

**OPTIMISING STUDENT ACADEMIC SUPPORT IN OPEN DISTANCE LEARNING AT A  
TECHNICAL VOCATIONAL EDUCATION AND TRAINING COLLEGE**

by

**GOODWILL PHEZULU MBAMBO**

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PROMOTER: PROF. EC DU PLESSIS

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## STUDENT DECLARATION

I, *Goodwill Phezulu Mbambo* (student number 5401-936-2) declare that “**Optimising student academic support in open distance learning at a Technical Vocational Education and Training College**” is my own work and that all the sources I have used or quoted have been indicated and acknowledged by means of complete references. I further declare that I submitted the thesis to originality checking software and that it falls within the accepted requirements for originality.

I further declare that I have not previously submitted this work, or part of it, for examination at UNISA for another qualification or any other higher education institution.

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## DECLARATION BY SUPERVISOR

I, Prof EC du Plessis, declare that the dissertation has been submitted to originality checking software.



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## **DEDICATION**

I dedicate this thesis to my late parents, Zakhele Peter and Ntombizodwa Bertinah Mbambo.

## ABSTRACT

The purpose of this study was to describe and analyse factors of management and teaching for optimising the student academic support services in ODL in TVET colleges. This was achieved through evaluating factors that contributed to the lengthy period it took students to complete their qualifications. Being an empirical study, this involved a review of published studies and empirical data. The main findings constitute that the academic support services offered to students studying in various institutions of higher learning are neither efficient nor sufficient. The challenges facing students who study through distance learning in terms of support services can be circumvented through provision of comprehensive support which includes academic, psychological, financial, exit, career related support among others.

In the process of collecting and analysing data, the mixed methods approach was used. Semi-structured interviews were conducted with selected TVET college staff members involved in lecturing, administration, and management. Interview schedule and questionnaire are the instruments used to collect qualitative and quantitative data respectively. Quantitative data were analysed descriptively and inferentially through the aid of a Spreadsheet computer application.

The findings constitute series of challenges associated with student academic support services provision. Through the findings, it was explicit that the academic support services offered by the college were neither efficient nor sufficient and these were counted among the reasons that caused students attrition and some taking longer than expected to complete their qualifications. The study also revealed that the college used blended learning to close the transactional distance gap between students and their instructors as well as addressing the feeling of isolation among students. Unfortunately, there were series of ICT related challenges mentioned as factors hindering the incorporation of an online learning. For example, lack of computer skills among students was another hindering factor. It was recommended that the college should employ e-learning which would feature both asynchronous and synchronous transmission to cater the needs for diverse students.

**Key concepts:** *Student support services, Open distance learning, Academic support, e-learning, Technical Vocational Education and Training (TVET) College*

## ISIFINQO

Inhloso yalolu cwaningo kwakuwukuchaza nokuhlaziya izici zokuphatha nokufundisa ukuze kuthuthukiswe izinsiza zokuxhasa abafundi ezifundweni ezivulelekile ezifundwa emakhaya ezaziwa nge-ODL emakolishi okungama -TVET. Lokhu kufezwe ngokuhlola izici ezibe nomthelela esikhathini eside esisithathe abafundi ukuthi baqedele izifundo zabo. Ucwangingo lubandakanya ukubuyekezwa kwezincwadi kanye nedatha yocwaningo. Imiphumela esemqoka ihlanganisa ukuthi izinsiza zokwesekwa kwezemfundo ezinikezwa abafundi ezikhungweni zemfundo ephakeme ezehlukene aziphumeleli futhi azanele. Izinselele zabafundi abafunda bengekho ezikhungweni zokufunda kodwa emakhaya ababhekana nazo mayelana nezinsizakalo zokweseka zingagwenywa ngokunikeza ukwesekwa okuphelele okuhlanganisa ukwesekwa kwezemfundo, kwengqondo, kwezezimali, ukuphuma kanye nokwesekwa okuhlobene nomsebenzi, phakathi kokunye.

Kusetshenziswe izindlela ezixubile ukuqoqa imininingwane; ukwenziwa kwezingxoxo ezingahlelekile nabasebenzi abathile bekolishi le-TVET ababambe iqhaza ekufundiseni, ekuphatheni nasekuphathweni; kanye nedatha yekhwalithi nenani laqoqwa, kusetshenziswa ishejuli yenhlolekhono kanye nohlu lwemibuzo. Idatha yobuningi yahlaziywa ngendlela echazayo futhi engasho lutho kusetshenziswa uhlelo lokusebenza lwekhompyutha yesipredishithi.

Okutholakele kuhlanganisa uchungechunge lwezinsalelo ezihambisana nokuhlinzekwa kwezinsiza zokweseka abafundi. Okutholakele kukhomba ngokusobala ukuthi, phakathi kwezizathu ezidale ukuthi abafundi baphelelwe yisikhathi futhi abanye abafundi bathathe isikhathi eside kunaleso ebesilindelekile ukuqeda iziqu zabo, izinsiza zokweseka ezihlinzekwa yikolishi zingaphumeleli futhi zinganele. Ucwangingo luphinde lwaveza ukuthi ikolishi isebenzisa ukufunda okuxubile ukuvala igebe lebanga lokuthengiselana phakathi kwabafundi nabafundisi babo, kanye nokubhekana nomuzwa wokuhlukaniswa phakathi kwabafundi. Ngeshwa, kube nochungechunge lwezinsalelo ezihlobene ne-ULK eyaziwa nge-(ICT) ezishiwo njengezici ezithikameza ukufakwa kokufunda ku-inthanethi. Ngokwesibonelo, ukuntuleka kwamakhono ekhompyutha phakathi kwabafundi kwaba esinye isici esaba isithiyo. Kunconywe ukuthi ikolishi lisebenzise kokubili ukufunda nge-inthanethi kanye nokuhanjiswa okungavumelaniyo nokuvumelanayo ukuze kuhlinzekelwe izidingo zabafundi abahlukahlukene.

Imiqondo esemqoka: izinsiza zokweseka abafundi, ukufunda ibanga elivulekile, ukwesekwa kwezemfundo, ukufunda nge-inthanethi, Ikolishi lemfundo yezobuchwepheshe nokuqeqeshwa (eyaziwa nge-TVET)

## OPSOMMING

Die doel van hierdie studie was om die faktore van bestuur en onderrig van akademiese steundienste vir studente in oop afstandslereer (OAL/ODL) by TBOO-kolleges te beskryf en te ontleed. Dit is bereik deur faktore te evalueer wat bygedra het tot die langdurige tydperk wat dit studente neem om hul kwalifikasies te voltooi. Die studie het 'n oorsig van literatuur en empiriese data behels. Die hoofbevindings behels dat die akademiese steundienste wat aan studente gebied word wat aan verskeie instellings van hoër onderrig studeer, nie doeltreffend of genoegsaam is nie. Die uitdagings vir studente wat oor 'n afstand studeer, met betrekking tot dienste, kan omseil word deur omvattende ondersteuning te bied wat, onder andere, akademiese, psigologiese, finansiële, uittrede en loopbaanverwante ondersteuning insluit.

Die benadering van gemengde metodes is gebruik om data te versamel; semigestruktureerde onderhoude is met uitgesoekte TBOO-kollegepersoneel wat by lesings, administrasie en bestuur betrokke is gevoer; en kwalitatiewe en kwantitatiewe data is versamel deur 'n onderhoudskedule en vraelys te gebruik. Die kwantitatiewe data is beskrywend en afleibaar met behulp van 'n sigbladrekenaartoepassing ontleed.

Die bevindings behels 'n reeks uitdagings wat met die voorsiening van akademiese steundienste vir studente geassosieer word. Die bevindings stel dit duidelik dat van die redes vir studente-afname en dat sommige studente langer as verwag neem om hul kwalifikasies te voltooi, was dat die akademiese steundienste wat die kollege bied nie doeltreffend of genoegsaam was nie. Die studie het ook bevind dat die kollege 'n gemengde benadering tot leer gebruik het om die transaksionele afstandsgaping tussen studente en hul instruktors te verklein en om die gevoel van isolasie onder studente te hanteer. Ongelukkig is daar 'n reeks IKT-verwante uitdagings genoem as faktore wat die inkorporasie van aanlyn leer verhinder. Byvoorbeeld, 'n gebrek aan rekenaarvaardighede onder studente was nog 'n faktor wat leer verhinder. Daar is aanbeveel dat die kollege e-leer gebruik wat beide asinkroniese en sinkroniese oordrag insluit om aan die behoeftes van uiteenlopende studente te voldoen.

**Sleutelbegrippe:** *studenteondersteuningsdienste, oop afstandslereer, akademiese ondersteuning, e-leer, 'n tegniese en beroepsgerigte onderwys- en opleidingkollege (TBOO-kollege)*



## ACRONYMS

ANOVA	Analysis of Variance
CAT	Computer Applications Technology
CAO	Central Application Office
CET	Community Education and Training
CMT	College Management Team
COVID-19	Corona Virus Disease 2019
CPD	Centre for People Development
CTEVT	Council for Technical Education and Vocational Training
DBE	Department of Basic Education
DE	Distance Education
DHET	Department of Higher Education and Training
EADTU	European Association of Distance Teaching Universities
EET	Economic, Equity and Transformative
EFT	Further Education and Training
ERIC	Education Resources Information Centre
ERIC	Education Resources Information Centre
EQE	European Qualifications Framework
FE	Further Education
GDE	Gauteng Department of Education
GDP	Gross Domestic Product
HEI	Higher Education Institutions
HESA	Higher Education Statistic Agency
ICP	Introductory to Computer Practice

ICT	Information and Communications Technology
IOM	International Organisation for Migration
IoT	Internet of Things
IT	Information Technology
KZN	KwaZulu-Natal
LAN	Local Area Network
LMS	Learning Management System
NASPA	National Association of Student Personnel Administrators
NATED	National Accredited Technical Education Diploma
NCV	National Certificate Vocational
NDP	National Development Plan
NQF	National Qualifications Framework
NSF	National Skills Fund
NSFAS	National Student Financial Aid Scheme
OAS	Office of Academic Support
ODeL	Open Distance electronic Learning
ODL	Open Distance Learning
OER	Open Educational Resources
OLU	Open Learning Unit
OUT	Open University of Tanzania
OOUK	Open University of United Kingdom
PED	Provincial Education Departments
PSET	Post School Education and Training
RPL	Recognition of Prior Learning

RSI	Repetitive Strain Injury
SAIDE	South African Institute for Distance Education
SANReN	South African National Research Network
SAQA	South African Qualifications Authority
SAS	Student Advice Service
SDP	Student Development Practitioners
SMART	Specific Measurable Attainable Relevant Time-based
SMT	School Management Team
SRC	Student Representative Council
SSC	Student Service Centre
SSS	Student Support Services
SU	Students Union
TMA	Tutor-Marked Assignment
TEDL	Technology Enhanced Distance Learning
TVET	Technical Vocational Education and Training
UK	United Kingdom
UNESCO	United Nations Educational, Scientific and Cultural Organization
UDSM	University of Dar es Salaam
UGC	University Grants Commission
UNISA	University of South Africa
UPS	Uninterruptable Power Supply
VSG	Victoria State Government
WHO	World Health Organisation
ZOU	Zimbabwe Open University

## TABLE OF CONTENTS

STUDENT DECLARATION .....	ii
ACKNOWLEDGEMENTS .....	iii
DEDICATION .....	iv
ABSTRACT .....	v
ISIFINQO .....	vi
OPSOMMING .....	viii
ACRONYMS .....	ix
CHAPTER 1 .....	1
ORIENTATION .....	1
1.1 INTRODUCTION .....	1
1.2 BACKGROUND TO THE RESEARCH .....	4
1.3 THEORETICAL PERSPECTIVE ON PROBLEMATIC STUDENT SUPPORT .....	5
1.3.1 Introduction .....	6
1.3.2 Moore's (1993) transactional distance theory .....	6
1.3.3 Holmberg's (1987) theory of interaction and communication .....	7
1.4 ELUCIDATION OF CONCEPTS .....	8
1.4.1 Basic concepts .....	8
1.4.2 Related concepts .....	10
1.5 PROBLEM STATEMENT AND RESEARCH QUESTIONS .....	11
1.5.1 Main question .....	11
1.5.2 Sub-questions .....	11
1.6 AIM AND OBJECTIVES .....	12
1.6.1 Research aim .....	12
1.6.2 Research objectives .....	12
1.7 RESEARCH METHODOLOGY .....	13
1.7.1 Research design .....	13
1.7.1.1 Research paradigm .....	14
1.7.1.2 Research approach .....	14
(i) Qualitative approach .....	16
(ii) Quantitative approach .....	16
1.7.1.3 Research strategy .....	16
1.7.2 Research methods .....	17
1.7.2.1 Choice of institution and participants/respondents .....	17
1.7.2.2 Selection of participants and sampling strategies .....	17

1.7.2.3	Sample size .....	18
1.7.2.4	Data collection .....	19
(i)	Semi-structured interviews .....	19
(ii)	Document analysis .....	20
(iii)	Questionnaire .....	20
(vi)	Pilot survey .....	20
1.7.2.5	Data analysis and interpretation.....	21
1.8	MEASURES OF TRUSTWORTHINESS IN QUALITATIVE STUDIES .....	21
1.8.1	Credibility.....	22
1.8.2	Transferability.....	22
1.8.3	Dependability.....	22
1.8.4	Confirmability.....	23
1.9	VALIDITY AND RELIABILITY OF QUANTITATIVE RESEARCH RESULTS.....	23
1.10	ETHICAL CONSIDERATIONS .....	23
1.11	CHAPTERS DIVISION .....	24
1.12	CHAPTER SUMMARY .....	24
CHAPTER 2 .....		26
OPEN LEARNING STUDENT SUPPORT SERVICES: CONTEXT AND THEORIES .....		26
2.	INTRODUCTION.....	26
2.1	CONTEXTUALISING STUDENT SUPPORT SERVICES IN OPEN DISTANCE LEARNING.....	26
2.1.1	Introduction .....	26
2.1.2	Student support from an international perspective .....	29
2.1.3	Student support from an African perspective .....	31
2.1.3.1	Education demand in Kenya .....	31
2.1.3.2	Botswana perspective .....	32
2.1.3.3	Support services in Ethiopia.....	33
2.1.3.4	Education resources in Nigeria .....	33
2.1.4	Student support from a South African perspective .....	34
2.2	THE OPEN DISTANCE LEARNING CONTEXT .....	40
2.2.1	Medium of instruction .....	43
2.2.2	Modern technology .....	44
2.2.3	Open Learning .....	47
2.2.4	Distance Learning .....	47
2.2.5	Open and Distance Learning .....	47
2.2.6	Open Distance and Electronic Learning.....	48

2.2.7	Open Learning Unit .....	48
2.3	THREE MODES OF LEARNING IN OPEN DISTANCE LEARNING .....	49
2.3.1	Synchronous learning .....	49
2.3.2	Asynchronous learning.....	50
2.3.3	Blended learning .....	51
2.4	ATTRITION VERSUS RETENTION .....	53
2.4.1	Introduction .....	53
2.4.2	Students' attrition .....	53
2.4.3	Students' retention .....	55
2.5	DIGITAL WORLD AND DIGITAL CITIZENS IN ODL.....	57
2.6	A THEORETICAL FRAMEWORK .....	62
2.6.1	Moore's transactional distance theory.....	62
2.6.2	Holbert's theory of interaction and communication .....	64
2.6.2.1	Learner-instructor interaction.....	65
2.6.2.2	Learner-content interaction.....	67
2.6.2.3	Learner-learner interaction.....	68
2.6.2.4	Learner-interface interaction.....	68
2.7	CHAPTER SUMMARY .....	71
CHAPTER 3	.....	73
CONCEPTUALISING STUDENT SUPPORT SERVICES IN OPEN DISTANCE LEARNING AT TECHNICAL VOCATIONAL EDUCATION AND TRAINING COLLEGES .....		73
3.	INTRODUCTION.....	73
3.1	CONCEPTUAL FRAMEWORK.....	73
3.1.1	Student Support Services.....	75
3.1.1.1	Nature of student support in Open and Distance Learning from international perspective.....	76
3.1.1.2	Nature of student support in Open and Distance Learning from African perspective.....	77
3.1.1.3	Students' perceptions on support services internationally .....	79
3.1.1.4	Students' perceptions on support services from African perspective .....	80
3.1.1.5	Instructors' perceptions on support services.....	81
3.1.2	Academic support services internationally .....	81
3.1.2.1	Teaching.....	84
3.1.2.2	Learning skills and development.....	85

3.1.2.3	Assessment feedback.....	86
3.1.3	Academic related qualities and skills concepts .....	86
3.1.3.1	Intellectual ability .....	87
3.1.3.2	Feedback as motivation.....	87
3.1.3.3	Time management skills .....	88
3.1.3.4	Ability to deal with stress .....	88
3.1.3.5	Building of self-confidence .....	89
3.1.3.6	Sense of humour .....	89
3.1.3.7	Ability to balance family, job and study demands .....	91
3.1.4	Forms of support required in open distance learning .....	91
3.1.4.1	Study skills.....	91
3.1.4.2	Learning styles.....	92
3.1.4.3	Thinking skills .....	93
3.1.4.4	Access to resources support.....	94
3.1.4.5	Library access and facilities .....	95
3.1.4.6	Computers and connectivity.....	96
3.1.4.7	Study material versus learning management system .....	98
3.1.4.8	Telephone support.....	100
3.1.4.9	Exit support.....	100
3.1.4.10	Financial support .....	102
3.1.4.11	Feedback as a form of academic student support .....	102
3.1.4.12	Counselling support and COVID-19 implications .....	103
3.1.4.13	ICT role in academic support.....	105
3.1.5	Technical Vocational Education and Training from a global perspective.....	108
3.1.5.1	TVET sector in Australia .....	109
3.1.5.2	TVET sector in Bangladesh .....	109
3.1.5.3	TVET sector in United Kingdom.....	110
3.1.5.4	TVET sector in China.....	111
3.1.6	Technical Vocational Education and Training from a South African perspective	111
3.1.6.1	TVET qualifications and stigmatisation .....	113
3.1.6.2	Lecturers' appointment .....	115
3.1.6.3	Attainment of qualifications challenges.....	116
3.1.6.4	TVET graduates placement and employability.....	116
3.2	THE CONCEPT OPEN DISTANCE LEARNING.....	117

3.2.1	Open distance learning benefits .....	118
3.2.2	Open distance learning challenges .....	118
3.2.2.1	Assessments related challenges .....	119
3.2.2.2	Resources challenges .....	121
3.2.2.3	Quality of education .....	122
3.2.2.4	Non-completion of qualifications .....	123
3.2.3	Open distance learning and online learning as modern technology .....	124
3.3	CHAPTER SUMMARY AND IMPLICATIONS FOR EMPIRICAL STUDY .....	126
	CHAPTER 4 .....	127
	RESEARCH METHODOLOGY .....	127
4.	INTRODUCTION.....	127
4.1	RATIONALE FOR EMPIRICAL INQUIRY .....	128
4.2	RESEARCH DESIGN .....	129
4.2.1	Pragmatic research paradigm .....	130
4.2.2	Mixed methods research approach .....	133
4.2.3	Research strategy .....	136
4.3	RESEARCH METHODS .....	137
4.3.1	Choice of institution and participants/respondents.....	138
4.3.2	Selection of participants and sampling strategies .....	138
4.3.3	Sample size .....	140
4.3.4	Data collection .....	140
4.3.4.1	Semi-structured interviews.....	141
(i)	Pre-testing .....	143
(ii)	Document analysis .....	143
(iii)	Questionnaire .....	144
(iv)	Pilot survey.....	147
4.3.4.2	Data analysis and interpretation .....	147
4.4	MEASURES OF TRUSTWORTHINESS IN QUALITATIVE RESEARCH.....	148
4.4.1	Credibility .....	149
4.4.2	Transferability .....	149
4.4.3	Dependability .....	149
4.4.4	Confirmability .....	149
4.5	VALIDITY AND RELIABILITY OF QUANTITATIVE RESEARCH RESULTS....	150
4.6	ETHICAL CONSIDERATIONS .....	151
4.6.1	Site access/Gate keeper's permission .....	152



4.6.2	Protection from harm.....	152
4.6.3	Informed consent .....	152
4.6.4	Anonymity and confidentiality.....	152
4.7	CHAPTER SUMMARY .....	153
CHAPTER 5	.....	154
DATA ANALYSIS AND INTERPRETATION	.....	154
5.1	INTRODUCTION .....	154
5.2	RESEARCH PROCESS .....	155
5.3	QUALITATIVE DATA ANALYSIS .....	156
5.3.1	Interview data.....	156
5.3.1.1	The nature of administrative support .....	157
5.3.1.2	Access to college resources .....	160
5.3.1.3	Information and Communications Technology.....	163
5.3.1.4	Learning environment .....	170
5.3.1.5	Academic support.....	173
5.3.1.6	Staff perceptions on academic support services.....	180
5.3.2	Themes and categories.....	183
5.3.2.1	Theme 1: Nature of student support .....	184
5.3.2.2	Theme 2: Access to college resources .....	186
5.3.2.3	Theme 3: Information and communications technology.....	188
5.3.2.4	Theme 4: Learning environment.....	189
5.3.2.5	Theme 5: Staff perceptions on academic support services .....	191
5.4	QUANTITATIVE DATA ANALYSIS .....	192
5.4.1	Response rate.....	193
5.4.2	Description of respondents' biographic data .....	195
5.4.2.1	Age group distribution.....	195
5.4.2.2	Gender and work status.....	196
5.4.2.3	Gender and field of study.....	197
5.4.2.4	Application preference and work status .....	199
5.4.3	Administrative support.....	201
5.4.4	Resources.....	203
5.4.5	Efficiency of student support .....	208
5.4.6	Academic support .....	212
5.5	DATA INTERPRETATION.....	215

5.6	CONCLUDING REMARKS.....	219
5.7	CHAPTER SUMMARY .....	220
	CHAPTER 6 .....	221
	SUMMARY, CONCLUSIONS AND RECOMMENDATIONS .....	221
6.1	INTRODUCTION .....	221
6.2	SUMMARY OF RESEARCH FINDINGS .....	221
6.2.6.1	Student Support Structures .....	228
6.2.6.2	Access to resources .....	229
6.2.6.3	Digital skills challenges.....	229
6.2.6.4	Learning environment.....	231
6.2.6.5	Feedback.....	231
6.2.6.6	Motivation .....	232
6.2.6.7	Student’s experiences and perceptions .....	233
6.2.6.8	Contact sessions .....	234
6.2.6.9	Student’s relaxation .....	234
6.3	RESEARCH CONCLUSIONS.....	235
6.3.1	How accessible are students’ academic support services rendered to ODL students? .....	235
6.3.2	What are the perceptions of ODL students about academic support services by the selected TVET College?.....	236
6.3.3	Which factors can retain students on their academic programmes till to qualification completion?.....	236
6.3.3.1	Student factors.....	236
6.3.3.2	Institutional factors.....	237
6.4	RECOMMENDATIONS .....	241
6.4.1	Governance level .....	241
6.4.2	Institutional level .....	242
6.5	AVENUES FOR FURTHER RESEARCH.....	244
6.6	STUDY CONTRIBUTION TO THE BODY OF KNOWLEDGE.....	245
6.7	STUDY DELIMITATIONS.....	247
6.8	LIMITATIONS.....	247
6.9	CONCLUDING REMARKS.....	248
	REFERENCES .....	249
	APPENDIX A: ETHICAL CLEARANCE CERTIFICATE.....	294
	APPENDIX B: INTERVIEW SCHEDULE WITH STAFF MEMBERS .....	296

APPENDIX C: LETTER FOR CONSENT TO HOD .....	299
APPENDIX D: LETTER FOR CONSENT TO STAFF MEMBERS .....	301
APPENDIX E: AN EXAMPLE OF INDIVIDUAL INTERVIEW WITH STAFF .....	302
APPENDIX F: QUESTIONNAIRE .....	305
APPENDIX H: RESEARCH PERMIT .....	314

## LIST OF TABLES

Table 4.1 Distinction between qualitative and quantitative approach .....	136
Table 4.2 Study participants' summative table .....	139
Table 4.3 Interview schedule guide .....	142
Table 4.4 Sections of the questionnaire.....	146
Table 4.5 Cronbach's Alpha reliability test.....	151
Table 5.1 Participants biographical data.....	156
Table 5.2 Themes.....	183
Table 5.3: Response rate .....	194
Table 5.4: Response rate percentage.....	194
Table 5.5: Age distribution .....	195
Table 5.6: Age group descriptive analysis .....	195
Table 5.7 Work status.....	196
Table 5.8: Work status in percentages .....	196
Table 5.9 Gender vs choice of study .....	197
Table 5.10: Gender vs choice of study in percentages .....	197
Table 5.11 Chi-square testing association between gender and study choice .....	198
Table 5.12 Students enrolled per course .....	198
Table 5.13 Application preference and work status .....	200
Table 5.14 Application preference and work status in percentages.....	200
Table 5.15 Availability of administrative support.....	201
Table 5.16 Scale: Administrative support .....	202
Table 5.17 Scale: Access to resources.....	203
Table 5.18 Access to resources percentage distribution of the responses .....	205
Table 5.19: t-test: Two-Sample Assuming Unequal Variances.....	206
Table 5.20: Scale: Access to resources data dispersion .....	206
Table 5.21 Efficiency of SSS regression analyses .....	209

Table 5.22 Student support scale .....	210
Table 5.23 Scale: Feedback .....	210
Table 5.24 Correlation .....	211
Table 5.25 Scale: Academic support scales .....	212
Table 5.26 Academic support provision presented in percentages .....	213
Table 5.27 Academic support analysis of variance.....	214
Table 5.28 t-test analysis t-Test: Paired Two Sample for Means.....	215

### **LIST OF FIGURES**

Fig 3.1 Academic Support - Source: Simpson (2012) .....	84
Fig 3.2 Graphic representation of the contextualisation and conceptualisation.....	125
Fig 4.1 A diagrammatical overview of chapter 4.....	127
Fig 5.1 Quantitative data analysis decision chart (Blake, 2013) .....	193
Fig 5.2: Total gender based participants in percentages.....	194
Fig 5.3 Number of students per course .....	198
Fig 5.4 Number of student in a current semester .....	199
Fig.5.5 Application preferences.....	200
Figure 5.6: Standard Deviations for administrative support.....	203
Fig 5.7 Strongly Agree vs Strongly Disagree scales.....	208
Fig 5.8 Feedback as part of SSS .....	211

# CHAPTER 1

## ORIENTATION

### 1.1 INTRODUCTION

Numerous studies have been carried out addressing various challenges associated with Open Distance Learning (ODL) Student Support Services (SSS), yet findings revealed the existence of some gaps to this day which need to be addressed. ODL programmes cater for students who cannot attend university lectures on full-time basis because of multiple reasons such as employment, accommodation and affordability amongst others. High percentage of the studies conducted largely focused on universities, leaving out Technical Vocational Education and Training (TVET) colleges. Forms of support services offered by institutions of higher learning to students include inter alia enrolment or registration, socio-economic support, counselling, learning support services (academic), advisory services, career guidance, access to Open Educational Resources (OERs), cognitive support, emotional support and provision of study centres as well as financial assistance.

Findings reported in previous studies (Sikwibele & Mungoo, 2009) reveal that students enrolled for ODL programmes tend to struggle with their studies because of lack of academic support. In addition, Dutta (2017:44) asserts that “The motivation of student support services is to provide educational help to the students. No one can deny the importance and pivotal role of student support services in the system of distance learning as it helps in the successful completion of the course”. Besides, in a study conducted by Shikulo and Lekhetho (2020), entitled “Exploring student support services of a distance learning centre at a Namibian university”, high rates of repetition, drop out and attrition among distance students were reported mainly due to the student-lecturer separation, which is typical of an ODL institutions. Normally, students that are enrolled for ODL at a selected TVET college are divided into two categories: those who started as ODL students because of employment reasons and those who were full-time students and failed to meet the requirements of progressing to the next level. The latter category makes up about 25% of students enrolled for ODL (Madwe, 2017).

Students that are enrolled for ODL particularly for the first time can be assisted or supported by bodies like Career Guidance Centres and SSS. In their study, Muchineripi and Addae (2018) insist on the establishment of a complete support system that would attend to challenges of students who come from various societies. It is also vital that SSS structures be equipped properly so that they would be able to give all forms of support to students. McDonnell (2014) asserts that foreign language centres, career designing services, academic student information centres, counselling services, libraries, and Open Learning Unit (OLU) centres are the most important components obtainable from SSS. This study was evaluating key factors that could optimise academic support services rendered to students enrolled for a programme via the mode of ODL in a selected TVET college, in order to improve academic student support interventions.

To indicate the significance for the study, the findings of this study will likely be of benefit to institutions of higher learning that offer ODL programmes and these institutions would start assessing their own SSS. The findings of this study could be used by various populations in colleges as an opportunity to relook or evaluate the key factors that can optimise all forms of SSS rendered, particularly an academic support. The motive in this study was to draw the attention of the College Management Teams (CMT) to the existence of problems and to ascertain whether the support they are rendering is efficient and accessible to ODL students. It is also important to ascertain that one of TVETs' objectives is to ensure that ODL students, including those that study on a full-time basis receive efficient support on their journey of acquiring the required skills and knowledge. The provision of academic services to students studying through ODL is one among variable that are measured in relation with students' completion. The mixed methods study was intended to address possible existing gaps that hinder access to the support services being provided by a TVET College.

The success of a study can be determined by its ability to contribute to the body of knowledge and practice (Missa, 2013). Among other challenges, institutions of higher learning are faced with, is a challenge of dealing with a high influx of full-time students each year. These institutions, which include TVET colleges and universities, are unable to enrol all students who require admission on full-time basis. Therefore, ODL plays a significant role to minimise the influx of full-time students which is difficult for

institutions to enrol because of limited floor space and limited resources among other things. This study was intended to contribute to the body of knowledge on the discipline of distance learning by highlighting challenges experienced by students who study through ODL and also recommend mitigation strategies to support students. It was also anticipated that this study would make a positive contribution to today's world of technology where globalisation seems to consume the world through digital platforms. Nowadays, concepts of digital communication and electronic learning (E-learning) cannot be divorced from distance learning. The use of good quality technologies to support students in distance learning is of cardinal importance (Shandu-Phetla, 2017). Modern digital technologies are a necessity in higher education particularly in the current student-centred education system (Stefan, 2019).

According to Virtual College (2012), cited in Dhlamini (2018), e-learning is a virtual form of learning offered through a computer in a campus-based or distance learning course. Mchombu (2012) further contends that the e-learning mode as opposed to the traditional face to face mode is valuable because it is flexible and cost-effective and evidence of this is the sudden move to e-learning that was adopted by many institutions during the outbreak of the COVID-19 pandemic.

The academic support provided to ODL students can be optimised by the incorporation of e-learning. One of the advantages of studying through ODL is the fact that it is supported by modern communication media and that students do not have to struggle with accommodation which is costly and insufficient. Institutions of higher learning especially those offering distance learning need to provide all forms of support in order for students to portray their academic potential, therefore they can complete their studies successfully and on designated period. Thus, the purpose of this study was to evaluate student academic support services rendered to students enrolled for ODL programmes at a selected TVET College in KwaZulu-Natal (KZN), South Africa (SA) and how these can be optimised.

This will establish a distance learning framework which will attempt to keep ODL students on their academic programmes until they complete their studies.

## 1.2 BACKGROUND TO THE RESEARCH

According to Krishnan (2012), SSS are the bunch of facilities and activities availed by institutions of higher learning to make the learning process much easier and more interesting. In some institutions of higher learning based in America, ODL is used as an option to increase the enrolment of international students in colleges and universities (Han & Hall, 2012). SSS provide solutions to a series of demanding expenses among them the relocation and adaptation of students to new environment. Student support services in ODL play vital roles including the retention of students on academic programmes, increasing the pass rates and the reduction of the dropout rate. Han and Hall (2012) emphasise on the first of the aforementioned points that is, the importance of ODL in the retention of students through student support services. Arifin (2018) confirm that indeed, SSS enhances the persistence of students, and they showed evidence of this in Indonesia. It is largely through the provision of good and comprehensive virtual student support services that an institution of higher learning such as the Regents college in the United States of America with an enrolment of about 17 000 students each year is rated as one of the best (Arifin, 2018).

In his study, Briggs (2017) reveals that a significant number of institutions of higher learning in America enrol and retain a markedly higher number of international students. However, the author is intrigued that despite the increase in enrolment, some of these institutions make no attempts to avail sufficient and comprehensive support services to students. Local students enrolled for ODL need efficient support services similar to that provided to international students, be it that they study on campuses or remotely. The increase in the enrolment of students that is observed and/or reported in the United States of America is also shown in institutions of higher learning in Spain which offer ODL programmes. To sustain this trend, these institutions need to ascertain that support services to students are strengthened, efficient and effective (Perez-Encinas, 2016). This is important because literature reveals the need for support services and interaction with students that embark on ODL.

Students who study in institutions of higher learning which do not offer efficient support services due to poor management or lack of resources experience many challenges among them dropping out, performing poorly, and taking longer to complete. Owing to its significance, the benefits of ODL are associated with accessibility, affordability, flexibility, and life-based education opportunities (Musingafi, Mapuranga, Chiwanza &



Zebron, 2015). Therefore, it is of cardinal importance for institutions involved in ODL to provide comprehensive support to their students.

In South Africa, the dominant distance learning institution, the University of South Africa (UNISA) implemented blended learning which involved face to face tutorials and online learning as part of its student support services (Arko-Achemfuor, 2013). Owing to regulations of the COVID-19 pandemic, constrained put to human movement and/or interaction, UNISA's approach was changed and since the year 2020, teaching and learning is conducted only online. Some positives of SSS are the assistance of students who experience different forms of learning challenges including those related to technology and others necessary to enable them to develop and accomplish their educational needs (Victoria State Government [VSG], 2018). TVET colleges in South Africa, like other institutions of higher learning have an obligation to deliver graduates with a range of skills and knowledge so they would make a positive and sustained contribution to the Gross Domestic Product (GDP) of the country and thereby improve its economy.

TVET colleges in particular are anticipated to make a significant contribution to combat skills deficit in South Africa. So far, the country has 50 TVET colleges with multiple campuses that offer skills development on management studies, business, and engineering (TVET College Times, 2019). Nine of these colleges are located in various districts in the province of KZN and boast training centres that assist among others, engineering students with studies that require practical engagement.

A study conducted by Madwe (2020) in a KZN TVET colleges reveals that one targeted college enrolled about 700 000 students in the year 2020. This was supported by Buthelezi (2020) who contends that The Department of Higher education and Training (DHET) administers all public TVET colleges and they have an enrolment of more than 700 000 students. This is an indication that South African TVET colleges are gaining preference by students hence they tend to enrol such large number of students.

### **1.3 THEORETICAL PERSPECTIVE ON PROBLEMATIC STUDENT SUPPORT**

This section describes various theories that are employed to achieve optimised academic support for students in ODL programmes offered by TVET Colleges.

### **1.3.1 Introduction**

Various researchers such as Nsamba (2016), Maimane (2016), and Ngubane (2018) described a range of theories associated with student support services in ODL such as distance education theory, ODL theory, assessment theory, theory of distance education based on empathy, theory of independence and autonomy, theory of industrialisation, theory of interaction, and communication among others. A theoretical framework is a concept that introduces and describes the theory or theories adopted for use in a research study and explain reasons why a problem identified in a study's research exists, also, the concept serves as a tool used to evaluate a particular research study. Asher's (2013) statement points out that a theoretical framework is all about the structure that can hold or support a theory of a research study. This study was informed by two sets of theories, namely the Moore's transactional distance learning theory as well as the Holmberg's theory of interaction and communication. The purpose of conducting this study was to understand what entailed on components of academic support in ODL/remote teaching and learning settings and how such support can be improved to optimise academic achievement. To pursue this purpose, it is important to understand the transactional dimensions of teaching and learning or curriculum delivery relevant to academic success. In addition, it is important to have a deep understanding of the interactions and communication between staff and students in ODL, since these have a direct effect on the effectiveness of academic progress.

### **1.3.2 Moore's (1993) transactional distance theory**

Moore's (1993) "transactional distance theory" is the first of the two theories that underpinned this study. Though it is an old theory, it is still relevant to the current settings of distance learning especially concerning the challenges that this study strived to address. Moore's transactional distance theory refers to a distance that exist in all educational relationships. The distance referred to is determined by the type and quality of dialogue that occurs between lecturers and their students, not leaving out the type of structure on which a particular course is designed (Tait, 2003). For example, students registered in the UNISA communicate with their instructors electronically, and use 'myLife' as a structure that promote effective interaction and communication. The physical distance that exists between lecturers and students in ODL is perceived as a barrier because it tends to create fear and anxiety among students and when that happens, it prevents them from benefiting from any form of

dialogue during the learning process (Arko-Achemfuor, 2017). This theory is associated with certain challenges experienced by part-time or distant students. It can be said therefore that an increase on transactional distance decreases communication between students and their instructors which has a negative impact on the performance of students. All of this is changing in the current remote settings with everything online.

Moore's theory was chosen by the researcher because it is still relevant and also the fact that students at TVET colleges who study through ODL are isolated and therefore unable to communicate with their lecturers or fellow students (Elmer, Mephram & Stadtfeld, 2020). As indicated earlier, ODL students spend much of their time preoccupied with their respective occupations. "Students' frustrations about the lack of any or adequate interactions with their lecturers confirm Moore's (1993) theory of transactional distance. This theory posits that the learning gap experienced by distance students can only be closed by applying different forms of interaction in distance learning institutions" (Makoe & Nsamba, 2019:92). As per the transactional theory in distance education, Moore (1993) affirms that the separation between students and instructors might lead to a gap in communication.

### **1.3.3 Holmberg's (1987) theory of interaction and communication**

The distance between students and instructors observed in the distance education discipline can be categorised as psychological, cognitive or affective, therefore, the Holmberg's (1987) theory of interaction and communication, the second theory used in this study, is appropriate.

One of the most crucial aspects in distance education as well as in support services to students is interaction. Taylor (2001) establishes that interaction is valued as a significantly key concept in distance learning. Xiao (2017) also insists on the functionality and need of the role played by interaction in ODL and how it affects learning experiences and satisfaction of students. Interaction improves and ensures effective communication between students and their institutions of higher learning. There is a plethora of interactions that support students involved in distance education. These forms of interaction are discussed in chapter two of this study.

## **1.4 ELUCIDATION OF CONCEPTS**

The purpose of this section was to define, give clarity to or explain concepts that were used in this study. Describing a study's concepts allows a researcher to unpack the research problem as well as research questions. The study evaluated key factors affecting academic support services provided to students studying in a selected TVET college with a view to improve them. Therefore, elucidations of concepts used in this study provide a good platform for a reader to understand the research problem being studied.

### **1.4.1 Basic concepts**

The following basic and interrelated concepts define the main focus of the study:

#### **1.4.1.1 Student Support Services (SSS)**

SSS are facilities and activities availed by institutions of higher learning to make the learning process much easier and more interesting (Krishnan, 2012). They can be divided into academic and non-academic (Sajiene & Tamuliene, 2012) and are used by institutions of higher learning to address various challenges faced by students. Also, they serve as guidelines which when implemented effectively, ensure that the support given to students improve their academic success (DHET, 2020).

SSS is an important support system whose adoption address challenges faced by students and leads to better academic achievement (Muchineripi, 2017). Tamuliene (2014), cited in Muchineripi (2017) describes student support as a practice that is adopted by institutions of higher learning in order to attend to academic and emotional needs of students and it is deemed as a requirement needed for their improved academic success. Institutions of higher learning should provide resources and an environment that is conducive for their students irrespective of their financial and social class status to complete their programmes (Tamuliene, 2014). In cases where tertiary students take longer to complete their qualifications and some drop out, that indicates that their institutions have neither efficient nor sufficient student support, nor that some students are not even aware that such support services are available.

#### 1.4.1.2 Open Distance Learning (ODL)

ODL is defined by the Paris OER Declaration (2012) as a system of teaching and learning characterized by separation of teacher and learner in time and/or place; uses multiple media for delivery of instruction; and involves two-way communication, occasional face to face meeting for tutorials, and learner-learner interaction. Ntaba and Jantjies (2018) on the other hand define ODL as an education that provides an opportunity for prospective students who require flexibility in education enabling learning without traditional face to face lecture sessions. In other words, ODL allows students to study remotely or on their own and can therefore be recommended for students who cannot attend on full-time bases because of various reasons. In ODL, students ought to be supported so that they can study independently and the support can include electronic and written materials (Darojat, 2016; Herman, 2017). Letseka and Pitsoe (2013:203) advocate that “ODL institutions provide access to higher education to mature working students who would otherwise not be able to obtain a higher education qualification were they to have campus-based contact higher education institutions as their only option for accessing higher education”.

According to Chen (2011), the term “distance” included in the definition of ODL is transactional that is, it is pedagogical not geographical. Distance learning is defined as a learning system that allows students to study remotely. Today, distance learning cannot be separated from ICT because through it, students are able to: access learning material, learn, communicate with instructors electronically, submit assignments and receive feedback.

