that the issue of task instruction was minimally discussed in the literature. I however recommend that clear task instruction be taken seriously particularly in very large classes. I also recommend that the task instructions be clarified in class to ensure that all students have a common understanding of what is required of them. Such clarity, I think, could minimize arguments and disagreements during task completion.

### **6.3.5 Measures for individual and group accountability**

Accountability in GWL remains a concern. Individual and group accountability are emphasized in all the manifestations of GWL used in this study as the core part of the conceptual framework. While the participants reported that they used accountability measures, it appeared that the measures they used were not quite informed and had

loopholes. This is evident in the fact that they report it as a major challenge, also that during the observations and informal conversations, I found that the student groups generated their own accountability measures. Several research studies on GWL, including the ones that conducted meta-analyses, still report individual accountability as a major challenge (Johnson & Johnson, 2014; Hammar Chiriac, 2014; Le et al., 2016; De Hei et al., 2016; Mamas, 2018). This is also evident in the fact that social loafing and freeriding, which are closely linked to accountability or rather lack thereof, remain areas of concern in the field of GWL. It is notable, however, that studies that particularly use TBL seem to experience less accountability problems and social loafing. I argue that this is because TBL requires individual preparatory learning, which is even tested before the students begin with the group discussions and completion of the task.

Based on the findings of the study and the points I have raised in the section above, I recommend that practitioners prepare student groups for group work learning and require of them to work thoroughly on the task individually following all the instructions before they work together in groups. The student groups should also provide or attach some written proof of the stages they underwent in the form of reflective notes, journal entries by both individuals and the whole group in their final submission. These measures, particularly the preparatory phase will ensure that each student has gone through the task. The phase where the students learn together would then add more value to what has already been learnt. During the GWL phase, things become clearer for some students, diverse ideas are be shared and each group member will have something to contribute because they shall have done the task individually.

I also recommend layering of assessment as applied by one of the participants. Where possible, a grade should be given for individual effort and for group effort, particularly where presentations are made in more manageable group sizes. This layering of assessment is also recommended in literature, because mark allocation during GWL has been reported as a sore point for many students and a cause for conflict. Students are often disgruntled with the fact that some group members earn high group marks while they had not contributed much. I note, however, that the layering of assessment will be challenging for practitioners with large classes.

Based on the findings by (Armien & Le Roux, 2010), and what I found in this study during observations, I recommend that practitioners also draw from the ideas and experiences of the students themselves in order to establish effective accountability measures during GWL.

### **6.3.6 Need and possibilities for improvement**

Based on the findings of the study, I recommend that practitioners constantly reflect on each GWL experience they have with their student groups, identify and note what needs to be improved as a matter of practice. I also recommend that practitioners ask for feedback from their student groups based on student reflections. Such an exercise can assist them to improve their practices as they continue to use GWL as a pedagogy. I also recommend that practitioners also read studies on GWL to see how other practitioners address problems.

### **6.3.7 Role allocation/Roles fulfilled**

Roles were not allocated to members of student groups even in those groups that were formed by the lecturers. This is evident in the fact that 6 of the 8 group leaders volunteered to lead the groups. It also shows in the fact that several groups allocated roles for each other themselves. I recommend that practitioners allocate roles or advise them to allocate roles that are task related so that they all learn. Some of the roles such as scribe, searching for materials and making copies are not task related. Roles such as reading the materials, summarizing the key points, analyzing the content or materials, consolidating the submissions by group members, in my view, are likely to improve academic learning and develop skills.

### **6.3.8 The use of language**

I found that students used English together with other languages that they were familiar with or were their first languages. Code switching was used a lot. I think the use of language is highly dependent upon the context within which GWL takes place. In multicultural settings such as in the study by Popov et al. (2012), students may find it almost impossible to code switch, while in a study like that of Armien & Le Roux (2012) students were able to code switch because most of them spoke the same language and

all of them knew Xhosa as a language. Armien & Le Roux (2010) found the use of the language known to the students, as an advantage because they could explain concepts to each other that were not understood in class. I recommend that practitioners advise students on language use based on the context. If the students in the group do not know each other's first languages, they should be encouraged to stick to the language of learning which would be common to all members in the group

### **6.3.9 Punctuality**

Punctuality has been reported as a matter of concern in other studies. During the observations I found that in several of the groups, punctuality was a problem. Some of the group members arrived late when the discussions and activities had already begun. This meant that they had missed on some aspects of the discussion. Such members would still be marked as present and their late arrival would not be captured. This is something that the practitioners may never get to know which has a negative impact on GWL. I recommend that the attendance registers be used and should capture arrival time as well. If journal entries and reflection notes are written at the end of the task, such irregularities could come to the attention of the practitioners and they could find ways to address them

### **6.3.10 Participation during group discussions**

During the observations, I noted that the level of participation among members differed from group to group. In some groups all the members would respond to questions and make contributions, while in others one or two members would remain silent and inactive for most of the time. I recommend that roles be allocated to all members even if it is in pairs. Practitioners should also design instruments that would encourage participation. For example, if group members are required to write short reflections on the contributions they made during each meeting and other related matters, and such reflections would be checked by other group members and signed for, this might help to encourage participation during discussions. It is imperative for group members to participate maximally because if they do not, the other group members will not identify their challenges, and their ideas will not come to the fore.

### **6.3.11 Challenges and lessons learnt**

The participants reported on several challenges such as accountability, poor participation, group dynamics, language proficiency, poor or irregular attendance and class size. Some of the challenges are rather difficult to address and require an extra effort from the practitioners. Examples are class size and language proficiency. I recommend that challenges such as accountability, poor participation, and group dynamics be addressed through preparation of students for group work, regulatory and reflection instruments as well as a fair amount of monitoring as well as support. If the GWL practices are properly guided and structured with group work learning activities that are clearly articulated the challenges experienced could be minimized.

As I communicated with the student groups, I was prompted to find out from them what lessons they learned through their GWL experiences given the several challenges they reported. The student groups reported on several lessons they learnt that were mostly related to social skills and not task related matters. Do not make any recommendations on lessons learnt as it emerged as additional information during the observations.