#### 1.4.1.3 Technical Vocational Education and Training (TVET) colleges

TVET is a term used in education internationally to refer to certain post-school educational institutes which were aimed at improving vocational training programmes (UNESCO, 2014). They focus on vocational and occupational education and training with an aim of preparing students to become functional workers in a skilled trade. Lastly, they provide the knowledge and skills required by students to enter a specific range of professions (Maidment, 2017). These institutions make a significant contribution with regards to combating skills deficit.

## **1.4.2 Related concepts**

The following related concepts are connected to the basic concepts:

### **1.4.2.1 Academic support services**

Academic support services refer to a range of educational services, instructions plus strategies which facilitate access to education resources afforded to students so that they would succeed on their academic quest. Academic support encompasses a broad array of educational strategies including tutoring sessions and supplementary courses (DHET, 2020). According to Freeman and All (2014), the Higher Education Institution (HEI) is a structure that is used to dispatch assistance and support to students consistently throughout their academic journey. The main assistance and support for students calls for access to resources in order to enable learning.

### **1.4.2.2 Student attrition**

Student attrition is conceptualised as the number of students who vacate their studies or move out of their learning programmes before completion (Ofole, 2018). This concept cannot be divorced from student drop out which is common to ODL institutions internationally. According to Musingafi et al. (2015), attrition rate is higher in ODL-based institutions compared to their campus-based counterparts. Attrition in the education environment is caused by a series of challenges that students using ODL face which among others is a lack of comprehensive student support.

### **1.4.2.3 Student retention**

Student retention refers to a number of students that are retained during a given academic period (Ofole, 2018). The concept of retention can be associated with student engagement which can be attained through continuous interaction and communication. Balkrishen (2016) defines student retention as a dimension of the rate at which a student progresses through an institution of higher education either as a new student, a returning student, or a re-enrolling student.

### **1.4.2.4 E-learning**

As opposed to the traditional method of curriculum delivery where students and an instructor gather in the same venue at the same time for lessons, e-learning

incorporates online resources such as websites, e-mail, and portals for asynchronous learning yet Microsoft teams, Zoom, Google meet and other applications are used for real time learning called synchronous. This form of learning allows students to complete a course at their own location (Dlamini, 2018). This scholar further argues that e-learning implies that students are at an advantage as they do not need to go to a particular learning institution.

## **1.5 PROBLEM STATEMENT AND RESEARCH QUESTIONS**

Students enrolled for ODL programmes in various institutions feel isolated and neglected during their course of study. Therefore, some students eventually drop out from their ODL studies while some get frustrated and helpless as they do not enjoy the benefits of interacting with their lecturers or having access to resources on their convenient times. Previous studies by Nsamba (2016), Ofole (2018) and Shikulo and Lekhetho (2020) on the same phenomenon have shown consequences of not knowing how this problem can be addressed. From this, the main question is described in sub-section 1.5.1. The DHET offer financial support to students through the National Student Financial Aid Scheme (NSFAS) in South Africa and it becomes the responsibility of the institution to provide other forms of support services to students, particularly academic support. Non-completion of studies coupled with the lengthy time it takes to complete a qualification by ODL students at one of the TVET colleges in the KwaZulu-Natal Province was the problem which underpinned this study. The aforesaid problem was closely associated with academic support services that is, its efficiency. Therefore, the main question of this study is indicated next.

### **1.5.1 Main question**

Which factors can contribute to an enhanced academic support offered to students studying through ODL at a selected TVET college in KZN, South Africa?

### **1.5.2 Sub-questions**

In the light of the main question, the following sub-questions serve as key foci for the research study:

- 1.5.2.1 How accessible are the academic support services rendered to ODL students?
- 1.5.2.2 What are the perceptions of ODL students about academic support services rendered by a selected TVET college?
- 1.5.2.3 Which factors can contribute to the retention of students to remain in their academic programmes for the duration of their qualifications?
- 1.5.2.4 To what extent are TVET students literate on the use of computers and related technology?

## **1.6 AIM AND OBJECTIVES**

This section discusses the research aim and objectives of the study.

### **1.6.1 Research aim**

The aim of this study was to describe and analyse factors of management and teaching for optimising the student academic support services in ODL in TVET colleges. Research aimed exploring perceptions of students studying through ODL on the efficacy of the support rendered by TVET colleges could lead to recommendations that could improve student retention and performance.

### **1.6.2 Research objectives**

The study further intends to:

- 1.6.2.1 Evaluate the accessibility of academic support services rendered to ODL students.
- 1.6.2.2 Establish perceptions of ODL students about academic support services rendered by the selected TVET College.



1.6.2.3 Explore factors that can contribute to the student's retention in their academic programmes throughout the period of their qualifications.

1.6.2.4 Assess computer skills and ability to use technology by TVET students.

## **1.7 RESEARCH METHODOLOGY**

Research methodology is defined by Rajasekar, Philominathan and Chinnathambi (2013) as a branch in science which involves studying how research ought to be carried out. Orngreen and Levinsen (2017) view methodology as resourceful particularly when it combines methods with other empirical data. This study evaluated the academic support services provided to ODL students and proposed key factors that can lead to the improvement of these services at a selected TVET college. Thus, a comprehensive solution must be found. Therefore, it was vital to choose a research methodology that would address the research question as well as the research problem in order to find relevant and reliable answers.

### **1.7.1 Research design**

Du Plooy (2009) is of an opinion that a research design is a plan that a researcher makes, and it gives direction during the research process, indicating what or who is concerned, the place and the strategy of the study. Thaanyane (2010) defines research design as an incorporation of thoughts of a research approach to be used and as one of the methods in the collection and analysis of data. Thaanyane (2010) further contends that a research design also connects the processes of data collection and analysis to the research questions that are being addressed. According to Neuman (2014), a research design refers to a logical structure of enquiry compared to a mode of data collection and that the structure focuses on the matter that involves designing a research study and developing a strategy to guide the research process. The latter resonates with the view by Nkosana (2016) who describes a research design as an overall grand plan describing procedures of data collection, interpretation and analysis. "Descriptive research design describes individual events or conditions as they are" (Siedlecki, 2020) Thus, this study adopts a descriptive design. The descriptive research design was employed in this study to attain information to systematically describe student academic support from the selected TVET college

students and staff. This design also helped the researcher to answer the questions regarding the research problem specified in section 1.5.

#### 1.7.1.1 Research paradigm

A research paradigm is a philosophical stance that guides a study. Of the different research paradigms used in educational research, this study was informed by the pragmatic paradigm. Some authors posit that this paradigm focuses on an individual's experience (Tashakkori & Teddlie, 2008) while others insist that apart from human experience, it involves an objective reality (O'Shea, 2012). These scholars agree that reality is based on human experience (Morgan, 2014). Pragmatists believe that reality is constantly negotiated, debated and interpreted. It is also about doing things practically. The pragmatic paradigm also accommodates a situation where two different research approaches (qualitative and quantitative) are merged in one study whose philosophical orientations differ and such is done in order to understand reality (Nsamba, 2016). Similarly, Creswell and Clark (2011) agree that pragmatism is often associated with mixed-methods or multiple methods where the focus is on the research outcomes and on the research questions rather than on the research methods. On the other hand, Teddlie and Tashakkori (2009) assert that pragmatic paradigm provides researchers with a philosophical framework to enable the use of mixed methods in a research study. The pragmatism paradigm was found suitable for adoption in this study since it involved collection of data about experiences of students in the field of ODL. Pragmatists believe that one cannot separate people from their experiences especially that of the past and from beliefs that would have emanated from those experiences (Kaushik & Walsh, 2019). According to Morgan (2014), what people do is similar to the situations and context in which such events take place. Unlike other philosophies which focus on reality, pragmatist focuses on human experience since people possess unique life experiences. This philosophy supports the various perceptions people have about life.

#### 1.7.1.2 Research approach

The purpose of this study was to describe and analyse factors of management and teaching for optimising the student academic support services in ODL at a selected TVET college. For this purpose, the research approach, paradigm, design data

collection methods are described. Research approach might be qualitative, quantitative or mixed. Since the researcher was interested on both statistical and narrative data, they opted to adopt a mixed methods approach in this study. Mixed methods research refers to the 'mixing' of the qualitative and quantitative components within the study (Taylor, Barnes & Young, 2011). According to Collis and Hussey (2009), a multi-methods approach helps a researcher to overcome the possibility of subjectivity associated with a single method. This researcher's motive in selecting a mixed approach was to gather and provide a better understanding of the research problem by collecting narrative data directly from participants as well as statistical data from respondents. The researcher also attempted to value and also to quantify the percentage of students who persisted and those who abandoned their studies before completion. The correlation between SSS provision and student's study completion were also be tested.

Teddlie and Tashakkori (2009) argue that a mixed methods design is a method that includes collection and analysis of data using both qualitative and quantitative approaches in parallel form. Bernard (2014) advocates that mixed methodology have led to an explosion of collaborative and creative research among various disciplines. Onwuegbuzie and Johnson (2006) further state that the aim of mixed methods research is nothing about superseding either the qualitative or quantitative approaches of research, but rather to draw from the strengths of both these approaches and minimise possible weaknesses. Cohen, Manion and Morrison (2007) assert that, when conducting research, a researcher can pick either approach however, the choice would be informed by the aim and focus of each study. In the case of other studies such as this one, the researcher can incorporate both approaches and this explains the need for a mixed approach. This study was intended to assess factors that can improve the academic support services rendered to ODL students studying at a selected TVET college. This means that the researcher was concerned with understanding how the academic support services offered to students are implemented in a selected TVET College. Just because a researcher can collect both numerical and narrative data in relation to a single research problem, it does not mean that they should undertake a mixed methods study (Halcomb & Hickman, 2015).

(i) Qualitative approach

According to Maree (2012), qualitative research methodology is concerned with understanding the processes and the social and cultural contexts which underline various behavioural patterns. A qualitative study is characterised by a researcher's active participation in data collection process by means of interviews (Pandor, 2018).

(ii) Quantitative approach

Quantitative methodology emphasizes on objective measurements and the statistical or numerical analysis of data collected through polls, questionnaires, and surveys (Labaree, 2009). Labaree (2009) further states that quantitative approach focuses on gathering numerical data and generalising it across group of people or to explain a particular phenomenon.

### 1.7.1.3 Research strategy

For the purpose of this study, the data gathering strategy associated with case study was deemed relevant. A descriptive single case study is the research strategy carried out in this study. This type of case study focuses on selecting one among many (Gustafsson, 2017). It can be a case of one person or institution selected by the researcher. Case studies are advantageous because both approaches, qualitative and quantitative are accommodated. A SSS case study based on a selected TVET college is applied to achieve an in-depth understanding of student support services. Saunders (2014) encourages the use of multiple sources of data in case study research. Salkind (2009) defines a case study as a method used to intensely study a person or an institution in a unique setting or situation. This view is supported by Cohen et al. (2011) who state that a case study provides a unique example of real people in a real situation, enabling readers to understand ideas more clearly by presenting them with abstract theories or principles. In his study, Muchineripi and Addae (2018) point out that a case study is more relevant when the intention is to learn more about a phenomenon which nothing much is known or when it is a poorly understood situation. Through the selected college case study, the findings can be adopted or transferred to other educational institutions offering ODL programmes.

## **1.7.2 Research methods**

Research methods as opposed to methodology are all about strategies employed in a process of data collection, analysis and interpretation to come up with solution or findings to the research problem (Creswell, 2014). Nkosana (2016) concurs with Creswell by asserting that a research method is an overall grand plan describing procedures of data collection, analysis and interpretation. Research methods are about ontology and epistemology. Elements of education philosophy which are epistemology and ontology play a vital role in a process getting to reality about a phenomenon.

### **1.7.2.1 Choice of institution and participants/respondents**

Despite the fact that the current study focussed on a TVET college in KZN, the researcher needed to select an institution/s as bases of the study. The target institution for this study was a selected TVET college, located in northern KZN; however, the study focuses on the OLU operating at one of the college campuses. This campus mainly dealt with open learning students, and it was the college where the researcher was employed. A population in research is a group of potential participants to who can provide data that could be analysed and interpreted by the researcher then findings made and recommendations (Van Zyl, 2014). McMillan and Schumacher (2010) indicate that a study population comprises a group of elements that are guided by a specific principle and that is where research results can be simplified. This resonates with the view of Cooper and Schindler (2011), who define population as a group of elements on which one wishes to make some inferences.

### **1.7.2.2 Selection of participants and sampling strategies**

The selection of participants, also called sampling, refers to the process of selecting a fragment of the population that agrees to participate to the study. Denscombe (2014) defines a sample as a subgroup of a population that is considered to be representative of the population. The researcher, as an employee from the target college find it convenient and easy for him to access to the population and also to select participants. Two non-probability sampling techniques namely convenience and purposive, were found suitable for this study. Non-probability sampling technique, according to

Showkat and Parveen (2017) is regarded less complicated and easy to apply if compared to probability sampling. The selection of the purposive technique was suitable for staff participants who provided qualitative data verbally through semi-structured interviews, while the convenience sampling technique was good for respondents (students), which provided quantitative data by filling the questionnaire. Participants who provided primary data comprised of current and accessible ODL students of all levels in the field of business and engineering, lecturers, administrative staff, OLD manager and the HoD within the college OLU. Cohen (2011) views convenience sampling as a type of sampling where participants who are accessible to the researcher get selected.

The selection of participants and respondents was based on their availability and willingness to be part of this study, as per convenience sampling technique. In as far as purposive sampling is concerned; participants were selected as per their knowledge and expertise in the field of Open Learning and education at large. The process of target participants for purposive sampling is a process where individuals get selected to provide primary data as per their knowledge on a particular topic being studied (Ormrod, 2005). Muchineripi (2017) concurs with Ormrod by pointing out that through purposive sampling, the researcher can identify information-rich individuals. Creswell (2009) is in support of selecting participants who can provide information about the phenomenon being studied.

#### 1.7.2.3 Sample size

Sufficient sample size is the minimum number of participants required to identify a statistically significant difference if a difference truly exists (Burmeister & Aitken, 2012). Maree and Pietersen (2007) maintain that there is no definitive answer to the question of how large a sample is required for any given study. Considering the nature of this mixed methods study and its purpose of evaluating factors that could lead to the optimisation of academic support services rendered to ODL students, the sample size might be determined by availability or saturation of data collected. Since this is a mixed methods study, a total of 220 participants or respondents were selected. The researcher decided to select fewer study participants in an attempt to circumvent rapid data saturation. Data saturation is when no new information is discovered which might

result in redundancy. Guest, Bunce and Johnson (2006) view data saturation as a point when no new information or themes are observed. The sample size for this study consisted of the following:

- 10 participants, consisting of six lecturers, two administration staff members, one ODL Head of Department (HOD) and one ODL Manager
- 70 respondents/students from IT and Business fields of study
- 70 respondents/students from Engineering field of study
- 70 respondents/students from the Human Resources (HR) and Public Administration (PA) field of study

Lecturers, administration staff members, HOD and Open Learning manager were interviewed individually for qualitative data collection, while students were the respondents who responded by completing the questionnaire for quantitative data collection.

#### 1.7.2.4 Data collection

Leedy and Ormond (2013) claim that data collection is the process of collecting data to be analysed and interpreted with the aid of questionnaires, structured interviews and observation instruments. Data that was collected in this study were mainly dependent on the main research question, the aim and the objectives. Data collection methods and instruments used included semi-structured interviews; document analysis, and completion of questionnaires, these are elaborated next:

##### (i) Semi-structured interviews

Qualitative data were collected through semi-structured interviews. In the process of collecting qualitative data, participants were allowed to express their views and experiences freely and the views were based on provision of academic support services rendered by the selected college. Each participant was aware that the interviews were being recorded. The schedule of each interview was designed by the researcher and was one of the instruments used to collect data directly from participants. During qualitative data collection, an audio recording device was used to record all interviews.

## (ii) Document analysis

Bowen (2009) is of the opinion that when a researcher adopts a qualitative research approach, they ought to use document analysis in combination with other methods and such leads to triangulation or the drawing together of complementary methodologies in exploring a specific research inquiry. Bowen (2009) further posits that document analysis, which is also known as content analysis, is a systemic procedure for reviewing or evaluating relevant documents. O'Leary (2014) refers to public records, personal documents, and physical documents as three primary types of documents that can be analysed. Luo (2019) postulates that content analysis is used to identify patterns in recorded communication. Luo (2019) further contends that these systematic data can be in a form of text, oral or visual. In this case, documents were analysed by paying attention on the attrition and retention rate of students. This was accomplished by tracking records of students at the start of each semester or trimester throughout to the time of examination. As a tool that can be used to trace back a history of current situation or status (Dekeza-Tsomo, 2012). Documents were employed to support data obtained through interviews and questionnaires.

## (iii) Questionnaire

A questionnaire was among the instruments that were used to collect data in this study. As a set of closed-ended questions instrument, a questionnaire was designed by the researcher so as to be used to collect quantitative data from the respondents. In the process of designing the questionnaire, the researcher tried to eliminate leading questions, vague questions, personal questions, overlapping questions and questions that failed to cover all possible answers. Closed-ended questions were preferred by the researcher since it is challenging to analyse open-ended type of questions. To avert subjectivity, the researcher decided to refrain from asking questions that might influence the responses or answers of the respondents.

## (vi) Pilot survey

As a technique of checking relevancy, correctness and subjectivity of questions, the researcher applied a pilot survey testing of a questionnaire. It was an instrument meant to detect if weaknesses existed in the questionnaire. Simple and appropriate language



was used in the questionnaire to accommodate all respondents including those who English was not their vernacular and not part of the main study.

#### 1.7.2.5 Data analysis and interpretation

Since this is a mixed methods study, qualitative data were analysed descriptively through coding while the recorded semi-structured interviews were transcribed verbatim and these were structured orderly into various themes and categories. The researcher repeatedly listened to the audio-recorded responses during interviews and also referred to notes taken during interviews. In this process of analysing and interpreting data, the researcher used the responses of the participants to construct a new meaning about the phenomenon being evaluated. This enabled the researcher to come up with theory that guides the optimisation of student academic support services rendered by the college. Moore's (1993) "transactional distance theory" was one among two theories employed in this process. Statistic data collected through questionnaires were quantitatively analysed using spreadsheet graphs and tables. Both descriptive and inferential analyses were employed. Document analysis was used to analyse enrolment/ registration documents. Analysed documents were obtained from the college OLU admission office. Bowen (2009) is of an opinion that the qualitative researcher uses document analysis in combination with other methods in order to achieve triangulation or the drawing together of complementary methodologies in exploring a specific research inquiry. Bowen (2009) further posits that document analysis is a systemic procedure for reviewing or evaluating relevant documents. During data analysis both qualitative and quantitative data were treated equally and both data types received equal priority (Terrell, 2012). Though qualitative and quantitative data were analysed separately in chapter five of this study, both types of data got merged during interpretation. In a process of interpretation, data get consolidated, compared and integrated. After data comparison, qualitative and quantitative data get integrated to come up with new variable (Onwuegbuzie & Teddlie, 2003).

## 1.8 MEASURES OF TRUSTWORTHINESS IN QUALITATIVE STUDIES

To ensure rigor and trustworthiness of the research results, the following aspects of trustworthiness were applied and integrated with triangulation. Concurrent

triangulation is suitable for data validation in a mixed methods study. It also improves validity and reliability, level of interpretation, making use of different data sources like questionnaires, interviews, observation, documents, photo's, public reports. To ensure trustworthiness of the qualitative research results, the following measures were considered:

### **1.8.1 Credibility**

Credibility in each study is of cardinal importance as it adds rigor and trustworthiness. Credibility is viewed as external validity in quantitative studies (Trochim & Donnelly, 2007). To maintain authenticity of this study, the researcher ascertained that he remained objective and refrained from influencing the responses of the participants during the stage or process of data collection. The researcher also allowed participants to express themselves fully and recorded all interviews for better transcription during analysis.

### **1.8.2 Transferability**

Transferability, which is also referred to as generalisation in quantitative studies, is a degree to which the results of a qualitative research can be generalized or transferred to another contexts or settings (Trochim & Donnelly, 2007). In simple terms, it is the extent to which findings of a study can be applied to another context. The data obtained from a study can be utilised to contextualise the phenomenon being investigated.

### **1.8.3 Dependability**

Dependability is about obtaining the same results when an enquiry is observed more than once (Trochim & Donnelly 2007). Kothari (2009) refers to reliability as a measure of consistency of results. Qualitative and quantitative data got compared to check if common results were obtained. Merriam (2009) asserts that reliability is traditionally viewed as the degree to which research findings can be reproduced.

#### **1.8.4 Confirmability**

Trochim and Donnelly (2007) refer to confirmability as the degree to which results can be confirmed by others. They continued pointing out that in studies involving the quantitative approach, confirmability is related to reliability or objectivity. It is also referred to as the degree to which results can be confirmed or corroborated by others (Mqulwana, 2010).

### **1.9 VALIDITY AND RELIABILITY OF QUANTITATIVE RESEARCH RESULTS**

This section ensures the trustworthiness of quantitative data. Validity and reliability are used to evaluate the quality of research in terms of quantitative data (Middleton, 2019). This notion is supported by Heale (2015) who defines validity as the extent to which a concept is accurately measured in quantitative studies. Validity is about the accuracy of a measure and reliability is about the consistency or the accuracy of an instrument used (Ibid). Reliability is the second measure of quality in quantitative study. For the purpose of this study, validity was ensured by piloting the questionnaire before administering it to respondents. Questionnaire's reliability was tested by using Cronbach's coefficient.

### **1.10 ETHICAL CONSIDERATIONS**

Data collectors such as researchers are required to comply with the Data Protection Act of 1998 (Bowan, 2020) and ascertain that data and research participants are protected. Research ethics are all about pursuing acceptable procedure which includes professional codes of conduct, moral rules to collect data, analysing it, reporting and publication of information about study participants (Vuban & Eta, 2018). To conduct the research in this field, ethical clearance was obtained from management of the selected TVET college, and the DHET. A certificate on Ethical clearance was obtained from the UNISA's ethics review committee. Ethics included inter alia site access, subjects' protection from harm, informed consent, anonymity and confidentiality. Since it is unethical to collect data from participants without observing what is mentioned above, the researcher ascertained that all these precautions were taken care of. All ethical related documents are filed for reference purposes.

## 1.11 CHAPTERS DIVISION

This study consists of six chapters, demarcated as follows:

**Chapter 1:** This chapter addresses the background, applicability of this study, the problem statement, the aim, objectives, and the outline of the entire research.

**Chapter 2:** The contextual framework accompanied by the theoretical framework based on open learning student support services are presented in this chapter.

**Chapter 3:** The conceptual framework, consisting of an extensive review of the existing literature, concerning support services in ODL discipline was set out in this chapter.

**Chapter 4:** This chapter offered a detailed account of the research methodology. The research design deals with the research paradigm, approach and research type. The research methods include procedures, tools and techniques used to gather and analysing data. Trustworthiness and ethical considerations regarding the participation of human beings in the study is also discussed.

**Chapter 5:** This chapter reports on data collected during the interviews and from documents by coding data into different themes. Data collected through questionnaires were quantitatively analysed by using spreadsheet computer application and findings presented in charts and tables. Data analysis and interpretation also formed part of this chapter.

**Chapter 6:** Presentation of qualitative and quantitative findings are synthesized. Recommendations based on study findings are provided. This chapter concludes this study by providing delimitations, limitations and concluding remarks.

## 1.12 CHAPTER SUMMARY

This chapter served as an orientation to the whole study. This study intends to evaluate the academic support services offered to students studying through ODL at a selected TVET college in KZN in order to propose key factors for optimising these in an attempt

to keep ODL students to their academic programmes till to completion of their studies. The focus of this chapter was on providing an orientation based on key factors for optimising student academic services. The background to the research in this chapter revealed that apart from academic support services required by students, there is also a variety of challenges facing ODL students and such challenges have a negative impact on the academic performance of students. It is believed that through the findings of this study, institutions of higher learning offering ODL programmes will benefit and will start to assess support services rendered to their open learning students. The ODL context and student support services related literature were introduced in this chapter using Moore's (1993) distance learning theory as well as Holmberg's theory of interaction and communication as theoretical framework which underpinned this study. The context and theories are elaborated in chapter two of this study.

## **CHAPTER 2**

### **OPEN LEARNING STUDENT SUPPORT SERVICES: CONTEXT AND THEORIES**

#### **2. INTRODUCTION**

The main objective of this chapter is to contextualise SSS focusing more on optimisation of academic support in ODL discipline by paying attention on an international perspective followed by an African perspective. The theories which informed this study are also featured. Various aspects of support services are reviewed by paying attention to their impact on students' academic performance in Higher Education Institutions (HEI) offering distance learning globally and locally. It was vital to review SSS as their vitality play a pivotal role to student's ability to complete their qualifications on time and that way, stop or reduce the drop out rate, reduces attrition rate and keep students on their academic programmes for a designated period. Students enrolling for distance education which is also referred to as flexible education seems to increase each year (Han & Hall, 2012). The increase in number of students studying through ODL calls for the need for research that assess whether the support offered to students currently is comprehensive. This chapter also contextualised distance learning in the broader sense, followed by the theoretical framework.

#### **2.1 CONTEXTUALISING STUDENT SUPPORT SERVICES IN OPEN DISTANCE LEARNING**

##### **2.1.1 Introduction**

The context of SSS in the discipline of ODL is extremely extensive and it has been contextualised by various scholars using multiple methods. In order to understand what student academic services are, it is also necessary to pay attention on a range of SSS offered by institutions of higher learning. According to Krishnan (2012), SSS are the package of facilities and activities that institutions of higher learning provide students in order to make the learning process much easier and more interesting. It is also vital to know the necessity of such services to the academic journey of students. Different scholars such Gaskell and Mills (2014), Shandu-Phetla (2017) insist on the importance of providing not just SSS but a good-quality SSS in ODL. The success of distance education largely depends on the quality support services that are available

and utilised by students. Tamuliene (2014) advocates that as a structure made that made available by institutions of higher learning and meant to support students should cater for their academic and emotional needs and it is therefore a vital requirement because it has potential to improve academic success. This assertion resonates with Richburg-Hayes (2015) who argues that student support services incorporate: academic advising, student access centres as well as technological support.

Students and scholars from various institutions have different perceptions and experiences pertaining to the provision of SSS. Muchineripi (2018) reports that there are numerous challenges that are experienced by students whose institutions of higher learning offer support services that are ineffective. Muchineripi (2018) further states that basically, SSS need to nurture an academic achievement through the establishment of a comprehensive support system that counter the challenges experienced by students. This discipline, SSS attracted numerous scholars and series of studies have been conducted about it yet there still exists a massive gap in knowledge. Apparently, institutions of higher learning offering ODL have their policies pertaining to their SSS in place, however, despite these policies being documented, there is a lack of implementation. Engelbrecht and Bhengu (2015) elude that policy documents alone cannot support change and emphasise that it is the presence of resources in the form of financial aid, increased staff capacity, and student support programmes that should be included and harnessed to be part of the interventions designed to promote change.

Despite the aforementioned point, distance learning should involve face to face tutorials that are organised in regional centres with support staff or by using other forms of electronic communications such webinars for those institutions without regional centres (UNISA, 2021). The current practice in ODL discipline in South Africa is that some institutions require a minimum number of students registered for a given course of study to justify the offering of face-to-face tutorials and to make it economically viable. This is totally unfair to students as it is not their responsibility to recruit a certain number of students for any particular course of study.

In defining SSS some scholars such as Muchineripi and Addae (2018) refer to a structure or a body created by an institution to cater for the needs of students. The

definition of SSS adopted by this study is that referring to services offered by institutions of higher learning to support students on their academic endeavours. Support to students must be holistic or comprehensive, meaning; it should be able to address various socio-economic students' diversity (Maimane, 2016). Zungu and Munakandafa (2014) show that the relaxed approach by TVET colleges in South Africa was because once the government provided financial aid to students, they saw it as a solution that enabled students to access and afford all their academic needs and therefore neglected the provision of other forms of support required by students. The focus of this section is more on the contextual framework accompanied by the theoretical framework based on ODL support services, paying attention on academic services.

SSS formation in educational institutions was initiated because of increased drop out of students from education and was therefore seen as a structure that would provide the necessary support to retain and facilitate their academic journey. A normal institution of higher learning has several other structures that represent students including the 'Student Affairs' and 'Student Representative Councils (SRC)', therefore, these need to collaborate with the SSS. In particular, the former provides services to students at HEI to improve their growth and other forms of development. Collaboration among these bodies in support of students can be effective and produce good results on improving the retention of students.

"Student support means creating an environment that is conducive to learning, developing strategies that create community engagement, and incorporating assistance throughout the process. Support provides students with a sense of community, which allows them to avoid the feeling of isolation; gives students a sense of self-direction and management, thus reducing loss of control; contributes to student satisfaction; and increases motivation, helping students persist" (Lehman & Conceição, 2014:2). Speckman and Mandew (2014) insist that the focus should be the welfare of students, adding that any student development must put forward student-centred system. This statement resonates with Zungu and Munakandafa (2014) who maintain that in general, when an SSS office is not able to provide comprehensive support to isolated students, such might worsen especially the poverty situation of some students and therefore that of their families.



### **2.1.2 Student support from an international perspective**

The provision of support services in education can be traced back to 1918 when Deans from various universities establish a support group for students at colleges and universities called National Association of Student Personnel Administrators ([NASPA], 2012–2014). NASPA is a student affairs organisation based in the United States of America and boasts more than 13000 members at 1400 campuses from 25 countries. The meeting evaluated ways through which institutions of higher learning could initiate effective methods provide that could provide support that addressed the intellectual, social, moral, and personal development of students.

Years later after the NASPA conference, universities in Europe realised that they were still faced with serious challenges particularly that pertaining to changes associated with changes of the 21<sup>st</sup> century (Sánchez-Elvira & Simpson, 2018). Besides changes forced by the 21<sup>st</sup> century, the world education system still needed to transform a wide range of learning scenarios and such changes ought to alter the traditional modes of learning and offer or adopt one that is more flexible. As a result, the European Association of Distance Teaching Universities (EADTU) launched the so-called EMPOWER project in 2015 (Sánchez-Elvira & Simpson, 2018). Its purpose was to enable universities to share expertise in the field of distance education. Participants of the gathering identified twelve areas for EMPOWER including Student support in Open Distance and electronic Learning (ODeL) and blended learning as that which were central to achieving improved students' success. Sánchez-Elvira and Simpson (2018) refer to ODL as a system that is used in teaching and learning and is characterized by separation of teacher and learner in time and/or place, also, that it uses multiple media for delivery of instruction. ODeL is like ODL but it involves the incorporation of electronic-learning platform on their system as an effective method for learning programme delivery. The creation of EMPOWER was also aimed at increasing student retention and optimising academic performance, integration, and satisfaction.

The Cambridge University in the UK claims to have an extensive welfare system and a good student retention rate through their student support (Cambridge, 2020). This institution has Student Advice Service (SAS) which provides professional advice to students through various forms of communication. The so-called “students supporting

students” is another structure run by students and comprise of a welfare officer or sometimes a crew that provides advice and support to students at each college of the university. The website of the Cambridge University (2020) reports that all their registered students are members of the Students Union (SU) and therefore they are represented effectively on matters pertaining to their studies and entire welfare.

The University of Nottingham, also in the UK, provides support, guidance, and access to information for all their registered and active students (Nottingham, 2021). Their support services are also accessible online. To ascertain that their students remain on the right lane during their academic quest, the university, through its services for students avails multiple support services such as careers related matters, counselling, disability support, and financial support.

Student support practitioners who specialise in advising students who reside off-campus play a vital role in widening participation, but their perspectives are rarely reached (Sapir, 2021). The selected TVET College had structures such as the SSS, SRC and student affairs which provided support to students, yet such structures did not fully support students or students were not aware of the existence of some of the structures. Gilardi, Gullino and Garibaldi (2013) indicate that numerous support services available in HEI are underutilised or not be accessible at the time and place convenient for students. Britto and Rush (2013) insist on the fact that emphasis about student support need to be placed on staff shoulders and also insist on staff members training, particularly those involved on student support services. Tarabochia and Koltz (2015) support this statement by adding that in order to enrich a student’s academic development; a counselling programme should include different type of support services which includes the physical, affective, economic and social aspects. Oliveira, Borges and Simoes’s (2018) study constitutes that high dropout rates in distance learning results from insufficient student support.

According to Kinghorn and Smith (2013), across the world, part-time students face multiple barriers identified as enamours obstacles. These barriers can compromise academic success for part-time students (Soria, 2012). Barriers result from part-time students trying their level best to bridge two massive various cultures (Tinto, 2012).

Eradication of such barriers can promote effective support for students and ascertain that they are able to access support system they deserve.

### **2.1.3 Student support from an African perspective**

Multiple factors affecting the academic performance of students studying in institutions of higher learning based in Africa have been described by various scholars such as Simpson (2018), Du Toit (2012), Freeman and All (2014). Other scholars mentioned lack of resources, lack of motivation, financial constraints, students' unpreparedness among other factors in ODL institutions as factors that led to students not completing their qualifications on the stipulated period. Some of the aforesaid factors have to do lecturing staff as Geda and Yimer (2016), maintain that numerous TVET colleges in Africa have few appropriately qualified lecturing staff members. Geda (2016) further states that among lecturing staff members, many of them are not performing their duties as expected as they lack preparation and presentation skills of the curriculum. No matter what challenges students experience on their respective institutions, comprehensive SSS is a mechanism of ensuring that students remain on their academic programmes through to completion of their courses. Non-completion is generally viewed as an institutional failure and sends negative signals about the quality of teaching or support on concerned institution. On the other hand, completion rates are performance indicators used to assess the success of educational institutions (Mdluli, 2017). Just like other countries of the world, the following African countries are not immune to these challenges as discussed next.

#### **2.1.3.1 Education demand in Kenya**

Just like other countries, Kenya is experiencing a high demand for education and an increase in the enrolment of students (Michubu, Nyerere & Kyalo, 2017). These demands call for increased financial support especially in institutions of higher learning to ascertain that students are coping with all forms of pressure brought by education. In an attempt to address the financial constraints of students, Wangenge-Ouma (2012) affirms that universities in Kenya have responded to the increased demands for access and declining state funding by creating programmes that generate revenue for the institutions. The decline in government subsidy for HE in Africa as Michubu, Nyerere and Kyalo (2017) allude, forces institutions to operate under tight budgets, and as a result, it has been very difficult specially to provide adequate student support

services, thus compromising the quality of HEI including those in Kenya. The enhancement of academic capabilities of students requires the availability of sufficient funding for academic support initiatives (Du Toit, 2012). Equity of opportunity and outcomes according to Du Toit, (2012) is constrained by insufficient funding to address under preparedness for higher education programmes, especially for indigent students. As a result of the increase in demand for higher education and student enrolment demand while state funding was declining in Kenya, public universities have responded by creating programmes that generate revenue for the institutions (Wangenge-Ouma, 2012).

#### 2.1.3.2 Botswana perspective

Poverty, which is common to most African countries has a negative impact on the academic performance of students (Morris, 2015). Similarly, students who study in TVET Colleges that are built in isolated areas of Botswana experience the worse kind of poverty and therefore their academic performance is negatively affected. It is noteworthy to indicate that institutions of higher learning in Botswana do provide support including learning analytics to improve the success and completion rate for their students (Tladi, 2016). It was this approach among other initiatives that attracted this researcher's attention and that through conducting this research, they could provide data that could inform institutional processes on diversity of learning needs and student success.

The literature also reveal that Botswana is one of African countries with an impressive technological infrastructure and a national policy to integrate the use of information and communication (Onwe, 2014). As per the demands of 4IR, other countries should invest in technology for the betterment and optimisation of SSS. The study conducted by Harris and Marlowe (2011) about educational challenges of African refugee constitutes that the large percentage of student from African countries need the language related support. It therefore important educational institutions to include the language support on their SSS.

### 2.1.3.3 Support services in Ethiopia

In an attempt to provide SSS and create a competent and adaptable workforce that could lift the economic and social development of Ethiopia, in 2008, Getachew (2019) asserts that the country set out an Ethiopian TVET national strategic plan. Among other ends, this initiative was aimed at absorbing at least 80% of students who completed their secondary education. According to Getachew (2019), the plan was in vain. This was mainly because, majority of the students exhibited poor academic achievements in the TVET Colleges.

Lack of resources caused by the lack of funding for TVET colleges by the Ethiopian government was the major contributor to the failure (Geda, 2016). Maclean and Fien (2017) add that in most cases, lack of resources emanates from students over enrolment which calls for more funding. The lack of resources includes among other things, the lack of digital devices among students or lack of ICT infrastructure which can put on institutions or Ethiopian education department shoulders. The Ethiopian government cannot be excused in these student's challenges.

Lack of proper ICT infrastructure and unstable power supply is said to be among the challenges hindering the provision of support to students in Ethiopia (Aberra, 2021). The same challenge is common to South Africa. What exacerbate matters in Ethiopian ODL is that "The students do not get support from their lecturers and feedback from their lecturers either arrives late or might not be adequate" (Aberra, 2021:3). Lack of tutoring, library services and student's inability to access or to use ICT are regarded as institutional factors which lead to student's attrition (Musingafi et al, 2015). In addition, Lekhetho (2021) advocates that low success rate among ODL students tend to be caused by the lack of required academic and research skills, low English proficiency, and inadequate student support. Lack of lecturer-student interaction emanates from poor ICT infrastructure.

### 2.1.3.4 Education resources in Nigeria

As the above section describes the Ethiopian scenario, the poor support services caused by lack of government-sponsored resources has also compromised the functioning of TVET colleges in other countries in Africa including Nigeria. A study

conducted by Ayonmike (2016) on the implementation of TVET curriculum in South Nigeria constitute that some TVET colleges had material resources of poor quality and quantity and it compromised the quality of the education because lecturers were unable to prepare their lessons as a result of poor and insufficient resources. Without a doubt, the poor condition and shortage of resources is directly linked to the insufficient funding. Ayonmike (2016) advocates that the provision of sufficient funding, resources can be improved which would enable TVET colleges to offer a curriculum that is relevant but also be able to support students. In the main, the resources that are in short supply include that which are material and human in nature. Overall, a shortage and/or lack of any among these two types of resources compromises a proper provision of SSS.

Studies pertaining to SSS in ODL are still required in Nigeria since distance education is still in its embryonic stage (Ojokheta, 2010). This scholar claims that the challenge the minimum deployment of technology which is the requirement in distance education. As a result of technology related challenges, interaction was found insignificant. In addition, SSS are design for the purpose of helping students to study conveniently at workplaces, homes or in their respective places of choice (Onwe, 2014). This scholar further affirms that the National Open University of Nigeria offer a wide range of SSS which includes among other services, the Tutor-Marked Assignment (TMA), tutorial sessions and counselling. The services TMA, help students to receive their assignment feedback with useful comments to guide student's learning objectives. The literature limitation in this scenario is the fact that it does not comment of the effectiveness of these services to students.

#### **2.1.4 Student support from a South African perspective**

For the purpose of this study, the shortage or lack of resources is seen as causing major challenges among institutions of higher learning in South Africa as is the case in other African countries. Majority of universities in sub-Saharan Africa are under-resourced with academic staff faced with high workloads that negatively affect their well-being and performances (DHET, 2014). Literature background has shown that similar to their counterparts in the continent, various institutions of higher learning in South Africa are constrained by lack and/or insufficient financial resources (Myende, Samuel & Pillay, 2018). One of the reasons for this challenge is the legacy of the

imbalances experienced under apartheid by South Africa (Pandor, 2018). The South African government has made strides to address this challenge partly through subsidising institutions of higher learning coupled with funding students through the NSFAS. In particular, the NSFAS is thought to also redress socio-economic imbalances. Some authors are of the view that SSS cannot be attained without financial resources as social security cannot be attained unless everyone has access to and awareness about the basic banking facilities (Rathor, 2020). Apart from contributing towards tuition fees, students require financial stability to purchase electronic devices such as laptops, routers, smartphones and other learning material as required by today's technology in the field of education, particularly in ODL discipline.

At a dedicated ODL institution in South Africa, support offered by the UNISA provides multiple services to students which include counselling, library services, digital access centres, UNISA radio, social media platforms, myLife e-mail account, myUnisa and more. These are accessible through the institution's six regional centres countrywide, their website, telephone and others student bodies (UNISA, 2020). UNISA provides the following SSS via relevant platforms:

(i) Counselling

UNISA provides counselling services, career guidance, academic and personal support to students. These support services are accessible online, by e-mail or in person.

(ii) Library services

UNISA has the largest academic library in Africa that encompasses more than two million items which include e-journals, books, reference resources, e-books, and e-newspapers. Without a doubt, the university seem to understand the importance of library services hence it provides online guidance services as to how to access and use these facilities. In fact, most students ODL used the online platform to access announcements, course content as well as resources such as journals, library facilities, assignment submission and more (Tladi, 2016).

(iii) Digital access centres

The world, economy, and education operate and interact through digital platforms therefore students should follow suit. Digital centres of the UNISA provide students with widened opportunities for accessing ICTs through contracting establishments within communities that have adequately functioning ICT infrastructures such as computer facilities. These facilities should have stable and readily available internet.

(iv) UNISA radio

UNISA Radio, which is Internet-based, is an informative platform of information and topics especially tailor-made for students who study at the UNISA. Its broadcasting consists among other things, informative interviews and talk shows which keep students abreast with matters pertaining to them.

(v) Social media platforms

A variety of social media platforms such as YouTube, LinkedIn, Twitter and Facebook play a vital role in the lives of today's students, and they are great channels through which students share ideas and communicate with others conveniently.

(vi) MyLife e-mail account

The Unisa student portal allows registered students get free myLife e-mail account and that is where all important information, notices and updates are sent.

(vii) Regional centres

Unisa is divided into seven regions: Gauteng, KwaZulu-Natal, Limpopo, Midlands, Mpumalanga, Eastern Cape and Western Cape. Together, the regions comprise 28 service centres and agencies that serve students. At most of the regional offices are learning centres where students get face to face tutorials and access to computers. International students enrolled at UNISA can access such facilities remotely via various platforms, synchronously or asynchronously.



(viii) Telephone

To address challenges associated with access to resources, students registered at the UNISA have access to computers that are connected to the internet even in rural areas throughout South Africa. Telecentres are private facilities equipped with computers connected to the internet, printers, photocopiers, scanners, faxes and telephones. Administrators are also available to assist students.

As part of student support, the UNISA further publishes tutorial letter 101 for all programmes and it provides a list of prescribed textbooks as well as recommended readings (Dyomfama, 2021). This ODeL institution, as described in sub-section 2.2.6 also boasts international students and its academic centre is in Addis Ababa, Ethiopia. It is important for other institutions of higher learning in ODL to ensure that their support services are known and accessible.

A study conducted by Arko-Achemfuor (2017) recommends that the UNISA should increase its support services and train the academic and support staff as well as students on how they can use the support services available to them. This scholar argues that students are not familiar with, or they are unable to access support services available for them. This also resonates with a research-informed conclusion made by the South African Institute for Distance Education (SAIDE) in 1999. They revealed that most South African distance students are unlikely to succeed in distance education when there is no sufficient student support.

Nowadays, technology has become a platform used widely to deliver good student support services. Despite various terminologies used by different institutions of higher learning globally, the main objective behind the creation of SSS is to provide support to students that would keep them motivated throughout their academic programmes in order to optimise throughput.

On their commitment to student support, the Northwest University (NWU) opened an Office of Academic Support (OAS) intended to optimise student's potential and development. This office operates under the Centre for Student Support Services (CSSS). Information published on the institution's website (NWU, 2021), OAS establishes innovative learning and development among students. With the support

provided by OAS, the retention of students is said to be enhanced as this office provides a variety of support services to students. The NWU provides support to students through their learning and teaching platform called eFundi, a platform that connects registered students and lecturers online.

Another institution in South Africa, the University of Pretoria (UP) supports its students through their Student Service Centre (SSC) which offers multiple support services to students. This division is reported to support students throughout their full academic cycle. UP's SSC offers contacts including contacts designated for online students only. Students are at liberty to contact SSC office whenever they need assistance or various forms of support.

Even though the focus of this study was more on academic support services, it was quite evident that services cannot be separate in terms of the way they are offered. Students require a series of support services that can assist them in their education related matters. It is to be expected that while going through their academic programmes, students become stressed. Julal (2013) alluded that normally, each student registered at an institution of higher learning is more likely to experience a series of stressors. These forms of stress cannot be overcome if students are not getting relevant support from their institutions and from their own families. Various stressors might lead to academic poor performance or even students dropping out.

It is of cardinal importance to note that students need support, the first being career choice as some come from schools with no career guidance on their curricular. Lack of adequate support led to some students enrolling for courses they are not interested upon and this is shown by the high number of students who make wrong career choices during their first year enrolment. The insufficient career guidance that is at times provided by especially colleges contributes significantly to indecisiveness and varied career pathways (Jaggers, 2015).

Despite the multiple support services that are offered to students by communities and/or families, it is the academic support that provides students with a real opportunity for development on academic related matters while assisting them with requisite requirements of a particular institution of higher learning as well as motivating

them throughout their studies. According to Gullat and Jan (2002), academic support system is a body of any HEI designed to provide assistance and support to students as well as maintain that support until students achieve their academic success. These scholars further contend that HEI creates a welcoming and supportive environment to students. Apparently, some students are not aware of such bodies and programmes that are designed to assist them. The question is, what do institutions do to familiarise students with such support services so that they can access and utilise their programmes?

Nowadays, the prosperity of distance education relies on high quality student support services supported using computers. In fact, the availability and usage of technologies of better quality to support students learning through distance learning is of cardinal importance (Shandu-Phetla, 2017). The provision of education cannot be effective without the use of modern technology. Chen and Chen (2008) cited in Baloyi (2012) stress the value of incorporating and delivering distance education using technology because it is considered a platform allow students and institutions to share and/or deliver educational resources in a cost-effective manner. Moreover, ODL systems typically use computer-based technology to mediate learning (Nyatsanza & Mtezo, 2013). Unfortunately, the use of technology in South African education is still facing serious challenges particularly for poor students located in remote areas that lack ICT infrastructure.

Public TVET colleges in South Africa do offer support systems to students. Such support systems have a significant influence on how well the students achieve academically (Council of Higher Education [CHE, 2014]). The TVET College selected for this study claims to have specially trained staff members that assist students with challenges which may arise during their course of study. The college's main aim is to support students to achieve their potential and overcome barriers that may be impacting negatively on their academic performance. One of their structures is the college Student Development Practitioners (SDPs) which reportedly offer confidential personal and emotional support via counselling sessions. Counselling is made available to assist students who may be facing difficulties or struggling to adjust to the TVET environment. Where required, students are referred to specialist services

outside of the College (Majuba College, 2021). The basis of this section was on contextualising SSS internationally and locally. The next section contextualises ODL.

## **2.2 THE OPEN DISTANCE LEARNING CONTEXT**

Numerous research studies have reported on open distance learning yet rarely any clearly defines ODL, instead, scholars are trying to find its common definition (Kamau, 2012). Distance education includes *inter alia* tutoring, a solitary form of learning, using student own pace, flexibility, getting feedback, open learning, student support, and studying at individual's own time. The latter exempt students from accommodation and transport related costs. This flexible form of education is not new and has been embraced even in countries such as the United Kingdom (UK). The UK has had the Open University of United Kingdom (OUUK) since 1969 and has contributed to the acknowledgement and legitimisation of distance education globally and has proven that the qualifications graduates produced from the institution were at parity with that from other traditional universities (Perraton, 2010).

Different scholars view distance education and learning in different perspectives. For example, Han and Hall (2012) view it as an option to international students and have contributed to increased enrolment in colleges and universities in America. Pitsoe and Maila (2014) view ODL as an instrument of social transformation that caters for everyone with interest in education irrespective of age or historical background. Literature reveals that institutions of higher learning that offer ODL programmes in Spain and United States enjoy an increasing enrolment of students. According to Heydenrych and Prinsloo (2010), ODL is a broader concept and is more than just distance education. These authors further point out that all ODL institutions can be categorised under distance education but not all distance education institutions can be classified as ODL institutions.

The establishment of a distance education institution in South Africa, UNISA since 1873 has added a different dimension and an integral part in the country's education landscape. Indeed, over years other ODL institutions have been opened in South Africa however, the UNISA remains the most significant ODL/ODeL institution not only in South Africa but in the African continent at large. Although this institution set certain specific dates for students to register, their application remains open throughout the

year which allows distance students to apply at any time (Unisa, 2019). This institution is in line with modern technology and of late, they blend online platform with convectional system while students receive printed material in the form of hard copies.

As education evolves, ODL institutions tend to rely more on modern wireless technology as a form of communication with students. Institutions with regional offices such as UNISA sometimes employ synchronous learning method whereby students assemble at a certain time and place so that they would be taught while the instructor is on a different location. This form of teaching and learning is referred to as video conferencing as it connects students and digitally and is another productive method of reducing the transactional distance between students and their instructors. Video conferencing provides live online lessons and is cost effective to students as they utilise resources of the institution. This is another form of support institutions need to opt for.

It is clear that certain institutions utilise both the e-learning and convectional learning systems. It is also evident that as education evolves, distance education institutions are gradually migrating to e-learning. The importance of e-learning in both the distance and face to face traditional system of learning was noticed during hard lockdowns associated with the outbreak of the COVID-19 when education activities were suspended in various countries of the world. Emergency remote teaching, the temporary shift of instructional delivery mode forced by certain crisis was an option (Erasmus, 2020). This was a good strategy since it kept the ball rolling in education even during the time of the pandemic. During the COVID-19 pandemic, institutions of higher learning and some offering basic education have had to rise to the occasion and come up with innovative strategies to keep teaching and learning in progress.

The initiatives adopted to facilitate emergency remote teaching posed a serious challenge to the South African education system and other countries in Africa where ICT infrastructure was a challenge. Numerous schools in South Africa did not include computer subjects in their curricular. This created a serious challenge when it comes to e-learning or emergency remote teaching as most students and even instructors lacked basic computing skills. Nagel (2013) points out series of new technology-related challenges in our schools today. In a study conducted by Mbambo (2017)

about challenges encountered by information system in TVET colleges, it was stated that students showed a serious lack of computer skills. This statement resonates with that of Wilson (2006) who states that in South African institutions of higher education, students show lack of computer skills.

The notion of time in ODL needs to be considered in various serious perspectives. As stated on the UNISA support services website (UNISA, 2020) and other institutions websites that in DE, students study at their own pace and time. Scholars tend to refer to distance learning as a kind of learning that is flexible and students do their work on their convenient times. Though students do not need to be in class on specific time, but the question of time cannot be taken as light as it sounds. Instructors give students assignments that ought to be submitted on certain dates. The submissions dates of the assignments and other related academic activities or assessments suggest that the students need to make a sound schedule that allows them to study, participate on online learning as well as write and submit assessments. Therefore, there is a limitation attached to time in distance learning.

A significant number of students that are enrolled for distance education tend to experience a range of challenges related to the academic environment. These challenges include *inter alia* the lack of basics or knowledge on certain subjects, lack of skills on how they should study, receiving study material late, not being conversant in the medium of instruction - English, reliable internet connectivity and its related cost, typing skills and other word processing application related skills and many more (Lee & Kim, 2012). Because distance students are isolated from their fellow students and instructors, they find it very challenging to get support when they are working on their assignments. Despite that some instructors avail their contact for students; it is not always possible that an instructor would always be available to attend to challenges faced by most students at a certain time. Lastly, although some instructors share their e-mail addresses to students, normally, it takes time for an instructor to attend to and respond to a series of e-mail messages (LaBarbera, 2013).

Distance learning is a complete paradigm shift from conventional learning because it is based on delivering lessons and learning material outside classroom (Mowes, 2005). Mowes (2005) continue maintaining that students in a learning environment

should be considered as customers or clients, and then good service should be provided to customers. As one of critical components in distance learning, student support has been viewed by Bowa (2008) as a concept that does not have widely accepted definition. Tracking student support services back to 1980's, Maimane (2016) view SSS in each institution as a unit that strives to provide all the necessary support and development services to make academic duration among student fulfilling as possible. These scholars mentioned a wide range of support services which include human and non-human resources.

Though this study is more concerned with academic support services, scholars such as Muchineripi, Arko-Achemfuor and Quan-Baffourb (2021:3), affirm that “student success hinges on the students’ involvement and engagement in college’s academic and non-academic activities”. Student commitment deals with the amount of physical and psychological energy being applied by a student to the academic experience (Ibid). Effective support creates a good learning environment to support students while maintaining their self-esteem. Information process and management is covered by systematic function which provides a comprehensive student support (Tait, 2000). Since numerous students are being educated with language, which is not their first language, they also need support that pertains to medium of instruction.

The following sections, 2.2.1 to 2.2.7, provide clarity and relevancy on these techniques as used in ODL discipline and specifically for this study. The purpose of these sections inclusion in this chapter was to give his typical context of the phenomenon being investigated prior to conceptual framework described on the next chapter (chapter 3) of this study.

### **2.2.1 Medium of instruction**

English is a language that is used widely by most institutions of higher learning in South Africa for teaching and learning, to offer computer skills, and to deliver academic services. Therefore, in order for students that are registered in these institutions to understand the subject content, they must be able to understand and write English. This poses a challenge since this language is not a vernacular to most students in South Africa and other parts of Africa. The majority of non-English-speaking African students are assumed to be conversant in English yet this is not always the case. This

simply means that English is another barrier to students on distance learning as well as conventional face to face learning. This poses a question as whether education is about knowledge and skills or is about English. The continued usage of the English language as the dominant language in South Africa's education is against the country's language policy. Section 29 (2) of the constitution states that "Everyone has the right to receive education in an official language of choice in public education institutions" (Act No. 108 of 1996). The language barrier is among factors that hinder certain students from accessing education. Proficiency in English is a challenge hindering a large number of students who apply for online courses because they do not understand it (Crea & Spanon, 2017). It is therefore not surprising that language barrier has been shown as one among factors that contribute to poor academic performance in the TVET sector (Mphale & Mhlauli, 2014). These scholars further state that the language problem results in poor performance among students in TVET Colleges.

Despite attempts by the South African government to insist that all official languages should be treated equally, English remains the dominant medium in our education system. The researcher believes that education can be offered in any language and education has nothing to do with a certain language. Given that language is a barrier to students, it is explicit that institutions of higher learning ought to strive to offer language related support services to students including translating software. This will be another form of academic support service to students.

### **2.2.2 Modern technology**

The use of computers in distance learning is becoming a mainstay in the whole world. These imply that students must be computer literate as this skill would enable them to use technology to solve educational related problems and other problems at large. Oncu and Cakir (2011) view online distance learning as a pillar of higher education which is rapidly consuming convectional system of education. COVID-19 also became a catalyst that facilitated change in the way through which our education was provided. It compelled most educational institutions to use online learning meaning, out of the blue, some students needed to possess computers skills. Lack of basic computing skills among distant students is another challenge since this form of flexible education



now features the use of ICT. A survey conducted in Arabia, Syria, Denmark, and Europe reported lack of ICT knowledge and skills among teachers (Bingimlas, 2009).

Numerous schools in South Africa do not include computer subjects in their learning programmes. This has a negative impact on the lives of students as they are supposed to possess such skills when they join institutions of higher education. Starting with the process of enrolment or registration, students are required to comprehend computers or have ICT skills. Once registered, they need to do and submit their assignments through the use of gadgets and systems that require some level of computer skills. Even when they need to communicate with an institution, digital communication skills such as creation of e-mail address, sending plus receiving e-mail messages is important. This indicates the significance of ICT and also indicates that distance education is now seemingly impossible without electronic form of communication. Krutka, Bergman, Flores, Mason and Jack (2014) are of the opinion that the rapid increase of e-learning qualifications has promoted knowledge gathering shifts towards democratic and horizontal relations amid teachers and learners. Shuttleworth cannot be ignored:

*“Computer is not a device anymore. It is an extension of your mind and your gateway to other people”.*

*Mark Shuttleworth (n.d.)*

Some instructors simply assign students to do some academic work on applications such as PowerPoint, not knowing that some students do not even know where to start launching that particular application on a computer, let alone using it. Some students struggle to even get access to a computer since some of them come from poor backgrounds with poorly resourced schools. It is clear that for distance learning to be possible, students need to be given some support services in terms of ICT. Seale, Georgeson, Mamas, and Swain (2015) refer to this as inequality in terms of accessing internet related technology amid the vulnerable populations who lack digital skills and capital to access online educational resources.

Owing to the widespread deficiency or lack of ICT skills and knowledge, some students who study online are unable to attach a folder with multiple documents and send it to an instructor. Obviously, even after several attempts, as long as they do not have

assistance, they would not be able to accomplish this task. This is caused by the lack of knowledge because when students are not aware that if one sends multiple documents that make a folder, the folder must be compressed or zipped before attachment. In a different scenario, a student made several attempts to send a document via e-mail in vain, not noticing that the file size was bigger than the size to be accommodated by e-mail message. These two scenarios make it clear that distance students struggle with ICT skills before struggling with course content. The support system students need starts from knowledge of computers followed by series of support including academic one.

In the past centuries, the face-to-face interaction was the most dominant form in teaching and learning in the education sector, however, it is currently superseded by the online learning platform. Technology specialists are required and they need to provide training to both instructors and students in order to ease the transition. As another platform which can be incorporated in learning, social media should be used effectively and be considered as an easily accessible mode of learning. Students need to undergo a proper training on how to use social media and other ICT tools. The improvement of the teaching learning process depends on the strategies used by instructors. Technology is also there to facilitate effective teaching. Instructors need to do more to motivate learners since ICT does not spontaneously improve teaching and learning (Boholano, 2013). Boholano (2013) further states that basic education institutions in the Philippines acknowledge the quick movement of institutions with the technology driven changes in society and economy.

There are multiple reasons for students to opt for distant learning programmes (Falloon 2011). The correlation and distinction of the following concepts associated with distance learning are briefly described:

- Open Learning
- Distance Learning
- Open and Distance Learning (ODL)
- Open Distance and Electronic Learning (ODeL)
- Open Learning Unit (OLU)

### **2.2.3 Open Learning**

There is a distinction between Open Learning (OL), Distance Learning (DL), and Open and Distance learning (ODL). ODL institutions offer learning which is open to everyone, without taking into cognisance the age and admission requirements. It is a kind of learning that is open to everyone. Internationally, there are open universities such the British Open University which was established in 1969 to widen access to education in Britain (Mills, 2007) as well as the Zimbabwe Open University which was established in the year 1999 to empower the world with quality open and distance learning. For this study, OL and DL concepts are combined to ODL referring to the kind of learning where students and instructors communicate electronically using different platforms.

### **2.2.4 Distance Learning**

DE, which is also known as remote learning, is a form of learning which occurs through certain means of communication such as correspondence or online. This form of learning does not need the physical presence of students in a particular location. There is a misunderstanding about the concepts of DE and ODL. For example, it is not all DE institutions that are open, some offer distance learning which is not open to everyone since certain criteria is used to admit students. A study conducted by Kamper and Du Plessis (2014) revealed certain misconception that OL is synonymous with DE and that institutions that labelled DE as ODL were moderately responsible for such misconception. As a kind of learning which excludes commuting, accommodation costs and other related costs, it is referred to as flexible learning. Students who study in these institutions report being frustrated. ODL and DE share the same sentiments, but it does not mean that all DE institutions embrace ODL, yet all ODL institutions are also deemed as DE institutions (Belawati & Baggaley, 2009).

### **2.2.5 Open and Distance Learning**

As DE institutions, ODL institutions tend to synthesise open learning and distance learning. ODL is characterised by separation or a pedagogical distance between students and instructors. As a result of such distance, some students feel isolated and neglected by their institutions. It is under these circumstances that students need access to institutions' SSS. "The universal demand for education, thirst for knowledge

and the incapability of the mainstream education system in catering to the increasing popular demand for higher education were the major contributory factors behind the emergence of the ODL system” (Ramzan, 2017: 295).

### **2.2.6 Open Distance and Electronic Learning**

Some DE institutions such as the UNISA offer both open and DE. After its establishment in 1873, the UNISA has undergone series of development from being a university college which offered courses via correspondence. It became an ODL institution after merging with the Vista university and Technikon SA in the year 2004 (Seletse, 2002). According to the Commonwealth of Learning (2012), UNISA has an OL policy which support ‘open access to courses, flexibility in learning provision, flexibility in methods and criterion of assessing learning process and achievement’. According to Wong (2017), ODL institutions present an ideal context for the use of learning analytics because they usually have large population of students who are increasingly being supported by the use of Internet.

These institutions, known as ODeL, tend to incorporate e-learning on their system as an effective method for learning programme delivery. This incorporation of e-learning promotes good interaction and effective communication between students and instructors. ODeL institutions tend to incorporate both open learning and distance learning by adding the form electronic platform on their education. ODeL studies are keeping up with the latest trends in this fast-growing sphere of education. As technology and education evolve, in the year 2013, the council of the UNISA accepted the implementation of ODeL. The adoption of a new ODeL model by UNISA in 2013 was an indication that it would henceforth become an online university over a short period of time (Du Plessis, 2019).

### **2.2.7 Open Learning Unit**

There are face to face conventional institutions which offer OL to part-time students. As indicated above, these institutions, including the sampled college admit full-time students and they have a unit called OLU that caters for students who cannot attend on a full-time, face to face classes. In most cases, these institutions do not hire more instructors for OLU students instead; they use the very same instructors that work with

full-time students. This is a disadvantage because these institutions do not have experienced instructors in the field of OL. Moreover, these instructors end up overloaded with academic work which also disadvantage their students. As a discipline on its own, ODL should be provided with instructors that would focus merely on ODL students. Curriculum in ODL discipline is offered three various modes.

### **2.3 THREE MODES OF LEARNING IN OPEN DISTANCE LEARNING**

Communication is an effective technique that enables interaction in education. The three main techniques that are used in learning and communication are synchronous, asynchronous, and blended. All these are used by various educational institutions to offer distance education as well as their counterparts offering the face-to-face method. We may not challenge the fact that there are institutions that use these tripartite techniques while some the first two. The focus in this thesis was on all three techniques that are used by institutions to interact with students as well as their effectiveness. It is necessary to explore all forms of learning or communication to find an effective mode in distance learning.

#### **2.3.1 Synchronous learning**

According to Moore and Kearsley (2012), the advantage of synchronous learning is that it is based on live interaction, that is real time contact and interaction where all students could see and hear the instructor. Synchronous learning is where a live lecture is recorded and is uploaded as a digital video or podcast for students to be viewed, either in real-time or after the lecture has finished. In a scenario where an instructor is at a different location from that of the students, communication with students is possible by using modern technology. Technologies such as Zoom, Skype, video conferencing, and Google docs are some of the platforms that can be utilised to enable live interaction between students and instructors. Synchronous learning is characterised by attendance and live interaction among students, their peers, and the instructors amongst others. It is also Instructor-centred as the instructor is the source of knowledge or source of information. The instructor-centred approach, according to Al-Zu'be (2013), portrays students as basically passive while the teachers are active since instructors are the main focus. Some instructors support their students by organising synchronous sessions (Rapanta, Botturi, Goodyear, Guàrdia & Koole,

2020). Rapanta, et al, (2020) affirm that when a synchronous session was conducted along an application exercise, the outcome was quite efficient and provides important feedback for instructors. Unlike the asynchronous learning method where students are able to access outside resources, the synchronous is class resource centred.

### **2.3.2 Asynchronous learning**

Islam (2019) affirms that during a synchronous virtual leaning process, social interaction and connectivity engages students as they interact with each other during group projects. Asynchronous systems can be used in conjunction with synchronous tools to create an online learning community that provides support to students from both peers and instructors because the web-enhanced classes enhance the interaction and create a sense of connectedness among students (Beattie, Spooner, Jordan, Algozzine, & Spooner, 2017). Students and their instructors are in different locations with limited interaction based on availability of technology such as video conferencing and other technology related techniques (Al-Samarraie, 2019). Instructors simply record lessons and upload them to the internet to be accessed by students at their convenient times. The asynchronous form of learning is advantageous in the manner that that it allows students to provide their own content and choose and have participants of their own choice (Moore & Kearsley, 2012).

Asynchronous learning is characterised by delayed feedback which is one of negativities of this technique (Yu, Liu & Nemat, 2019). Regular feedback is essential to students and it keeps students motivated. Karaaslan, Kilic, Guven-Yalcin and Gullu (2018) contend that motivated students can work better in asynchronous learning partly because the students are at different locations, yet an instructor is also away from students. Students do not need to attend classes as their learning material can be accessed online. Some of the online lessons can be downloaded to be accessed later. That way, students can design their own learning schedule and this calls for discipline. Live interaction is limited since students can interact with instructors by using other methods such as e-mails, phone calls, WhatsApp and other platforms (He, 2013).

This is a student-centred form of learning. As a student-centred form of learning, according to Taylor and Francis (2014), requires students to be actively involved and

take full responsibility for their own learning. After uploading lessons, instructors can notify their students about it or sometimes it is on student's shoulders to keep checking the new content uploaded. It is also advantageous in a manner that students can repeat the lessons as many times as they want to for better understanding. One among challenges of the asynchronous learning is that some students are not well equipped with ICT skills and devices. Peters (2017) also advocates that asynchronous also offer students an opportunity to review outside resources so as to supplement their learning. Students interact mostly with a particular course content and interphase since it uses digital devices and software.

Scholars such as Han (2013) refers to this form of learning as a method that provides learning resources online and allow students to learn on their own. Challenges such as delayed feedback, lack of participation, lack of social presence and low motivation are associated with asynchronous learning (Kear, Chetwynd, Williams & Donelan, 2015). Cunningham (2014) view asynchronous as a learning that separates students from others or from the class and makes it challenging for students to collaborate with classmates or other students. It is also important to note what has been said by other scholars. Scholars reveal some challenges not impossibilities. This indicates that there are technologically related techniques that can be implemented to address such challenges.

### **2.3.3 Blended learning**

Various authors, scholars and writers define blended learning in various forms. These scholars concur with each other on a fact that blended learning collaborate face to face and online form of learning. As a combination of traditional face to face and online teaching and learning, Garrison and Kanula, (2004), Osguthorpe and Graham (2003) and Williams (2002) describe blended learning as frequent concepts which have been included in the studies that aim to make use of technology in recent educational activities.

Different methods, resources, and technologies get synthesised in an attempt to enhance student learning. It is a teaching and learning practice which combines instructor interaction with students and computing devices. It is sometimes called hybrid learning. In a scenario of online learning, both synchronous and asynchronous

learning can be featured to face to face. This simply means that there is blended synchronous learning and blended asynchronous learning. According to Jacobs, Renandya and Power (2016), certain campus-based institutions tend to use a blended approach by incorporating online discussions so that communication among students can proceed beyond classrooms.

Blended learning excludes neither the synchronous nor the asynchronous type of learning, but both are combined to facilitate the learning process (Prasetya, Wibawa, Hirashima & Hayashi, 2020). Dewi, Ciptayani, Surjono and Priyanto (2018) contend that blended learning provides flexibility in education and can be counted among student support services as it is aimed at providing students with different techniques to understand course content. The purpose of such an approach is to reduce the transactional distance. Neither of these forms of learning, online or face to face is perfect. Each learning system has advantages and disadvantages associated with as elaborated above.

During the COVID-19 pandemic, certain educational institutions such as the University Grants Commission (UGC) in Bangladesh opted for flipped classroom as well as emergency remote teaching (Khan & Abdou, 2021; Izagirre-Olaizola & Morandeira-Arca, 2020). In flipped classroom, instructors tend to record lessons prior and student access those lessons online. As part of blended learning, flipped classroom also feature the face-to-face traditional learning system. In this case, students come to class with some information or knowledge about the content as they would have had access to it prior through the online option. The outbreak of the COVID-19 in the year 2020 accelerated the need for colleges to hasten offering both remote and blended learning approaches. In the scenario of the pandemic which disturbed teaching and learning in the entire world, the flipped classroom was an option.

The main purpose of blended learning is to provide information, best practices, hints and strategies on how TVET colleges may enhance student support (DHET, 2021). The DHET published this information after the hard lockdowns experienced in 2020 caused by COVID-19 pandemic which put educational activities on hold in various educational institutions. As mentioned in chapter one of this study that the sampled college used to organise weekends contact sessions to assist students, that is how



blended learning comes in as it combines the traditional method with face-to-face learning and online learning. It is quite evident that the collaboration of these two methods can enhance the provision of SSS for ODL students as the purpose of this study was to propose key factors for optimising the student academic support services in order to enhance the provision of student academic support in ODL. A failure by institutions to provide the required SSS may result in student attrition rather than maintaining retention.

## **2.4 ATTRITION VERSUS RETENTION**

### **2.4.1 Introduction**

It is discouraging to notice that the rate of attrition is higher than the rate of retention in the education system in South Africa particularly in distance education. In one of the studies conducted by Ewa and Kutieleh (2017) to curb students' attrition at the Flinders University in South Australia, their findings suggest that target assistance to students with the most significant predicted attrition risks is useful on minimising student attrition. Attrition is said to be a factor that creates negative implications and low self-esteem to students concerned. On the other hand, students' retention is low. In this case, students should be supported to increase and maintain retention. Various forms of student support services in HEI can maintain reasonable retention rate.

### **2.4.2 Students' attrition**

When interaction and communication is effective and well maintained, the transitional distance between students, instructors and institution can be reduced. On the other hand, attrition which is said to be high in DE can also be reduced.

Attrition is to be caused by the form of learning that does not provide students with a sense of inventiveness and dissatisfaction (Raviv & Bar-Am, 2014). When they compare attrition rate, these scholars assert that it is 10% to 20% higher in DE than to face to face setting. They continue insisting on the importance of using different strategies of curriculum delivery. Moreover, there is wider student participation with lower completion rates for non-traditional students which highlights the need for new methods of understanding the student experience to ground policy and practice (Kahu & Nelson, 2018).

Students' engagement is also said to be part to be prioritised in distance education as a form of attrition reducing attempt. Students' inclusion in learning process is about customising the course content and students pre-existing knowledge. When these two concepts are compared in DE, attrition seems to be higher than retention.

Apart from academic related matters in DE such as lack of support services, there are numerous factors associated with attrition rate. Financial constrains are also labelled as another factor that increases attrition. Social and family related problems also take students out of the education prior to completion of qualifications. Students drop out cannot be separated from attrition. It is also important to note that student support services are not only expected from institutions of learning but from family members as well. "In order to lower the rate at which student drop out, universities must embark on a thorough screening, face to face orientations as well as to maximise the technical support services" (Russo-Gleicher, 2013:3).

Transforming students from high school life to post education environment is also vital. Benavides and Keyes (2016) advocate that a successful integration of students into the academic and social fabric of the institution can enhance their retention and success rates. Different students are the output of different schools in basic education. The culture of teaching and learning varies from each school and this creates a new challenging for other students when they are facing tertiary education. This transformation is not user friendly for other student particularly in distance learning.

Almost all countries of the world with various HEI are facing a serious challenge of student attrition (Taylor, 2005). In support of Taylor's statement, Schreiner and Nelson (2013) are of the opinion that the satisfaction of students within their institution becomes a determinant whether they persist or withdraw. In his statement of integration models and attrition models of retention, Thomas (2012) insists on the importance of creating the sense of belonging for students, stating the strategy of enhancing retention. High drop out and low pass rate is reported in ODL (Perraton, 2000). Lack of comprehensive support services is among the reasons behind course non-completion. Insufficient student support services in various distance education institutions are denounced as the course of students' abandonment of their studies

(Simpson, 2013). South Africa's CHE (2013) published low participation rate and a high drop out rate among TVET college students called low participation, high attrition system.

Ngubane (2018) reports on a number of reasons why students drop out of college. This scholar mentions financial reasons, learning environment related challenges, lack of motivation, inability to deal with their workload, isolation and new environment. Ngubane (2018) further affirms that academically deserving students who complete all forms accurately and on time deserve government funding and internships after the successful completion of their studies at the college. As an employee of the sampled TVET College, the researcher knows and understands financial constraints faced by ODL students as they neither receive funding from NSFAS nor from other government ministries. Despite all forms of students' challenges, institutions remain with the responsibility of maintaining and enhancing students' retention. Maimane (2016) is of the notion that SSS must focus on holistically addressing different socio-economic backgrounds and the diversity of students.

### **2.4.3 Students' retention**

Low retention rate according to Lee and Choi (2011) is another major challenge facing distance education. These scholars made mention of series of factors that influence retention. This is supported by Simpson (2013) who contends that student's persistence in DE is typically lower than in conventional learning, adding that it is worse. Some of the factors that influence retention are students' factors, environmental factors and course related factors. To change the current situation in distance education where attrition is above retention, interaction and communication need to be encouraged and to be blended. Through interaction, institution will be able to keep students to their learning programmes until they complete their qualifications.

Institutions of higher learning should come out with strategies of improving students' retention. Comprehensive student support services are among those strategies, not leaving out students' engagement and interaction. Garrison (2011) concurs with Harasim (2012) on the contention that online learning platforms are capable to increase student engagement in distance learning. If these factors are ignored by HEI, attrition will always exceed retention. As indicated earlier, almost all institutions

offering DE have support services documented, lacking implementation. Support services members need to undergo a continuous training and be encouraged to take this issue of supporting students into a serious note. Various strategies can be developed by each institution to maintain retention. Towards the process of students' retention and to reduce drop out in ODeL, support services should expedite more meaningful learning experiences for all (Gil-Jaurena, 2014).

At the beginning of each year, institutions tend to experience long queues of students who come for enrolment. It is an unfortunate situation to notice that by the end of the year some of these students did not persist. One of the causes of this failure to keep students on their academic programmes is attached to the lack of support services, particularly in distance learning. Following the need for increasing TVET college qualification, there is an ongoing evaluation as to how to increase retention and graduation rate among TVET students (Hayter, 2015).

An imbalance between students' intake and graduation rate is the evidence of institutions failure to improve retention. Data collected by Higher Education Statistic Agency (HESA) in United Kingdom (UK) show the rise in college enrolment and reduction of graduates. HESA further constitute the rise of dropout rate in three consecutive years, insisting on the fact that many students give up within twelve months of enrolment. The so-called 'distance education deficit' indicates that graduation rates in UK distance education institutions is much lower compared to full time average (Simpson, 2012). It must be noted that a high dropout rate has a negative impact to an institution as students are being considered as customers and institutions are service providers. When an institution loses numerous students due to the lack of support services, the image of that particular institution gets damaged and is losing customers. As students are dropping out, they also withdraw their money from an institution. In an attempt to keep students on their academic programmes, colleges and universities are anticipated to develop actionable plans that will enhance student's retention.

The non-supply of student support services leads to attrition, most importantly, it is destructive and frustrates students and as a result, they fail to face challenges of this demanding and competitive life. This can be counted among factors that contribute to

the high crime rate that is experienced in various societies. Retention at institutions of higher learning matters more in various aspects. First, student who manage to complete their qualifications can face day to day challenges. However, those who end up dropping out either end up committing in crime or participating in anti-social acts which include suicide. In general, the failure of students to complete their studies on stipulated periods as is common among numerous distance learners result in them experiencing a variety of academic related problems. It is for this reason that this study was conducted. The Fourth Industrial Revolution (4IR) of the current 21<sup>st</sup> century necessitated by mobile technology converted the world and education to go digital.

## **2.5 DIGITAL WORLD AND DIGITAL CITIZENS IN ODL**

Nowadays, DE cannot be divorced from digital communication or digital learning. ODeL is the best option for both students and instructors. As education evolves, globalisation is here to simplify our daily living through digital communication platforms but COVID-19 has proved that we are not fully ready for real online teaching and learning (Makhmudov, Shorakhmetov & Murodkosimov, 2020). The challenge is that numerous novice ICT users, students in particular are lacking computing skills and they are not familiar with some digital ethical related issues and about operating computers (Makhmudov et al. 2020). Some students are also new to the digital world at large. Most users end up being the victims of cybercrime which seems to blossom locally and globally. Digital communication platforms or social media sometimes become anti-social. Software related crime such as phishing, virus software and more tend to pose a threat to this digital world and its citizens. Nevertheless, the current status of technology requires all citizens to go digital (Sasti & Sasti, 2019). So far, the usage of computers and Internet as well as its affiliated technology affect all spheres of life including education, banking, and so many other facets of our daily lives (Marcum & Higgins, 2019). However, with this constant use of technology and innovation, it is no surprise that a dark underworld of criminality called cybercrime emerged. As a result, it is quite evident that students need to be taught about hardware and software related crimes which can course serious damage to their lives and their studies. Students need to be taught about data protection precautions as another form of support services to be rendered by HEI. The challenge associated with digital world emanates on student's background where computer skills are not taught.

*“Basic and fundamental computing skills are not taught to students except to those schools where computer subjects like Computer Applications Technology (CAT) is part of the curriculum. Computer subjects need to be introduced and to be part of curriculum so that students will be able to develop all computing skills rather than getting to Google and social networks only” (Mbambo, 2017:19).*

Wilson (2006) supports the above statement, stating that in our institutions, students show lack of computer skills. The reason being is the fact that our education system as South Africans is under the leadership of people who possess no proper technology-related kind of education. This is a problem attached to the lack of computer subjects in our schools which negatively impacts students when they pursue their tertiary education, which is today based on digital communication.

This digital platform of communication in education can be associated with series of aspects that relate rules and regulations of ICT. Here we can start by mentioning the ergonomics of ICT, crime related issues, information accuracy, environmental issues as well as network matters. Computer users, particularly students and other network users should be familiar with all these aspects.

Ergonomics is also referred to as a human factor, is a science about people physical comfortability, safety and efficiency as they use computers (Sasti & Sasti, 2021). This is about safety in the world of technology. In as far as ergonomics are concerned, ICT users, students in particular who spend long hours in front of computers or other ICT related devices such as tablets and smart phones need to be taught that there are health risks associated with the usage of computers. Here we can mention eyestrain, back pain, Repetitive Strain Injury (RSI), anxiety and much more. It is important for students to understand that the use computers need people who are familiar with such ergonomics.

Cybercrime does not affect only internet bankers (Raghavan & Parthiban, 2014) but it can also be linked to identity theft, hacking and cracking as well as stealing of information which also associated with plagiarism whereby hackers and crackers can

steal information online and pretend to be rightful owners. All this calls for knowledgeable students or users to understand precautions concerning data protection. Of these precautions, we can mention the creation of strong passwords, backup, and many more. Data are very important in ICT and it must be treated as such by following all data protection precautions. Sasti and Sasti (2019) alluded that cyber criminals also tend to create viruses, that is, malicious software designed to access computers without a user's knowledge and cause a detrimental damage such as corrupting files or stealing user's credentials for their own illegal use and benefit.

Students lacking the required ICT skills believe that Google can provide them with all accurate information they need, which is not true. This is the reason why El-Maamiry (2017) refers to this as poor information seeking skill and is preventing students from searching information effectively. In as far as education matters are concerned; students are encouraged to use reliable sources of information such as google scholar, ERIC and many more. Students need to know that not all google obtainable information is accurate. There is considerable misleading information online. When students are given assignments by their instructors, they simply opt rely on google for answers. These constitute a lack of information accuracy among students and they need to be familiarised with fake information that is uploaded to internet on daily basis.

Security of a network is addressed into three different perspectives which are protection of equipment/hardware, protection of confidential information, and students'/users' protection. Starting with the latter, it has been said that minors tend to be at risk in the sense that they communicate with inappropriate people, or access to age-inappropriate material. This risk includes underage individuals accessing pornographic websites and other material which might be harmful to them as minors. Teachers, parents and students should be alerted to the possible harmful aspects of Internet use (Schleicher, 2015b). As distance education continues adopting the use of computers through digital communication, users need to be alerted about disadvantages associated with modern technology.

Bingimlas (2009) also reports about information security threads like viruses and unauthorised access which include crackers and hackers. Viruses can cause disruption and damage, often incurring expense to computer networks. It is essential

that institutions put in place comprehensive security systems that can protect against unauthorised access and accidental damage. Information security is the protection of information systems against unauthorised access to or modification of information, whether in storage, processing or transit, and against the denial of service to authorised users, including those measures necessary to detect, document, and counter such threats (Yeh, Lin, Wu, Chang, Chen & Chen, 2007).

Crime associated with stealing of computer hardware is rife (Kim, Newberger & Shack, 2012). Portable devices such as laptops, smartphones, and flat screen televisions need protection of all forms. If these devices are not well protected, users might lose not only the device, but the vital and confidential information contained by laptop or smartphone. Nurse (2018) affirms that criminals tend to target these electronic devices knowing very well that there is a good market of such devices out there. A student losing a laptop, that can disturb him/her even psychologically, knowing that all information about his/her studies including written assessments to be submitted is in the stolen laptop. In this field of ICT, people should learn relevant skills such as information backup by using removable storage devices. They need to be taught even that they can backup using their own e-mails. All these are the precautions required to protect information.

Lack of computing skills is a serious problem not only to students but to instructors as well. No one can be blamed for this except the inequalities of the past in South Africa where some people were given the so-called miseducation. During the apartheid time, learners who attended the so-called Black schools were given inferior education that made them to be labourers and could therefore largely rely on employment given to them. This was a kind of education that circumvented Blacks from being employers themselves. As a result of this, a kind of curriculum offered to black learners was that of expressing themselves in English and Afrikaans. It was a kind of curriculum not accompanied by skills. The intention of the apartheid government was to lead Blacks astray so that they could throw away that which belonged to them. Imagine a combination of Biblical studies, History and Afrikaans forming part of the curriculum for a black child. Information and Communications Technology forms the greatest part of people's daily lives today. Imagine our schools producing learners who knew nothing about ICT skills. In their study, Fouts and Burggraf (2000) point out that the



study that found that computers are effective for basic skills instruction when that is their designed purpose.