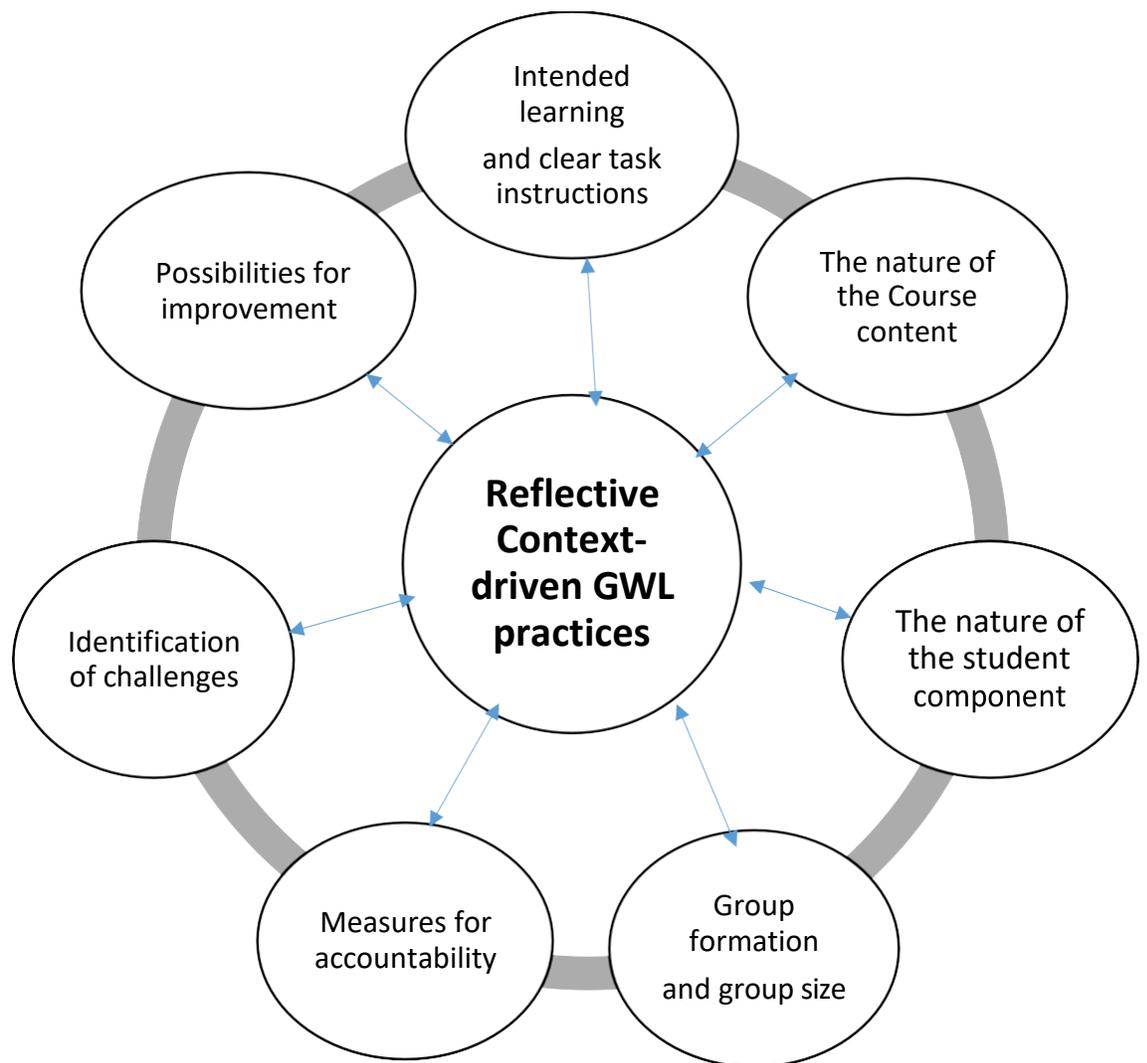
### **6.4 PROPOSED APPROACH**

The study found that the practitioners who were participants in the study did not use or refer to any elements/essentials to inform their group work learning practices and that accountability measures used had loopholes that allowed for freeriding, social loafing and uneven participation. The study further found that lack of accountability, poor participation and group dynamics were reported as major challenges by the participants. Based on the findings, I thus propose a guided, contextual approach to GWL, that is cyclic in character, provides a rationale for choices made, measures put in place, is underpinned by some theories/models/elements/principles/guidelines of GWL, and, places the practices at the center of the process. An approach that also connects the practices to the contexts within which the GWL experiences occur with clear intended learning outcomes, inclusive of skills values and attitudes.

The proposed approach also reflects clear task instructions, clear measures to foster accountability; group formation and group size based on a clear rationale as well as continuous reflection on the process with a view to improving and refining the practices. Such an approach, in my view is likely to provide the student groups with some framework on how to learn together and complete their tasks/assignments and projects in a manner which is accountable.

I present the following as a diagrammatic representation of the proposed approach for GWL within the context of this study

**Diagram 6.1: Proposed approach**



According to this proposed model for group work learning, the practices are placed at the center of the model alongside the context and the rationale which influence the practices. The different contexts within which the group work learning practices took place in the study, are determined by factors such as class size, the nature of the discipline or field and the cultural nuances. The rationale for using group work learning as a pedagogy also has an influence on the practices within the different faculties and schools or departments.

The central blocks of the approach/model are then related to the components that circulate around them and inform how the practices should unfold. According to the model, the first component comprises the intended learning outcomes which should be clearly articulated in terms of knowledge to be learnt, skills to be developed and values and attitudes to be inculcated during the learning process. Coupled with this are clear task instructions. The study found that while the task instructions were clear in almost all the cases in the study, most of the intended learning focused on knowledge acquisition and least on values and attitudes.