According to Dede (2009), ICT enabled skills prepare students for a workplace where they would be required to collaborate with peers across the world, produce new intellectual work that would add value to society, and communicate new knowledge. While ICTs are not a panacea for educational problems, they offer the potential to advance student knowledge and skills, to foster co-operative and autonomous learning (Wilson-Strydom & Thomson, 2005; Madumere, 2012), and to encourage students to move away from learning characterized only by memorisation of facts towards a process of knowledge creation (Mascarenhas, Cahan & Naiker, 2010; UNESCO, 2011).

Digital skills, knowledge, and usage are still a challenge to South Africans. Out of 63 countries in the world, the 2018 International Institute for Management Development (IMD) World Digital Competitiveness ranking positioned South Africa at number 49 (IMD World Competitiveness Center, 2018), cited in Du Plessis (2019) inaugural address. Wilson-Strydom and Thomson (2005) refer to the acquisition of technical skills and learning about computers as implementation without integration whereas learning through or using a computer is referred to as implementation with integration. Implementation with integration is where students use ICTs to learn and where ICTs are at the centre of teaching and learning in the classroom. Bingimlas (2009) confirms that surveys conducted in Syria, Arabia, Europe and Denmark has proven that teachers lack ICT knowledge and skills to start the integration process. When students engage themselves in distance education, they need to prepare themselves for the use of computers too. This calls for skills development pertaining technology as well as its related implications.

Owing to modern technology, digital skills and knowledge play a pivotal role in ODL and education at large these days. The literature constitutes series of technology related challenges experienced by students. These challenges are perceived as an elephant in the room. Lack of digital skills and knowledge is mentioned as a hindering factor in ODL students' success. Yet the same skills are required by students not merely to learn but to access various forms of support available for them. Digital skills

are part of education and should be taught not only in post-school education but starting from basic education. As this study aimed on optimising academic support for students, it is imperative also to consider digital knowledge and skills as part SSS. The next section presents the two theories which formed basis of this study.

## **2.6 A THEORETICAL FRAMEWORK**

Various researchers used various theories dealing with the concept of student support services in ODL. Some of those theories are DE theory, ODL theory, assessment theory, theory of DE based on empathy, theory of independence and autonomy, theory of industrialisation, the theory of interaction and communication and many more. Theoretical framework in research is viewed as an epistemology that guides, evaluation tools that helps during data interpretation and presentation. A theoretical framework introduces and describes the theory that explains reasons why a particular research problem chosen for a particular study exists. Asher's (2013) statement point out that a theoretical framework is all about the structure that can hold or support a theory of a research study. Adom, Agyem and Hussein (2018) refer to theoretical framework as a plan that is borrowed by researchers in the process of constructing their houses. Buthelezi (2020) concurs with Grant and Osanloo (2014) that theoretical framework should be built on an existing theory. This framework assists researchers to position formal theories that guide their studies (Ravitch & Carl, 2016). Moore's transactional theory in collaboration with the theory of interaction and communication form basis of this study. The researcher decided to feature these two theories, transactional distance theory as well as the interaction and communication theory as they both put emphasis on the need for student support services that promote effective communication and reducing the distance.

### **2.6.1 Moore's transactional distance theory**

Moore's (1993) "transactional distance theory" underpinned this study. The motive to opt for this theory is nothing but its relevancy to distance learning related challenges which this study strives to address. According to Jowallah (2014), Moore's (1993) transactional distance theory holds an idea that studying through ODL institutions may result in hurdles between the students and their instructors. The transactional learning theory addresses student's expectations and experiences in ODL. Moore's

Transactional theory refers to distance which exist in all educational relationships. Moore (1993) view pedagogical separation as transactional distance. Transactional distance is perceived as cognitive, psychological effective distances among students and instructors. Such distances have certain impact on curriculum delivery. This distance referred to is determined by the amount of dialogue which occurs between lecturers and their students, not leaving out the amount of structure which exists in the design of the course (Tait, 2003). The physical distance is perceived as a barrier because it tends to create fear and anxiety among distance students, by preventing them from benefiting from any form of dialogue during the learning process (Unisa, 2007). This theory is associated with certain challenges experienced by distant students. An increase on transactional distance decreases communication between students and their instructors which impacts student's performance negatively.

“ODL is ideally suited for breaking the barriers of distance by providing access to higher education to students without the actual physical contact with their lecturers” (Letseka & Pitsoe, 2012:205). Moore (1994) view separation between students and their instructors in ODL as a psycho-social or transactional distance. According to Letseka and Pitsoe (2012), ODL is an educational approach designed to reach learners in their locations, provide learning resources for them to qualify without attending formal classes. Distance learning is defined as a learning system that allows students to study remotely. Today distance learning cannot be separated from ICT to access learning material, learn, communicating with instructors electronically, submitting assignments and receiving feedback.

Tait (2003) further suggests the use of ICT as a strategy of minimising transactional distance. The researcher concurs with Tait's suggestion, but the challenge is the fact that numerous students, particularly from remote areas are still facing various forms of ICT challenges. Technophobia and poor ICT infrastructure are among the challenges facing students. Wilson (2006) study findings constituted insufficient computing skills among students. Wilson (2006) continues stating that the education testing service is conducting studies that could reveal lack of “information literacy” among college and high school students. Challenges associated with the use ICT, online learning on this matter is that numerous students are not exposed to this platform of learning. Lack of resources like laptops, tablets and relevant software are

among the challenges, even to those who are in possession of required knowledge and skills. This lack of ICT resources creates a barrier to students as student's success in DE relies on various forms of ICT being utilised (Mir, Patel, Iqbal, Cecconi & Nouraei, 2017).

The researcher's motive to use Moore's theory was that ODL students at TVET colleges find themselves in isolation, unable to communicate with their lecturers or with fellow students during the course of their studies. This seems to create a distance between themselves and their instructors. As indicated earlier, most of their time is spent doing tasks of their respective occupations. The frustrations echoed by student on the lack of any or adequate interactions with their lecturers confirm Moore's (1993) theory of transactional distance. This theory posits that the learning gap experienced by distance students can only be closed by applying different forms of interaction in distance education institutions (Nsamba & Makoe, 2016).

The distance that exists between the students and the institution is perceived as a serious concern (Baloyi, 2012). As part of support system, Moore (2012) envisages the implementation of orientation when students begin their study programs. Apart from course content and an institution's expectation from students, digital technology related orientation can be incorporated and be part of support services to students. This might be another strategy to combat lack of computing skills among students.

### **2.6.2 Holbert's theory of interaction and communication**

As a collection of perceived psychological, cognitive and affective distances between students and instructors in distance education discipline, the theory of interaction and communication can be applied to multiple education phenomena which have to do with distance education. As per transactional theory in distance education, Moore affirms that the separation between students and instructors might lead to a communication gap. In ODL, student support services should be instrumental and ascertain that two-way educational communication is possible.

One important aspect in distance education as well as in support services to students is interaction. Taylor (2001) cited in Van den Berg (2021) established that interaction is significantly valued as a key concept in distance learning. Xiao (2017) also insists

on the functionality and need of the role played by interaction in ODL and how it affects students' learning experiences and satisfaction. Through interaction, communication between students and their institutions can be effective. There is a plethora of interactions that can be featured in distance learning to support students.

Holmbert (1987) insist on personal communication between instructors and students in distance education. In addition, the same scholar Holmbert (1987) and Moore (1989) use the theory of interaction and communication in distance education, insisting on the importance of two methods communication or more. There are three essential types of interaction in distance education (Moore, 1989) yet Gunawardena (1994) decided to add another form of interaction called learner interface. These theory types according to Moore are as follows:

- Learner-instructor interaction
- Learner-content interaction
- Learner-learner interaction

The theory of interaction and communication insists on the vitality of students' engagement in learning process. These types of theories on interaction and communication are briefly elaborated below:

#### 2.6.2.1 Learner-instructor interaction

Open distance learning is known and characterised by separating students from their instructors (Van den Berg, 2020). This separation tends to create distance and minimise interaction between students and instructors. Through interaction between students and instructors, the barrier of distance can be eliminated. The literature reveals that in a scenario where there is no active engagement with instructors, students learning outcomes and achievement drops by 80% or more (Thomas, 2012). Learner-instructor interaction occurs between students and their instructors. Unlike the past where the paper-based form of correspondence was the most dominant in learning, interaction and communication in distance learning is very important and is made easier by digital communication. There are multiple methods of engaging students through online platforms of communication. For example, an instructor can present a lesson live and communicate directly with students in real time by using applications such as Skype, Zoom, Microsoft teams, Google chrome browser,

Microsoft edge, My view board and many more. This form of interaction promotes live communication between students and instructors.

When an instructor increases interaction and engagement with students, retention might be maintained. It is also important to understand that it takes time for students to learn something new. So, instructors need to use multiple teaching methods to accommodate all students. It is also important to know that some students are technologically disempowered, and they are struggling to learn new skills that come with this digital world. As they are struggling with technology, they also struggle with subject content. Despite all forms of difficulties, they encounter, when they increase frequency of interaction, they can manage other content-based challenges. Through interaction, DE can be effective just like face-to-face education. This is a cost-effective kind of interaction since travel cost, accommodation cost and other related cost are eliminated.

As motivated by COVID-19, some instructors opted for social media such as WhatsApp as well as Google classroom to interact with their students during lockdown period (Chem, 2020). Through this media, instructors are able to interact with all students of the same group at the same time. Students are also able to communicate with instructors by posting questions on a group; the question from one student benefits all students in a group when answered. Some instructors simply post a lesson in a group and students can access it during their convenient times. During the pandemic COVID-19, numerous lessons were posted online by different institutions for the benefit of students. This was one method of interaction between students and instructors.

Another method used by instructors to interact with their students is through feedback. Whenever students submit their assignments, they wait for feedback from instructors. Some instructors tend to fail their students by marking and returning student's marks or percentage obtained without further comment or without motivating feedback. When a student does not perform well in an assignment and there is no comment as to where they would have gone wrong, such leads to student frustration. Instructors are supposed to give positive and constructive feedback to students in order for the students to improve in the future. Students find it difficult to improve their performance

if they get low marks while it is not stated how such marks have been accumulated and where they did not do well. Shikulo and Lekhetho (2020) advocate that feedback is key to successful learning and could assist each institution in its endeavours to facilitate student learning, bridge the lecturer-student separation and balance out the deficiencies imposed by a lack of face-to-face contact with lecturers. Feedback also plays a vital role to clear up students misunderstanding and is another form of motivating students.

#### 2.6.2.2 Learner-content interaction

Interaction with course content refers to the process when students study new content, comparing new knowledge or information with their pre-existing knowledge. In this case, students interact with the author of the content in absence. Owing to an inclusion of technology in our education system, students are now expected to interact with technology before interacting with course content. In learner-content interaction, students become a producer of new knowledge. This is achieved by combining newly found information with an existing knowledge (Bouhnik & Marcus, 2006). In support of this, Zimmerman (2012) postulates that learner and course content interaction play a vital role as it contributes to the prosperity of the learning outcomes and student course completion.

Instructors can present lessons in distance learning using various strategies such as synchronous, asynchronous or any other methods. They can communicate directly or indirectly with their students, presenting and demonstrating the course content. With respect to the use of communication media, Rajasegeran (2012) establish that such media is good on facilitation and increasing practices that improve student's engagement and communication in distance learning. After an instructor has played his part, students are then expected to interact with course content, accumulate new knowledge and skills, write assignments and other related duties expected from them.

Accumulation of new skills and knowledge is what education is all about. Digital technology is a suitable technique in reducing transactional distance, creates simple interaction, communication and relationship between students and their instructors. This technique also promotes knowledge creation and development through certain software and by accessing various websites and search engines. It is the very same

technique that can be used to keep students engaged on their studies through various online communication media.

#### 2.6.2.3 Learner-learner interaction

This is an interaction among students themselves, interacting with each other about the course content or about their studies at large. Learner-learner interactions, which is also called peer interaction has its role to play in education as student feel comfortable when interact with their fellow students and they can freely assist each other without any fear. As students interact with each other, they are not compelled to use a certain language, but they express themselves in an extent that put them at ease. This informal communication is of great benefit to them and this is also a support coming from other fellow students. A study conducted by Noble and Henderson (2011) reveals that interaction between students and their fellows as well as academic staff in an informal context is of cardinal importance. They continue saying students involved in such interaction creates a bond with their instructors and they feel valued.

In Learner-learner interaction, students interact with one another with or without an instructor (Hurst, Wallace & Nixon, 2013). This form of interaction reduces distance among students themselves. Under the learner-learner interaction, the behaviour of students is somewhat similar to that shown in face-to-face situations where students are able to communicate, share ideas about various issues concerning their studies. Xiao (2017) argues that learner-learner interaction is said to be good and useful for interpersonal skills training. Hurst et al (2013) further affirm that this form of interaction cannot be excluded from student support because students also need support from other fellow students. Even on learner-learner interaction, students are not on their own quest, but they need supervision. Instructors are expected to facilitate this interaction and make students feel comfortable on learning environment. Instructors can also maintain discipline, ascertaining that only course related matters are discussed in a group (Schmutz, Meyer & Archer, 2019).

#### 2.6.2.4 Learner-interface interaction

In support of interaction, Xiao (2017) argues that there is a lack of interest research of learner–content interaction despite its fundamental and critical role in ensuring the



effectiveness of the distance learning experience and education more generally. This interaction highlights a correlation between students and the technology being used as a vital component of the model, which was ignored for so long. With this in mind, Gunawardena (1995) insist on the need for instructional designers to incorporate learner-interface interaction that allow students to have successful interaction with technology. According to Wang, Chen and Anderson (2014), interaction between people and modern technology is important in distance learning environment. This form of interaction calls for modern technology skills to be taught or to be part of curricula and to form basis of support to students.

To increase dialogue between students and their instructors and to reduce transactional distance, Moore and Kearsley (2005) recommend the incorporation of communication media in DE. Khan, Moore and Kearsely (2005) show their dissatisfaction on the criteria being used by institutions on selection of distance learning instructors. These scholars insist on the fact that institutions tend to recruit inexperience or less experience instructors to work with distance students. This statement insists on the fact that certain institutions which offer both face-to-face and distance learning tend to use the very same instructors teaching on face-to-face environment and simply give them additional duties to deal with distance students as well. The fact is these instructors are only exposed or familiar with face-to-face environment and they lack required skills of open learning.

According to Holmbert (1987), theory of interaction and communication and theory of independence and autonomy are related since all argues for a two-way communication between students and their instructors. Hope (2006) alluded that the pillar of learner support services is on the improvement of interaction and communication between students, tutors and service providers which are institutions of higher learning. Through interaction and communication, student support can also be effective and productive. The usage of communication media is vital because it is a tool that reduces transactional distance between students and institutions. When technological media is used successfully, it can benefit both students and their instructors in a process of archiving a common goal.

Angelika (2013) conducted a study with the purpose of exploring the impact of communication and social presence in adult education students. It was found that more than 78% of students were unable to communicate with their instructors. This seems to be a serious challenge facing distant students on their respective institutions where they enrolled. These findings also made it clear that students are on their own after enrolment. The findings further indicate that such students are not able to access support from their instructors or from their institutions. Swerling and Thorson (2014) view communication as a bridge between students and institutions management, adding that technological apparatus plays a vital role to this support. In a process of building the necessary connections between students and technology, Tirri and Kuusisto (2013), insist on the significance of interaction.

Despite incorporation of technology in education, student support remains one of vital services in DE. Computer hardware or software can do nothing in an absence of human being. A human being therefore is most important element of technology. For hardware or software to perform any duties, it must get instructions from human element. Though the use of technology seems to simplify certain aspects in education, technological skills need to be part of curricular. This simply means that such skills need to be taught. People enrol for higher education because of various reasons which include inter alia employability, career chosen related skills accumulation and to develop creative skills (Long, Ferrier & Heagney, 2006). The researcher also believes that the purpose of education is to prepare people for workplace and to provide them with innovative life skills. Reasons for people to continue with their education vary.

*“The best educated human being is the one who understands the most about the life in which he is placed.”*

*Hellen Keller (n.d.)*

People pursue and persist on education for different purposes which include reskilling and upskilling themselves as per demand of their respective careers. Some of them need to keep updated with their employment related knowledge and skills. Therefore, for students to interact with course content, they must interact with technology as well.

The suspension of the face-to-face teaching approach because of the COVID-19 lockdown brought major changes to how education ought to be offered henceforth (OECD, 2020). Distance education cannot be exempted from this as it was also affected. The so-called 'new normal' also brought some changes even in the manner in which examinations are conducted in certain institutions (Lieberman, Levin & Bazaldua, 2020). Some institutions such as the UNISA opted for online examinations and the approach became a challenge to numerous students who were not used to online examinations. This was all about learner-content interaction in an absence of instructors or invigilators. There were numerous complaints and criticism levelled against this form of examination from students who found it difficult to interact with the content while interacting with interface. The so-called academic cheating was also mentioned among other challenges raised about online assessments and the grievances resulted in the university developing what is termed an invigilator app (UNISA, 2021). Criticism was also raised concerning the authenticity of the online examination since asynchronous transmission was utilised. All stakeholders involved in the education sector, including those who are conservative need to understand and accept that the pandemic, COVID-19, brought a new paradigm into our education system. The options allowing students to have access to course content through online platforms and also with interact with lectures or instructors is a better method to be employed. It is of cardinal importance to note that all these forms of interaction, students/learners are always a centrepiece.

It is imperative to acknowledge that Moore's transactional distance theory as well as Holmbert's (1987) theory of interaction and communication play a crucial role and are the basis for SSS establishment for all ODL students. The transactional distance theory together with the theory of interaction and communication are found relevant to this study as they shed some light on how to identify key factors that might optimise academic support offered to students. The next chapter presents a detailed description of the concepts used in this study.

## **2.7 CHAPTER SUMMARY**

This chapter provided context on student support services in distance learning. Two theories namely, transactional distance as well as the interaction and communication which were chosen for this study were also discussed critically, focusing on their

relevance to student support and distance learning. The context constitutes a serious gap concern with support services in distance education. This study is one among many which required to address such gap. Since theoretical grounding is about what is already known and what can be learnt from it, chapter two also reviewed literature that is relevant to the phenomena being evaluated in this study. Scholarly data review shed some light about the provision and efficacy of SSS and also made it clear that students lack various forms of support, including that which ought to be offered by academic institutions. For the purpose of this research, clarification of key terms referred to as a conceptual framework is addressed in the next chapter.

## **CHAPTER 3**

### **CONCEPTUALISING STUDENT SUPPORT SERVICES IN OPEN DISTANCE LEARNING AT TECHNICAL VOCATIONAL EDUCATION AND TRAINING COLLEGES**

#### **3. INTRODUCTION**

This chapter extends from chapter two's context and theory and its focus is on key concepts that have been but related to the phenomenon being studied. The purpose of this chapter is to unpack the concepts used on this study and provide meaning for the reader. This is done with an intention of establishing the perceptions of other individuals pertaining to the provision of academic support services to students. Literature review is also incorporated and discussed in conjunction with the conceptual framework. By accessing other related work, the researcher managed to established the contribution made by other scholars on this phenomenon. Through relevant literature, the researcher also managed to identify the gaps concerning the provision of student academic support from various ODL institutions. To get a better understanding about the nature and provision of student academic support services in various educational institutions, the researcher started by conducting preliminary research in order to solidify the topic by broadening or narrowing it down.

#### **3.1 CONCEPTUAL FRAMEWORK**

As stated in the introduction above, the purpose of a conceptual framework is to unpack the concepts used on a study and also to provide meaning for the reader. A conceptual framework can be presented textually or graphically. Kumar (2011) postulates that conceptual framework forms the basis for reinterpreting existing concepts. Kumar (2011) further states that it is important to conceptualise the research problem prior to undertaking an extensive literature review. This idea is supported by Swaen (2021) who insists on the benefit of constructing a conceptual framework before engaging on data collection process. This study evaluated key factors for optimising student academic support services in a selected TVET college, therefore it is of cardinal importance to give clarity of concepts used in this study for the benefit of readers as well as for understanding the research problem being studied. A conceptual framework illustrates what a researcher expects through the research and defines

concepts and mapping out how they relate to each other. As Adom, Hussein and Agyem (2018) affirm that when writing up, the section on a conceptual framework should be described along literature review, an approach adopted in this study as both these sections formed part of this chapter. Like the meaning of the delimitations of a study, a conceptual framework also narrows down ideas that are utilised by a researcher by basing its focus on the concepts which are main variables (Hussein & Agyem, 2018). “A conceptual framework is the total, logical orientation and associations of anything and everything that forms the underlying thinking, structures, plans and practices and implementation of your entire research project” (Kivunja, 2018: 47).

This chapter focuses on the conceptual framework and the literature review; therefore, it is crucial to describe each and their value in research. First, a conceptual framework illustrates what a researcher expects to find and does not analyse any data (Khattak, 2014). This notion is supported by Mathipa and Gumbo (2015) who contends that it reveals assumption, beliefs and expectations that support and inform research. Overall, it can be said that a conceptual framework concerns the scope and structure of research problem. The section on literature on the other hand reviews and analyses largely studies that are published by other scholars on the topic or similar to it (Ibid). Literature provides other scholars’ ideas and work related to the one being studied. The framework derived from concepts illustrates the existing relationship between concepts and their impact on the phenomenon being investigated (Ngulube, Mathipa & Gumbo, 2015). For the purpose of this study, the conceptual framework is addressed concurrently with the review of relevant literature. Here, the researcher started by addressing SSS in general and later narrowed the focus to academic services.

Literature review is about providing, acknowledging and summarising other scholars’ work but which is relevant to the selected research phenomenon (Pandor, 2018). The review of literature assists the researcher not to repeat but to acknowledge what is already published. It also enables researchers to position their investigations within a larger discourse (Schutte & Steyn, 2015). Relevant literature was reviewed in this section to establish the nature of SSS in various institutions offering ODL programmes both locally and globally. According to Taylor (2012), literature review is about

reviewing previously published articles or studies on a topic by other researchers or accredited scholars. In support of this statement by Taylor (2012), Schumacher (2010) view the review of literature as an account done to establish the important links between existing knowledge and the research problem under investigation, which improves significance and avails useful information about methodology that can be incorporated into a new study.

Ridley (2012) advocates that literature review is where extensive reference in relation to a study is found. In addition, reviewing literature helps the researcher to establish the links between what is known or examine and what has already been studied (Kumar, 2011). Through literature, the researcher focuses on collecting secondary and relevant published information from various sources such as journals, websites, and textbooks with an intention of identifying or exposing an existing gap in relation to the phenomenon being studied. Relevant online search engines such as google scholar, OER and Education Resources Information Centre (ERIC) was used to access recent published scholars' work based on the phenomenon under evaluation.

### **3.1.1 Student Support Services**

As stated in previous chapter 2, section 2.1, by SSS, some scholars such as Muchineripi and Addae (2018) refer to a structure or a body created by an institution to cater for student's needs. For the purpose this study, SSS refers to services availed by institutions of higher learning to support students on their academic endeavours. SSS are the bunch of facilities and activities made available by institutions of higher learning to make the learning process much easier and more interesting (Krishnan, 2012). According to Simpson (2012), SSS is a wide detailed and sometimes confusing area of study. SSS is divided into academic and non-academic dimensions (Sajiene & Tamuliene, 2012) and the main priority of SSS in each institution of higher learning is to address various challenges faced by students. As structures designed to provide guidelines to support students, SSS assist students in achieving their academic success (DHET, 2020).

SSS is an important structure in any academic institution and it plays a vital role to students' experiences. This structure, SSS need to adopt academic achievement through the provision of a support system that stalls the students' challenges

(Muchineripi, 2017). Tamuliene (2014) describes student support as a practice availed by institutions of higher learning to attend to the academic and emotional needs of students and it is deemed as a requirement for improving the academic success of students. The conditions that allow students to complete their programmes irrespective of their financial and social class status need to be provided (Tamuliene, 2014). The longer it takes a student to complete a qualification and high drop out rate within institutions of higher learning indicates that student support services are neither efficient nor sufficient, or some students are not even familiar with an availability of such support services. Though support services are inseparable, but this study focused more on academic services.

Maimane (2016) view SSS as a resource that provides comprehensive support services for appropriate participants to assist them accomplish their full academic potential. This scholar further posits that SSS provide all the required support and development to make the time a student spends at all colleges as fulfilling as possible. Balkrishen (2016) concurs with Maimane by affirming that SSS offer an opportunity to students so that they would develop academically, it also assists them with basic college requirements to motivate them to successfully complete their post-school education. This idea is supported by Kinghorn and Smith (2013) who argue that psychological barrier is detrimental, and it tends to result in poor attitude and even poorer self-image among students.

#### 3.1.1.1 Nature of student support in Open and Distance Learning from international perspective

Roberts, Dunworth and Boldy (2018) reported that the levels of awareness about services offered to students varies and that lack of knowledge on how to access such services and information explained why students did not benefit, and that the helpfulness of staff impacted on whether the services were useful. These scholars recommend the practices their research assessed needed to be reconsidered so as to move towards a model of student support service provision that put students at the centre.



International students or those pursuing their tertiary studies outside their home countries largely rely on SSS and this explains its need and importance (Brown & Carasso, 2013). Statistics showing figures of international students indicate that in the UK, their enrolment increased from 272,095 in 2014 to 436,585 in the 2015 academic years (Department of Education and Training [DET], 2016). Such rapid increases in enrolment SSS ought to be considered a vital component of especially international institutions of higher learning (Brown & Carasso, 2013).

The support that institutions of higher learning provide to students should be comprehensive especially with regards to being able to tackle the social, emotional, and academic aspects because if addressed satisfactorily, these can enhance the quality of higher education. Despite the many policies that have been developed to uplift the quality of higher education, when making policies, policy makers tend to omit students, yet they are the key element of higher education (Kaur, 2016). This scholar insists on conducting research that seek to understand the perceptions and responses of students on how support systems such as the SSS can be improved to enhance the performance of students. Unfortunately, some reports including that by Kaur (2016) show that SSS is neglected in some institutions of higher education including some in India. It would be nearly impossible to initiate and implement new services nor improve the current without getting the perceptions of students regarding SSS. Therefore, it is vital to get students perceptions first. The next section's focus is on SSS in ODL discipline.

### 3.1.1.2 Nature of student support in Open and Distance Learning from African perspective

Student support services are perceived as a backbone and success of distance education (Raja, 2018). Therefore, it is so vital for any HEI to ascertain that support services to students are taken care of for both on-campus and off campus students. Institutions are anticipated to take full responsibility of not only the wellness but the participation of students on academic activities through providing them with support services. The provision of relevant and required services would ensure that students persist in their studies and reach their academic prosperity without being derailed by demotivating obstacles. Such prosperity can be made possible by colleges and

universities through offering a comprehensive support to students. Petty (2014) asserts that SSS is not a one size fits all when they argued that SSS are organised in a system to address unique challenges faced by individual students and/or colleges so that the processes of teaching and learning can be more effective. This simply means that the SSS of each institution most likely vary from that of other institutions as its needs of the students are different.

Unlike other institutions of higher learning that offer ODL, the University of South Africa (UNISA) and Zimbabwe Open University (ZOU) organise contact sessions at certain times, by contrast, some colleges including that chosen for participation in this study, distance students used to attend an organised lectures during weekends. This is one among attempts by colleges to provide academic support to students and is a method that minimises the transactional distance. These contact sessions organised over weekends are extremely useful and they assist especially students who cannot proceed with their academic work find it difficult to do their academic activities in isolation. Through the contact sessions, students get time to interact with their counterparts, communicate with their lecturers and thereby share their experiences and challenges. Some institutions also publish previous examination question papers so they would be accessed by students, and this assists them in preparation for examinations.

Arko-Achemfuor (2017) contends that studying through distance education can be problematic for any student, but it can be worse for rural students, for various multiple reasons. Furthermore, the author alerts that it appears that most students registered in the institution are not able to access its services adequately. Such inaccessibility is caused by numerous reasons which include the use of technology in distance education. Student support takes several dimensions from career counselling through to workplace support and student development (McKay, 2008). Literature recommends that the mass access to higher education is commendable however, it calls for universities to provide the required academic support to enhance the performance of students while reducing the attrition rate and increasing throughput and retention (Mngomezulu, 2011). Owing to inadequate support from institutions offering distance learning, numerous students abandoned their studies (Simpson, 2013). The support services provided by universities as posited by Tinto (2012), is

largely aimed at providing students with the subject-specific knowledge that they might need for their studies.

It is necessary for ODL institutions as well as campus-based institutions to evaluate their SSS provision timeously. This would keep them updated about amendments required in order to improve academic support for their students. Some amendments concern upgrades or changes on the modern technology and if done timeously, facilitate easy, faster and suitable access to all students on their respective locations. According to Pienaar (2007), the UNISA has been increasing their intake of students for a while, intriguingly, this intake has not been accompanied by an equal increase in academic and administrative student support structures.

### 3.1.1.3 Students' perceptions on support services internationally

Mah and Ifenthaler (2018) contend that students tend to commence their tertiary education unprepared and with idealistic perceptions and expectations concerning academic competencies for their studies. These scholars further affirm that preparedness and realistic perceptions are important factors that contribute to student retention. Owing to the lack or inefficiency of support services, literature revealed that students enrolled with various ODL institutions are struggling to get their studies on track, yet they are not satisfied with support services they receive from their institutions. Nsamba (2016) finds student support services level offered by the UNISA fail to meet the needs and expectations of the students. In this scenario, institutions of higher learning are service providers while students are users. Raja (2018) contends that the perceptions of woman employees towards services of ODL programmes should give efficient enquiry services and institutions must provide technological services for improvement.

It is vital to pay attention on student support services, as the main objective of this study by comparing their expectations and perceptions. Published literature reveal that there is numerous criticisms levelled against institutions of higher learning concerning the type of support services that is rendered. According to Pillay, Mbambo, and Mason (2017), expectations of TVET students in terms of quality exceed their perceptions, thus leading to dissatisfaction with their TVET Colleges.

The expectations of students seem to be higher in the provision of support services while their perceptions are lower (Makoe & Nsamba, 2019).

*“The focus of academic support programmes through mentoring and tutorials should predominantly target low performance subjects such as languages, Maths, Maths Literacy and Engineering studies, and any other difficult subject as identified by the College through the analysis of results. Colleges should ideally use models that address the needs of their students” (DHET, 2020:14).*

#### 3.1.1.4 Students’ perceptions on support services from African perspective

Enrolment and attrition of students in higher educational institutions in Morocco increased rapidly in the past two decades (Mansouri, 2020). Much credit for this has to be given to the Moroccan department of education which carried out reforms that encouraged institutions to provide students with support services that contributed to their retention through to the completion of their qualifications. Also, the institutions ought to be credited for implementing the good services. Despite the credit, the government and institutions in Morocco had lessons on that some students admitted feel that it would be better if the end product (SSS) was offered by experts in a particular field and not by anyone (Mansouri, 2020). Specifically, interviewed students made an example that psychological support should be offered by psychologist as such would add credibility, value, and ensure that the resources are used effectively. Based on this statement, some students registered in institutions of higher learning in Morocco perceive the current provision of SSS as not effective enough.

Lack of support has been identified by Greene (2015) as a contributing factor to non-persistence of students in various institutions of higher learning. Nonetheless, numerous students in the current age are going digital and they rely on internet to interact with their families, friends as well as classmates through software applications or text messaging (Mahdi, 2019). This scholar further asserts that numerous institutions decided to opt for social media and networking sites as tools for learning due to the perception that their usage would be received positively by their students. This indicates that students perceive digital platforms brought by 4IR as best methods of learning and getting support from their respective institutions in a convenient

manner. Al-Qoot and Abu-Jado (2016) reported that Twitter and WhatsApp were the most trusted and preferred social media options both in academia and social life. Instructors from various institutions have their own perception about SSS.

#### 3.1.1.5 Instructors' perceptions on support services

Instructors or lecturers and tutors at both TVET colleges and Universities need to be equipped with the technical know-how that way, they will understand factors that contribute the causal effects of poor performance by students and suggest solutions aimed at intervening to assist those who fail to meet the acceptable academic standards (UNISA, 2016).

Students enter higher education institutions with a range of perceptions and expectations regarding their educational context such as access to academic staff, feedback, and support (Mah & Ifenthaler, 2018). Unfortunately, research constitutes a distinction between perceptions and reality that students have. What students anticipate in terms of support sometimes is not what they get (Nsamba, 2016).

### 3.1.2 Academic support services internationally

This section discussed the concept of academic support and also reviews literature on academic support with an intention of comparing scholarly data with empirical data. Academic support services are a range of educational services and instructions plus strategies which include access to education resources that are offered to facilitate the success of students in their academic quest. Academic support encompasses a broad array of educational strategies including tutoring sessions and supplementary courses (DHET, 2020). According to Gullat and Jan (2003), an academic support programme is a body at HEI designed to provide assistance and support to students throughout the duration of their qualifications. Academic support services are a range of educational services and instructions plus strategies which include access to education resources availed for students to succeed in their academic quest. These services consist of all the aspects of teaching and learning processes in a programme such as registration, curriculum delivery, assessment and other related forms of support.

Academic support is also being referred to as cognitive because it has to do with developing learning, cognitive skills and qualities of students (Shikulo & Lekhetho, 2020). It also involves teaching and assisting students to develop learning, assessment and feedback skills. Academic support also includes students assisting each other on both academic and non-academic matters, and instructors assisting students to master course content, providing constructive feedback and responding to their questions (Lee, 2014). As a requirement to all students, academic support and development does not mean that each student requires special attention over and above what lecturers are able to provide in their daily teaching (DHET, 2013). It is a broad approach to be adopted by institutions as part of academic support and be taught as part of the curriculum.

When various students' support services are combined, it is named as comprehensive support services. Academic support includes learning support, emotional, psychological support. Despite that this study focuses specifically on academic support services, it was also vital to review other student support services. It is also necessary for distance institutions to ascertain that students have access to support services holistically. These services include tutoring, language proficiency, access to resources, and availability of study centres including library services, course content, interaction, administrative support, and financial support to mention some. Support services are inseparable (Nsamba, 2016), therefore it is challenging to categorise such services.

As another form of academic support, extra lessons and catch-up classes are helpful and convenient for campus students who are struggling with their studies but this form of support services does not suit distance or off-campus students. This form of support can also be implemented to distance students through application of online synchronous or asynchronous delivery. Academic support needs to respond to students' academic related challenges and ascertain that students complete their studies successfully. Each student need support not only from an institution's SSS structure but from various people including family members, friends, lecturing staff, administration staff, student body structures and all other stakeholders. As stated on DHET 2013 White Paper for post-school education and training, TVET colleges' student support services annual plan, revised in 2020:

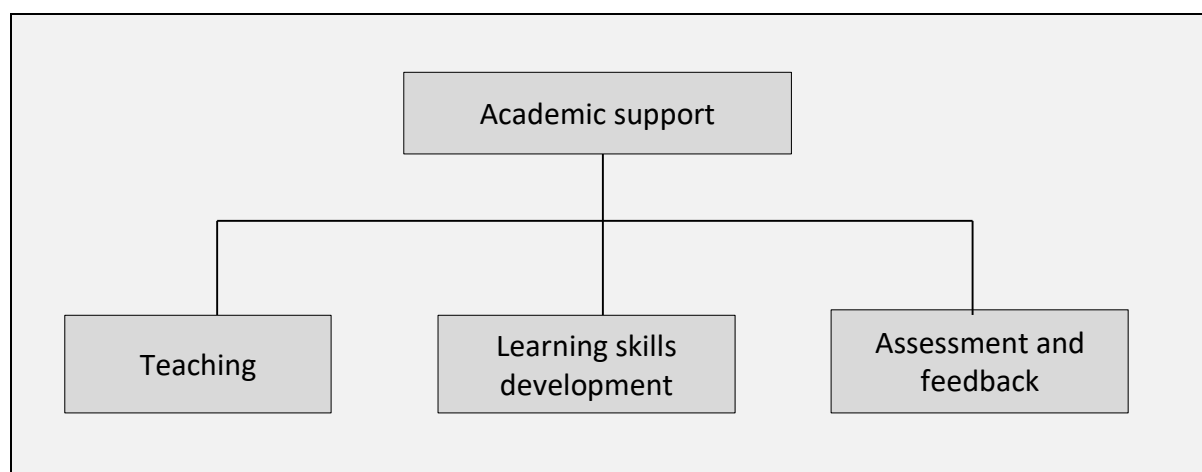
*“The planning and implementation of academic support programmes should not only be the responsibility of student support units but should be conducted jointly with academic units and lecturer involvement. The college should consider establishing multi-disciplinary teams per campus to focus on providing valuable intervention to students with academic pressures and increase overall academic performance. Student academic support programmes should be integrated and find expression in the students’ learning process” (DHET, 2020:13).*

Academic support services are a range of educational services and instructions plus strategies which include access to education resources that are made available for students to use and succeed on their academic quest. Support services are being provided to campus as well as off-campus students, the latter pursue their studies via distance learning. Services which include study skills, learning styles, thinking skills, goal setting, time management and even exit support are categorised under academic support. Apparently, on-campus students are advantageous since most institutions have their SSS offices on campuses. Off-campus or distance students on by contrast have to access such services via other communication platforms. Doyle (2020) poses a question: how can both student affairs and academic support services staff best serve students who are not at campus? It is therefore recommended that all structures that are put in place to give support to students should work together with one main common interest, that is, to give comprehensive support to students.

Academic support, according to Lee, Srinivasan, Trail, Lewis, and Lopez (2011) comprise students assisting one other on both academic and non-academic issues, and instructors assisting them to understand course content by giving constructive comments and responding to questions from students. This is also common in ODL discipline whereby digital platforms promote effective interaction between students and their instructors. Data collection and analysis on the academic performance of students is another relevant method of academic support (Deming, 2017). It is therefore a good idea for institutions to analyse data concerning the performance and persistence of students, consulting academic studies and conducting action

research to evaluate academic support services they offer. Their own student support evaluation will identify discrepancies if they exist and they improve on that.

While Tait (2000) observes prime functions of student support as cognitive, affective and systemic, Simpson (2012) categorised SSS into cognitive, emotional and organisational, referring to these as qualities and skills that are required by distance students. These scholars are sharing the same idea, using different terminology. Cognitive deals with intellectual combined with learning skills, emotional deals with motivation, self-confidence and organisational which focuses on student time management. In figure 3.1, Simpson (2012) illustrates an academic support services model.



**Fig 3.1 Academic Support - Source: Simpson (2012)**

According to Figure 3.1, student academic support services in ODL is divided into three categories which are teaching, learning skills and assessment feedback. For the context of this study, Simpson's (2012) student academic services are briefly discussed next:

### 3.1.2.1 Teaching

The method of teaching used in ODL differs from that used in the tradition method as it uses innovative methods to deliver the curriculum. Through it, students and instructors get in touch through electronic means, provide access to communication between students, and bridge the gap and distribute educational material innovatively (Sadeghi, 2019). Teaching in ODL employ numerous technologies such videos, e-mail and discussion boards which promote effective communication and sharing of ideas



among students and their fellows as well as their instructors (Velasenko & Bozhok, 2014). Teaching and getting taught anywhere, anytime while saving money and time are among advantages that are attached to this form of teaching and learning. Distance students can also be taught by accessing Massive Open Online Courses (MOOC) which is a website-based learning whose purpose is to offer limitless contributions and contact using the internet (Kaplan & Haenlein, 2016). MOOC is a supplement resource which provides, recorded learning sessions, readings and case studies that assist instructors to teach and students to learn.

It is quite evident that whether proper teaching and learning are effective is judged through the outcomes or student performance, meaning, students' assessment is the most trusted and reliable indicator of effective teaching. Therefore, Instructors should be assisted to enhance the quality of teaching for betterment of the academic performance of students. Students too need to be assisted as to how they can access and utilise all forms of support that is available.

### 3.1.2.2 Learning skills and development

Learning skills refer to strategies that are adopted in order to achieve effective, situational, and intentional learning (Mah & Ifenthaler, 2018). As an experienced lecturer who has been in academia for a long time, the researcher is convinced that students possess different learning skills which assist them to acquire knowledge as per their academic requirements. The question is how they manage their studies as they are separated from their instructors. Students studying through ODL need to acquire skills on how best they can interact with the content that gets generated and uploaded to computer systems (Heidrich, Barbosa, Cambruzzi, Rigo & Martins, 2018). Globalisation made it easy for them to access centralised information irrespective of geographical location through World Wide Web (www) via cloud computing. Such interaction of students with virtual information calls for them to acquire computer knowledge. Wei, Yang, Chen and Hu (2018) refer to this as learning styles that vary from one student to another and contribute significantly to the improvement of their efficiency. Although artificial intelligence seems to be gaining prominence across the world, it cannot be divorced from learning styles and skills (Bajaj & Sharma, 2018). The dominant form of teaching and learning in ODL that is, virtual content, lacks

adaptively since it offers common resources for all beneficiaries irrespective of their varying needs and preferences (Ibid).