A set of elements/essentials for group work learning are an essential tool for good practice. They provide some theoretical base for conducting group work learning experiences in different contexts and at different levels. These are not cast in stone and can be generated by practitioners, ideally from an informed position. Group formation and group size come through in literature as essential for group work learning practices. Practitioners are required to always provide a rationale for forming groups in a particular manner and group size. It is not just a random exercise as it has a bearing on how the learning unfolds and students interact and relate. A key element that forms part of group work learning in different forms is accountability. Both individual and group accountability. It is imperative for each student to emerge from the group work learning experience having learnt all that was intended in the learning experience. It is also essential for the group members to work together in a manner that will be supportive of each other's learning. Poor accountability measures are very likely to result in conflict, social loafing and freeriding.

This study found that the measures put in place for accountability had loopholes. The proposed approach also recommends that practitioners constantly reflect on the challenges they experience when employing group work learning for the improvement of future practices. Reflecting on the challenges could assist them to identify areas that need to be improved and come up with ways to improve them. Preparation of student groups for group work learning emerges as an important aspect of good practice in literature. It is seen as measure that could be used minimize negative aspects such as conflict, passiveness, dominance and poor attendance, amongst others. The proposed model recommends group preparation as an initial phase in the group work learning process. A phase that could lead to the process unfolding in a cyclic interconnected manner.

## **6.5 CONTRIBUTIONS OF THE STUDY**

The study explored and described how practitioners at the University of Limpopo practiced group work learning as a pedagogy. The study looked at what the intended/required learning was, how the task instructions were communicated. What elements/essentials that inform GWL were used, how groups were formed and what the group size was, what measures were used to foster accountability, what the possibilities for improving the current practices were and what challenges were experienced during this session of GWL. Based on the findings, the study culminates in providing a proposed approach for GWL within the context of the study. The approach argues for the careful consideration of the context in relation to all the elements of GWL. It considers the context of the intended learning in terms of specified knowledge skills, values and attitudes. The context of the learning content of the course/module. If students are learning together independently in a group, it is imperative to think about how practical it is to learn what they are required to learn in a group. If, for example they are required to produce a computer programme, how possible is it to do so in a group of ten members? How different would the context be from a situation where they would be working on a research project in a language course, for example? This has to do with how the groups are formed and what size the group is. Another important factor to consider with regards to context is, who are these students? What are their language differences? What is their gender? How do they relate? This is captured in the model by Tuckman (1985). All these different

factors are context related and could lead to good informed practices of GWL by practitioners.

The model also has implications for tertiary education. It can prompt GWL practitioners to reflect on their own practices and find ways to improve on how they use GWL by looking at variables depicted on the model

Students will also function better as groups if they understand why they are grouped in a particular manner, what it is that they are required to learn and why, what their contexts mean for their learning and why they should each remain accountable for their final group product. Students will also directly or indirectly contribute towards the refinement of the practice if there is open communication regarding the task at hand.

The context of accountability is also important? What are they accountable for? What measures are in place to foster accountability in the individual member and in the group? How have these measures of fostering accountability been communicated to the student groups? The physical context of learning in groups is also a basic consideration. How available are learning spaces for the student groups? How safe and conducive are these learning spaces? Do all these students stay around the same place? Do some stay on campus while other stay about 25 kilometers away from campus? All these factors have implications for the functionality of the group and need to be considered by the practitioners when they set up the groups. The findings and reflections made in this study, together with the proposed approach, have the potential to assist other practitioners to reflect on their own practices with a view to improving them. Reflective practice is also an important approach to incorporate into GWL practices. The proposed approach suggest that practitioners should use models or instruments that will enable them to consciously reflect on their GWL experiences and how to improve them. Reflective practice will assist practitioners to think of how to address punctuality, conflict between group members, social loafing and free riding, conflict based on gender differences, language differences, ethnic differences and poor relations between some group members.

The study also makes a methodological contribution by using informal student conversations which are rarely used in GWL studies, as opposed to the more formal focus

group interviews. The informal student conversations allowed for a freer communication environment and spontaneous responses regarding how the groups operated during the completion of the task.

## **6.6 LIMITATIONS OF THE STUDY**

The study focused on all four (4) faculties of the University of Limpopo and sampled/selected eight (8) lecturer participants, and 8 student groups who were students of the same lecturer participants. This is a limited target population of both the lecturer participants and the student groups. The lecturer participants and student groups in the study may not be representative of all the lecturers and student groups in the University of Limpopo. The findings can therefore not be generalized beyond the selected participants and their student groups. The honors lie with the reader to decide on the relevance of the findings to their context and setting.

## **6.7 RECOMMENDATIONS FOR FURTHER STUDIES**

The following views deserve further investigation the limited scope of the study, a more comprehensive study which includes all the schools from within the four faculties could be conducted. A survey study which sampled from the total population and was more inclusive could be conducted. There is a need for further investigation into what the rationale is regarding all the decisions taken when a group work learning experience is explored. The study found that accountability, participation and group dynamics were a challenge during GWL A study could be done to explore how the challenges experienced in GWL could be addressed from a students' perspective. Amongst the findings, lecturers did not use elements/essentials recommended for use in GWL models. Action research studies could be conducted to create awareness among practitioners, of the need to use GWL based on sound theories or models guided by relevant elements/essentials.

## **6.8 CONCLUDING REMARKS**

This study aimed at investigating and reflecting on the GWL practices at the University of Limpopo with regards to intended learning, element/guidelines/principles used, group formation and group size, task instruction, accountability measures, improvement and

challenges. The findings, conclusions and proposed approach of this study, serve as a premise for the use of GWL with a view to addressing the challenges experienced by both practitioners and students.