### 3.1.2.3 Assessment feedback

Student support among other things includes constructive and motivational feedback. Assessment should not only support sound judgements about student competence but also generate meaningful feedback to guide learning (Watling & Ginsburg, 2019). Lack or absence of feedback is detrimental to the progress of students as Eberlein (2015) refer to it as a barrier on the work produced by students during modular section of the programme. Baloyi (2012) concurs with Eberlein (2015) by affirming that absence of student feedback could indicate that the lecturers are not interacting sufficiently with students. Eberlein (2015) further advocates that it is necessary to have measures in place that would ensure that students received tutorial assistance and timely feedback on assignments and other assessment work from instructors. It is evident that feedback reveals student strength and weaknesses, creating an opportunity for improvement. A study conducted by Baloyi (2012) established that 43,2% of respondents agreed and 26,1% strongly agreed that feedback play a vital role on enhancing each student performance.

### 3.1.3 Academic related qualities and skills concepts

Simpson (2012) posed the question: 'What qualities and skills do students need to succeed in a distance learning environment?' The purpose of this question was to get answers which might optimise the provision of SSS. The answers received from educators around the world pertaining to this question contain mostly the following:

- Intellectual ability
- Motivation
- Time management skills
- Ability to deal with stress
- Building of self-confidence
- Sense of humour
- Ability to balance family, job and study demands

The particular qualities and skills that are needed by students in order to succeed in an ODL environment are also briefly discussed next:

#### 3.1.3.1 Intellectual ability

As to be expected, the intellectual ability of students varies (Garcia-Perales & Almeida, 2019; Marsaleen & Munaf, 2020). As a result, their academic achievement also varies. Kuswana (2014) describe intellectual intelligence as the ability of individuals to provide an appropriate response to the stimulus they receive. Buthelezi (2020) adds that the challenge of intellectual and creative work is important to the learning of students. Leggette, Whitaker and Miranda (2017:36) argue that “in order to develop competence and interpersonal qualities, intellectual, manual and physical aspects should be involved”. These scholars further maintain that being intellectually competent mean the ability of an individual to use their brain in building skills by making use of systematic and comprehensive thinking.

#### 3.1.3.2 Feedback as motivation

Motivating feedback is another support that is used by instructors to ascertain that their students do not despair but keep working even if their assessment results are not good. Feedback should be effective, corrective, cognitive (Hattie & Temperly, 2011), informative and motivational (Simpson, 2012). Demiray (2008) insist that timely feedback is another form of motivation for distance students. These scholars agree on the fact that if feedback is delayed, it can contribute to students drop out. Despite the argument above, self-motivation called intrinsic also play a pivotal role in each student academic quest. Students studying in TVET colleges are seen as immature and such is viewed as the main course of lack of intrinsic motivation because they are not yet ready to face the world and to take responsibility for themselves (Ngwato, 2020). Reasons cited for the lack of motivation among college students, particularly first year students are reportedly because they are purported to be spoon-fed information format the basic education and therefore it takes them longer to realise that the TVET environment is different. In fact, it requires that everyone should take full responsibility for his/her own study.

### 3.1.3.3 Time management skills

As distance learning insists on its flexibility, the notion of time management is also crucial. Actually, there is a misconception that students who study through distance learning have more time. Some students might not attend in-person lectures as affording them liberty to complete their assignments and other academic related duties at any time. In actual fact, they forget that their assessment of the courses they ought to be done diligently and submitted on time. There is a need therefore to teach such students ways in which they can manage the time for their studies effectively. The so called freedom and flexibility associated with distance learning has its own discrepancies which mislead students to at time over relax. In reality, ODL students should be able to manage their time effectively as courses are not taught in real time. Successful ODL students need to be self-disciplined, self-motivated, be prepared, good readers, and have good time management skills. Effective time-management is a skill to be taught or learned since it does not just happen (Burns, 2011).

It is important for especially ODL students that are employed to know how to manage personal responsibilities, family responsibilities, work related responsibilities and academic matters. Some students are compelled by family background to work part-time so as to be able to supplement their educational expenses and living costs during their course of study (Lemmens, 2010). In the case of DL, a large number of students are employed in various sectors of economy. Participant students in a study by Mngomezulu (2011) referred to their lack of skills on time management as one among factors that contribute to the underperformance of students during their academic quest. In her study about academic invention experiences of students who at risk, Mngomezulu (2011) further insist that time management is a vital skill to equip students. As per this researchers' experience in this field, students tend to procrastinate the completion of their academic work such as assignments. This used to be the result of flexibility attached to this form of learning.

### 3.1.3.4 Ability to deal with stress

Academic related challenges might lead to various forms of stress. Chao (2012) argues that stress is a problem for numerous ODL students and psychological support is perceived as well-being and found that students require an increased social support

when experiencing stress. Students must learn to avert distractions which can let themselves to lose their focus on what they are supposed to do, know what time it is, and not let their academic lives interfere with their home lives (Passanisi, 2021). Academic and home related challenges may lead to stress and anxiety. Creation of conducive learning environment, according to Passanisi (2021), is vital for ODL students.

Watson and Watson (2016) mention feelings of loneliness which is typical in ODL, job hunting, family issues, life goals, social pressure, and physiological issues as sources of stress, insisting firmly on academic stress. These scholars affirm that these stressors may negatively affect the academic performance of students. Vela, Ikonomopoulos, Hinojosa, Gonzalez, Duque and Calvillo (2016) also argue that satisfaction in life given its relationship to happiness, psychological well-being, and meaning in life are the most important factors in academic and mental health of college students. These factors play a vital role in the reduction of stress. Dong (2014) insists on the fact that academic stress had a negative relationship to achievement motivation. Dong (2014), further insist that students who had higher levels of academic stress were demotivated and they portrayed a poor academic performance.

#### 3.1.3.5 Building of self-confidence

Self-confidence, according to Moneva and Tribunalo (2020) is someone's abilities or power to perform certain tasks. In order for students to accomplish certain given tasks, they need self-confidence. These scholars further advocate that self-confidence is a problem that confuses many students. It is crucial for students to have confidence because it gives them an opportunity to be able to believe in their ability (Goel & Aggarwal, 2012). Srivastava (2013: 57) defines confidence as one of the "attitudes possessed by each individual who has a positive outlook on himself and his situation". It is the belief in self and self-ability, a mental attitude that trusts or relies on oneself.

#### 3.1.3.6 Sense of humour

Špaček and Legény (2019) refer to humour as one among important techniques of engaging students in learning. These scholars further postulate that humour is a specific method of communication, and is closely linked to human life, architecture and

education. Effects associated with cognitive, physiological, psychological, and pedagogical are also mentioned as they bring positive benefits in human life. As a serious and complex matter that play an important role in human life, humour is an integral part of the culture of all social groups (Špaček & Legény, 2019).

*“In modern pedagogy the use of humour is considered an effective strategy in formal or informal learning. In terms of the communication function, humour provides a way to present oneself, a topic. Humour is a form of positive communication, a manifestation of constructive behaviour that increases interpersonal contact. Humour helps students to retain subject matter, to remember more material longer, and reduces student negativism or hostility regarding potentially confrontational issues” (Špaček & Legény, 2019:4).*

According to Tisljár (2016), humour requires intelligence that involves cognitive skills, divergent thinking, and creativity as well as emotional identification and empathy. The study conducted by Obialo (2018) entitled: “Teacher-student perception of humour, playfulness and creativity on student learning outcome in Ibadan, Nigeria” constitute that being playful and creative in the Nigerian educational system seems to be unpopular yet it comprises of psychological, physiological, cognitive and pedagogical benefits. Humour plays as an important role in the field of education especially because it assists to convey a meaningful messages and enhances the learning of students. Seidman and Brown (2016) claim that humour acts as a powerful psychological tool in education. Humour is regarded as one powerful teaching tool that can be used to impart knowledge to students.

It is evident that humour is a technique that ca be included among those used to deal with mental and emotional disruptive or upsetting conditions called stress. Stress affect students negatively during their course of study. Many organisations tend to use humour in an attempt to combat stress among employees (Wang, Chan, Goh, Penfold & Harper, 2018). Therefore, the same strategy can be effective in ODL as students use to experience various stressors.

### 3.1.3.7 Ability to balance family, job and study demands

Work demands and family demands can be defined as “a global perception of the level and intensity of responsibility within the work family domain” (Berger, 2018:2). Balancing these demands leads to lower levels of satisfaction because for example, a working mother feels “spread too thin” between work and family commitments. Berger (2018) further advocates that the demands of a working environment include time pressures of work hours, high workloads, unfavourable work schedules, high expectations from managers, and short deadlines. Family demands on the other hand calls for parents balancing work, family and studies. Therefore, an ODL student who also happen to be a parent is expected to manage his/ her time accordingly, that is, being able to share it between family, work, and studies. The form of support required in this scenario cannot be expected from an institution only, but from family as well.

### 3.1.4 Forms of support required in open distance learning

The success of students in ODL relies on various skills, knowledge and various forms of support and these ought to be developed by each student or to be provided by institutions as some of the aforesaid are discussed next.

#### 3.1.4.1 Study skills

Study skills which cannot be separated from learning skills and are essential in a journey of equipping students with useful tools. This is another support which needs to be provided to students since some students are lack it. This section did not elaborate on learning skills but providing figures of each style as stated by Ramim (2016). Study skills workshop is a requirement and is a relevant strategy to equip students on matters such as how to study, how to manage time as well as setting goals (Kelley-Hall, 2010). Education is about attaining knowledge and skills. In various activities which include daily activities such as work, sport, or education, skills are the basis of what enable individuals to be successful in their respective fields (Fletcher & Wolfe, 2016). When it comes to learning, skills are required to ascertain success in all forms of human development and their career, while appear to be important in e-learning courses as well (Levy & Ramim, 2015).

### 3.1.4.2 Learning styles

Learning styles are about employing various strategies designed to assist students develop their own styles of learning as individuals. Students need to be equipped with certain forms of learning. It is evident that it may not be easy for registered students to learn the skills required for distance education. Results of a study by Mowes (2005) states that the provision of student support services is of cardinal importance especially for the success of students studying through distance education, therefore this can be attained by employing relevant and suitable learning skills.

Setting an online learning study group is ranked among innovative and effective learning styles for ODL students. Since the approach involves a situation where students are separated from each other, taking part in an online study group reduces the transactional distance and promotes interaction and communication among them. Online study groups enhance the learning experience of students (Leow, Neo & Hew, 2016). Each students' participation in a group can be beneficial as it helps students see the need and benefit of working as a team while giving them the practice they need for their respective careers. Different personalities and challenges in some study group train students to get along with others (Rhode, 2020). Online study groups are created for one main reason, to avail an opportunity that would let distance students to achieve their academic goals. Students are getting trained as to how they can use or manage their time wisely, to interact with their peers, and also to solve study related problems.

In the main, frustration among distance students is caused by separation from their fellows and from their instructors; however, it can be breached by engaging on online study groups (OECD, 2020). It is evident that this frustration has an impact on high attrition rate, which is common in ODL. Some students according to Best (2017) are not aware as how to get hold of other students with common interest. As part of modern technology, social media platforms can be an answer to this question. Some students are advantageous because their institutions have a good and effective portal where students can get all forms of support, they need including discussion forums. Rhode (2020) contends that being part of an online study group can expose students to new things such as study methods and getting advice from other peers. Advice and new information received can help students to strengthen their learning and studying



abilities. Knowledge and skills are the core for education globally. Rhodes continues adding that when one student is perfected, that student can also help others to improve their knowledge and skills.

Learning styles include among other things, note taking. Note taking according to Ranca (2013) is a fundamental and universal learning activity that students are expected to perform and master during their educational development. It has a number of benefits including enabling students to organize, summarize, and better comprehend lecture information, recording content for later studying.

#### 3.1.4.3 Thinking skills

Critical thinking is vital in solving education and other socio-economic related challenges. Such skills are about equipping students by developing their cognitive skills in order to enhance their thinking capacity. These skills include different types of cognition and different approaches and methods used in education. Critical thinking is defined by Ennis (2013) as a method of reflective thinking that is based on logic focusing on determining what to believe and to do. Hashemi (2011) concurs with Ennis by adding that critical thinking is a skill required to promote the thinking skills of students. Some scholars such as Fuad, Zubaidah, Mahanal and Suarsini (2017) agrees on the fact that a mind map is an effective graphical technique and a universal key to unlock the power of human brain. Long and Carlson (2011) is of the view that the usage of a mind map in a learning process assists students to make a connection of information between previous materials towards materials being learned. Kharbach (2012) contends that the dominant thinking skill that is required strongly these days is critical thinking. Bialik (2015) and Scott (2017) divides critical thinking skills into two main components called abstract skills related to thinking skills, this pertain to creative and critical thinking and is a concrete skill which involves communication and collaboration.

A thinking skill is said to be an integrated process to study and understand the learning material (Rosidin, Suyatna & Abdurrahman, 2019). According to these scholars, thinking skills are categorised into two. First is the ability to remember, understand, and apply and these are said to be first and lower order of thinking. Second, it is the higher order thinking which includes the ability to analyse, evaluate, and create. On

the contrary, the revised Bloom's taxonomy categorised thinking skills into six levels, namely memory, comprehension, application, analysis or synthesis, evaluation, and creation (Syafa'ah & Handayani, 2015). In their study, Barnett and Francis (2012) indicate that higher order thinking encourages students to think deeply about a particular learning material. Therefore, is vital that an assessment is designed such that it increases the learning of students. The technique through which this is done includes using sets of items that depend on the context and involve critical thinking, problem solving, and creativity skills (McNeill, Gosper, & Xu, 2012).

#### 3.1.4.4 Access to resources support

In order to have access to most resources that are offered by institutions of higher learning, particularly in ODL, students should possess digital skills. The current challenge of shortage of skills that is facing the economic sector of South Africa cannot be distanced from the shortage of resources in the education sector. The South African government realised that a large percentage of unemployed youth are poorly educated and lack the required skills needed in our economy (Kamarul Azla, Azman, Wan Mohd Azman, & Mohi, 2014). Therefore, the government decided to institute strategies that would impart the requisite skills to especially young people so that they would attain decent work. Despite the role of the National Development Plan (NDP) on developing practical, employable skills, and thus the reduction of youth unemployment and skills shortages in the country (Zungu & Munakandafa, 2014), coupled with an increase in the enrolment of students in plus public TVET colleges (White Paper for Post-School Education and Training [DHET, 2014]), the challenge of youth unemployment in South Africa shows no decline.

Accessing ICT resource is particularly a common problem among numerous DL students (Mahlangu, 2018). It is vital for students to get access to resources for their own empowerment. Students need access to various resources such as library facilities, computers, internet connectivity, study material, telephone, and other ICT related resources. Some students can get access to resources through institutions' regional centres while some are struggling to make use of the resources. Some students must pay more just to get access to resources which include digital platforms and other educational resources.

#### 3.1.4.5 Library access and facilities

Days of visiting a physical infrastructure called a library with an intention of accessing information are gone. As technology evolves, online library services play a vital role to information access (Paulson, 2021) and it cannot be separated from access to the ICT resource. Students are able to create their own online library by collecting online items that they need such as articles and books by using Google library services. As opposed to print storage media, a digital library is a collection of electronic documents, audio visual material stored in an organised method and accessible on internet (Ntuli, 2015). It provides papers, journals, videos and sound files online and digital books according to Kucirkova (2017) and have an impact of enjoyment among students. Such unlimited and lengthy access to such a library setting calls for students to have access to reliable and unlimited access to internet access. Apart from accessing the library, students need access to other online resources such as Google Scholar, Google Docs, Skype, Zoom, Microsoft Teams and more. As a result of modern technology dominated by digital systems, institutions of learning are facing a massive task of digitising old, printed textbooks. According to Lynch (2017), digital books are safer and more accessible than printed ones. In some institutions of distance learning, students tend to borrow a printed textbook which takes couple of days before arrival. If that particular textbook has been borrowed, for that period, it cannot be accessed by others. This is a challenge that can be conquered by using online library facilities. The main concern here is the ability of students to access digital platforms, a trend that seems to dominate the education sector.

A consensus among researchers is that access to library services especially by students with disabilities is still a challenge, almost in all countries of the world (Ngoepe, 2016). It is digital library access facilities that might bridge this gap since students do not need to go to the library physically. Accessing library services at the comfort of their own apartments eliminates some costs such as commuting and increases access to all students regardless of a distance between student and library location. This form of online library also provides all students, including those that are physically challenged with an equal access to library facilities at all times.

Shaheen, Mahmood and Shah (2020) describe a library as one among the most important structures for SSS. Through accessing a library, students can self-educate

themselves and gain knowledge by accessing available information through various communication platforms. It remains the responsibility of a library to educate students to be able to solve their information related issues (Shaheen, et al. 2020).

It would be if ODL students acquired basic technical skills that they would be able to use ICT resources confidently and among other things, access library services. Such skills include knowledge on how to navigate online resources, download and upload required material and ability to create and share documents. It is also helpful for institutions to organise new student orientation programs that would introduce them to an institution Learning Management System (LMS) and other online tools. Technical skills would enable students to know whether their hardware and software specifications are compatible with institution requirements and if not, ask for assistance.

#### 3.1.4.6 Computers and connectivity

To date, computer-related equipment and connectivity forms the greatest part of resources considered crucial to enable distance learning. Students need support that pertain to computers and they also need to use the same skills to access SSS available online. Internet connectivity is still a challenge to students who reside in remote areas because some are yet to be electrified. This is still a challenge that is associated with the lack of ICT infrastructure. According to Reju (2016), there is limited and unreliable internet connectivity accompanied by serious shortage of textbooks and shortage of relevant course materials facing ODL institutions in Nigeria. This challenge does not affect Nigeria alone, most countries in Africa are grappling with challenges on internet connection.

Acquiring and protecting computer equipment is still a challenge among certain students. Despite being costly, the hardware and software get outdated rapidly and the high crime rate which include stealing of such portable devices are perceived as an elephant in the room. According to Brown (2017), any student who needs to enrol for a distance learning programme is required to invest in multiple ICT equipment including computer, webcam, and stable internet connection. In addition, students need invest on the security of their equipment, which is insurance and that is expensive and cannot be afforded by other students. It is therefore important for institutions to

review their support services and making sure that they are still inline and relevant to academic and technology dynamism in meeting the needs of students.

Students possess some computer skills, but they are seldom able to transfer their digital personal skills to an educational context (Lai & Hong, 2015). It is said that the daily usage of social media platforms by the youth is accompanied by high risk of cyber-crime, Moafa (2018) states that social media users can be negatively affected by cyber harassment. This harassment can cause emotional distress and disrupt the lives of students which sometimes lead to suicide. It is therefore vital to teach students about the risks of living their lives in social media and that is recommended to transfer such skills to their educational context. Transferring their ICT skills to academic related matters can be a great benefit among themselves than using such skills in unprofitable and risky matters of social media. The risk that comes with the use of electronic devices can be extremely detrimental as it sometimes includes the publication of their identities particularly those who are not familiar with online related crimes. Overall, the usage of computers and other related devices and internet relies on electricity supply as described next.

The intermittent supply of electricity that is experienced by South African has become a major challenge in the field of ODL and ODeL today and it may not be ignored in these disciplines. This is a kind of a challenge which cannot be ignored when it comes to distance learning since this form of learning rely more on electronic devices. Here we can mention the lack of electricity in remote areas, high costs of electricity which is problematic to South Africans who are facing high unemployment rate, load shedding which seem to confuse numerous distant students as well as campus-based students in South Africa. Jones (2013) also affirm that the lack of electricity in rural schools seem to be another factor that hinder ICT in remote areas. Distance learning depends on a stable supply of electricity for the use of ICT techniques and equipment. Digital platforms used by students and instructors such Zoom, Skype, video conferencing plus hardware such as computers, tables, printers all rely on good supply of electricity. It is really confusing and irrational for a country like South Africa to experience continuous electricity cut.

The problems that reportedly affect ODL students will persist. The effect of these continuous power cuts is negative in an education system at large. It also poses a serious threat to the education system which today relies on the usage of ICT. Studies about load shedding such as the one by Memane, Munda and Popoola (2019) and one by Ndaguba (2018) have reported on its effects on the health care. Rarely many have shown the impact of load shedding on education, and these are also required. The findings constituted by these studies made it clear that load shedding is a serious problem in South Africa, particularly in the health sector and by implication, in the education sector as well.

#### 3.1.4.7 Study material versus learning management system

Study material can be delivered in hard copies to students or accessible online. This section of this study described study material versus Learning Management System (LMS). In ODL, institutions rely on the use of printed and electronic study material. Both these types of study materials are important. Students who are struggling with ICT resources such as skills and knowledge tend to rely more on printed material. Bijeesh (2017) argues that for an ODL student, their classroom is right in his/her bedroom and the study material on the desk through e-material. This simply denotes that nowadays students are surrounded by a vast collection of ICT resources which brings all information they need to their fingerprints. E-material is more convenient as students do not need to wait for a long time for their study material to be delivered. There are also numerous discrepancies caused for example by the inefficiency of the post office and other forms of physical material deliveries which include delays and crimes that involve hijacking of delivery vehicles.

Owing to students' separation from their fellows and from their instructors, some find it difficult to interact with their study material. Mahmood, Rashid and Rashid (2017) argue that study material is a compulsory and effective component of distance as well as traditional method of learning. According to these scholars, learning is impossible without effective study material. Students also need support as to how to interact with study material, both physical and electronic one.

It is recommended that instructors utilise multiple techniques and methods to provide students with better learning opportunities and ascertain that they facilitate learning

(Tawalbeh, 2017). LMS forms part of electronic method of learning and is good on enhancing the online communication of students with the instructors by motivating them to play an active role in the learning process (Tawalbeh, 2017). This is a result of the emergence of complex communication technologies and mobile devices that has enabled users to satisfy their demands for knowledge without the need to meet physically (Turnbull, Chugh & Luck, 2019). Turnbull, et al (2019) described LMS as technologies that facilitate the provision of courses over long distances. Owing to the evolvement of information systems in education around the world, institutions of higher learning are investing vastly in various LMS as to support and improve their student academic performance (Caputi & Garrido, 2015). Through LMS, instructors are able to provide different online course management features. As a web-based software, with its roots on distance learning, LMS is easily accessible to students around the planet without any form of limit. Ntuli (2015) recommended that LMS be synthesised with institutions' digital library services in an attempt to enhance students' academic support.

This form of student support needs to be designed in a manner that is able to support the collection and storage of assessment tasks (Turnbull, et al, 2019). It is quite evident that LMS is a good administrative tool for instructors since education became student-focussed, particularly in ODL discipline. Turnbull, et al (2019) further affirm that LMS need to be supported by the structure of each respective institution in order to promote a conducive learning environment. LMS is beneficial as it is capable to nature communication with students outside of the classroom environment. This may include: video-conferencing, discussions, e-mail, real-time messaging, and announcements.

It is of cardinal importance for Instructors to master the technical skills to be able to use the LMS and pedagogical skills to facilitate the progress of students. "Certain institutions such as the University of Dar es Salaam (UDSM) and the Open University of Tanzania (OUT) have established IT units that provide support services to students on how to use LMS and other related technologies" (Raphael & Mtebe, 2016:124). Garrison and Vaughan (2013) concur with Raphael and Mtebe (2016) by alluding that Instructors require to be afforded some time so that they would design learning programmes, learn new technologies, and facilitate online instruction in every

semester. This means instructors need support, technically for them to provide support too for their students.

#### 3.1.4.8 Telephone support

In order to access support services, some students rely on telephone because they need to access their institutions. In most cases, students direct their calls to administration or admission offices for support. Owing to high costs of airtime and data in South Africa, calling and institution is very expensive since institutions of higher learning do not have free telephone access.

Unlike in the past when students relied on landline telephone to communicate with their educational institutions, Kumar, Jamatia, Aggarwal and Kannan (2011) claim that an introduction of mobile phones brought greater flexibility and assisted in reducing communication barrier to education. The finding of the study conducted by Kumar et al (2011) show that students exhibited a high level of satisfaction in relation to the use of mobile devices for SSS through information exchange. These findings indicate that despite multiple modern methods of digital communication, phones still play a vital role in communication and is still used numerous students worldwide. Therefore, it is recommended that ODL institutions should provide full time telephone helpline support to attend to students concerns and questions.

#### 3.1.4.9 Exit support

As another form of support that paves the way for students to prepare for entry into the labour market or further their studies (Maimane, 2016), exit support is about assisting those students who are doing their final year. This form of support calls for a range of workshops to be organised by institutions to prepare students for work environment. Despite that some students in distance education are employed in various sectors of the economy, work related support is still required to equip, upskill and reskill them. Exit support may include inter alia techniques for job application such as writing proper curriculum vitae, filling of application forms, customer care, conflict management, communication skills development, presentation skills and writing of application letter among other things (College Times, 2019). Preparing candidates for job interview should not be ignored in this form of support.



The aim of TVET colleges is to equip school leavers with knowledge and skills required for employment in the labour market (DHET, 2013). This applies to other HEI such as universities. In other words, it is a responsibility of all institutions of higher learning to equip students with skills that can prepare graduates for employment. Each country's economy depends on relevancy of the education curriculum of such institutions. Though essentiality of dedicated student support services office to coordinate such services is stated on government post-education white paper, success rates of college students are still generally too low (DHET, 2013).

Colleges have job readiness programmes that are designed for students who are at exit level. The main objective of this programme is to equip students with knowledge and skills required by employers in various economic sectors. To prepare students for client service out there is among the objectives of this job readiness programme. There are challenges and discrepancies attached to these programmes. For example, they are tailor-made to produce jobseekers not job creators. This is a serious damage attached to South African education system. This calls for a need to redesign the curriculum so that it would channel students into entrepreneurship opportunities. This resonates with Roos (2014) who justify those goals for educating leaders requires an inclusion and understanding of sustainable global thinking, innovation entrepreneurship, and decision making based on practical wisdom. This should teach students how to create employment opportunities based on acquired knowledge and skills, how to get funding and how to manage businesses. The current exit support offered by TVET colleges is still troublesome.

Entrepreneurship education is a mechanism that can addresses issues pertaining to youth unemployment and is a strategy that can grow the economy of the country (Gamede & Uleanya, 2017). These scholars further insist on “the need to link entrepreneurial training with Institutions of higher learning such as Technical Vocational and Education and Training (TVET) Colleges tend to provide gainful employment to the recipients which are the base for industrialisation and technological development in the 21st century country” (Gamede & Uleanya, 2017:1).

#### 3.1.4.10 Financial support

Social demands and needs as well as instable economic situation in South Africa and other countries of the world put pressure on the finances of students. According to Young, Schreiner and Mcltosh (2015), youth unemployment remains extremely high with 36.1% in 2014. Some students end up struggling to pay for their tuition and these results in students' experiencing anxiety which leads to stress and withdrawal. As another form of academic support, financial support cannot be excluded from wide range of student academic support. Some college campus-based students rely mostly on the government financial aid scheme called NSFAS to fund their studies and other related costs such as accommodation, meals and transport. The financial support called national bursary scheme was introduced in 2018 with an aim of supporting students with families earning an annual income of up to R350 000. This scheme was introduced to accommodate colleges and universities students (TVET College Times, 2019). Unfortunately, this form of support benefits students who are enrolled on a full-time basis leaving out those enrolled for open learning.

To provide financial support to ODL students is part of the responsibilities of an institution to enable students to afford their tertiary education. The fact that some students are working while studying put pressure upon them as they are also anticipated to provide for their families. Owing to this argument, student support services can assist students further through the provision of financial aid services.

#### 3.1.4.11 Feedback as a form of academic student support

Assessment feedback is important, and it forms part of student academic support services. Chokwe (2015), cited in Uiseb (2017), insist on the fact that feedback is a crucial form of academic support in the processes of teaching and learning. Through feedback, students can identify their weak points and they can improve their performance. Accessing feedback can help students to rectify the mistakes they made on previous assessments. Assessments must be supplemented by relevant, suitable and meaningful feedback (Evans, 2013). In the study conducted by Mowes (2005) which was based on support services in distance learning offered by the university of Namibia, it was revealed that numerous participants were not happy about the feedback they received from their lecturers. The feedback to students should be a

motivational and constructive. Feedback, according to Hattie and Temperly (2011) should be constructive, affective, intellectual, educative, developmental and informative to students. Demiray (2008) support this idea by adding that feedback should be timeous, motivates and if feedback is delayed, it might lead to students to drop out. Segoe (2014) constitute that feedback to students must be constructive, adding that if the feedback is not constructive, and students will get discouraged.

#### 3.1.4.12 Counselling support and COVID-19 implications

Counselling can be viewed as a crucial matter concerned with the psychological being of students who are facing a series of socio-economic challenges, but the fact is that this form of support is part of academic support. It is evident that students facing social problems cannot portray their academic potentials, so it is of cardinal importance to give them counselling. As another form of academic support, counselling is vital for ODL students because they study on their own for most of the time and they tend to experience various problems related to anxiety and lack of confidence, accompanied by the lack of proper study skills which can interfere with their progress and programme completion (Simpson, 2012).

After implementation of the first lockdown in South Africa in April 2020, the Human Science Resource Council (HSRC) in collaboration with higher health and DHET conducted a study intended at establishing the social impact of the COVID-19 pandemic on young people in the Post School Education and Training sector (PSET) in the country. The council came up with multiple findings which pertained to unfavourable conditions experienced by students. As a result of socio-economic pressure brought by COVID-19, the findings of the HSRC constitute that more than 65% of students experienced severe psychological distress (HSRC, 2021). The findings further revealed that 79,9% of study's participants made it clear that students should receive routine counselling support. Psychological distress is a serious anxiety condition which might also result in students' withdrawal from studies. Therefore, institutions should make a point that all forms of support are available and accessible to students.

Drug abuse has become a major social challenge facing today's youth (Oyedele, Chikwature, Oyedele & Kadenha, 2016). Individuals with drug disorder deserve the

kind of care similar to that given to patients with other health conditions (World Health Organisation [WHO, 2021]). Psychological distress is among the factors which contribute to drug abuse by students. Therefore, it is of cardinal importance for educational institutions to offer comprehensive support to students to circumvent academic related stress. O'Keeffe (2013) also advocates that colleges are losing large number of students each year because of mental illness, affecting adversely upon student success rate. The issue of mental illness cannot be separated from psychological distress experienced by students.

Loss of study time, estimated at 57,9% was also mentioned as another challenge experienced by students. The point was that some students were converted to distance learning and it was a new paradigm for them. Even those who were familiar with this form of learning encountered challenges which includes loss of social interaction estimated at 42,2% and financial constrains caused by the country being on hard lockdown. Students were unable to afford data bundles for their education purposes and also unable to communicate with their counterparts. The ODL discipline is characterised by diverse students as some of them are working while studying. COVID-19 left numerous people unemployed while some were compelled to accept reduced salaries. This is an unfortunate situation because a large percentage of ODL students did not benefit from any form of financial aid for their studies. Students are expected to fund their studies from their own pockets.

As a part of academic support, findings of the HSRC (2021) findings showed that some students from universities and TVET colleges managed to access internet by using data bundles which were provided by their respective institutions. Unfortunately, those students are estimated at seven percent only. About 38% of TVET college students reported that their institutions offered virtual learning while some encountered multiple challenges on communicating with their institutions.

Numerous factors contributed such as a new learning environment, unemployment caused by the pandemic, reduced salaries for those who were employed or their parents, financial constraints, shortage of food, challenges of ICT equipment and techniques were listed as having contributed to the distress of students. It is quite evident that these stressors had a negative social impact to the daily lives of students

and their education at large. The challenges brought by the pandemic were a catalyst for numerous institutions to assess their support services and also relook on the relevancy of the method through which the curriculum was delivered. The modern method of curriculum delivery is the one which cannot be separated from new technology.

#### 3.1.4.13 ICT role in academic support

The use of Information and Communications Technology (ICT) in ODL today is something its role in education cannot be denied. Reliance on hard copies through post office for ODL is fading out and soon it is going to be history. Students who enrolled in ODL should not shy away from technology. West (2012) asserts that digital technology makes it possible to monitor how long students devote to readings and videos, where they get electronic resources, and how quickly they master key concepts. On the other hand, Hegarty (2006) points out those students reported having benefited from using learning technologies such as the ability to learn at their own pace, to learn independently and to have fun. This view is supported by Anderson and Dron (2012) who conclude that the usage of social media for teaching and learning in ODL also gained popularity these days. Anderson and Dron (2012) further maintain that remote classrooms enhanced by video conferencing, seem to be another best way to be followed by institution offering ODL programmes.

Since ICT play a significant role in ODL, student lacking ICT skills find it challenging to proceed with their studies because of data loss and frustration resulting from the lack of cloud computing. Deming (2017) advocates that institutions should provide skill-based support that focuses on technological literacy and math skills. The comfort of teaching from home among educators and the comfort of learning from home for students call for a high level of discipline, commitment, technology, professional behaviour and resource availability.

Kucirkova (2017) supports the usage of printed material, Compact Disks (CD), Digital Versatile Disk (DVD), PowerPoint presentation, video conferencing, electronic mails (e-mails) and other internet tools such as social media; all forms part of today's distance learning. This calls for a need to have students technologically empowered in order to cope with modern technology which forms part of their studies (Jiang, Lou

& Hu, 2019). The usage of technology to present a lesson is not a one size fits all approach as it relies on the types of modern technology in use at the time and also the content being taught on that curriculum (Orlando & Attard, 2015). According to Richburg-Hayes (2015), student support services include inter alia: technology-based support, academic advising and student access centres.

To mitigate some challenges associated with distance learning, ICT infrastructure need to be put in place and be maintained. Online learning software need to be developed and to be used while educators, lecturers and students must be trained as to how to go about using such software (Mbambo, 2017). 'Active Presenter' is among online software that are able to record everything being demonstrated on computer screen plus instructor's voice for the benefit of students located in various areas. Other software such as Google meet and Google classroom are also freely downloadable for the benefit of distance students and can be used to reduce a transactional distance between students and instructors. The use of ICT in teaching and learning comes with numerous challenges and benefits; it poses challenges pertaining to the cost of hardware and software.

The immediate shift to emergency remote learning received lot of critics during the outbreak of the COVID-19 pandemic in South Africa and other African countries when physical classroom attendance got suspended internationally in an attempt to curb the spread of the virus (Czerniewicz, Agherdien & Badenhorst, 2020). These scholars further contend that COVID-19 became a wakeup call of inequality that existed in the education system of South Africa. It was during this critical and unprecedented period where educational institutions were anticipated to opt for e-learning to mitigate the situation in the field of education. Certain institutions in South Africa and other parts of the continent were not in the position to offer online learning because of a number of technologically related issues and challenges also referred to as digital inequalities (Sikhakhane, 2020).

The COVID-19 pandemic became detrimental not only in education but in all spheres of life (HSRC, 2021). This pandemic did not only cause a crisis in schooling in South Africa, but it exposed the country's existing inequality in the education system. A relevant scenario to this inequality is where students in the Gauteng Province were given tablets by the Gauteng Department of Education (GDE) but nothing of this sort

was given to students in the other provinces. The question posed by Mkhize (2015) as cited in Pandor (2018) is: “How to teach Africa in a post-apartheid academy?” This question reveals inequalities that still persist in South Africa’s education in a post-apartheid era. During this COVID 19 pandemic, e-learning was really required to keep students on their studies while they were not in classes physically. It was so unfortunate that for e-learning to be possible, relevant devices were needed while the cost of data bundles is also high. The DHET and Department of Basic Education had to do something for students to access the websites of their institutions free of charge.

In order to connect TVET College campuses to the South African National Research Network (SANReN), the DHET launched the so-called TVET Colleges Connection Project (TCCP) which was an ICT infrastructure initiative funded through a grant from the National Skills Fund (NSF). The purpose of this project was to solve bandwidth deficiency at South Africa’s TVET Colleges by connecting them to SANReN, thereby enabling them to contribute to meeting the goals of the developmental state (DHET, 2021).

When educational activities got suspended because of COVID-19, numerous concerns were registered about students who studies in TVET colleges especially that the majority did not have access to technology and other resources required for online lessons (Mapulane, 2020). It was envisaged that institutions of higher learning and the DHET would assist students who may not have had appropriate learning spaces at home. This was also regarded as an inequality in our education sector which needed a transitional justice.

The unprecedented period experienced during the lockdown necessitated by the COVID-19 pandemic in 2020 forced the education system across the globe into an emergence of a new era. As a result, the 4<sup>th</sup> industrial Revolution (4IR) with its innovation and its integrated network skills expanded its roots to all spheres of life. Virtual classrooms, virtual libraries, virtual meetings through Microsoft teams, zoom and other computer network related applications started to show some significance. Just like other educational institutions, the TVET sector had no other option but to expand to virtual communication platforms as was the seemingly viable option that

would have enabled effective interaction with students. Virtual communication became a suitable platform for interaction.

### **3.1.5 Technical Vocational Education and Training from a global perspective**

TVET is the term used internationally in education that is applied to certain post-school educational institutes (UNESCO, 2014). For the purpose of establishing a better understanding about TVET sector, Nazis (2019) affirms that it is of cardinal importance to critically reflect on the existing literature on TVET, in the global and national context, as well as the experiences of students and TVET experts. According to the White Paper (DHET, 2013), the post-school system is understood as comprising all education and training provision for the benefit of the students who managed to complete school, including those who would have failed to finish their schooling (SAQA, 2014). TVET has become an international educational initiative aimed at improving vocational training programmes around the world (UNESCO, 2014). As a result of unemployment and under-employment globally, researchers' consensus was that the Economic, Equity and Transformative (EET) approach needs to be introduced to address work force and socio-economic demands by formulating TVET geared towards developing skills relevant for work and social life (UNESCO, 2012).

“TVET systems all over the world have realized that there should be joint efforts between government, business and industry to provide and finance training programmes. The key then is finding an appropriate and practical balance between government, private and non-government provision for training people in the field of skills development (Council for Technical Education and Vocational Training” [CTEVT], 2021:9). This statement made it explicit that employers play or might play a significant role in TVET curriculum design and development as they know the business and industrial requirement in terms vocation. Therefore, departments of education from various countries should collaborate with employers in their design of curriculum to be taught in the TVET systems. It is the belief of this researcher that each country needs to develop an education curriculum both basic and higher by basically considering the economic resources of that country rather than adopting it from other countries. In this section TVET sector of few countries was investigated.



### 3.1.5.1 TVET sector in Australia

Australia has a competent-based TVET system which is highly recognised worldwide largely necessitated by its strong focus on industrial demand, skills application and to its scalability and flexibility. Currently, the country has 4,200 registered training organisations that include 58 public providers with 4.2 million TVET students (UNESCO, 2016). The strength of the Australian TVET system is on the existence of qualifications that meet the needs of the industry and individuals which allows people with portable skills to move across the labour market and support lifelong learning. Qualifications ensure opportunities for students to engage and progress in TVET via multiple entry and exit points.

Despite the fact that Vocational Education and Training systems are developed by each country based on specific cultural, social, and economic scenarios, industry is engaged and is considered as one of the key stakeholders in consultation about TVET policy development as well as in providing private funding for accredited and non-accredited training, such as 'in-house' enterprise training in Australia (UNESCO, 2018). In terms of TVET trainers, it is stipulated by Australian Industry and Skills Committee Authority that all trainers and assessors must be in a possession of certificate IV in training and assessment or qualification in adult education diploma or higher as well as appropriate skills, qualifications and knowledge for the industry (UNESCO, 2018).

### 3.1.5.2 TVET sector in Bangladesh

It is the responsibility of Governments in each country to create flexible transition opportunity between TVET and further and higher education (UNESCO, 2016). It was the aim of the Bangladesh government to increase the enrolment in TVET to 20 per cent of the total enrolment at the secondary level, by 2020 (Naziz, 2019). Of the three key academic streams in Bangladesh namely the general educational stream, religious educational stream, and the TVET stream, the latter enjoys a relatively lower social status (International Organisation for Migration [IOM, 2017]). Despite this, the stream has gained significant attention in recent years compared to universities because its graduates earning better and have better prospects of career progression (Naziz, 2019).

An inclusion of employers or businesspeople during the design of the curriculum of TVET colleges seem to be ignored by some governments as Roknuzzaman and Soo-Bong (2020) advocate that there is an existing gap between skills development and employment, especially between TVET and industries in Bangladesh. There is a mismatch between the outputs of the TVET system and the requirements of the employment sectors that involves the trades or technologies being offered, the competencies acquired in relation to the requirements of industries or self-employment opportunities are not sufficient, and the lack of practical experience of the learners for acquisition of skills (Mia & Karim, 2015). A partnership between employers and TVET sector should be encouraged. The British have a TVET sector in their education system too.

### 3.1.5.3 TVET sector in United Kingdom

Employers in the UK are not just customers but active participants as they play a significant role in the design of the TVET curriculum and other TVET related systems (British Council, 2021). According to the British council (2021), employers contribute equipment, their expertise and apprenticeship levy and avail venues. The council further affirm that training outcomes are measured against employment-based outcomes and not by the passing of examinations. Through apprenticeships which are developed in partnership between colleges, universities, employers and professional bodies, student receive relevant vocational based training as per the country's economic needs. At the heart of the UK's TVET system, there are Further Education (FE) Colleges responsible for the provision of training across various economic sectors. Apart from the FE Colleges, schools also provide some vocational courses among learners aged between 14 and 18 (British Council, 2021).