## REFERENCES

- Alharbi, N.M., Athauda, R.I., & Chiong, R. (2018) Empowering collaboration in project-based learning using a scripted environment: lessons learned from analyzing instructors' needs. *Technology, Pedagogy and Education*, 27(3), 381-397.
- Alwahibee, K.M. (2018). Effectiveness of cooperative learning in teaching English as an elective course for non-specialized students. *Journal of Emerging Trends in Educational Research and Policy Studies (JETERAPS)*, 9(6): 272-281
- cognitive change by social conflict". *Developmental Psychology*, 18, 894-897.
- Ambady, K.G. (2018). Reflective practices in teaching: Profession and professionalism. NCERT: RIEM.
- An, H., Kim, S., & Kim, B. (2008) Teacher perspectives on online collaborative learning: Factors perceived as facilitating and impeding successful online group work. *Contemporary Issues in Technology and Teacher Education*, 8(1). Retrieved from <http://www.citejournal.org/vol8/iss4/general/article1.cfm>.
- Andrews, J. (2001). Group work's place in social work: A historical analysis. *Journal of sociology and social welfare*. [www.findarticles.com/p/articles](http://www.findarticles.com/p/articles)
- Armien, M.N. & Le Roux, K. (2010). Student perspectives on group work in support of the learning of mathematics at high school and at a university of technology. *African Journal of Research in MST Education*, 14(2), 42-55.
- Arthur, J., Waring, M., Coe, R. & Hedges, L. (Eds) (2013). *Research methods and methodologies in education*. London: Sage.
- Arumugam, N., Rafik, G.S., Mello, G.D., & Dass, L.C. (2013). Cultural influences on group learning in an ESL classroom. *Review of European Studies*, 5(2), 81-89.
- Baker, M.J. (2015). Collaboration in collaborative learning. *Interaction Studies: Social*

- Behavior and Communication in Biological and Artificial Systems*, 16(3), 451-473.
- Baloche, L., & Brody, C.M. (2017). Cooperative learning: Exploring challenges, crafting innovations. *Journal of Education for Teaching*, 43(3), 274-283.
- Barkley, E. F., Major, C. H., & Cross, K. P. (2014). *Collaborative learning techniques: A resource for college faculty* (2nd ed.). San Francisco, CA: Jossey-Bass.
- Baxter, P. & Jack, S. (2008). Qualitative case study methodology: Study design and implementation for novice researchers. *The Qualitative Report*, 13(4), 544- 559.
- Belward, S.& Balatti, J. (2012). *Doing it differently: the ups and downs of peer group learning*. In: Mathematics Education: expanding horizons, pp. 839-842. From: 35th Annual Conference of the Mathematics Education Research Group of Australasia, 2–6 July 2012, Nanyang Technological University, Singapore.
- Bolton, G. (2010). *Reflective practice: writing and professional development* (3rd ed.). Los Angeles: Sage Publications.
- Brame, C.J. & Biel, R. (2015). Setting up and facilitating group work: Using cooperative learning groups effectively. Retrieved [1 May 2020] from <http://cft.vanderbilt.edu/guides-subpages/setting-up-and-facilitating-group-work-using-cooperative-learning-groups-effectively/>.
- Brindley, J. E., Walti, C., & Blaschke, L. M. (2009). Creating effective collaborative learning groups in an online environment. *International Review of Research in Open and Distance Learning*, 10(3), 1–18.
- Burdett, J. (2003). Making groups work: University students' perceptions. *International Education Journal*, 4(3), 177-191.

- Burke, A. (2011). Group work: how to use groups effectively. *The Journal of Effective Teaching*, 11(2), 87-95.
- Capdeferro, N. & Romero, M. (2012). Are online learners frustrated with collaborative learning experiences? *The International Review of Research in Open and Distributed Learning*, 13(2), 26-44.
- Cevik, A.P., Elzubeir, M. Abuzidan, F.M. & Shaban, S. (2019). Team-based learning improves knowledge retention in an emergency medicine clerkship, *International Journal of Emergency Medicine*, 12(6).
- Chen, C.M. & Kuo, C.H. (2019). An optimized group formation scheme to promote collaborative problem-based learning. *Computers & Education*, 133, 94-115.
- Cochran-Smith, M. & Lytle, S. L. (1999). "Relationships of knowledge and practice: teacher learning in communities". *Review of Research in Education*, 24(1), 249–305.
- Coetzee, I.M. Heyns, T., Botma, Y., van Rensburg, G.H. (2018). Collaborative learning: Key considerations for nurse educators. *Gender Behaviour*, 16(3), 12111-12117.
- Cohen, L., Manion, L. & Morris, K. (2011). *Research methods in education* (7<sup>th</sup> edition) London: Routledge Falmer.
- Corbin, J. & Strauss, A. (2015). *Basics of qualitative research: Techniques and procedures for developing grounded theory*. London: Sage.
- Creswell, J.W. (2003). (2<sup>nd</sup> edition). *Research design: Qualitative, quantitative and mixed method approaches*. London: Sage Publications.
- Creswell, J.W. (2009) *Research design: Qualitative, quantitative and mixed methods approaches* (3<sup>rd</sup> ed.). Thousand Oaks: Sage publications.

- Creswell, J.W. (2013). *Qualitative inquiry and research design: Choosing among five approaches*. Los Angeles: Sage publications.
- Criticos, C., Long, L., Mays, T. Moletsane, R., Mthiyane, N. Grosser *Getting Practical: A guide to teaching and learning*, M. & De Jager, L. (2012). (3<sup>rd</sup> Ed). Cape Town: Oxford University Press Southern Africa.
- Criticos, C., Long, L., Mays, T. Moletsane, R., Mthiyane, N. Grosser, M. & De Jager, L. (2014). (4<sup>rd</sup> Ed). *Getting Practical: A guide to teaching and learning*. Cape Town: Oxford University Press Southern Africa.
- Davidson, H. & Major, C.H. (2014). Boundary crossings: Cooperative learning, collaborative learning and problem-based learning. *Journal on Excellence in College Teaching*, 25(3&4), 7-55.
- De Jong, T., Cullity, M., Haig, Y., Sharp, S., Spiers, S. & Wren, J. (2011), Enabling Group-Based Learning in Teacher Education: A Case Study of Student Experience. *Australian Journal of Teacher Education*, 36(5), 92-105.
- De Hei, M.S.A., Strijbos, J.W., Sjoer, E., & Admiraal, W. (2015). Collaborative learning in HE: Lecturers' practices and beliefs. *Research Papers in Education*, 30(2), 232-247.
- Denzin, N.K. & Lincoln, Y.S. (eds). (2008). *The Landscape of qualitative research*. California: Sage Publications.
- Dewey, J. (1938). *Experience and education*. New York: Collier Books.

- Drury, H., Kay, J. & Losberg, W. (2006). *Student satisfaction with group work in undergraduate computer science: Do things get better?* Learning Center, School of Information Technologies and Yoorang Garang: *The School of Indigenous Health Studies*, University of Sydney, Australia. College.
- Elliot, S.N., Kratochwill, T.R., Littlefield, C.J. & Travers, J (2000). *Educational Psychology: Effective teaching, effective learning*. (3<sup>rd</sup> ed). Boston, MA: McGraw-Hill.
- Farland, M.Z., Sicat, B.L., Franks, A.S., Pater, K.S. Medina, M.S., & Persky, A.M. (2013). Best Practices in implementing TBL in pharmacy education: The seven core elements of team-based learning. *American Journal of Pharmaceutical Education*, 77(8).
- Fearon, C. McLaughlin, H. & Eng, T.Y. (2012). Using student group work in Higher education to emulate professional communities of practice. *Education & Training*, 54(2/3), 114-125.
- Fellenz, M.R. (2006). Towards fairness in assessing student group work: A protocol for peer evaluation of individual contributions. *Journal of Management Education*, 30 (4), 570-591.
- Fenwick, L. & Cooper, M. (2013). Learning about the effects of context on teaching and learning in in pre-service teacher education. *Australian Journal of Teacher Education*, 38(3).
- Fox, R. (2001). Constructivism examined. *Oxford review of education*, 27(1), 23-25.
- Giri, V., Ambady, K.G. & Paily, M.U (2018). Being facilitator: Fostering intrapersonal intelligence through reflective practices. *International Journal of Innovative Research Explorer*, 5(4), 265-269.

- Good, R. (1991). Context in teaching and learning. *Journal of Research in Science Teaching and Learning*, 28(10), 883-884.
- Green, H.E. (2014). Use of theoretical and conceptual frameworks in qualitative research. *Nurse Res.* 21(6):34-8. doi: 10.7748/nr.21. 4. 6.3e1252
- Greetham, M. & Ippolito, K. (2018). Instilling collaborative and reflective practice in engineers: Using a team-based learning strategy to prepare students for working in project teams. *HE Pedagogies*, 3(1), 510-521.
- Gregory, R. & Thorley, L. (2013). *Using group-based learning in HE*. London: Routledge
- Gross Davis, B. (1999) "Cooperative Learning: Students Working in Small Groups" in *Speaking of Teaching: Stanford University Newsletter on Teaching* ,10(2) 1-4.
- Gross Davis, B. (2009). Tools for teaching. San Francisco: Jossey Bass Publishers.
- Hall, D. & Buzwell, S. (2012). The problem of freeriding in group projects: Looking beyond social loafing as reason for non-contribution.
- Hammar Chiriac, E. (2014). Group work as an incentive for learning: Students' experiences of group work. *Front Psychology*; 5: 585: Jun 5. Doi: 10.3389/fpsyg.2014.00558 Published online 2014. Learning experiences? *The International Review of Research in Open and Distance learning*, 13(2), 26-44.
- Hassanien, A. (2006). Student experience of group work and group assessment in higher Education. *Journal of Teaching in Travel & Tourism*, 6(1), 17-39.
- Henn, M, Weinstein, M & Foard, N. (2009). A critical introduction to social research (2<sup>nd</sup> ed). London: Sage.
- Hennebry, M.L. & Fordyce, K. (2018) Cooperative learning

on an international masters, *HE Research & Development*, 37(2), 270-284,

DOI:10.1080/07294360.2017.1359150

Hertz-Lazarowitz, R. (2014). *Interaction in cooperative groups*. London: Cambridge University Press.

Hesse-Biber, S.N., & Leavey, P.L. (2011). *The practice of qualitative research*. London: SAGE Publications.

Hodges, L.C. (2017). *Ten research-based steps for effective group work*. Idea paper #65 University of Maryland Baltimore County.

Imenda, S. (2014). Is there a conceptual difference between theoretical and conceptual frameworks? *Journal of Social Sciences*,38(2), 185-195.

Johnson, D.W. & Johnson, R.T. (2009). An educational Psychology success story: Social interdependence theory and cooperative learning. *Educational Researcher*, 38(50),365-379.

Johnson, D.W., Johnson, R.T. & Smith, K.A. (2013). Cooperative learning: Improving university instruction by basing practice on validated theory. *Journal of Excellence in University Teaching*,

Johnson, D.W., & Johnson, R.T. (2014). Cooperative learning: Improving university instruction by basing practice on validated theory. *Journal of Excellence in College teaching*, 25 (3&4), 85-118.

Kelemba-vita, K. (1977). *Black civilization and education*. Paper presented at the Second world black festival of arts and culture, Lagos, Nigeria

- settings. *Journal of Management Education*, 17(2), 253-259.
- Khoja, S. A. Sana, F. Abid, K. and Rehman, A. A. (2009). Implementing Constructivist Pedagogical Model in Dynamic Distance Learning Framework, *Wireless Networks, Information Processing Systems, Comp. Info. Sci*,20, 191-201.
- Kolb, A.Y. Kolb, David A. (2005). "Learning styles and learning spaces: enhancing experiential learning in higher education". *Academy of Management Learning and Education*, 4(2), 193–212.
- Kuhn, T.S. (1970). *The structure of scientific revolutions*. Chicago. University of Chicago Press.
- King, H. (2016). Learning spaces and collaborative work: Barriers or supports? *Higher Education Research and Development*, 35(1), 158-171.
- Kriflik, L. & Mullan, J. (2007). Strategies to improve student reaction to group work. *Journal of University Teaching & Learning Practice*, 4(1), 13-27.
- Laal, M. & Ghodsi, S.M. (2012). Benefits of collaborative learning. *Procedia- Social and Behavioural Sciences*, 31, 486-490.
- Laal, M. (2013). Collaborative learning; Elements. *Procedia- Social and Behavioural Sciences*, 83, 814-818.
- Lange, C., Costley, J., & Han, S.E. (2016). Informal cooperative learning in small groups: The effect of scaffolding on participation. *Issues in Educational Research*, 26(2), 260-279.
- Le, H., Janssen, J., & Wubbels, T. (2016). Collaborative learning practices: Teacher and