In as far as TVET trainers or employees are concerned; the UK has trainers with dual profession in the TVET sector that includes technical knowledge as well as the ability to apply pedagogical theory. It is quite evident that someone with a teaching qualification is required. In addition to technical qualifications, trainers are also required to obtain a teaching qualification (British Council, 2021). Qualification obtainable from TVET colleges in the UK range from basic level called European Qualification Framework (EQF) 1 to EQF 8. While universities focus on awarding

bachelor's degrees as well as postgraduate degrees accompanied by apprenticeship, FE Colleges focuses on vocational qualifications to equip students with practical and relevant work-related experience. TVET also play a pivotal role in China.

#### 3.1.5.4 TVET sector in China

China focuses its own TVET curriculum to transferable skills. Transferable skills defined by Bai and Geng (2014) as competencies that are not subject specific but can be optimally applied to different new subjects and fields. These scholars further affirm that numerous researchers define transferable skills as the competencies required to solve problems, communicate ideas and think creatively. Transferable skills are neither technical nor vocational but these skills, once obtained or developed by a student, they can be transferred into various vocational or non-vocational areas such as personal or group life. In an attempt to combat youth unemployment, the government of China prioritised rapid development of the TVET sector (Pilz, 2017).

Economic prosperity in numerous countries including China has been attributed to the ability to link TVET with the national economic development strategies (Zouliatou, 2017). Zouliatou (2017) further claim that the TVET sector in China is considered as a panacea in national challenges towards sustainable development, thus attracting more emphasis on its effective coordination. China claims to enjoy successful experience in knowledge and skills development through TVET in the past decades. According to Zouliatou (2017), China is one among countries that have an experience of poverty alleviation and education development with developing countries including Cameroon, on the other hand, China has achieved many successes in her TVET implementation shows positive reflection on the socio-economic development of the country. The next section focused on local TVET sector and experiences attached.

#### **3.1.6 Technical Vocational Education and Training from a South African perspective**

TVET Colleges focus on vocational and occupational education and training with an aim of preparing students to become functional workers in a skilled trade. TVET Colleges are also defined as institutions that provide knowledge and skills required by students to enter a specific range of professions (Maidment, 2017). These institutions

are there to combat skills deficit. So far, there are fifty TVET colleges in South Africa with 267 campuses across the nine provinces and serve approximately 700 000 students each year (Pandor, 2019). TVET Colleges, according to Cong and Wang (2012) combine theoretical and practical forms of education whereby technological and scientific aspects are learnt in respect of different social and economic sectors.

The TVET sector, formerly known as Further Education and Training (FET) in South Africa was established in 2002 in terms of the (FET) Act 98 of 1998. The merger process transformed 152 former technical colleges into 50 multi-site TVET colleges across South Africa's nine provinces (DoE, 1997). Between the years 2001 and 2002, 152 FET colleges in South Africa got amalgamated into 50 FET colleges, named TVET in 2012 to consolidate college administration and reduce funding inconsistencies. During this time, the administration of these colleges was under the Department of Basic Education. Furthermore, in April 2015, all administrative functions of these colleges were shifted from the provincial governments to the DHET, staff members were also transferred to the DHET. These major reforms contributed to the rapid increase in the enrolment of students in TVET colleges (TVET College Times, 2016). "The migration of TVET Colleges to DHET invariably influenced matters related to the human resources, finances, logistics and other general, management-related matters" (La Cock, 2017:2).

"As a post-school provision form, representing an indispensable means to develop at the individual level, skills which have indisputable impacts on national development in a developing context, TVET Colleges have the capacity to serve as a significant means for responding to the continuing education and training of both the employed and non-employed elements of society" (Akoojee, 2008:1). These colleges offer vocational training and provide academic and theoretical education for apprentice (TVET College Times, 2019). Plumbing, motor mechanic, electrical, civil engineering, Information Technology and business studies are among courses offered by TVET Colleges. Youth with artisanal interest is encouraged to opt for TVET colleges, the institutions that will let their dreams come true. As institutions regarded as cornerstone of South Africa's skills development, TVET colleges are ideal for employment and entrepreneurship purposes.

In South Africa, TVET programmes are categorised into two, namely the National Accredited Technical Education Diploma (NATED) and National Certificate Vocational (NCV). NATED, also referred to as Report 191 caters for students who completed their National Senior Certificates (NSC) and falls under post school programmes. On the other hand, NCV is for students who are still at school. Students are only allowed to enrol for NCV programmes if they would have completed their grade nine in basic education. In as far as funding is concern, both NATED and NCV student receive financial assistance through NSFAS. NCV programme starts from level 1, level 2 and level 3 of NQF which is equivalent to grade 10, grade 11 and grade 12 respectively. Their programmes rely more on practicals with three compulsory subjects which are languages (English and vernacular), Life Orientation and Mathematics or Mathematical literacy as compared to basic education same levels. In addition to compulsory subjects, students have the choice on electives and additional subjects.

The excellence of higher education is based largely on the support services that are available to students (Shaheen, Mahmood & Shah, 2020). If an institution is lacks adequate support needed by students, there is no point of its accreditation. There is a literature that there is an optimistic link between the academic performance of students and the active use of the support system (Ibid). In support, Steyn (2014) alluded that SSS have been organized in a structure to support individual institutes to make their learning further effectual.

#### 3.1.6.1 TVET qualifications and stigmatisation

Just like qualifications received through Recognition of Prior Learning (RPL) which is recognition of non-formal and informal learning, TVET qualifications are still undermined by certain employers in South Africa because they are perceived as of low status as compared to qualifications issued by universities. Even TVET colleges were considered to be of low status as Fryer (2014) argues that in 1994, colleges were racially segregated with multiple unfair practices being legally sanctioned. On contrary, “from their inception, TVET colleges are viewed as ‘a vehicle for providing skills that respond to the economic needs of the country’ (Buthelezi, 2016: 4).

In Ghana, there is a misconception and poor public image of TVET as numerous people believe that TVET education is designed for students who cannot use their

brains or those who do not qualify for admission into the universities (Isaac, Ebenezer & Newton, 2014) yet countries such as United States of America, Canada, and Australia view TVET as main mode of skills acquisition. The inability of students to complete their academic programmes on stipulated time contributes to the stigma attached to TVET and the perception that it is of a low quality especially when compared with university education (Harris, 2014). This notion receives support from Puckett, Davidson and Lee (2012) who affirm that TVET colleges are perceived as institutions offering inferior education when compared with a general academic education obtained through traditional universities. This resonates with Mbambo (2013) statement who affirms that South Africans have a poor perception about TVET colleges and this has a negative impact to the growth of the sector in terms of student intake. Adams (2019) supports an existence of the common misconception that TVET colleges are alternatives for students who cannot gain access to universities.

*“Recent and previous academics studies, point out that, among the factors that influence student choice of an institution, are that of an institutions image, branding and reputation, quality of teaching, financial aid and administrations issues and admission requirement” (Mbambo, 2013:16).*

There is published literature that focussed on the needs to reform the curriculum that is offered in TVET colleges while some assessed its relevance with regards to its ability to address skills shortage (Dlamini, 2016; Selepe, 2017; Terblanche & Bitze, 2018). The study conducted by Terblanche and Bitze (2018) on TVET curriculum change recommended that the need for change. The findings indicate that a reform of the curriculum of the TVET college was necessary. Such reforms could contribute to enhanced productivity, employability and success rates of candidates graduated from TVET colleges. The findings also insist on crucial need for change in management strategies to prepare for current and future TVET curriculum challenges.

The study conducted by Thindwa (2016) in Malawi revealed multiple barriers that led to TVET graduates not being preferred candidates by employers. Outdated curriculum, lack of alignment to requirements of businesses and industry, overall, these were seen as contributing to poor quality of the graduates. Therefore, it is of cardinal importance for colleges to ascertain that the curriculum they offer is in line with current business

and industrial needs. This would ensure employability of TVET graduates and remove the negative stigma attached to these institutions.

### 3.1.6.2 Lecturers' appointment

With regard to the appointment of lecturers in TVET colleges, according to Mgijima (2014), no teaching qualification was required for one to be appointed as a lecturer. Mgijima (2014) further affirms that lecturers were mostly appointed on bases of their technical know-how and their experience in the workplace. In contrary, to improve the quality of teaching and learning to match local labour markets was another key objective of TVET colleges (Sibisi, 2019). There are lecturers that are in possession of teaching qualifications and those who possess vocational knowledge and experience without teaching qualifications. Some among those who possess teaching qualifications have high qualifications that include postgraduate degrees such as Honours, Masters and Doctoral degrees and their qualifications are not taken into consideration by DHET as they receive no incentives as per their qualifications. It is quite evident that the TVET sector will keep on losing relevant, experienced and qualified human resources because of this. For example, a lecturer in TVET college who possess Doctoral degree earns the same amount as their colleague with a Diploma. This is the reason why there is always a need to upgrade qualifications to keep up to date with rapid educational changes and development (Carrington, 2010).

*“Professional development of college lecturers in vocational education is crucial to the success and effectiveness of the sector. In its report, the national education quality assurance body in South Africa concluded that the majority of lecturers are ill-equipped to cope with the academic and social demands of vocational teaching. The major causes of this poor performance are outlined as the lecturers’ lack of subject expertise and their inability to meet administrative requirements to undertake practical work” (Umalusi, 2014:68).*

The study conducted by the DHET to evaluate the qualifications of lecturers who teach in TVET colleges and found that there is a skills shortage (DHET, 2014). The DHET report revealed that most TVET lectures employed in Public TVET Colleges in South Africa had no work experience or work exposure and some were without pedagogy

knowledge or teaching qualification. Research has found that very few TVET lecturers are qualified for the job (DHET, 2014).

#### 3.1.6.3 Attainment of qualifications challenges

Challenges facing TVET students include inter alia, lack of in-service training opportunities, attainment of their qualifications after completion and reduction in employment opportunities. After completion of their studies, Information Technology and business students have to go for in-service training in order to complete their practical section and also to obtain work experience before applying for their qualifications to be issued by DHET. Numerous students find it difficult to get opportunities for in-service training. Some end up doing the kind of in-service training which is irrelevant to their courses. This brings a lot of frustration among students as most of them are struggling to get their qualifications to be issued by DHET even if they met all the requirements.

#### 3.1.6.4 TVET graduates placement and employability

As stated in 2.2.7 exit support, TVET colleges provide employment-related support called job readiness programme to final year students. Colleges also have a relationship with some companies where they tend to place students for in-service training and employment opportunities. It is unfortunate that given the increase in enrolment and completion, colleges cannot cater for all students in such programmes. Dlamini (2014) argues that TVET colleges are struggling to place students at a simulated workplace, adding that colleges struggled to find workplace training programmes within local businesses. This is something which cannot be avoided since some colleges are in areas with no industries or companies that can give them employment opportunities. Even in areas that are surrounded by industries, unemployment rate remains high as a result population growth and other economic challenges in South Africa. Fear of not getting employment after obtaining a TVET qualification completion is said to be common among TVET graduates (Ngubane, 2018). As a result, most of the students are unsure about of what the future holds after completing their courses in TVET colleges. The DHET's White Paper (2013) insists on the importance of promoting strong partnerships between TVET colleges and employers (Human Resources Development Council [HRDC], 2014). The relation



between the employers and TVET colleges will ascertain that students graduate with an updated set of skills which will in turn make these graduates more attractive to the market (HRDC, 2014). The next section also shed some light about ODL and related concepts.

### **3.2 THE CONCEPT OPEN DISTANCE LEARNING**

ODL is defined by the OER Paris Declaration (2012) as a system of teaching and learning that is characterized by separation of teacher and learner in time and/or place; uses multiple media for delivery of instruction; it involves two-way communication and occasional face to face meeting for tutorials and learner-learner interaction. Ntaba and Jantjies (2018) define ODL as an education that provides an opportunity for prospective students who require flexibility in education enabling learning without traditional face to face lecture sessions. ODL is also defined as a learning system that allows students to study remotely or on their own. This system is recommended for students who cannot attend on full-time bases because of various reasons. In ODL, students are supported to work independently by using electronic and written materials (Darojat, 2016; Herman, 2017). ODL is growing rapidly and its open entry and access to learning opportunities, improves employability skills of students and let them accomplish their goals in education and in life (Jena, 2020). “Though the students’ enrolment in Higher Education through ODL system has increased, but the ODL institutions need to emphasize on student success rates” (Jena, 2020: 7).

Keegan and Garrison (1993) view the separation between students and their instructors as geographical, on contrary, Moore (1994) view separation between students and their instructors as a psycho-social or transactional distance. According to Chen (2011) the distance which is normally referred to as transactional is pedagogical not geographical. Distance learning is defined as a learning system that allows students to study remotely. Today, distance learning cannot be separated from ICT, accessing learning material, learning, communicating with instructors electronically, submitting assignments and receiving feedback.

“Open learning is said to be an approach which combines the principles of learner-centeredness, lifelong learning, flexibility of learning provision, the removal of barriers to access learning, the recognition for credit of prior learning experience, the provision

of learner support, the construction of learning programmes in the expectation that learners can succeed, and the maintenance of rigorous quality assurance over the design of learning materials and support systems” (DHET, 2013:7). The introduction and flexibility of ODL has changed the face of tertiary education worldwide and overcame multiple barriers to learning that were experienced with traditional (Ferreira & Venter, 2011). The use of technology also reshaped and enhanced the methods of interaction in ODL.

### **3.2.1 Open distance learning benefits**

ODL services enhance the relationship between students and an institution (Krishnan, 2012). One among advantages of ODL is that students can learn at their own pace. Students can proceed with their studies while they are working. Without neglecting their respective jobs, those students who are employed on full-time bases get an opportunity to complete higher level education (Kim & Shih, 2003). This form of education opens doors for everyone who is willing to further and to accomplish his or her educational interest.

This allows students to develop skills and knowledge without getting disturbed on their work. Through distance learning, students can upskill and also to reskill themselves with latest knowledge and skills without interrupting their daily duties on their respective employments. According to Kamau (2012), open learning is preferable to numerous people because of its flexibility. Distance learning allows them to access quality education, quality teachers, and innovative delivery methods without having to travel long distances to receive it (Collins, 2010). Distance learning today cannot be separated from digital approach which play a pivotal role in curriculum delivery and interaction. Digital platforms managed to simplify the method of learning programme delivery. Yet there are challenges are also attached to ODL.

### **3.2.2 Open distance learning challenges**

Various studies have shown the existence of challenges associated with ODL students. Fear and anxiety are mentioned as some among the causes of low levels of motivation, promoting high failure and resulting to non-completion of studies (Kamau, 2012). Tshivhase (2008) states that lack of contact sessions and lack of self-help study groups are some of the key issues causing low performance and low pass rates at the

University of South Africa (UNISA). On the other hand, Nsamba (2016) points out that the level of student support service at the UNISA does not meet the needs and expectations of students. Irrespective of a country's level of development, institutions offering distance learning tend to face some difficulties and challenges concerning access to academic content by registered students (Arko-Achemfuor, 2013).

ODL students seem to be facing numerous challenges yet the support services being received are inadequate. Owing to inadequate support services, the dropout rate is reported to be high among distance learning students. High dropout rate and low graduation rate in distance education is perceived as “an elephant in a room” by Woodley and Simpson (2014). Simpson (2015) further points out that when distance education is compared to full-time studies in United Kingdom, ODL institutions tend to have low rates of graduation. Different students tend to experience different challenges as per their respective locations in the country. Some students residing in the countryside and those coming from previously disadvantaged areas of South Africa where basic services such as postal, Internet, electricity, and online connectivity continue to be the worst affected (Letseka & Pitsoe, 2013).

Some challenges concerning ODL students are institutional. The study conducted by Musingafi, Mapuranga, Chiwanza and Zebron (2015) revealed that over 65% of the respondents felt that institutional challenges in ODL greatly affected the performance and progress of students. Delayed receipt of study materials, accessing administrative services, lack of an effective institutional network of technical assistance, lack of responsiveness from regional centre, lack of appropriate students' support, and delayed important information were institutional challenges mentioned and attached to ZOU.

#### 3.2.2.1 Assessments related challenges

As a body responsible to oversee further development and implementation of the National Qualification Framework (NQF), the South African Qualifications Authority (SAQA [2001]) asserts that assessment in education and training should involve gathering evidence of learners' work so that judgements can be made about their achievements or non-achievements.

The question of resources seems to be a serious challenge in all fields of our education system. Physical Science educators and learners in schools complain about science laboratories that do not have consumables, equipment and/or glassware. Let alone the issue of computer laboratories. Computer laboratories never existed in a number of schools. Learners complete their schooling not knowing how a computer laboratory looks like and how to apply a cold boot on a computer. There are schools in the province which are not electrified. An issue of resource shortage starts from the human resources and continues to equipment.

Assessment related challenges which include cheating during examination and other forms of irregularities have been reported among students doing online assessments (Daily Maverick, 2021). It is also reported that there was an increase of online cheating in the year 2020 when numerous institutions conducted their online examinations for the first time. Many institutions recorded an overall increase in students pass rates in 2020 (Lange, 2021). Instead of writing online examinations alone, some students tend to organise themselves into a central area and assists each other during the examination process. Some are cheating by using textbooks, study guides and internet for answers. This is a serious challenge facing ODL in online assessments. Institutions need to devise some strategies to deal with such challenges. The reported cases of examination irregularities used to be the consequences of various reasons such students' unpreparedness, struggling with content, over relaxation, which is common in ODL, lack of comprehensive support during the course of the year, challenges attached to resources, anxiety caused by loneliness and new ICT environment challenges.

As a result of online challenges, some institutions prefer blended learning so that students struggling with online platform can catch-up during face-to-face delivery. The problem continues during examination time when all students must do their examination online. During the COVID-19 pandemic in 2020, some institutions and the DHET promised to support students with ICT devices such as laptops, unfortunately not all students managed to get laptops while some struggled with required knowledge and skills which perpetuated their frustrations, particularly during examination time.

Teaching with technology is not a one size fits all approach (Orlando & Attard, 2015), it depends on the types of technology in use at the time and also the curriculum content being taught. Even though technology is the best method of delivering curriculum in ODL, Surma and Kirschner (2020) contend that technology pose both a risk and a chance for delivering distance education. These scholars further affirm that instructors are advised on good practices on how to design Technology Enhanced Distance Learning (TEDL) which includes the risk that developers focus so closely on what the innovative technology does that they lose sight of two other major components of quality instruction. Nevertheless, lack of ICT skills and resources remain a challenge among numerous students on both conventional and ODL.

### 3.2.2.2 Resources challenges

The shortage of the human resources inter alia shortage of educators who can teach computers used to be listed among challenge in the South African education system. Lack of skills on computers among educators is still mentioned as a challenge. A report on Digital Technologies conducted in New Zealand schools revealed that only 14 percent of schools felt that all their teachers had the necessary skills to effectively manage student when using their personal digital devices during learning (OECD, 2020). This is a clear indication that this challenge is widespread across the world and calls for a review of the training institutions' curricula offered to educators. Institutions of higher learning that train educators need to ascertain that computer subjects are among those compulsories for someone to become a qualified educator (Passey, 2017). Lack of the human resources is not only a problem experienced in KwaZulu-Natal (KZN) but nationally if not internationally.

Sarkodie and Adams (2020) postulate that electricity is fundamental to fulfilling basic social needs, driving economic growth and fuelling human development, yet certain parts of rural South Africa are not yet electrified. In particular, the province of KwaZulu-Natal is located in the countryside and therefore its greatest part still lacks electricity. It is noteworthy is, this cannot be regarded as the main reason why schools do not introduce computer subjects because a number of schools in the province with access to electricity do not offer these subjects. Knoth (2013:1) argues that "many children in the developing world walk long distances to get to school from home, often leaving or returning in the dark. If, as is often the case, their house doesn't have a source of

energy, these students aren't able to study at home in the evening". The researcher supports the idea that lack of electricity cannot be a scapegoat on this matter. Burbules and Repp (2020) contend that the popularity of technology in education is dramatically changing the skills needed in the labour market, therefore those schools failing to introduce computer related subjects compromises the future of students.

Some schools, according to Lomas, Kumar, Patel, Ching, Lakshmanan and Kam (2013) have old computers with outdated software and old fashion hardware. Such computers are not taken good care of. Therefore, end up being stripped and some stolen which might sometimes lead to loss of data (Ali, Jalal, Al-Obaydy, 2020). It can take time for some educators and principals to realise that computers have been stripped because some of them know nothing about the interior components of computers. Problems such as the shortage of Information Technology (IT) and youth unemployment can be addressed through encouraging more girls for example to consider careers in IT (O'Grady, 2016). In spite of the above statement, yet there are schools which deprive students the most required skills.

The challenge of computer illiteracy prevalent among teachers and students seem to be exacerbated by an ill-equipped and/or understaffed human resources. Yang (2008) found that due to the lack of information technology experts or teachers, 46.3% of the 378 teachers in his study reported that no professional development on technology integration was offered in their educational institutions in China. Inadequate teacher training is often cited as the most serious obstacles in helping them learn how to use computer technology in their instruction (Bauer & Kenton, 2005; Mitchem, Wells & Wells, 2003; Yang, 2008). Based on this researcher's experience, educators tend to show phobia on computer use that range from uncertainty. Numerous educators seem to distance themselves from computers even in schools where computer subjects are offered. Anything which has to do with computers becomes the responsibility of an educator who is teaching computer subjects.

### 3.2.2.3 Quality of education

Following the unplanned migration of campus-based learning to distance learning caused by COVID-19, a lot has been said about the quality of education that such a change offers (Duraku & Hoxha, 2020). There are institutions that offer face to face

form of learning and their curriculum is strictly designed for that. According to Zhang, Wang and Yang (2020), during the pandemic, some institutions had to opt for distance or virtual learning in order to keep their teaching and learning operational. Although this seemed the only viable that ensured continued learning, it was adopted haphazardly and has had unintended consequences. For example, the conversion of a curriculum designed for face-to-face delivery to that delivered virtually was a challenge and most likely compromised the quality of education (Fleming, 2021). A large percentage of TVET curriculum content is practical and it requires students to be hands-on and guided by their instructors. In the field of engineering, TVET student use modern innovative mechanism to do their practical and this is done in training centres located within TVET colleges. Therefore, all these calls for a face-to-face form of delivery and cannot be done adequately and effectively through distance learning. Trying to do these virtually is does more harm especially but compromising the quality of education. As a result, the curriculum of TVET colleges in South Africa needs to be restructured in order for it to support more innovative responses to industry requirements and TVET standards (Terblanche & Bitzer, 2018).

#### 3.2.2.4 Non-completion of qualifications

The failure of students to complete their academic qualifications is escalating across the world and this has serious outcomes for students in terms of time, costs and emotional energy (Moore-Cherry, 2015). Non-completion of academic qualifications refers to a situation where students enrol for a certain programme and drop out before getting the designated qualification. Although some students do complete, it is after a long time than the designated period. Multiple factors including lack of academic support, personal problems, family matters, financial constraints, medical and work-related challenges are listed as courses of students' non-completion of studies. This also includes course difficulty and wrong course choice. This is also referred to as student attrition.

Apart from the abovementioned motives of students abandoning their studies, there are also positive reasons. The study conducted by Moore-Cherry (2015) entitled "Student non-completion in higher education in Ireland" constitute that it is not all students who abandon their studies because of negative factors, some tend to leave their studies because of the new and positive plans that they could have. Positive

plans include appointment to new positions on their respective employments which demands more of their time and some changing their choice of study to the one more relevant to their future plans.

### **3.2.3 Open distance learning and online learning as modern technology**

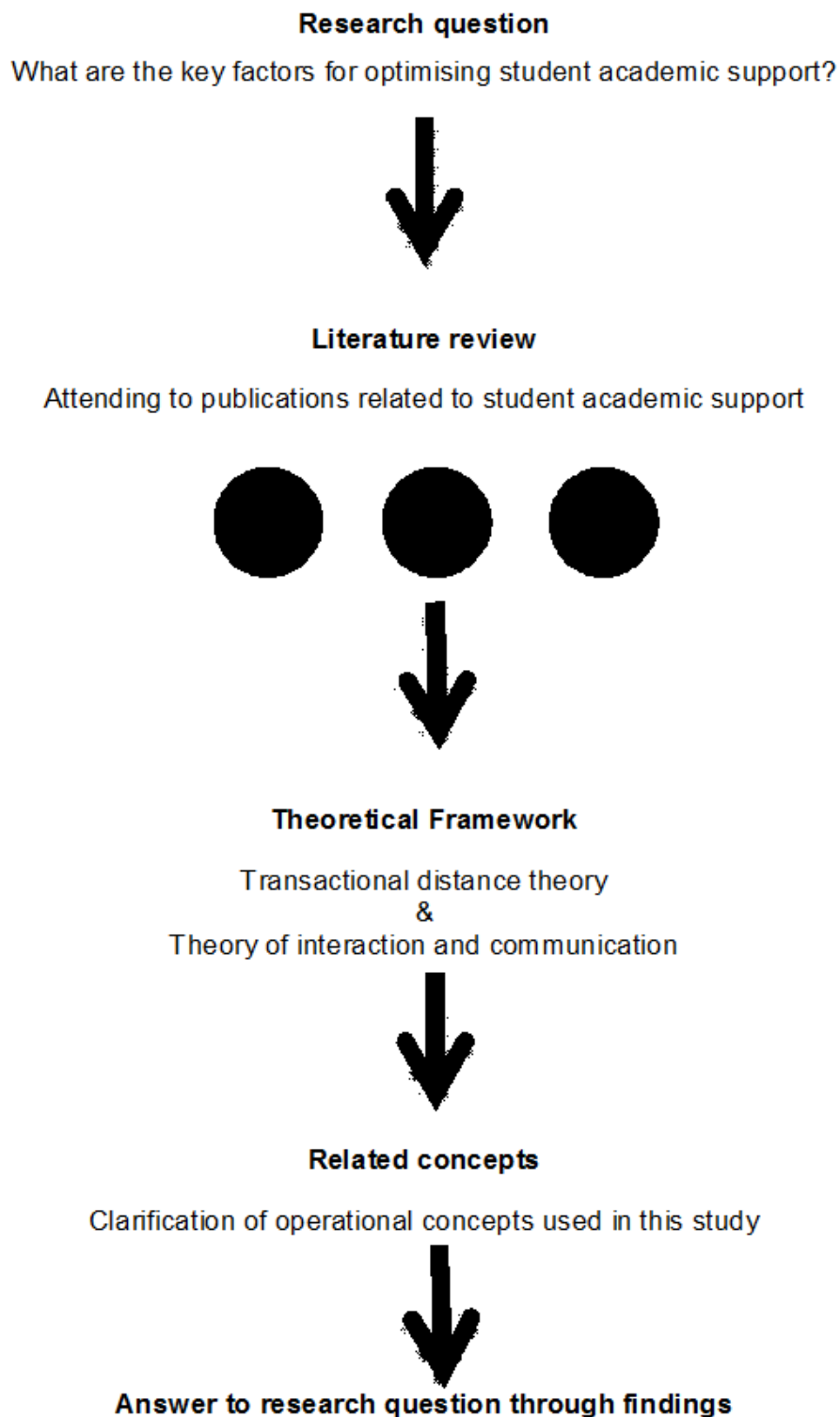
The concepts ODL and online learning seem to be confusing. In ODL, students are separated from their instructors and their peers and that is common to online learning. Nowadays, ODL cannot be separated from digital communication which forms part of online communication between students and their instructors. Therefore, ODL today incorporates online learning, leading to ODeL.

Lack of computing skills remains a challenge to a significant number of students. Apart from lack of computer skills, some students are technophobic as Jacobs (2013) affirm that people often feel intimidated by computer subjects and are hence likelier to show computer anxiety. According to Salmon (2015), knowledge is the best way of overcoming this fear. Individuals suffering from this technophobia must be willing to share ideas, information and knowledge by first admitting to their phobia. Some students do possess required computers and other ICT devices required in education but do not have technical support. Both ODL and online learning calls for digital skills among students to prosper on their studies.

Students are experiencing numerous technical challenges including data loss. Data loss is confusing in the field of ICT as some students are not even familiar with reliable storage techniques, data backup or even cloud computing. Cloud computing is the on-demand availability of computer system resources, especially data storage and computing power without direct intervention by the user (Sasti & Sasti, 2021). It is also a good and reliable platform to store data and can be accessed anywhere and anytime. Data loss alone can lead to serious frustrations and even to students dropping out. Consequently, technical computer skills should be part of a students' support. Series of studies addressing SSS have been conducted such one by Nsamba (2016), Muchineripi (2017) and Ngubane (2018) as literature verifies.

The next merged diagram distils the key understandings and culminate towards a theoretical lens:





**Fig 3.2** *Graphic representation of the contextualisation and conceptualisation of the study*

### **3.3 CHAPTER SUMMARY AND IMPLICATIONS FOR EMPIRICAL STUDY**

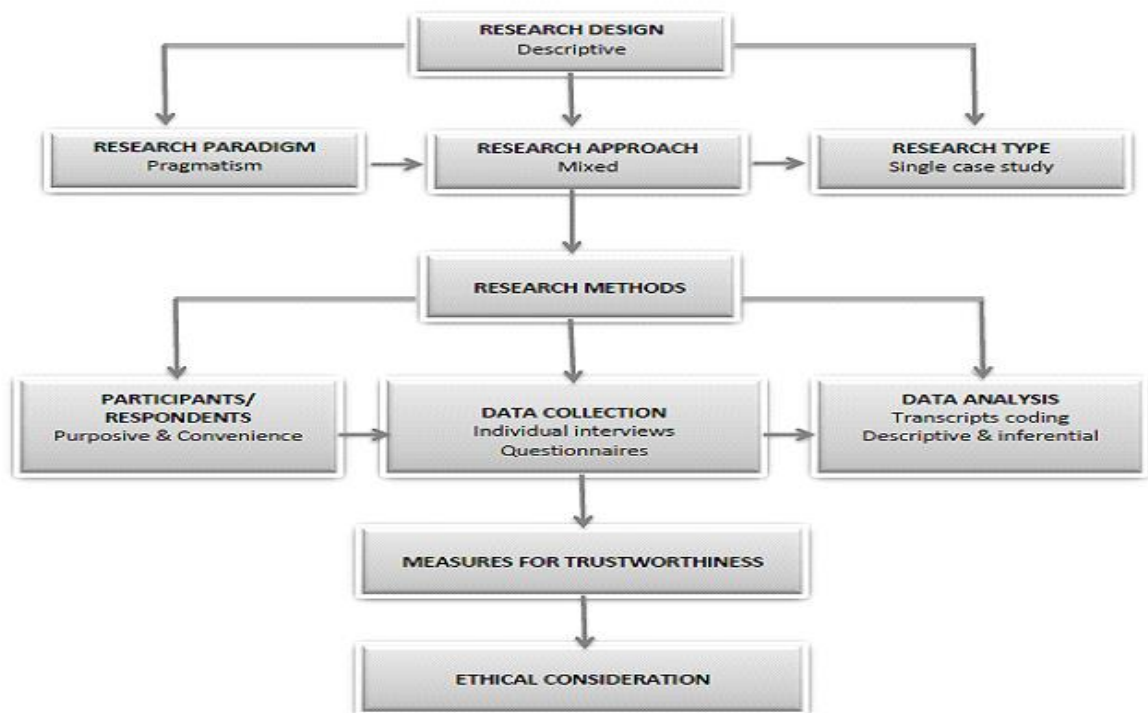
This chapter reviewed the conceptual framework and an extensive literature in relation to student academic support optimisation. Academic support, other forms of student support, ODL and TVET were the main concepts discussed in this section aimed at providing a better understanding of research problem. Multiple challenges attached to student support services have been discussed based on desktop research. Data collected through literature in this chapter will be compared against empirical data obtained direct from study participants in chapter five of this study. The next chapter addresses the methodology pursued in this study. As per the deliberations of this chapter, it is clear that SSS is neither efficient nor sufficient in ODL institutions across the world and students do not enjoy full access of these services. Therefore, it is necessary to explore those hindering factors which are limiting their access to SSS.

## CHAPTER 4

### RESEARCH METHODOLOGY

#### 4. INTRODUCTION

The purpose of this study was to address the main question, stated in subsection 1.5 of Chapter 1, namely: What are the key factors for optimising student academic support in ODL at a Technical Vocational Education and Training College? This chapter discussed the research methodology and motivated why the specific methodological choices were made. The chapter is about how the entire research has been carried out and addresses the unfolding of the entire research process. It also outlines the entire data collection and processing about optimising student academic support which led to reliable research findings. It further discussed an organisation of data and preparedness for analysis. Since the researcher knows and understands the vitality of the protection of participants and data, ethical issues which include inter alia professional codes of conduct, moral rules to collect data, analysing it, reporting and publication of information about study participants (Vuban & Eta, 2018) are also addressed at the later stage of this chapter. The diagrammatical sketch in Figure 4.1 provides an overview of this chapter.



**Fig 4.1 A diagrammatical overview of chapter 4**

#### **4.1 RATIONALE FOR EMPIRICAL INQUIRY**

The motive behind an inclusion of empirical data was to ascertain that primary data about SSS collected direct from study participants' experiences is compared with literature in an attempt to optimise academic support. Empirical research is research in which data is acquired through direct observation or experimentation and is recorded and analysed quantitatively or qualitatively, sometimes both approaches are carried out (Bradford, 2015). According to Mohlouoa (2014), the analysis of the empirical research findings refers to the theories advocated in the literature review. This notion is supported by Cahoy (2016) who resonates that empirical research is evidence-based therefore it is necessary to provide information about the research phenomenon based on a phenomenon that would be observed and measured and that which knowledge would be derived from actual experiences of participants rather than from theory or belief.

Apart from contextual, theoretical and conceptual frameworks, this study also based its findings on empirical data collected from the real-life experiences of the participants. Thus, data gathered were compared against the theory and concepts employed in this study, but results were still based on the real-life experiences of the participants. Empirical data is obtained by means that conclusions that are drawn based on first-hand evidence from real life experiences or observations. In contrast, Secondary data is obtained by means of literature review where key concepts are collected and explained but this study basis its findings on empirical data, collected directly from study participants.

There are multiple and repeated references in relation to the provision of SSS and such references do not provide an understanding that is empirically informed, cohesive and shared, therefore empirical data is capable to address this gap. For the purpose of this study, a single case study strategy was viewed as the relevant form of empirical inquiry that would investigate the contemporary phenomenon. "The case study approach is useful in situations where contextual conditions of the event being studied are critical and where the researcher has no control over the events as they unfold" (Baloyi, 2012:8).

Empirical studies evolved to test the conventional concepts of evidence and truth while still observing the subjects being studied (Powner, 2015). To gather information that provides answers on the research questions outlined in chapter one, sub-section 1.5, the researcher conducted an empirical investigation through direct interaction with study participants. This direct interaction was accomplished through semi-structured interviews and a questionnaire that was filled by respondents. Empirical findings are discussed in chapter six of this study.

## **4.2 RESEARCH DESIGN**

Msimanga (2017) defines a research design as a guide to be followed in order to attain answers to research questions that are valid, objective, accurate, and economical. Thaanyane (2010) further contends that a research design also connects events of data collection and analysis to the research questions that are being addressed. Neuman (2014) describes a research design as a procedure that focuses on designing a research study and developing a strategy to guide the research. Shahnazarian (2017) on the other hand advocates that a research design provides details on how the research is structured with regard to data needed including methods to be utilised in data collection and analysis. This resonates with the view by Nkosana (2016) who describes a research design as an overall grand plan describing procedures of data collection, interpretation, and analysis. This study adopted a descriptive design. Quantitative data will be analysed and presented using descriptive and inferential statistic. This analysis will include calculation of mean, range, maximum, minimum, variance, standard deviation, median, and mode. Analysis of variance (ANOVA), t-test and pivot table were used for data analysis. Descriptive research focuses more on answering questions such as what, how, when, and where and this design describes a population, situation, or phenomenon being investigated (Research connections, 2020).

As part of articulating the research design for the current study, the following subsections; namely, research paradigm, research approach, and research strategy will be discussed.

#### 4.2.1 Pragmatic research paradigm

A research paradigm is a philosophical stance that guides a study. It is defined by Willis (2007) as a framework that guides research. According to Fletcher (2017), a paradigm is a complete method of thinking and the basic suppositions and philosophies that guide the behaviour of a researcher. This affirmation resonates with Abdul (2015) who advocates that a paradigm enables participant researchers to test the fundamental belief structures that control their project.

The paradigm or pragmatism was found suitable for this study since the data was about experiences of students in the field of distance education would be collected. Pragmatists believe that one cannot separate people from their experiences of the past and from the beliefs that would have emanated from those experiences (Kaushik & Walsh, 2019). This paradigm focuses on an individual's experience (Tashakkori & Teddlie, 2008) as other pragmatic scholars insist that apart from the human experience, there is an objective reality that exists. These scholars also insist on the fact that reality is based on human experience (Morgan, 2014). Pragmatists believe that reality is constantly negotiated, debated and interpreted. This paradigm also accommodates a merging of two different research approaches (qualitative and quantitative) in one study whose philosophical orientations differ, to understand reality (Nsamba, 2016).

Creswell and Clark (2011) contend that pragmatism is often associated with mixed-methods or multiple methods where the focus is on the research outcomes and on the research questions rather than on the research methods. According to Morgan (2014), what people do is similar to situations and context in which such events take place. Unlike other philosophies which focus on reality, pragmatist focuses on human experience since people possess unique life experiences. This philosophy supports the various perceptions people have about life.

In order to give one's research clarified direction, the researcher should determine a selected paradigm early in the research (Sefotho, 2015). The purpose of the study is to evaluate the availability, efficiency and accessibility of academic support services rendered to students in distance education. The main research question was: What

are the key factors for optimising academic student support in ODL at a selected TVET college? To fulfil the purpose, the researcher decided to utilise pragmatism as an appropriate paradigm for this study. This paradigm assisted in answering the research question. The experiences and perceptions of the students about the academic support offered to them would also assist in a process of answering the research question through collected primary data.

Morgan (2014) insists on the fact that this reality is based on human experience. Being action oriented is what pragmatism is (Hammond, 2015). Hammond (2015) further points a close link between pragmatism and action research. Hothersall (2019) concurs with Hammond on an issue of practicality or experience by adding that the purpose of research is to assist people to address matters that deals with how they experience and how they know the world in a practical manner. Pragmatists believe that reality is constantly negotiated, debated and interpreted. This paradigm allows a merging of two different research approaches (qualitative and quantitative) in one study whose philosophical orientations differ, to understand reality (Nsamba, 2016). This view is supported by Creswell and Clark (2011) who contend that pragmatism is often associated with mixed-methods or multiple methods where the focus is on the research outcomes and on the research questions rather than on the research methods. On the other hand, Teddlie and Tashakkori (2009) assert that pragmatic paradigm provides researchers with a philosophical framework for mixed methods research.

The paradigm or pragmatism would be suitable for this study since support services related data would be collected on basis of the experiences of the participants in the field of distance education. Pragmatists believe that one cannot separate people from their experiences of the past and from the beliefs that have emanated from those experiences (Kaushik & Walsh, 2019). According to Morgan (2014), “what people do is similar to the situations and context in which such events take place”. Unlike other philosophies which focus on ideas or reality, pragmatists focus on human experience since people possess unique life experiences. This philosophy supports the various perceptions people have about life.

Pragmatism became Pierce's philosophy, who acknowledged borrowing the word "pragmatic" meaning practical from Greek language. The word pragmatic was firstly used in public speech by James who also acknowledged it as Pierce's philosophy. The concept was introduced to an American research vocabulary by Rorty in 1979 (Ormerod, 2006).

Creswell and Clark (2011) further indicate that pragmatism allows a merging of approaches, qualitative and quantitative data collection and analysis methods in one study, thus bringing precision to the research question that would not be accomplished by applying one approach. A research paradigm is defined by Willis (2007) as a framework that guides research and practice in a field, comprise a set of concepts, assumptions, values and practices that constitutes a method of viewing reality. This resonates by Morgan's (2007) view who concludes that research paradigm is a shared belief system that influences the types of knowledge researchers seek to obtain and how they interpret any research evidence they may collect. According to Sefotho (2015), a researcher must determine a chosen research paradigm early in their research studies in order to give one's research 'illuminated direction'. On their attempts to make sense of their worlds, people continuously interpret, create, give meaning, define, justify and rationalise daily actions (Babbie & Mouton, 2008).

Pragmatism insists on learning through experience. Pragmatist addresses the problem in a logical and practical way, insisting on practical than ideology. Scholars such as Smith (2015) focus on the links between people's experience and their thoughts in relation to actions. As opposed to idealism, pragmatism insist on change, adding on the fact that the world is dynamic and is changing so education evolves and educationist must adapt to the change. This change is something that should work to the advantage of the person concerned. A practical example in this scenario is this field of education whereby educators or instructors are anticipated to accept and adapt to a new system of curriculum delivery. If instructors are conservative, they are disadvantaging their students. This change in education calls for a new curriculum, new methods of teaching, innovative resources, and new methods of teaching, all these must be accepted to embrace change. Pragmatists believe that change occurs through the focus of pragmatism which is experience. These experiences depend on what people encounter on their daily living. Even though it is a nature of a human being



to defy change, however, change does happen as this dynamic planet evolves in various forms.