- student perceived obstacles to effective student collaboration. *Cambridge Journal of Education*, 48(1), 103-122.
- Lin, W.S., Wang, Y.J., & Chen, H.R. (2018). A study of crowd collaborative learning: "An empirical study". *Library Hitech*, <https://doi.org/10.1108/LHT-01-2018-0016>.
- Lincoln, Y.S. & Guba, E.G. (2000). Paradigmatic controversies, contradictions and emerging confluences. In Y.S. & E.G. Guba (Eds.). *Handbook of qualitative research* (pp163-188). Thousand Oaks, CA: Sage. *methodologies. Issues in Educational Research*, 16(2), 193-205.
- LoSavio, S.T., Dillon, K.H. Murphy, R.A, Goetz, K. Houston, F. & Resik, P.A. (2019). Using a learning collaborative model to disseminate cognitive processing therapy to community-based agencies. *Behavior Therapy*, 50, 36-49.
- Lund, T.J. & Stains, M (2015). The importance of context: An exploration of factors influencing the adoption of student-centered teaching among chemistry, biology, and physics faculty. *International Journal of STEM Education*, 2(13), 2-21.
- Malatji, K.S. (2016). Moving away from rote learning in the university classroom: The use of cooperative learning to maximise students" critical thinking in a rural university of South Africa. *Journal of Communication*, 7(1), 34-42.
- Ma, S. & Njeru, S. (2016). The impact of culture (individualism & collectivism) on identified Multicultural group work challenges. Masters study Linnaeus University, Faculty of Health and Life Sciences, Department of Psychology.
- Mamas, C. (2018). Exploring peer relationships, friendships and group work dynamics in HE: applying social network analysis. *Journal of Further and HE*, 42 (5), 662-677.
- Maxwell, J. A. (2013). *Qualitative research design: An interactive approach* (3rd ed.). Thousand Oaks, CA: Sage.
- May, M. & Doob, L. (1937). *Cooperation and competition*. New York. Social Sciences Research Council.

- McCrea, R., Neville, I., Rickard, D., Walsh, C., Williams, D. (2016). *Facilitating group work: A guide to good practice*. Dublin: Dublin Institute of Technology.
- Mckeown, R. (2011). Using rubrics to assess student knowledge related to sustainability: A practitioner's view. *Journal of Education for Sustainable Development*, 5(1), 61-74.
- McLeod, S. A. (2019, July 17). *Constructivism as a theory for teaching and learning*. Simply Psychology. <https://www.simplypsychology.org/constructivism.html>
- Mentz, E. & Goosen, L. (2007). Are groups working in the information technology class? *South African Journal of Education*, 27 (2), 329-343.
- Merriam, S.B. (1998). *Qualitative research and case study applications in education*. San Francisco. Jossey-Bass.
- Michaelsen, L.K. & Richards, B. (2005). Drawing conclusions from the team learning *Literature in health-sciences education: a commentary". Teaching and Learning in Medicine*. 17(1), 85–88.
- Michaelsen, L.K. & Sweet, M. (2008). The essential elements of team-based learning. *New Directions for Teaching and Learning*, 116, 7-28.
- Michaelsen, L.K. Sweet, M. & Parmalee, D. 2009. Literature in health sciences education: A commentary. *Teaching & learning in medicine: An International Journal*, 17(1), 85-88.
- Michaelsen, L.K. & Sweet, M. (.2011). Team-based learning. *New Directions for Teaching and Learning*, 128, 41-51.
- Michaelsen, L.K., Davidson, N. Major, C.H. (2014). Team-based learning practices

- and principles in comparison with cooperative learning and problem-based learning. *Journal on Excellence in College Teaching*, 25(3&4), 58-84.
- Middlehurst, R. Cross, M. Jeannin, L. (2018). Job-embedded, collaborative and reflective professional development for university administrators: The action learning pedagogy. *South African Journal for HE*, 32(1), 162-177.
- Mthiyane, N. (2014). Cooperative learning as an innovative strategy in the teaching of life orientation education: experiences of PGCE pre-service students. *Alternation*, 21(1), 137-152.
- Nafziger, R., Meseke, J.K. & Meseke, C.A. (2011). Collaborative testing: The effects of Group formation process on overall student performance. *The Journal of Chiropractic Education*, 25 (1), 11-15.
- Neo, M. (2005). Engaging students in group-based cooperative learning: A Malaysian perspective. *Educational Technology and Society*, 8(4), 220-232.
- Newsome, B.O. (2016). *An introduction to research analysis and writing*. Los Angeles: Sage.
- O'Connor, H. & Gibson, N. (2003) A step by step guide to qualitative analysis. Pimatziwin: *A Journal of Aboriginal and Indigenous Community Health*, 64-90.
- Onrubia, J., Rochera, M.J., & Engel, A. (2015). Promoting individual and group regulated learning in collaborative settings: An experience in HE. *Electronic Journal of Research in Educational Psychology*. 13(1) ,189-210.
- Opdecam, E. & Everaert, P. (2018). Seven disagreements about cooperative learning.

*Accounting Education*, 27(3), 223-233.

Otienoh, R.O. (2015). Implementation of Pair Work and Group Work for Creation of

Interaction opportunities for Learners in Large Classes: The viability of the two strategies. *Journal of Education and Practice*, 6(10), 171-179.

Panitz, T. (1999). *Collaborative versus Cooperative Learning: A Comparison of the Two*

Concepts Which Will Help Us Understand the Underlying Nature of Interactive Learning. Cape Cod Community College, peninsula, Massachusetts; USA.

Retrieved 30 Sept 2014, from: [http://home.capecod.net/~](http://home.capecod.net/~tpanitz/tedsarticles/coopdefinition.htm)

[tpanitz/tedsarticles/coopdefinition.htm](http://home.capecod.net/~tpanitz/tedsarticles/coopdefinition.htm).

Park, S.E., Salihoglu-Yener, E., & Fazio, S.B. (2018). Use of team-based learning

pedagogy for pre-doctoral teaching and learning. *European Journal of Dental Education*, 23, e32-e36.