The motive of this researcher behind this paradigm was based on optimisation of student support services rendered to students who studies in a college through distance education. Are the support services available? Are they efficient? How students access these services? Are they practical and useful to students? What are the perceptions of the students about the support services rendered? The researcher needed to acquire from students and staff about their experiences concerning academic support services and to test the practicality of these services in the environment of distance education. By using a defined method and prescribed research tools, the researcher would interact with participants who were directly involved to the research problem stated in chapter one of this study. The use of pragmatism in this study had to do with practical experiences of the participants since pioneers of pragmatism such as Charles Sanders Peirce, William James and John Dewey believe in human experiences as opposed to ideas. Since this paradigm incorporates both approaches, qualitative and quantitative, a qualitative approach would be employed in a process of gathering experiences related data from participants through in depth semi-structured interviews.

Pragmatism is concerned with what people say and what they do by perceiving how they act. Pragmatists insist on the fact that in an organisation, staff members tend to rely on documents but sometimes the organisational processes are not well documented. This paradigm does not reject ideas and beliefs in all forms but insist on the fact that beliefs and ideas need to be investigated and evaluated in terms of practical functioning.

#### **4.2.2 Mixed methods research approach**

A research approach in a study might be qualitative, quantitative or mixed. Since the researcher was interested on both statistical and narrative data, mixed methods approach was utilised in this study. Mixed methods research is the 'mixing' of the qualitative and quantitative components within a study (Taylor, Barnes & Young, 2011). A mixed method approach according to Descombe (2010) improves accuracy and compares the findings from other study methods. Shorten and Smith (2017) in

addition advocates that mixed-method approach also enhances the validity of the findings and enables the researcher to gain a better understanding of the connections and contradictions between quantitative and qualitative data. In picking a mixed methods approach, the motive of this researcher was to gather and provide a better understanding on a research problem by collecting narrative data directly from participants as well as statistical data from respondents. The researcher also required to value and to quantify the percentage of students who persisted and those who abandoned their studies before completion. The correlation between SSS provision and student's study completion was also tested.

In this mixed method study, a qualitative and quantitative data would be collected concurrently and analysed distinctively starting with the qualitative followed by the quantitative. When filling the questionnaires, respondents did so with help of the concerned lecturers who taught at the college while the researcher would be conducting interviews with the study's participants. This concurrent triangulation would validate the findings generated by each method.

*“Mixed methods research includes more than one purpose of mixing. Underlying a purpose of mixing is a researcher's wish to raise the scope, power, and/or quality of his or her study by pursuing at least two research strands. For example, a researcher may want to strengthen the answer to his or her research question by using data from both questionnaires and interviews. This example purpose requires two separate research strands, one research strand involving collection and analysis of questionnaire data and one research strand involving gathering and analysis of interview data” (Schoonenboom, Johnson & Froehlich, 2018:1).*

For the purpose of this study, these two approaches namely, qualitative and quantitative would be treated distinctively. The researcher would start by analysing qualitative data, followed by quantitative and both would be synthesised during interpretation. Mixed methods, according to Creswell (2015) is an approach with philosophical assumptions as well as methods of inquiry and which as a methodology, involves assumptions that guide the direction of the collection and analysis of both qualitative and quantitative data within one study. Sometimes a study such as this one

incorporates both approaches and a mixed approach is carried out. This study addressed the key factors of academic support services rendered to ODL students at a selected TVET college. This means that the researcher was concerned with understanding how student academic support services were implemented in a selected TVET College. Just because the researcher could collect both numerical and narrative data in relation to a single research problem, this does not mean that the researcher should have undertaken a mixed methods study (Halcomb & Hickman, 2015). A research approach determines research methods or vice versa. The two approaches which informed this study are briefly described next.

According to Maree (2012) qualitative research methodology is concerned with understanding the processes and the social and cultural contexts which underline various behavioural patterns. Qualitative study is characterised by a researcher's active participation in data collection by means of interviews (Pandor, 2018). According to Gopaldas (2016), qualitative research is an analysis technique and method of data collection that utilises open-ended interviews, semi-structured interviews and purposive sampling. Gopaldas (2016) further supports this notion as they argue that the purpose of qualitative research is to discover the experience of research participants and also to recognise the involvement of the researcher plus the relationship that exist between the researcher and participants. For this study, the researcher was directly involved in collecting the primary qualitative data by conducting semi-structured interviews personally and this was intended to optimally stimulate discussion about academic support for students. The researcher served all participants with formal invitation letters prior. In qualitative approach, non-numerical data get collected and analysed to determine the underlying reasons, views and meanings direct from study participants (Powner, 2015).

A quantitative approach is about collecting and analysing numerical data (Bhandari, Rangarajan & Mavrikakis, 2020). These scholars further allude that quantitative data can be used to find patterns and averages, make predictions, test causal relationships, and generalise results to wider populations. The questionnaires in this study and formal invitation letters were administered to respondents with the help of an assistant from ODL lecturers. The researcher collected the questionnaires later from lecturers

for quantitative analysis. Distinction between qualitative and quantitative approaches is described in Table 4.1

**Table 4.1 Distinction between qualitative and quantitative approach (Hemavhandra, 2016)**

<b>ORIENTATION</b>	<b>Qualitative</b>	<b>Quantitative</b>
<b>Assumptions about the world</b>	Multiple realities	A single reality can be measured by an instrument
<b>Research purpose</b>	Understanding a social situation from participants' perspectives	Establish correlation between two variables
<b>Research methods and processes</b>	Flexible and changing strategies: <ul style="list-style-type: none"> <li>• Design emerges as data are collected</li> <li>• A hypothesis is not needed to begin research</li> <li>• Inductive in nature</li> </ul>	Procedures are established before study begins: <ul style="list-style-type: none"> <li>• A hypothesis is formulated before research can begin</li> <li>• Deductive in nature</li> </ul>
<b>Researcher's role</b>	The researcher participates and become immersed in the research/ social setting	The researcher is ideally an objective observer who neither participates in nor influences what is being studied
<b>Generalizability</b>	Detailed context-based generalisations	Universal context-free generalisations

### 4.2.3 Research strategy

A research strategy is a general plan used to carry out research that has its characteristics and clear objectives derived from research questions, which specify the sources from which the researcher intends to collect data. Creswell and Plano-Clark (2017) describe a research strategy as a strategy concerned with finding out

what is meant by describing a behaviour or type of subject rather than looking for any specific causal correlation among two or more variables. A descriptive single case study is a research strategy carried out in this study. This type of case study is about selecting one among many. It can be a case of one person or institution selected by the researcher. Case studies are advantageous because both approaches, qualitative and quantitative are accommodated. In this study, the case selected was a TVET college is applied to achieve an in-depth understanding of student academic support services. Saunders (2014) encourages the use of multiple sources of data in case study research. Cohen et al. (2011) contend that case study provides a unique example of real people in a real situation, enabling readers to understand ideas more clearly by presenting them with abstract theories or principles. In their study, Muchineripi and Addae (2017) point out that case study is good for learning more about a phenomenon of which nothing much is known or when it is a poorly understood situation. Though this selected college case study, the findings can be adopted or transferred to other educational institutions offering ODL programmes. Yin (2014), mentions documents, archival records, interviews, direct observation, participant observation and physical artefacts as six sources to collect data for a case.

The case study is defined by Hardwick (2017) as the study of a single instance or a number of instances of a particular phenomenon in order to explore the context of that phenomenon. In support of this notion, Yin (2014) describes a case study as an empirical inquiry that investigates a contemporary phenomenon, which is the case in depth and within its real-world context, especially when the boundaries between phenomenon and context may not be clear. The features of case study comprise three aspects, the first one deals with technical distinctive situations, followed by that which describes several informational resources which are merged by triangulation and thirdly that direct the collection and analysis of data by setting up theoretical propositions (Yin, 2014). The next section addressed data collection methods applied in this study.

### **4.3 RESEARCH METHODS**

Research methods, as opposed to methodology are all about strategies employed in a process of data collection, analysis and interpretation to come up with solution or

findings to the research problem (Creswell, 2014). Nkosana (2016) concurs with Creswell (2014) by asserting that a research method is an overall grand plan describing procedures of data collection, analysis and interpretation. This section discusses the population and sampling procedures adopted in this study. It first provides clarification of research site and participants and then articulates the sampling procedures that were used in the study.

#### 4.3.1 Choice of institution and participants/respondents

This study focusses on the student academic support provided by TVET colleges. The researcher decided to select an institution/s as bases of the study. The target institution selected was one TVET college located in northern KZN, however, the study focused on the Open Learning Unit (OLU) operating in one of college campuses. This campus deals mostly with OLU students. The college students and staff members formed the population in this study. A study population is defined by Hu (2014) as a subgroup of the target population from which the sample is actually selected. McMillan and Schumacher (2010) indicate that a study population comprises a group of elements that are guided by a specific principle and that are where research results can be simplified. This resonates with the view of Cooper and Schindler (2011), who define population as a group of elements on which one wishes to make some inferences.

#### 4.3.2 Selection of participants and sampling strategies

The selection of participants also called sampling, refers to the process of selecting a fragment of the population that agrees to participate to the study. Denscombe (2014) defines a sample as a subgroup of a population that is representative of the population. Two non-probability sampling techniques which are convenience and purposive were suitable this study. Purposive selection was suitable for the staff participants who provided qualitative data verbally through semi-structured interviews while convenience sampling was good for the selection of the respondents (students) who provided quantitative data by filling the questionnaires. Jamshed (2015) affirms that semi-structured interviews are in-depth interviews allowing the researcher to ask open-ended questions probing the opinions of participants. Participants who provided primary data comprised of current and accessible ODL students who were either of

the study level in the field of business and engineering, lecturers, administrative staff, OLU manager and the HoD within the college OLU. Cohen (2011) views convenience sampling as a type of sampling where participants who are accessible to the researcher get selected.

The selection of participants and respondents was based on their availability and willingness to be part of this study, as per convenience sampling technique. In as far as purposive sampling is concerned participants were selected as per their knowledge and expertise in the field of Open Learning and education at large. Purposive sampling participants' targeting is a process where individuals get selected to provide primary data as per their knowledge to the topic being studied (Ormrod, 2005). Muchineripi (2017) concurs with Ormrod by pointing out that through purposive sampling, a researcher can identify information-rich individuals. Creswell (2009) is in support of selecting participants who can provide information about the phenomenon being studied. Table 4.2 gives a summary of the participants.

**Table 4.2 Study participants' summative table**

<b>Designation</b>	<b>OLU Manager</b>	<b>OLU HOD</b>	<b>Admin. Staff</b>	<b>Lecturers</b>	<b>Students</b>	<b>Students</b>	<b>Students</b>
<b>Field</b>				Engineering Business HR & PA	IT & Business	Engineering	HR & Public Admin.
<b>No. of participants /Respondents</b>	1	1	2	6	70	70	70
<b>Sampling</b>	Purposive	Purposive	Purposive	Purposive	Convenience	Convenience	Convenience
<b>Data collection instrument</b>	Individual Interview	Individual Interview	Individual Interview	Individual Interview	Questionnaire	Questionnaire	Questionnaire

### 4.3.3 Sample size

A sample size that is considered sufficient is that in which the minimum number of participants are required to identify a statistically significant difference if a difference truly exists (Burmeiste & Aitken, 2012). Sample size depends on what the researcher wants to achieve with statistical analysis (McCombes & Van den Eertwegh, 2019). Considering the nature of this mixed methods study and its purpose of optimising student academic support services rendered to ODL students, the sample size might be determined by availability or saturation of data collected. Since this was a mixed methods study and involved the selection of a total of 220 participants/respondents. The researcher decided to keep study participants' minimal to circumvent rapid data saturation. Data saturation is when no new information is discovered which might result to redundancy (Faulkner & Trotter, 2017). The sample size for this study consists of the following:

- 10 participants, consisting of one OLU Manager, one OLU Head of Department (HOD), two administration staff members, six lecturers, and 210 respondents (students) categorised as follows:
  - 70 respondents/students from the IT and Business field
  - 70 respondents/students from Engineering field
  - 70 respondents/students from the Human Resources (HR) and Public Administration (PA) field

Lecturers, administration staff members, HoD and Open Learning manager were interviewed individually for qualitative data collection, while students were the respondents who responded by completing the questionnaire for quantitative data collection.

### 4.3.4 Data collection

Data collection is an established systematic method of gathering and measuring information on variables of interest (Kabir, 2018). This scholar further advocates that this process enables one to answer a stated research question, test hypotheses, and evaluate outcomes. Parveen and Showkat (2017) argue that the efficacy of any research depends on the accuracy of the collected data. The research question stated in 1.5.1 guided the data collection method. For this study, the data that were collected mainly dependent on the main research question, the aim, and objectives of this study.



Methods of data collection and instruments used which include semi-structured interviews; documents and completion of structured questionnaires are elaborated next:

#### 4.3.4.1 Semi-structured interviews

Qualitative data were collected through semi-structured interviews. As per the nature of semi-structured interviews, the researcher adhered to the questions that appeared on the interview schedule and made follow-up questions where it was necessary. In the process of qualitative data collection, participants were allowed to freely express their views and experiences based on provision of academic support services rendered by the college. Open ended questions were used to allow participants to express themselves openly. Each participant was aware that interviews were being recorded. An interview schedule was designed by the researcher and was one of the instruments used to collect data directly from participants. When qualitative data were collected, an audio recording device was used to record all interviews. The researcher also supplemented an audio recording by notes taking during interview process.

Semi-structured interviews have some strengths and limitations. One of the strengths is that a researcher can get facial expression of participants and this instrument is useful for the collection of in-depth information through further probing participants (Kumar, 2014). This method of data collection also promotes two-way communications between the interviewer and interviewee, allowing participants to open up even about sensitive issues. DeJonckheere and Vaughn (2018) argue that semi-structured interviews allow the researcher to collect open-ended data, to explore participant thoughts, feelings and beliefs about a particular topic. This method is characterised by open ended questions. “The nature of the semi-structured interviews produces a greater likelihood to inspire new ideas to be put into play” (Kakilla, 2021:4). Kakilla (2021) further postulates that participant’s views are dragged natural, including non-verbal expressions.

It is also advantageous to use a schedule designed for semi-structured interview as it gives an explicit set of instructions for the interviewer which produces reliable data. This interview schedule serves as a guide for the interviewer to adhere on structured

questions formulated for that particular data collection process which would address the research questions.

Certain limitations are attached to this method of data collection. The researcher needs to meet sufficient participants to make comparison and also to make informed decision based on data collected. This suggests that the research needs to plan well so that they have more time. This might also be costly especially when the researcher needs to meet interviewees in real time or face to face. It also requires proper planning before interviews are conducted which is time consuming.

Sometimes participants do not honour appointments or arrive late for an interview. This can interrupt a researcher’s plans and disrupt appointments with other participants if more than one interview is planned within one day. It is also disadvantageous for an interviewer to ask leading questions which might influence the participant’s answers. This is a common mistake researchers need to guard against. It is also not an easy task to determine the precise number of participants in order to collect adequate data. Repetition of the same or related answers from different participants might indicate rapid data saturation. Participants need to be contacted in time so as to make appointments and to explain the goals aim of an interview.

Table 4.3 provides a brief overview about the nature of interviews conducted as well as participants who formed part of this study by providing primary data.

**Table 4.3 Interview schedule guide**

<b>Participants</b>	<b>Relevant technique</b>	<b>The interview purpose</b>	<b>Number of interviews</b>	<b>The interview focus</b>
Six lecturers  Two administration staff  One ODL HOD  One ODL Manager	Purposive sampling	Gathering data about availability, accessibility and efficiency of SSS the college renders	Total of 10 in depth semi-structured interviews with duration of between thirty to forty-five minutes	Based on academic support services availability, accessibility, relevancy, efficiency and students’ expectations.

(i) Pre-testing

For the purpose of correctness, this research conducted pre-testing and this ensured consistency and that errors among interview questions were identified. For pre-testing purpose, the researcher conducted interviews with individuals who did not form part of the current study. This technique is about using a limited number of participants to test the appropriateness of the questions and their comprehension. Pre-testing also helps to identify and rectify any inadequacies, if they existed before the data collection instruments is administered. After the compilation the interview schedule, the interview questions on the schedule were discussed with the promoter and feedback was implemented.

(ii) Document analysis

Document analysis is a form of qualitative research yet is used in a mixed method study as it uses a systematic procedure to analyse documentary evidence and answer specific research questions (Frey, 2018). For this study, documents were used to triangulate findings gathered from interviews and from questionnaires. O'Leary (2014) refers to public records, personal documents and physical documents as three primary types of documents that can be analysed. Luo (2019) postulates that content analysis is used to identify patterns in recorded communication. Luo (2019) further contends that these systematic data can be in a form of text, oral or visual. In this case, documents were analysed by paying attention to the attrition and retention rate of students which are deterrents of academic support provision in a sampled college. This was accomplished by tracking the records of the participant students at the start of each semester or trimester through to the time they wrote the examination. As a tool that can be used to trace back a history of current situation or status (Dekeza-Tsomo, 2012), documents were employed to support and to triangulate data obtained through interviews and questionnaires.

Documents can sometimes be subjective in a manner that they can comprise information that do not provide the true reflection of an organisation. For this reason, data collectors needed to guard against biasness. This explains why this researcher used documents just to support the data collected from other data sources. Another

limitation about this method is that some organisations tend to be reluctant to release such documents as they treat information contained as a confidential because it might expose their nakedness. For this reason, sometimes it becomes a challenge to access organisation documents.

### (iii) Questionnaire

As one of the data collection instruments that uses questions in the gathering of data from different respondents, a questionnaire was among data collection instruments in this study. This instrument might consist of open or closed ended type of questions. As a set of closed ended questions instrument, a structured questionnaire was designed by the researcher to collect quantitative data from the respondents. In the process of questionnaire design, the researcher tried to eliminate leading questions, vague questions, personal questions, overlapping questions and questions that fail to cover all possible answers. The purpose of scrutinising a questionnaire was to circumvent respondent confusion and to ascertain that ambiguous questions are eliminated or rephrased. Close ended questions were preferred by the researcher since it was challenging to analyse open ended type of questions. To avert subjectivity, the researcher decided to refrain from asking questions that might have influenced answers from the respondents. Questions were categorised into five sections labelled as section A to E. Section A was based on biographical details, section B was based on college administrative support, section C focused on academic support, section D dealt with efficiency of student support and section E which was based on student perceptions and expectations. All questions that were formulated were in line with the study main question as well as sub-questions. Answers to the questionnaire are based on four Likert scale answers ranging from Strongly Agree (1), Agree (2), Disagree (3) and Strongly Disagree (4).

Like any other data collection instrument, the questionnaire is also characterised by its own strengths and limitations. A questionnaire has advantages and one such is that there is no face-to-face interaction between respondents and this offers greater anonymity (Kumar, 2014). The researcher decided to use a structured questionnaire because it is easy to code the results of a structured questionnaire than it can be done with other data collection instruments (Creswell, 2013). This is one of structured

questionnaire strengths. Respondents are also able to answer the questionnaire at their convenience since it does not need direct interaction between the researcher and the respondent. Structured questionnaire results can be used in any other data collection instruments and coding is easier (Creswell, 2013).

The limitations of a questionnaire include inter alia some respondents not returning questionnaires also called low response rate (Debois, 2016). This scholar envisaged that respondents needed to be awarded for their time through gifts or any other forms of incentives to boost response rate. Open ended questions can produce a large pool of data which might consume much time to analyse. It is therefore for this reason the researcher in this study decided to use close-ended questions. It is also a limitation that some respondents tend to ignore other questions and leave them unanswered while some answers are dishonest.

Another limitation of this instrument is that respondents cannot show or express their feelings or emotional responses. For the fact that respondents respond to the question at their own, without direct interaction with the interviewer, therefore it was recommended that the questionnaire had to be short and uncomplicated. Questionnaires do not offer the researcher an opportunity to make follow up answers that require more clarify. The researcher cannot ask for further explanation on certain questions since there is no direct or live interaction with concerned respondent.

Table 4.4 gives a picture as to how the questionnaire was designed. The questionnaire which is Appendix G in the list of appendices comprise of five sections from section A-E with plus or minus 10 to 15 questions per section. The respondents simply tick the relevant answer as all were close-ended questions with no correct or wrong answer. All answers would be based on respondents' experience as an open learning student.

**Table 4.4 Sections of the questionnaire**

<b>Questionnaire Sections</b>	<b>Related Data Collection</b>
<b>Section A</b> Biographic information	Personal information which includes age, gender, ethnic group, qualification etc.
<b>Section B</b> Availability of administrative support services	This section is collecting data related to SSS availability to students which includes tutoring, e-mail response, on time feedback on assignment or any form of assessment, interacting with lecturers in various forms of communication, student's interaction with each other in a form of a group.
<b>Section C</b> Accessibility to support services	This checks whether students are able to access the support services rendered by the college. This will also cover the students access to college resources such library activities support, access to computers and internet, clarity on assignments, mode of assignments submissions, study material.
<b>Section D</b> Efficiency of student support services	Information about efficiency or effectiveness of support services.
<b>Section E</b> Academic support services students' perceptions and expectations	This final section will give respondents a freedom to mention any academic support services challenges encountered by students not covered on above sections and their expectations.

#### (iv) Pilot survey

In order to check for relevancy, correctness and subjectivity of the questions, the researcher applied a pilot survey which was aimed at testing the structured questionnaire. The pilot survey was the method of detecting possible weaknesses of the questionnaire. Simple and appropriate language was used in the questionnaire so as to accommodate all respondents including those who are using English as their second language.

#### 4.3.4.2 Data analysis and interpretation

Data collection, analysis and interpretation require lengthy time and great care needs to be taken to interpret data accurately (McLeod, 2017). The section on data analysis and interpretation, empirical data were described, summarized, compared and organised so that it become informational. Moore's (1993) "transactional distance theory" was one among the two theories that was employed in this process. Statistic data collected through questionnaires were quantitatively analysed by using spreadsheet graphs and tables. Both descriptive and inferential analyses were employed. Document analysis was used to analyse enrolment/ registration documents. Analysed documents were obtained from college the OLU admission office. Details on how data were analysed such as procedures and software used are discussed in different headings below.

#### (i) Qualitative data analysis

The general process for analysing and interpreting interviews includes reviewing of the data in the form of audio recordings, transcripts and notes taking. The researcher tends to apply descriptive codes to such data and categorise those codes (DeJonckheere & Vaughn, 2018). Since this was a mixed methods study, qualitative data were descriptively analysed through open coding method, recorded semi-structured interviews were transcribed verbatim and these was orderly structured into certain themes and categories. The researcher repeatedly listened to audio recorded during interviews and also referred to notes taken during interviews. In this process of analysing and interpreting data, the researcher used responses of the participants to construct a new meaning about the phenomenon being evaluated which was

academic support in ODL. This enabled the researcher to come up with a theory that guided the optimisation of student academic support services that were rendered by the college.

(ii) Quantitative data analysis

The researcher started by organising all questionnaires and checked for completeness and accuracy. This was followed by assigning unique identifiers for each questionnaire. Computer application, Spreadsheet 2016 version was used for the analysis of quantitative data by applying both descriptive and inferential analysis. Numeric and non-numeric data got analysed sequentially on the same chapter. Relevant tables and graphs of this application made it easier to statistically analyse data quantitatively through ANOVA, chi-test, t-test and pivot tables. During data analysis, both the qualitative and quantitative data were treated equally and both data types received equal priority (Terrell, 2012).

(iii) Interpretation of data

By interpreting the collected data, the researcher had intended to attach meaning to these data. Although the qualitative and quantitative data were analysed separately in chapter five of this study, both types of data got merged during interpretation. During the process of interpretation, data get consolidated, compared and integrated. After data comparison, the qualitative and quantitative data is integrated to come up with new findings that generate new information. Measures of trustworthiness are discussed in the next section in order to ensure and maintain rigor and authenticity for qualitative as well as validity and reliability of quantitative data.

#### **4.4 MEASURES OF TRUSTWORTHINESS IN QUALITATIVE RESEARCH**

To ensure rigor and authenticity of the qualitative research results, the following aspects of authenticity were applied:



#### **4.4.1 Credibility**

Credibility in each study is of cardinal importance as it adds rigor and trustworthiness. Credibility refers to the confidence of the data and is similar to internal validity in quantitative studies (Trochim & Donnelly: 2007). To maintain authenticity of this study, the researcher ascertained that he remains objective and refrained from influencing answers by the participants during the process of collecting data. The participants were informed of their right to stop participating at any point in the study. This ensured that only those with a genuine interest in participating and interest to give honest accounts would participate.

#### **4.4.2 Transferability**

Transferability, which in a quantitative study is also referred to as generalisation, is a degree to which the results of qualitative research can be applied or transferred to other contexts or settings (Trochim & Donnelly: 2007). Findings of a study can be applied to another context. Study background data can be utilised to contextualise the phenomenon being investigated. The researcher ensured that the eligibility criteria used to select the participants of this study were clear and picked suitable people who possessed the expected characteristics. The session involving data collection were made long enough to ensure that adequate and accurate data was collected for ease of transferability to similar situations.

#### **4.4.3 Dependability**

According to Guba and Lincoln (1994), dependability is related to reliability in quantitative research. It is about obtaining the same results when an enquiry is observed more than once (Trochim & Donnelly 2007). Kothari (2009) refers to reliability as a measure consistent result. To ensure dependability of qualitative data in the current study, the researcher provided an in-depth description of the interview results. The researcher also employed well-established research methods as a means of ensuring the dependability of the data.

#### **4.4.4 Confirmability**

Trochim and Donnelly (2007) refer to confirmability as a degree of which results can be confirmed by others. Also, they point out that confirmability is related to reliability

or objectivity in quantitative study. It is also referred to as the degree to which results can be confirmed or corroborated by others (Mqulwana, 2010). Confirmability is the ability of a researcher to produce research results that are the actual outcomes or representations of the study and are not the researcher's preconceptions. The researcher used triangulation to promote objectivity as well as to reduce possible bias.

#### **4.5 VALIDITY AND RELIABILITY OF QUANTITATIVE RESEARCH RESULTS**

This section ensures the trustworthiness of quantitative data. Validity and reliability are used to evaluate the quality of research in terms of quantitative data (Middleton, 2019). This notion is supported by Heale (2015) who defines validity as the extent to which a concept is accurately measured in quantitative study. Validity is about the accuracy of a measure while reliability is about the consistency, or the accuracy of an instrument used (Ibid). Reliability is the second measure of quality in quantitative study. For the purpose of this study, validity was tested by piloting the questionnaire before administering it to respondents. This was a content validity. Content validity was conducted for the purpose of ascertaining that the questionnaire covers all the content pertaining to student academic support. The instrument, questionnaire was also forwarded to the supervisor, who is an expert in the field in order to test face validity. After the administration of the questionnaire to respondents for pilot purpose, minor changes were made on some questions or statements to enhance validity. All questions on the questionnaire are derived from the objectives of the study and were in line with the main question to come up with the valid, reliable and problem-solving findings. Piloting the questionnaire determines the accuracy of the questions that were asked and revealed ambiguous and unclear questions so that they can be corrected. Questionnaire's reliability was tested by using Cronbach's coefficient, which is the scale used to determine internal consistency. A general acceptance for this test starts from 0.7 and this alpha shows an acceptance level of reliability (Taherdoost, 2016). The Cronbach coefficient alpha ( $\alpha$ ) obtained ranged from 0.70 to 0.92 which indicates the acceptance and the reliability of the questionnaire as shown in table 4.5.

**Table 4.5 Cronbach's Alpha reliability test**

Variable	Items	Cronbach's Alpha ( $\alpha$ )
Availability of administrative support	10	.70
Accessibility to resources	15	.92
Efficiency of academic support	10	.83
Student's perceptions	10	.90

#### **4.6 ETHICAL CONSIDERATIONS**

The collection of data from the subjects (participants) and about other subjects is what especially educational researchers undergo (Punch, 2005). In a South African scenario, data collectors such as researchers are anticipated to comply with South African Data Protection Act (1998) and ascertain that data and research participants are protected. Research ethics are all about pursuing acceptable procedure which includes professional codes of conduct, moral rules to collect data, analysing it, reporting and publication of information about participants of a study (Vuban & Eta, 2018). Ethics are moral principles that guides on that which constitutes behaviour that is socially acceptable and that subscribed to by a group of people (Wellington, 2015). Msimanga (2017) also advocates that researchers should consider the ethical issues that might have a negative impact on the research process and that they should ascertain that what the study constitutes do not harm the participants.

To conduct the research in this field, ethical clearance was obtained from a selected TVET college management under the Department of higher education (DHET). A certificate on Ethical clearance was obtained from the UNISA's college of education ethics review committee. Ethics include inter alia site access, protection of subjects from harm, informed consent as well as anonymity and confidentiality. Since it is unethical to collect data from participants without observing what is mentioned above, the researcher ascertained that all these precautions were taken care of. All ethical related documents were filed for reference purposes and an ethical clearance certificate is attached as appendix A.

#### **4.6.1 Site access/Gate keeper's permission**

The researcher applied for permission to conduct research at the institution. In this case it was the Open Learning Unit operating at CPD campus of the selected TVET college. The Head of Department (HoD) ODL received an application to get access to the campus of the college.

#### **4.6.2 Protection from harm**

According to Leedy and Ormrod (2001), the researcher needs to ascertain that participants are protected and they are not exposed to any undue psychological or physical harm. The researcher of this study ascertained that this was taken care of by ensuring that all the study subjects were not subjected to any form of emotional or physical harm. The researcher ascertained that he refrained from acts that would cause distress, anxiety, lowering the self-esteem of participants, embarrassment, resentment and any other forms of harm to participants.

#### **4.6.3 Informed consent**

Prior to data collection, all subjects were provided with the consent letters which described the research process. Netshitangani (2016) points out that the researcher needs to ensure the use of informed consent forms, discussion of the interview agenda and timeframe. Informed consent is defined by Shahnazarian, Hagemann, Aburto, and Rose (2013) as voluntary agreement to play a part in research. Springer (2010) contends that participants should be notified about their voluntary participation and about their freedom of refusal or withdrawal from the study. This information makes participants feel at ease and also encourages free choice of participation. All subjects were notified about the purpose of the study and also notified verbally and also in writing that they were free to withdraw at their sooner convenient time if they did not feel comfortable with the process.

#### **4.6.4 Anonymity and confidentiality**

Anonymity and confidentiality were taken into serious consideration by the researcher. The researcher refrained from linking participants/ respondents with data provided. This was about ascertaining that participants' names are not disclosed or written on the questionnaire. All participants who took part in this study in the form of interview

were assured that the information they would provide would be kept as anonymous and confidential. According to Cohen et al. (2011), confidentiality is about refraining from divulging participant's information in any manner. On the other hand, Burns and Grove (2001) point out that maintaining confidentiality is the duty of the researcher. Strydom (2014) also support these scholars by adding that confidentiality is an extension of confidentiality or privacy of the respondent of a study.

Data collected from participants were not shared with others without the permission of the concerned participants. No underage participant/ respondent took part in this study. In all forms of data collection, no participant name would be attached to the responses provided. Collected data transcripts and electronic versions were stored safely in the office of the researcher.

#### **4.7 CHAPTER SUMMARY**

This chapter addressed the research methodology employed in this study. Elaborations pertaining to methods followed to conduct this study were also addressed. In an attempt to address the gap, which is a problem statement mention in chapter one, both approaches, qualitative and quantitative were featured. This was done with an intention of drawing the strength of data and to minimise weaknesses of each approach. Details about the procedure used to collect the data were elaborated while ethical issues associated with data collection were also addressed. The researcher also designed a questionnaire for quantitative data collection together with an interviews schedule to collect qualitative data. These data collection instruments are displayed in annexures. The next chapter, chapter 5, will analyse and interpret the data which will incorporate quantitative and qualitative data sets.

## CHAPTER 5

### DATA ANALYSIS AND INTERPRETATION

#### 5.1 INTRODUCTION

The purpose of this study was to propose key factors for optimising the student academic support services offered in ODL at a selected TVET College. This chapter presents empirical data in a systematic manner in order to provide answers to the research questions. After the collection of the empirical data, a detailed analysis is provided in this section.

As mentioned in chapter four, subsection 4.2.2 qualitative and quantitative data were collected concurrently and analysed distinctively and sequentially starting with qualitative data, followed by quantitative data. Qualitative data was collected during interviews and was analysed manually through coding and thereafter, different themes were employed. Data collected through the questionnaires were quantitatively analysed through using a spreadsheet computer application, tables and graphs were used. These spreadsheet tables and graphs were supported with text to give clarity on quantifiable data being analysed. Data analysis and interpretation also formed part of this section. These two types of data were later synthesized to construct a comprehensive meaning for the entire research.

As stated in chapter one, subsection 1.5.2, the study was guided by the following questions:

- How accessible are students' academic support services rendered to ODL students?
- What are the perceptions of ODL students about academic support services rendered by a selected TVET college?
- Which factors can retain students on their academic programmes till to qualification completion?

- How computer literate is TVET students and to what extend can they use technology?

## **5.2 RESEARCH PROCESS**

This section gives a brief research process. An interview schedule (Appendix B) and a questionnaire (Appendix F) were the instruments employed in this mixed method study to collect qualitative and quantitative data respectively. These instruments were tested and minor amendments and alterations were made on both prior to actual data collection. In qualitative data analysis, codes were broken down into themes. For the purpose of quantitative data, descriptive and inferential statistical analyses were employed for numeric data. The problem of certain questionnaires not returned was also experienced but did not affect data collection as more than 90% were returned.

This chapter presents an analyses of data, interprets the data and findings as guided by the objectives of the research and are shown in 1.6.2 on orientation section. With regard to the collection of the qualitative data, eight interviews were conducted on college campus, all COVID-19 rules and regulations were observed. As a result of the commitments of the participants during working hours, the remaining two interviews took place at the apartments of the participants. With the aid of lecturers involved in open learning, questionnaires were administered to relevant respondents. The researcher requested some documents such as those on the enrolment and progression of students but staff in the administration section of the college were reluctant to release such documents, insisting on the fact that they were private and confidential. These staff members said such documents could be released with the approval of senior management. Attempts to get such documents from senior managements were all in vain.

Apart from the comprehensive academic support that was provided to the students, the researcher had a belief that the most important aspect was accessibility. The next section reports on the process of data analysis, starting with the qualitative data and followed by the quantitative data.

### 5.3 QUALITATIVE DATA ANALYSIS

As indicated in chapter four, an interview schedule designed by the researcher was used to collect qualitative data from ten various participants employed at the targeted college. All interviews were audio-recorded for reference purposes and the audio was complemented by note taking during each interview process.

#### 5.3.1 Interview data

In the next sections, data obtained through the interview from employees of the college were discussed in accordance with the headings (see Appendices B & F). During the interviews, lecturers, administration staff members, the HoD and Open Learning manager were probed on their perceptions and experiences of SSS provision to elaborate on what more could be done to optimize the provision. In the next sections, data from the in-depth individual interviews are presented. Responses of the participants on each question are reported verbatim and interpretation is also provided. Before engaging with the real questions from the interview schedule, the researcher started each interview by asking general questions for the purpose of creating a conducive environment and also to put participants at ease. A total of ten participants were interviewed. Participants are shown on table 5.1.

Table 5.1 shows the biographical data of the participants, their designations, gender and percentages based on gender.

**Table 5.1 Participants biographical data**

N = 10 Designation	Female		Male	
	Gender	Percentage	Gender	Percentage
Administration staff	2	40%		0%
HOD		0%	1	20%
Lecturers	3	60%	3	60%
Manager		0%	1	20%
Grand Total	5	100%	5	100%

Table 5.1 shows an even distribution of participants in terms of gender. A total of ten participants, made up of five females and five males from various positions at the college were interviewed (see appendix B for the interview schedule).



Data were coded; accordingly, participants were assigned identifiers as *Part1* for participant number one, *Part2* for participant number two up to *Part10* for participant number ten. This was done for the purpose of differentiating data obtained from various participants in terms of interviews. To analyse qualitative data, the researcher started with data on support offered by administrative staff. This is the first line of support required by students during enrolment periods.

#### 5.3.1.1 The nature of administrative support

On the question as to how do administration staff members assisted students academically? Various participants provided different but common responses.

*“Anything which is academic related is a burden of lecturers. Admin staff assists students with other forms of support such as registration during admission periods” (Part1).*

This quoted response was provided by participant number 1 who made it clear that administration staff members focused on other forms of support such as admission. According to this participant, academic support is shifted to academic staff, lecturers in particular. As stated earlier, participant number two from the same division said:

*“The greatest part of such support is on college management in collaboration with lecturers. Here we support our students with admission related challenges they encounter during enrolments times, we capture their marks and we issue examination permits” (Part2).*

The response from participant number 2 is common to the one provided by participant one. This shows that the college exempted administration staff from facilitating academic related support. All academic support, according to these two participants was the responsibility of the CMT and academic staff.

On the question as to how the college assisted students with regards to the selection of courses during registration periods? Participant number 1 also indicated that they relied on information bronchus, flyers and pamphlets which contained information about courses that the college offered.

*“We have bronchus, pamphlets and flyers stating all courses offered by the college as well as the entrance requirements. We use to distribute these documents before and during admission periods” (Part1).*

*“Actually, we do not select courses for students, instead we provide our support by showing them the courses offered by the college and we also state the entrance requirements. We also use our advertisement via social media platforms. Therefore, it becomes each student duty to select the course of his or her interest” (Part2).*

These responses from two participants made it clear that the administration staff was partly involved with student course selection. They stated that it was material that had been printed by the college such as bronchus and flyers as well as internet advertisements that assisted students with course selection. Participant number 2 continued stating that some students came to the college with no idea as to what courses they needed to take. As open learning students, some had an interest of upgrading themselves but intended to study courses that were related for their respective occupations and therefore needed assistance as they had no idea as to what courses the TVET sector offered.

On the question as to how do administration staff members assist students academically? Participant 1 from the administration division of the college said that they ascertained that all student received their course material which included printing of registration proof, student cards which was a requirement they needed to produce at the entrance in order for them to access the campus. Also required at the entrance point was an academic transcript.

*“We ascertain that our students do not struggle with all documents they need. Apart from capturing their marks we receive from their respective lecturers, we also record their weekend’s attendance; we print students’ cards and academic transcripts” (Part1).*

*“Any admission or examination related challenges they encounter; we are always available to provide support. As open learning students, some of them are employed but not all of them. Therefore, we support those who need in-service training by placements on those organisations partnering with the college. We also assist them to apply for the issuing of their qualifications from DHET” (Part1).*

In this question, the responses seemed to be opposite to the previous one. This response indicates that there was an academic support provision from administration division. College management staff participant had to respond on the question: How does the college deals with long queues during registration/enrolment periods?

*“Long queues during registration periods are something of the past. The college recently introduced online application and registration and this method assisted us a lot to quickly reduce such queues. I am not saying we don’t have queues anymore, but what I am saying is that we are now able to assist our students quickly because most of them they come to the college already started with their online enrolment” (Part9).*

*“It is a portal that the college introduced which assisted us to reduce those queues quickly during registration periods. Yes, we know that most of our students are still struggling with digital skills which I believe give them challenges when they do their online registration. Some tend to start the process of online registration but sometimes failing along the way. When they come to the college during registration periods it becomes easy for us to assist them to complete the process” (Part10).*

Participants further stated that prior to the introduction of online registration; they used to experience long queues, administration staff and lecturers plus management used to work together in an attempt to deal with such long queues. These participants stated that online application and registration exempted lecturers from participating on enrolment duties and at the time of the interviews, that was duty meant for the administration staff and CMT.

### 5.3.1.2 Access to college resources

The questions of college resources were mostly directed to three divisions which were academic staff, lectures in this case, CMT and administration staff members. The interviewer begun by analysis data collected from the lecturers. As one among college resources required by students, the first questions in connection with college resources were based on library facilities and accessibility.

On the question as how are students assisted with library activities and access? One of the participants from the lecturers said:

*“The issue of library access is a serious challenge for part time students. As public college under the department of higher education, our librarians are not working during weekends. Therefore, our students have a limited access to our library facilities, especially those who are working” (Part3).*

Participant number 4 among the lecturers also provided almost a similar response by stating that:

*“Our part time students especially those who are employed do not enjoy college resources such as library because they come to the college during weekends when librarians are off duty” (Part4).*

These responses imply that open learning students were limited with regards to access of the college library. This deprived them access to information because participants also mentioned that the college library facilities were not yet digitised. The college was still using the traditional method of accessing library facilities.

*“As distance students they do not get time to use our library except those who reside around because those are able to use library during mid-week, but most of them they are away from the college or they always occupied by their respective occupations during the course of the week. This makes it impossible for them to access library facilities” (Part5).*

Participant number 5 came up with a unique response to this question, stating that it was in the hands of management as how students accessed library facilities.