Petersen, N. & Petker, G. (2017). Teacher education students' struggles with group

work in service learning. *South African Journal of Childhood Education*, 7(1), 1-18.

Popov, V., Brinkman, D., Biemans, H.J.A., Mulder, M., Kuznetsov, A. & Noroozi, O.

(2012). Multicultural student group work in HE: An explorative case on challenges as perceived by students. *International Journal of Intercultural Relations*, 36(2), 302-317.

Punch, K.F. (2005). *Introduction to social research: Quantitative and qualitative approaches* (2<sup>nd</sup> ed.). London Sage.

Raubenheimer, D & Nel, M.M. (2012). Guidelines for group work in an undergraduate

programme. *Journal for New Generation Sciences*, 6(1), 82-96.

- Reissmann, C.K. (2008). *Narrative methods for the human sciences*. London: Sage.
- Riebe, L. Girardi, A. & Whitsed, C. (2016). A systematic literature review of teamwork pedagogy in HE. *Small Group Research*, 47(6). 619-664.
- Roberts, T.S. & McInerney, J.M. (2007). Seven problems of online group work Learning (and their solutions). *Educational Technology & Society*, 10(4), 257-268.
- Rule, P., & John, V. (2011). *Case study research*. Pretoria: Van Schaik Publishers
- Saputra, M.D. Joyoatmojo, S. Wardani, D.K. Sangka, K.B. (2019). Developing critical thinking skills through the collaboration of jigsaw model with problem-based learning model. *International Journal of Instruction*, 12(1), 1077- 1094.
- Schon, D.A. (1983). *The reflective practitioner: How professionals think in action*. New York: Basic Books
- Schwab, J.J. (1969). The practical: A language for curriculum. *The School Review*, 78(1), 1-23. Published by: The University of Chicago Press Stable URL: <http://www.jstor.org/stable/1084049> Accessed: 25-07-2016 08:52 UTC.
- Schulte, P.L. (1996). A definition of constructivism. *Science Scope*, 20(6), 25-27.
- Sharan, Y. (2010). Cooperative learning for academic and social gains: valued pedagogy, problematic practice. *European Journal of Education*, 45(2), 300 – 313.
- Siltala, R. (2010). *Innovativity and cooperative learning in business life and teaching*. University of Turku.
- Silverman, D. (2006). (3<sup>rd</sup> edition) *Interpreting qualitative data*. Thousand Oaks California: Sage Publications.
- Silverman, D. (2014) (4<sup>th</sup> Edition). *Interpreting qualitative data*: Los Angeles: Sage.
- Sinkovics, R., Pentz, P., & Ghauri, P. (2005), "Enhancing the trustworthiness of

*qualitative research in international marketing,” Management International Review, 48 (6), 689-714.*

Stake, R.E. (1995). *The art of case study research*. Thousand Oaks, CA: SAGE Publications.

Struass-Keevy, M. (2015). Using collaborative learning exercises to transfer pervasive skills: Some South African evidence. *Contemporary Issues in education Research, 8(2), 79-92.*

Summers, M. & Volet, S. (2008). Students’ Attitudes Towards Culturally Mixed Groups on International Campuses: Impact of Participation in Diverse and Non-Diverse Groups. *Studies in HE, 33(4), 357-370.*

Swanson, E., McCulley, L.V., Osman, D.J., Scammacca, L., N. & Solis, M. (2019). The effect of team-based learning on content knowledge: A meta-analysis. *Active Learning in HE, 20(1), 39-50.*

Sweet, M. & Michaelsen, L.K. (2012). *Team-based learning in the social sciences and humanities*. New York: Stylus Publishing.

Taylor, C.A. (2004). *Cooperative learning in an African context*. University of Port Elizabeth South Africa. 239-253 In: Shwalb, B.J. & Shwalb, D.W. (eds). (2004). *Cooperative learning in cultural contexts*.

Terreblanche, M., & Durrheim, K. (2002). *Research in practice: Applied methods for the social sciences*. Cape Town: University of Cape Town Press Singapore: Sage.

Terreblanche, M., & Durrheim, K. (2014). *Research in practice: Applied methods for the social sciences*. Cape Town: University of Cape Town Press Singapore: Sage.

Tessmer, M. & Richey, R. E. (1997). Ready to learn instructional design. Technology

- Research and Development, 45(2), 85-115.
- Thomas, G. (2014). How to do your case study: A guide for students & researchers.
- Thomson, K. & Trigwell, K.R. (2016). The role of informal conversations in developing *university teaching? Studies in Higher Education*, 43(2), 1-12.
- Thondlhana & Belluigi, G. (2014). Group work as “terrains of learning” for students in South African HE. *Perspectives in Education*, 32(4), 50-55.
- Väljataga, T. and Laanpere, M. (2010). Learner control and personal learning environment: a challenge for instructional design, *Interactive Learning Environments*, vol. 18(3), 277-291.
- van Rheede van Oudtshoorn, G.P. & Hay, D. (2004). Group work: A mismanaged evil or a potential good? *South African Journal of HE*, 18(2), 131-149.
- von Glasersfeld, E.V. (1974). Piaget and the radical constructivist *epistemology*. *Epistemology and Education*, 1-24.
- von Glasersfeld, E. (1994), A radical constructivist view of basic mathematical concepts: *Constructing mathematical knowledge: Epistemology and mathematics education*, 5-7
- Vygotsky, L. (1978). Mind in society: *The development of higher psychological Processes*. Cambridge, MA: Harvard University Press.
- Yavuzer, Y. & Dikici, A. (2006). The effects of cooperative learning on the abilities of pre-service art teacher candidates to lesson planning in Turkey. *Australian Journal of Teacher Education*, 31(2), 350-44.
- Yazan, B. (2015). Three approaches to case study methods in Education: Yin, Merriam and Stake. *The Qualitative Report*, 20(2), 134-152. Retrieved from <http://www.nova.edu/ssss/QR/QR/2/yazan1.pdf>.

Yin, R.K. (2002). 4<sup>th</sup> Edition. Case study research: Design and methods. Thousand Oaks, CA: SAGE Publications

Yin, R.K. (2009). Case study research: *Design and methods*. London: Sage

Yin, R.K. (2014). Case Study research: Design and methods. Singapore: Sage.

Yusuf, Q., Jusoh, Z., & Yusuf, Y. Q. (2019). Cooperative Learning Strategies to

Enhance Writing Skills among Second Language Learners. *International Journal of Instruction*, 12(1), 1399-1412. <https://doi.org/10.29333/iji.2019.12189a>

## LIST OF APPENDICES

APPENDIX A

APPENDIX B

APPENDIX C

APPENDIX D

APPENDIX E

APPENDIX F

APPENDIX G

## APPENDIX A ETHICAL CLEARANCE CERTIFICATE



**University of Limpopo**  
Department of Research Administration and Development  
Private Bag X1106, Sovenga, 0727, South Africa  
Tel: (015) 268 2212, Fax: (015) 268 2306, Email:noko.monene@ul.ac.za

### TURFLOOP RESEARCH ETHICS COMMITTEE CLEARANCE CERTIFICATE

**MEETING:** 03 March 2016

**PROJECT NUMBER:** TREC/20/2016: PG

**PROJECT:**

**Title:** Reflections on current practices of group work learning at the University of Limpopo, South Africa: Towards a refined contextual approach

**Researcher:** Ms MC Modipane

**Supervisor:** Prof MJ Themane

**Co-Supervisor:** N/A

**Department:** Education Studies

**School:** Education

**Degree:** PhD in Curriculum Studies

  
**PROF TAB MASHEGO**  
**CHAIRPERSON: TURFLOOP RESEARCH ETHICS COMMITTEE**

The Turfloop Research Ethics Committee (TREC) is registered with the National Health Research Ethics Council, Registration Number: REC-0310111-031

**Note:**

- i) Should any departure be contemplated from the research procedure as approved, the researcher(s) must re-submit the protocol to the committee.
- ii) The budget for the research will be considered separately from the protocol.  
PLEASE QUOTE THE PROTOCOL NUMBER IN ALL ENQUIRIES.



APPENDIX C CONSENT FORM

**CONSENT TO PARTICIPATE IN THE RESEARCH STUDY**

Name: I ..... hereby give consent to participate in the research study conducted by Ms M.C. Modipane entitled: A reflection on the current practices of GWL at the University of Limpopo: Towards a refined contextual approach.

I voluntarily agree to participate in the study.

Signed: .....

Date: .....

APPENDIX D INTERVIEW SCHEDULE

**REFLECTIONS ON CURRENT PRACTICES OF GWL AT THE UNIVERSITY OF LIMPOPO, SOUTH AFRICA: TOWARDS A REFINED CONTEXTUAL APPROACH**

RESEARCHER: MC MODIPANE

Interview schedule: Lecturer: (HULB)

(This was a pilot interview in preparation for the scheduled interviews)

HULB: *Good morning Mam it is my pleasure to assist...I think we can start...*

1. What do you want the students to learn during this group work session?
2. Do you refer to or use any guidelines, elements or principles for the group work activities you give to your students?
3. How do you apply or use the guidelines, elements or principles you referred for the group work activities or tasks you give to your students?
4. What is the size of the groups your students work in and who forms the groups?
5. Why do you use this group size?
6. How do you communicate your group tasks/activities instructions to your students
- .....
7. What measures do you take to encourage and promote accountability among your students during group tasks/activities?
8. Do you think there is a need to improve the manner in which you implement group work currently?

Yes, yes...I think there is room for improvement

9. What do you think you could do to improve on the manner in which you currently use group work?

10. What are the challenges you come across during the group work sessions?  
Kindly state all of them

APPENDIX E

OBSERVATION SCHEDULE

**REFLECTIONS ON CURRENT PRACTICES OF GWL AT THE UNIVERSITY OF  
LIMPOPO, SOUTH AFRICA: TOWARDS A REFINED CONTEXTUAL APPROACH**

RESEARCHER: MC MODIPANE

*Observation Schedule: student groups (HUGB)*

Items for observation	Notes and comments
1. What are you required to learn through this task? How are you going to be assessed?	
2. Instruction instrument/How was the task communicated to students?  Are there any guiding principles?	
3. Group formation and Group size	
4. Leadership role	
5. Medium of communication	
6. Accountability instruments used to ensure that each member contributes to the task	
7. Roles fulfilled by different member	
8. Group relations	

APPENDIX F GUIDE FOR INFORMAL CONVERSATIONS

1. What were you required to learn in this particular task/assignment? What are the task requirements?.....  
.....
2. How was the task communicated to you? What modes of communication were used?.....
3. Were you given any elements/principles/guidelines on how to complete the task?.....
4. If you were given elements/principles/guidelines, what were those guidelines?.....  
.....
5. How were your groups formed and what group size was recommended?.....  
.....
6. How was your group leader chosen?.....
7. What medium of instruction do you use during your discussions? Why?.....  
.....
8. What do you do to ensure that everyone in the group does the task and contributes meaningfully to the task at hand?.....  
.....
9. Based on your participation in the completion of this task/assignment, how do you perceive group work learning and what lessons did you learn from the experience?.....  
.....  
.....  
.....

APPENDIX G CONFIRMABILITY FORM

To: Prof/Dr/Mr/Ms.....CODED.....

From: Ms MC Modipane, School of Education

Subject: Confirmation of data on transcripts

Date : .....

Dear Study Participant

I hereby wish to humbly request you to go through the attached transcript on the study titled: *Reflections on current practices of group work learning at The University Of Limpopo, South Africa: Towards a refined contextual approach*, and make the necessary corrections/comments/additions where applicable. I have also included the observation transcripts.

1. To what extent do you agree with the contents of the transcript as a reflection of the interview I conducted with you on group work learning? Kindly explain.....
2. Are there any parts of the transcript that you think need to be corrected or edited? Kindly indicate.....
3. Are there any additional comments you would like to make regarding the information on the transcript? If in full agreement with the information on the transcript, kindly indicate and sign below.

.....

Signature    Date

I wish to once again heartily thank you for agreeing to participate in the study

.....