*“I cannot say anything much about library facilities because that is for college management to answer. Our part time students do not attain any funding from NSFAS, meaning they are paying for their studies from their own pockets, yet they are limited to college resources such as library” (Part6).*

*“The issue of library access is for administration staff and management. As lecturers we present lessons and support our students with other methods such as digital lessons that we publish on media platforms for students to access them. Library access is not on the hands of us as lecturers” (Part7).*

Participant number 2 shifted the blame for students' access to the library to CMT and claimed that she was not working during the weekends when part-time students attended. Her response got support from her colleague who also maintained that they were not working during weekends, and therefore CMT could address this matter far better.

*“We do have librarians, but they are always off duty on weekends and these part time students tend to attend classes during Saturdays only” (Part2).*

*“Our college library is always closed during weekends and students cannot use it since it is still using traditional method, meaning its facilities are not digitised” (Part1).*

Participant number 9, the ODL manager promised that the problem of the college library accessibility was a problem they were working upon. This participant stated that anytime soon they would solve this problem.

*“I am very much concern about library matters because most of our students do not have access since librarians are not available during weekends but we are working to the problem and I believe we are going to sort it anytime soon” (Part9).*

Still on other access to college resources such as computer venues, the participants provided different responses. On the question as to how and when students got access to college resources such as computer venues? Participants provided the following responses:

*“Students have access computer venues during class times only. The reason is that as they are part time, they come to the college on Saturdays only to attend lectures throughout the day. Because of that reason they cannot other resources on the same day” (Part3).*

*“I am teaching computer related subjects and I am always using computer venues with my students. Unfortunately, they do not have sufficient time to work on their own on computers because time does not allow us to do so” (Part4).*

These two responses show that some students, particularly those who were doing computer subjects enjoyed access to college computers. Those whose subjects had nothing to do with computers were limited to college computer venues. It was quite clear that access to other resources such as computers was limited to some students, yet some had better access. Participants number 5 and 6 also responded to this question stating that it depended on what subjects a particular student was registered for.

*“Access to computer venues is a real challenge for our student. In the past I recommended that the college should avail some computer venues to be used by our students at their convenience times during weekends and the management promised to do so, yet they have never done anything till now” (Part5).*

*“Access to computer venues is determined by subjects our students enrolled for. Those who are doing computer subject are the ones with sufficient time on such venues. Unfortunately, each student needs to use computers these*

*days and it is the college duty to teach them computer skills as everything goes digital in this planet” (Part6).*

These responses indicate that lecturers were not satisfied with the method that was used by the college to give students access to resources such as computer venues. This should be a serious concern as this world is being consumed by digital technology brought by 4IR. One respondent made it clear that the college needed to provide or to teach students computer skills.

### 5.3.1.3 Information and Communications Technology

Information and Communications Technology play the greatest part in education today. Digital skills brought by the 4IR are a need in education and particularly in ODL. Through ICT, the transactional distance between students and instructors may be reduced. Participants made it clear that the college used to publish lessons online. This is said to be part of academic support for ODL students who was not always in contact with their lecturers. On the question as to how the online lessons assist students? Participants provided various responses.

*“The college started to develop online lessons during lockdown, which was a COVID19 results. Some students do commend this form of support” (Part3).*

*“We started with online lesson in the year 2020, when contact lessons were suspended as a result of lockdown necessitated by COVID 19. On your question as how these online lessons assist our students, I can online lessons did not reach all students. I can mention series of reasons as to why some students cannot benefit” (Part4).*

Participant number 4 provided more details on why some students did not benefit on college online lessons:

*“We do have lessons publish on college website and on YouTube but the challenge is that our students are from various locations including rural areas with problems of connectivity and lack of electricity. These challenges prevent*

*them from accessing internet and they cannot access any form of online support the college provides” (Part5).*

This response demonstrates that the college lecturers worked hard to support their students via online platforms but there were challenges which were beyond the college or beyond the control of the lecturers which among others, lack of electricity supply on certain parts of the country. Participant number 9 had a different response when compared with that from participant number 5:

*“Some of our students are employed but not all of them. Those who are not employed they complain about high prices of data bundles, saying when they need to access academic related matters, they need much time online and that is impossible for them as they not afford data bundles. Since our online lessons are on multimedia formats, more data bundles are needed” (Part9).*

This response shows that the DHET had not yet zero rated academic related websites which prevented or restricted students from spending sufficient time online doing their academic work or accessing various forms of academic support obtainable online. Data bundles were said to be very expensive for poor background students to afford.

On the follow up question mainly addressed by objective number four, 1.5.2.4 of this study saying: “How computer literate is TVET students and to what extent can they use technology?” Participants provided different but common responses.

*“That is another challenge facing our students. We are still having a large number of students who are lacking computer skills, or they are totally computer illiterate. Some of them come to the college knowing nothing as to how to start using a computer. I believe this is burden of the department of basic education to start with an introduction of computer subjects from primary level students” (Part8).*

Responding on the same question, participant number 7 also mentioned the same challenge of computer illiteracy among students. This implies that lack of computer knowledge and skills among certain students was a challenge which hindered them



from accessing various forms of support that was available on the website of the college.

*“What I can say is that our students or greatest percentage is technological disempowered. Numerous contributing factors can be mentioned in this case. Apart from the fact that most of students come from disadvantaged background, the departments of education both basic and higher need to prioritised computer related subject in all qualifications they offer. We cannot deny the fact that this is a digital world, and we need digital citizens who can cope with the current and fast changing world in terms of technology” (Part7).*

Both responses seemed to direct the blame to the departments of education (Department of Basic Education & the Department Higher Education and Training), saying computer subjects or digital skills were not taught and according to these respondents this put students into a serious disadvantage especially those who pursued their studies via ODL. It was also quite clear that students who could not use digital skills and those with connectivity challenges could not even access online student support provided by their respective institutions. Participant three articulated the following:

*“You have just mentioned a serious challenge facing our students. The lockdown of 2020 exposed their nakedness in terms of computer knowledge or skills. What I am saying is that most of students lack computer skills and the suspension of contact sessions because of COVID 19 pandemic forced them to learn computer skills. They ended up facing the challenge of their respective courses and now the challenge to learn how to use computers” (Part3).*

On the question of college Wi-Fi connectivity which was needed to enable students to access services using their own devices, all responses stated that the college had no such a facility for students. That simply indicates that there was no method in place for students to connect even during weekends when they were available at the college for contact lessons. As the college does not have Wi-Fi, students needed to connect at their own expense as they used their own data bundles to connect to internet. This

also indicates that the college still relied on a traditional method of teaching which was being phased out by current digital technology.

On the question based on whether or not students' access examination results online? All responses showed that this was a recent development at the college, trying to assist students so that they did not travel to the college in order to get their examinations results. At the same time, this development meant reduction of work from staff members because the college had to assign certain staff members to deals with issuing of results and some on the process of registration.

*“Yes, students are now accessing their results online via college portal. This is a recent development, but I am happy because the college started to engage in this prior to COVID-19, meaning the pandemic was not a catalyst to this development” (Part9).*

Responding to the same question, participant number ten in management section indicated that an introduction of online activities, mentioning registering and accessing results online was a massive relief for both staff and students and was another method of minimising long queues during enrolment periods.

*“Before in introduction of online facilities we use to have long queues of students checking their result and continue to enrolment queues. As they are now able to access their result online, queues are minimised except some few who are still complaining about lack of connectivity” (Part10).*

According to these respondents, the college was trying albeit at a snail's pace to migrate into the digital world but more still needed to be done pertaining to digital skills.

On the question based on the college portal availability and whether students do get all forms of assistance they need? Participants agreed that the college's portal was up and running but there was no agreement on its effectiveness.

*“The portal is there but some students are struggling to utilise it properly as some of them are struggling with computer related issues” (Part3).*

*“Yes, the portal is there and is very effective because students use it for inline applications and registration. Since its introduction students are not struggling to access their results. It is very effective I can say” (Part4).*

Both these participants agreed on the availability of a portal at the college, but participant number 3 insisted on the fact that students were struggling with it yet participant four insisted on the fact that portal was very helpful. As both participants agreed on the existence of a portal at the college and differed on its effectiveness, it was clear that the portal was useful for staff members and students were struggling as to how they could use it.

Participant number 1 and 2 also had the same sentiment about the effectiveness of the portal at the college. Both participants agreed that the portal brought about massive relief and it also reduced their work as students were able to do other things on their own. Lecturer participants said the portal was available, always up and running but they were not sure of its effectiveness. All responses imply that the college portal was not user-friendly since most students needed support to complete online application or registration.

*“Yes, we do have the portal, but I am not sure how effective it is because I am using it during enrolment periods only. People who are using it frequently are administrative staff member because their greatest part of their daily activities has something to do with it” (Part7).*

*“College portal was introduced as part of online activities to simplify and to reduce a workload from staff and its advantage is that students can use it at their convenient times to apply, to access their results without any interference of any staff member but the problem is on computer illiteracy among some of our students” (Part8).*

All participants agreed that the college did have a portal, but some indicated that it was effective for staff members and few students who knew how to use it or those with digital skills. Lecturer participants agreed on the fact that numerous students lacked

computer skills which made it impossible for students to use it. According to the participants, the portal was introduced to complement existing resources that supported students but not all of them benefited from it.

As institutions of higher learning including ODL institutions tend to use various methods of student support such as telephone, portals, social media platforms and e-mails, the question was: does the college have an e-mail facility for student's inquiries? Participant number ten and eleven from management agreed by saying:

*"Yes, there is an e-mail address available where students can send their enquiries" (Part9).*

*"Yes, we do have an e-mail for students' enquiries and it has been there long times ago" (Part10).*

This facility, e-mail address is among the resources students can use to communicate with an institution, but it depends on its effectiveness and students' knowledge about such facility. Administration staff participants also agreed on the availability of e-mail address but insisted on the fact that students did not use such facilities instead they preferred to make phone calls for enquiries. This might be another indication of computer illiteracy among students. Since the selected student participants were ODL students, meaning they were off campus, they were expected to use such facilities which served as a method of reducing transactional distance which existed in the field of ODL. Variety of online applications was available and suitable for SSS. Owing to series of technology related challenges, students were not able to use these applications.

To address objective number four stated in subsection 1.6.2 of this study which assessed computer skills and the use of technology among TVET students, it was clear that most students were struggling with computer knowledge and skills. Computer literacy is defined by Michael and Igenewari (2018) as an effective knowledge and ability to use computers and related technology with series of abilities covering several levels. These scholars also insist on the vitality of digital skills which students need in order to develop and enhance their learning. This constitute that their

access to student support is limited as some cannot afford electronic devices such as laptops while some continuously encountering ICT technical challenges. These data propose the development of technical skills among students in order to troubleshoot some technical glitches they encounter with their electronic devices as well as network glitches.

Questions based on computer skills and knowledge were evaluating students' capabilities on applying basic skills such as typing in Microsoft Word, simple calculations on Microsoft Excel, file management, Microsoft PowerPoint presentation, internet and e-mail and ability to access various forms of support obtainable online which might contribute to their learning enhancement. Being able to use online communication tools is of cardinal importance for interaction between students and lecturers and students with their fellows. Basic computer skills and knowledge allow users to use computers and other related technology brought by the 4IR. Students need to know that education today relies on computerised technology to efficiently complete academic tasks. One cannot argue that the world economy also relies on technology today. Therefore, students are expected to master such digital skills.

Qualitative data revealed that online platforms or ICT at large was one among the most vital resources in ODL, but it was underutilised by both students and lecturers. This underutilisation of ICT was a counter towards what the college wanted to accomplish and was another factor that hindered students to complete their studies in a designated period. Participants made it clear that the ICT-related challenges they faced emanated from the basic education department whereby schools did not offer computer-related subjects to high school students. Students tended to complete their matric with basic computer skills which made it difficult for them to adapt to the new environment of ODL. Participants also made it clear that weekend contact sessions enjoyed good attendance because students still preferred this conventional method of curriculum delivery. This made it clear that college students were facing serious challenges in connection with ICT digital skills. Nevertheless, the college claims to have uploaded all the support required by students on the college website and through LMS.

#### 5.3.1.4 Learning environment

The atmosphere plays a major role in memorising and understanding the contents (Ameritech College of Healthcare, 2015). Therefore, the performances of students did not only depend on the method of teaching, but the environment made a significant contribution (Kamarul Azlan, Azman, Wan Mohd Azman & Mohi, 2021). Student isolation from their instructors is not new to the ODL field. Nevertheless, this transactional distance or students' isolation has a negative impact to the' academic performance of students. This has been revealed by responses of the participants on interview questions based on learning environment. These questions focussed on interaction between students and their fellows, interaction between students and lectures as well as other learning environments students find themselves upon as they are from various locations with unique challenges which hinder access to resources, they require to portray their academic excellence.

On the question: What form of communication platform the college has for students to interact with each other? Learning environment related questions were mostly directed to CMT participants. The motive for directing these questions to CMT participant is because the researcher had a belief that it is the duty of college management to create platforms to be used by students and lectures to interact. Participant number eight and nine from CMT provided common responses in this question:

*“As per my knowledge we don't have such platform. I am saying this because I cannot respond to your question on behalf of curriculum department from our central office. Therefore, I am saying as per my knowledge because it might happen that they are currently developing it or something” (Part9).*

This participant did not come clean as to whether the college had a platform for the interaction of students or not. Instead, he shifted the blame to the college curriculum department as they were the ones who could provide a clear answer to this question.

*“No, we do not have such platform, students tend to create their own WhatsApp groups and they are using such groups to interact for both social and academic matters” (Part10).*

It was clear that the college did not have any platform for student interaction hence students decided to do so on their own by creating WhatsApp groups where they interacted with each other. “Social media networks are an effective tool for providing student support services” (Arifin, 2018: 35).

On the question: Which platform is in place for students to interact with their lecturers at any time when they need help? Responses obtained constitute that lecturers gave their contact numbers to students so the latter could communicate with them via WhatsApp or SMS. This also indicates that the college did not have a platform designed for such purpose. Therefore, lecturers opted for WhatsApp and SMS to create interaction between students and themselves at their own expense. This study concludes that there was a need of such platform since it was not easy for students to manage themselves without the supervision of their lecturers.

It was also revealed that out of multiple platforms the college could use such as Google classroom, Zoom, Microsoft teams to interact with students but the college did not use any. Instead, only WhatsApp was an option. Effective usage of these real time applications can minimise the transactional distance experienced by ODL students and can conquer the feeling of isolation. The inability of the college to use current digital platforms in education might have had a negative impact on academic success of students resulting to high attrition rate. “The review revealed that student support services’ effectiveness and efficiency in ODL institutions in Africa are measured by the success, failure, drop out and attrition rates at these institutions” (Shabani, Kefiloe, Omari & Maboe, 2021: 1).

The learning environment that students find themselves in is different from that which students in another location may experience. Some ODL students do not have people who can assist them with their academic matters on their respective locations and some are experiencing challenges which include among other things limited internet access, technical glitches, lack of digital skills and many more. Therefore, continuous communication between them and their lecturers is of cardinal importance. Some students are being advantaged, some disadvantaged by an environment they find themselves upon. Therefore, it is vital for the college and other ODL institutions to

create a conducive learning environment for students by availing sophisticated forms of interaction through modern technology.

The study's participants also indicated that lecturers used to publish recorded lessons or asynchronous online learning via social media platforms like YouTube but this seemed not to be enough since it was not a real time communication between students and lectures. There should be a real time platform that enable interaction between students and lecturers, especially in case students need clarity on some issues concerning their academic challenges.

*“We have a newly introduced LMS to be used by lecturers and students. As I have already indicated, this is still new in such a way that even lecturers are not yet used to it because it was introduced during if not after the lockdown. Some lecturers complained about the fact that this LMS increases work for them and they seem to be reluctant on using it. Therefore, this is a kind of support which is not yet effective” (Part9).*

It was also revealed by CMT participants that the college had just started to develop LMS which is another form of academic support necessitated by the lockdowns in 2020. The responses made it clear that this form of support was still new to the college population and the curriculum department engaged to the process of training the lecturing staff as to how to use it. This LMS support was not yet functional since lecturers were still learning its techniques. This indicates that it was still early for students to benefit from this support.

*“The curriculum department decided to come up with a new form of support called LMS to be used by students and lecturers. Unfortunately, this calls for someone with high skills of digital technology. Some of our lectures and most students do not possess such skills which makes it impossible for this LMS to be effective” (Part10).*

Participant number 10 stated that the newly introduced LMS was a good and effective method for lecturers and students to interact but also mentioned that there were challenges that faced this system. According to this participant, some lecturers were



not well informed on computer skills and this might have hindered the success of LMS. Some lecturers needed to develop their digital skills before they could be engaged to this form of student support. The participant also insisted that not only lecturers, but most students were totally technological disempowered as a result of the lack of digital skills, challenges of connectivity, lack of computing devices, electricity challenges in some locations and high costs of data bundles. It was therefore clear that the students had not yet benefited from this LMS and was not yet an effective method of interaction between students and lecturers.

As an online-based form of support, LMS provided a connection between lecturers and students via online interaction. As a result, both students and lecturers needed to have a stable internet to use this support effectively. Challenges attached to poor ICT infrastructure make it impossible for students to access all forms of support obtainable online and this increases pressure among students which results in poor academic performance or sometimes attrition. Responses from the participants revealed that ODL students were overwhelmed by academic pressure, the lack of effective support led to desperation resulting in inability to display academic excellence.

The only environment that was good and conducive for learning was a classroom which was fully resourced and there was a lecturer that was available to interact directly with students. However, such an arrangement was beneficial for in-person studies not for ODL students. Some resided in noisy locations or along with families with limited space which was noisy and this did not promote learning at all. It is quite clear that if learning environment is not conducive for students they could not do well on their studies. The data collected in this study on this regard propose that families needed to take part in student support by assisting ODL family members who were registered with educational institutions. This effort should not be shifted to institutions only, but collaboration is important.

#### 5.3.1.5 Academic support

Though services are inseparable, but the focus of this section was more on pedagogic or academic support services. Most of the questions related to academic support were directed to lecturers and CMT. As described by Mansouri (2018), academic support is vital and it is evident that “effective academic support reduces loss of control and

contributes to student satisfaction, increases motivation and helps students complete a course” (Mansouri, 2018: 10). This scholar made insist on motivation as the vital aspect that can assist students to qualification completion.

Feedback is said to be among the most crucial methods used by instructors to interact with their students. As stated on 2.6.2.1 that feedback is a key to successful learning, critical and could assist each institution in its endeavours to facilitate student learning, bridge the lecturer-student separation and balance out the deficiencies imposed by a lack of face to face contact with lecturers (Shikulo & Lekhetho, 2020). In a process of addressing academic support, feedback was considered to be one of academic support pillars.

On the question as to how do lecturers provide assessment feedback on time to students? Participants three, five and six provided common responses as they said they used the contact sessions held during the weekends to send feedback their students.

*“Open learning students have contact sessions during weekends, that is how we communicate directly with students and they receive their assessment scripts” (Part3).*

Participants number 4, 7 and 8 on the other hand said they used two methods to provide feedback. They mentioned the use of the college’s portal and weekend contact sessions. According to these participants, the reason of using portal was that some students did not attend contact sessions because of various reasons or weekends commitments which included their respective occupations.

*“I provide feedback via college portal and I also avail their marked assessments scripts on Saturdays of our contact sessions. I also noticed that attendance is sometimes poor which I believe is because of weekend commitments” (Part4).*

Participant number 8 mentioned the disadvantage of using college portal to access feedback, saying students could only access their marks there without seeing

lecturers' comments. According to this participant, portal was not an effective feedback method because it did not indicate where the student was expected to improve. When the interviewer asked them about motivational feedback, they all agreed on the point that they ascertained that the feedback was motivational as a method of encouraging students and also to circumvent attrition which sometimes come as a result of poor performance and lack of constructive feedback.

On the question as to what extent did, they ascertain that students received the feedback on time. Responses from participants 3 and 4 indicated that it depended on their commitments because they do not focus on ODL students only, but they are also facing a volume of work for their full-time students. Therefore, they end up having lot of work which includes marking scripts for both full-time and part-time students. As a result, these sometimes delays feedback for part-time students.

*“We are trying by all means to give feedback to students at our sooner possible time, but the challenge is a volume of work we are facing since we are working with both full time and part time students. I can say that this tend to delay feedback for our part time students” (Part7).*

*“Yes, we provide them with feedback, but I cannot say the feedback is on time because I know the students' curiosity for feedback especially after an assessment is written. Unfortunately, the college does not have full time lecturers for part time students therefore we not to avail time for our full-time students and some time for our part time” (Part8).*

These responses constitute that students did not get their feedback on time as per their curiosity. Lecturers spent much of their time on students who attended in-person lectures since the college had not employed lecturers that would focus on part-time or ODL students. This also indicates that the college make attempts to support students, but part-time students are not adequately taken care of. These students did not have lecturers to take full care of their academic needs, but they relied on lecturers who were employed to cater for students who attended on a full-time basis.

On the question as to whether lecturers provided students with assistance and guidance to complete their assignments and how? Responses from CMT participants agreed that lecturers were supporting students with assignments in different methods depending on individual lecturers.

*“As per my knowledge lecturers do assist their students but I cannot tell how because that depends on lecturers themselves as how they work and how they guide their students with assessments completion” (Part9).*

The response from participant number ten was almost similar to that shown above. According to this participant, the CMT supported lecturers with teaching and learning material and equipment and lecturers also supported students.

*“It is our responsibility as the college management to ascertain that lecturers have all teaching material as well as equipment in order to assist their students with all forms of academic support, they need including assignment completion guidelines. As per my knowledge, we are always striving to do that” (Part10).*

Lecturer participants agreed that they did whatever it took to assist students so they could complete their assignments.

*“We have a limited contact time with students since we physically meet them during weekends only. Therefore, we spend that little time teaching which makes it difficult for us to do everything on those three to four hours we spend with them. As a result, we are using college website as well as college YouTube to support them with matters that pertains assessment completion and other things” (Part5).*

*“Yes, we consider that as part our duty. Though it is not easy for us to do everything during contact sessions, but we rely on digital platforms such as WhatsApp to assist them with other forms of support including assignment completion guidelines” (Part6).*

These responses reveal that lecturers were supporting their students on guidelines concerning how they could complete their assignments, but it was also clear that they opted for social media platforms to add on limited time they had with students during contact sessions. It was also clear that students who were technology disempowered as a result of connectivity challenges or lack of electricity in their respective locations were disadvantaged.

On the question as to how the college made previous examination question papers accessible to students for their preparation for the examination, the responses show that the college tended to keep question papers for students.

*“Yes, we keep previous question papers for lecturers concern and those lecturers distribute question papers to their respective students” (Part9).*

*“After each examination we use to collect and keep all examination questions papers to be distributed to students of the same subject in the following semester. I believe these question papers assist students on the methods of assessments used by various examiners. This is another support the college avails to students. As a result of COVID 19 pandemic, our curriculum department from central office started to upload previous question papers to college website so that students can access them on their convenient times” (Part10).*

These responses show that the college had strategies to prepare students for examinations. Students could use these previous question papers obtainable from lecturer’s concern. These question papers are also downloadable from the website of the college. This seems to be a good strategy implemented by the college in an attempt to prepare students for examinations. “Tutoring is an age-old practice used in contemporary universities as a form of support to students who need specific assistance” (Mansouri, 2020:3). This assertion insists on tutoring technique as an effective student support which have been used by universities in the past to support students with specific needs. Some institutions are still using tutors effectively on their student support programmes.

On the question as to whether the college provides tutors to assist students with their studies? All respondents provided the same response indicating that the college had never engaged on such, students relied on lecturers for their subject content matters.

*“Not at all, students rely on their lecturers for academic support and other matters concern with their subject content” (Part3).*

*“No, we don’t have tutors. Academic matters are on lecturers and CMT shoulders” (Part4).*

*“As public TVET College we are under the administration of department of higher education so the college cannot employ tutors on its capacity just like universities and private colleges. The DHET shift all academic matters to lecturers” (Part5).*

*“I can say sometimes we are lecturers and sometimes we are tutors because we are doing everything on our own” (Part6).*

The responses from these four lecturer participants made it clear that the college did not employ tutors and therefore, the selected lecturers blamed the department about this. According to participant five, the employment of tutors was a responsibility of the DHET and not the college. The migration of all public TVET colleges from councils to DHET also shifted numerous duties from colleges’ central offices to Pretoria where the headquarters of DHET are located. This means that the powers of the colleges to take decision on certain matters were transferred to the DHET.

Lecturer participants were asked if the college or lecturers prepared study guides to simplify subject’s content.

*“As per my knowledge there are no study guides, but we rely on prescribed textbooks. That is what I know but I cannot answer this question of behalf of other lecturers because I believe we do things in different methods” (Part3).*

*“No I do not develop study guides but I used ones that come with textbook if possible and available” (Part4).*

*“Even if want to design study guides but time cannot allow us as I have mentioned that we are not full time on our open learning students, but we work full time with full time students and that is where we spend most of our time” (Part5).*

*“No we don’t, instead we prepare some notes for students to simply not the entire textbook but to give clarity to certain sections of prescribed textbooks which are challenging our students” (Part6).*

All responses indicate that students did not get any study guides from lecturers but both lecturers and students relied on textbooks for subject content and also to prepare for assessments. In a follow up question based on two types of assessments; summative and formative, all lecturer participants agreed on the fact that though they understood the importance of summative assessment, but they did not do it because of time constraints. As a result, students were only engaged on formative assessments.

Participants also stated that most of the subjects they offered involved a practical component especially in the field of engineering and ICT, therefore these subjects required more time than theory-based subjects. As a result, they did not get time to conduct summative assessments which they said were also important to prepare their students for formative assessments. This also indicates that TVET students needed to learn to work on their own or with their fellows in order to cope with academic challenges the encounter.

It is necessary for institutions to review their provision of academic support. As 4IR brought digital platforms of communication, institutions should evaluate the student support services and ascertain that they are always updated with latest technology. Participants insisted on traditional method of support, leaving out the inclusion of the latest technology. They insisted on summarising textbooks and availing study guides without saying anything about digitisation of these documents.

*“No matter how hard we can try to provide our students with all forms of academic support, the problem is that they seem to be lazy. We can feel during our contact times that they don’t give themselves time to study. I understand that their situation is unlike that of full students who are compelled to be in class every day. Part time students need to be discipline and they need to have a schedule which will accommodate their daily activities, not leaving out study time” (Part7).*

As mentioned in chapter three, subsection 3.1.3.3 that students needed to be taught as how to manage their study time effectively. The freedom and flexibility of distance learning has its own attached discrepancies which give students over relaxation. It is this over relaxation and lack of discipline which lead to poor performance.

#### 5.3.1.6 Staff perceptions on academic support services

After evaluation how SSS was provided to students, it was also vital to check if academic support the college offered were efficient and sufficient. As per their respective designations, participants perceived college academic support differently. This question was directed to all participants in order to evaluate effectiveness of SSS: What is your perception on support services the college provides?

*“The support given to students, open learning students in particular is not enough and some students are unable to access it and they end up failing to complete their studies” (Part1).*

The participants highlighted major areas of concern with regard to the provision of academic support. As stated by participant number 1 that the college provided support to students but for ODL student the support was neither efficient nor sufficient. The college’s inability to provide comprehensive support was mentioned as one among causes of students’ attrition. Another participant viewed this differently.

*“There college management is doing everything to support ODL students, but the challenge lies with students’ inability to access or to utilise the support provided. The college curriculum department tend to upload any material that can assist students on college website and they have recently started to*



*develop LMS which is another attempt to give academic support to ODL students” (Part2).*

Participant number 2 made it clear that academic support was available and the challenge was that students were not using it or they were unable to access it because it relied on connectivity which was another challenge facing students. Given these two conflicting ideas or responses, it can be said that students did not receive effective academic support from the college. It was also stated that the college started to develop LMS resulting from the emergence of COVID-19 pandemic which led to suspension of contact sessions. Actually, LMS is widely used by ODL institutions to monitor students’ academic progress.

*“Yes, the college does not support ODL students effectively but people who are benefiting from this are full time students because they have full access of SSS structure all the time. Part time students cannot access even this SSS because SSS staff members are not available during weekends when ODL students have contact sessions” (Part3).*

*“I am very much concern about ODL students because they don’t benefit from NSFAS, meaning they are responsible for funding of their studies, yet the college is not doing enough to support them academically” (Part4).*

These responses indicate that the CMT or college support structure did not consider academic support for ODL students as vital and urgent matter for the success of students.

*“Some students are not familiar with academic services available, so it should be the college responsibility to organise inductions to notify students about support services available and as how to access such services. If the college does not organise such inductions how students will know about available support for them? I such services are fully utilised I believe students can display their full academic potential” (Part5).*

The participants believed if academic support services are utilised to its full potential, the retention of students at the college would improve. It was also revealed that the college did not use students' structures such as the SRC and Student Affairs to notify students about academic support that the college provides. This was stated by participant number 6:

*“There are students’ representatives such as SRC and Student Affairs which are the structures to be used by the college to communicate such things with students. Unfortunately, these structures tend to focus on other matters such as enrolment and student’s funding leaving out this of academic support” (Part6).*

This response indicates that the college did not include students' structures on matters of academic support and as a result, students lacked knowledge of SSS that ought to have been available for them. Therefore, if the college could involve all students' structures to the matter, provision of SSS could be improved.

Despite the different responses from the participants, that from the administration staff together with the lecturing staff was similar on the fact that the provision of academic support to ODL students was not sufficient. They believed that the CMT needed to do something to improve student academic support. On the other hand, the CMT members claimed to provide comprehensive support with the exception of minor issues which needed some attention.

*“As the college management we ascertain that our students receive all forms of support they need to portray their academic potential. We understand that it is a lack of support that results to students’ drop out or sometimes poor performance” (Part9).*

Participant number 10 response concurred with that of participant number nine on the fact that the college did its best to avail SSS in an attempt to circumvent attrition which was reported to be high in the ODL field as stated in subsection 1.4.2.2 and 2.4.2 respectively.

*“Our curriculum department from our central office is working hard to make sure that support structures are functional and they reach our students. I understand and accept that there are certain challenges associated with students’ access to the support we provide. Those challenges are beyond the CMT and curriculum department because they associated with ICT” (Part10).*

Participant number 10 made mention of ICT-related challenges as they hindered ODL students to access SSS the college provides. The high cost of digital devices, data, electricity and connectivity challenges had been mentioned several times as real challenges facing ODL students in various institutions. As a result of these, students could not fully access any online support that the institution provided.

### 5.3.2 Themes and categories

In this process of qualitative analysis, the collected and analysed data were categorised into five different themes which are: nature of administrative support, access to college resources, Information and communications technology, learning environment and staff perceptions on academic support services. Themes were derived from study objectives mentioned in 1.5.2 subsection. Table 5.2 describes five themes with various categories.

**Table 5.2 Themes**

Theme	Description	Category
1.	Nature of administrative support	<ul style="list-style-type: none"> <li>• Enrolment/Registration</li> <li>• Course selection</li> <li>• Examinations</li> </ul>
2.	Access to college resources	<ul style="list-style-type: none"> <li>• Access to library</li> <li>• Access to computer venues</li> </ul>
3.	Information and communications technology	<ul style="list-style-type: none"> <li>• Digital skills challenges</li> <li>• Connectivity</li> <li>• ICT infrastructure</li> <li>• Devices challenges</li> </ul>

4.	Learning environment	<ul style="list-style-type: none"> <li>• Distance learning</li> <li>• Online learning</li> <li>• Unfavourable learning environment</li> </ul>
5.	Staff perceptions on academic support services	<ul style="list-style-type: none"> <li>• Provision of academic support</li> <li>• Effectiveness of academic support</li> </ul>

### 5.3.2.1 Theme 1: Nature of student support

Administrative support is extremely important and is a requirement from students' applications and admission to examinations. Before seeking other forms of support, students began with admission and that is where administrative support is required.

#### i) Enrolment/registration

Enrolment or registration used to be a hectic process caused by overcrowding of students in their rush of getting admitted. Students tend to find themselves in series of long queues during the college registration periods. Participants indicated that the college managed to reduce stress from students and staff by introducing the method of online application and online registration. It is the same online process that was offered through the college's portal where students are able to access their examinations results without spending time and money to travel to the college. Although the system had been introduced recently, it proved useful and enabled the college to minimise long queues which used to be experienced in the past. The online system is good, but it is not beneficial for all students as some are still facing series of internet related challenges. Despite this challenge, students without the required electronic devices could use other options such internet café rather than travelling to the college.

## ii) Course selection

The selection of a course that a student would like to study is another challenge facing especially first entering students. Some students come to the college with no knowledge of courses the college offers, and they need assistance from staff as to which courses they can take. This indicates that some students come to the college just to be admitted to any course they qualify to do. Not all of them fall under the same category. Some know what courses they need as per their respective occupations among those who are employed. This simply indicates the lack of career guidance among some which is a challenge to be referred to the Department of Basic Education. Participants made it clear that they still had numerous students who were interested on courses not offered by TVET sector.

As part of administrative support to students, the college notified students about courses it offered through flyers and pamphlets but also made announcements on the media which included social media platforms. Staff members of the administration also gave guidance to those who were not certain about what they wanted to study but were careful not to select courses on their behalves. It is administration staff members who also accepted students on their arrival on the first day of each semester or trimester. Those who did not complete their enrolment process online received assistance as to how to finalise their registration.

## iii) Examinations

The performance of students is measured by assessment results. De Villiers, Scott-Kennel and Larke (2016) refer to assessment as a process to measure the achievement and progress of students. Therefore, it is of cardinal importance for educational institutions to ascertain that they conduct their assessment in a fair, valid and reliable manner. On the questions concerning the examinations, participants stated that the college used the conventional method. This implies that the college was still maintaining the traditional examination method rather than an online option. The immediate transition was going to be a challenge among students.

The responses sourced from the selected participants made it clear that even during the COVID-19 pandemic, the college did not migrate to online examinations. This was because of number of reasons which pertain to ICT challenges. Specifically, the students registered in the institution are lacking computing skills. The same students do not have ICT resources such as laptops and suitable applications. Lecturers with wide range of experience in this field complain about fraudulent or cheating behaviour which is said to be a serious problem that affects numerous institutions of learning internationally (Adzima, 2020). Therefore, the college conducted its academic business in the conventional way and had in-person examinations in venues where social distance was maintained as per the requirements from higher health. In addition, Larabee (2021) argues that 'academic fraudulent' is now aggravating among ODeL and online students and is encouraged by the evolvement of technology through mobile devices brought by 4IR in the field of ICT.

In a study conducted in Saudi Arabia, Ebaid (2021) reported a prevalence of cheating behaviour among accounting students. The cheating was in a form of text messaging, sending or receiving examination answers to/from another student, use of impermissible open book during an online examination, physical or electronic interaction between students during examination as well as delayed entry to the online assessments for some time in order to get questions from another student. The usage of crypt notes during an online assessment was also mentioned as part of student's cheating behaviour.

#### 5.3.2.2 Theme 2: Access to college resources

Under-resourced and poor-resourced institutions limit students from displaying their academic potentials. Large portion of the unemployed youth in South Africa are poorly educated and lack required skills needed to boost the country's economy (Speckman & Mandew, 2014). Lack of access to resources or poor resourced education institutions are among the causes of the above statement. Hence the South African government decided to introduce the NDP. Its role was to develop practical, employable skills, and thus the reduce youth unemployment and skills shortages in the country.

i) Access to library facilities

Participants made it clear that the college had a library, but it was not accessible to ODL students. They mentioned a few reasons as to why it is not accessible. The most prominent reason was that its facilities had not been digitised which made it impossible to be accessed online. This indicates that the college had a lot to be done in terms of digitising the facilities of the library facilities in order to match the 4IR and also to ascertain that students became digital citizens. Open learning or ODL students tend to come to the college only on weekends to attend their contact sessions and during that time library was closed. It is quite clear that students were deprived access to resources such as library which was one of vital resources needed by the students.

This study's data made it clear that students studying in the college had visit municipal libraries since facilities of that of the college were neither digitised nor accessible. Clearly, the students could not access library facilities using their devices. At the same time, some students had no access to the internet on their respective locations. As mentioned in subsection 3.1.4.5, Shaheen, Mahmood and Shah (2020) describe a library as one among the most important structures for SSS.

ii) Access to computer venues

Access to computer venues is another challenge being experienced by ODL students. In this study, only students who studied ICT-related subjects got access to computer venues during weekends contact times only. Those whose courses did not include computer subjects were unable to use the computers of the college even for the purposes of typing their assignments. On this aspect the college was failing to provide support to students as per requirement. Some students needed to use these venues to enhance their digital skills, but they were deprived such opportunity.

The college is fully resourced but the problem is that ODL students have a limited access to such resources. Since SSS is considered to be the pillar of ODL, resources make positive connections with students' knowledge, experience, and identity. Besides, resources and support in ODL can be accessed through technology. It is for this reason why students need to develop digital knowledge and skills in order to excel on their academic work.

### 5.3.2.3 Theme 3: Information and communications technology

Libraries, computers and networks play a significant role in education today. In a field of ODL, ICT with its associated 4IR digital skills and social media platforms supported by internet are the key to education.

#### i) Digital skills

Lack of digital skills was also mentioned as one among the challenges facing ODL students. Participants indicated that some students who came to the college had limited computer skills while some did not have knowledge of computers at all. Despite the Department of Basic Education offering Computer Applications Technology (CAT) to learners in grade ten to grade twelve, it seems that most students who register in colleges seem to never have been exposed to it. By contrast, students who had done CAT in high schools joined the college with some computer skills and knowledge.

#### ii) Connectivity

Connectivity is still a challenge to various locations of South Africa especially in poor rural areas in the countryside because they are not yet electrified. The serious challenge is the absence of ICT infrastructure which at times is caused by high rate of crime which includes electricity cable theft and network towers relying on electricity. Load shedding is a serious disturbance to students since network is now relying on electricity supply.

#### iii) ICT infrastructure

It is quite clear that the internet is now the heart of education, particular in ODL. This implies that high speed internet connection is a vital requirement in education starting from when students are doing their online applications, registration process, writing examinations and using or accessing other forms of SSS. As a result, one cannot ignore the importance of ICT infrastructure across the country and internationally. Without proper ICT infrastructure, online communication which involves various platforms is impossible. The emergence of the 5<sup>th</sup> generation (5G) of mobile technology is an attempt to access high speed internet. Since the world is going digital,



human beings need to go digital too. The usage of electronic devices depends on the supply of electricity.

Currently, South Africa is undergoing a serious problem of scheduled power cuts locally called 'load shedding'. This problem with them is that they are done during schools' hours and therefore affects students' academic work negatively since their learning relies on electronic devices and network. Apart from power supply required by these devices for continuous operations, internet and other related Local Area Networks (LAN) also rely on continuous power supply. Distance education examinations are being conducted online which is an act that brings frustration among students when power goes off while they are busy with examinations for example.

#### iv) Device challenges

Lack of electronic devices such as laptops, iPad and tablets were identified as another challenge hindering students to access all forms of SSS that the institution provided. Participants mentioned that these devices were expensive and they were also targeted by thieves since they were portable. Even students who were employed were unable to afford such devices.

#### 5.3.2.4 Theme 4: Learning environment

A learning environment is referred to as a physical location and contexts where students learn. It plays a vital role in the lives of students. The creation of a conducive learning environment ensures a good platform that allows students to prosper in their academic performances. It is also important to note that the learning environment for ODL students differs from that of students who attend on campus.

#### i) Distance learning

Institutions that offer distance learning should engage technology on their daily operations but the challenge with the sampled college is that they relied only on WhatsApp groups to create interaction between students and lecturers. This seems to be not adequate for the process of teaching and learning. There is a variety of applications suitable for ODL that the college can choose from. The rapid transformation necessitated by the COVID-19 pandemic in the education sector

across the world came with new methods in which curricula could be delivered as well as challenges in the field (Ebaid, 2021), institutions need to adapt to the new methods.

Distance learning institutions tend to engage on online examinations, some they have regional offices and other venues where they conduct their contact examinations. COVID-19 forced other institutions to engage with online examinations. Challenges have been experienced by students during online examinations. Students were uncomfortable with such transition and as a result of technology related challenges it took some students about thirty minutes failing to start with their examination. Students had to master their digital skills before mastering the course contents. Some students were anticipated to travel in order to look for locations with good connectivity before starting with examinations. Participants indicated that technophobia is another factor that causes students attrition. Series of challenges associated with online challenges such as low internet speed, load shedding, and lack of computer skills among some were experienced.

#### ii) Unfavourable learning environment

Learning environments of students studying through ODL differs from that they have access to when on campus. Participants made it clear that numerous students were struggling with their studies because of various unfavourable learning environments they found themselves in. As a result, they were unable even to schedule time on which they could study and such leads to procrastination of assignments completion as well as studying. This eventually results in poor academic performance which also leads to stress and anxiety causing attrition. Some students could not study at home because the young siblings and their family houses were small and therefore there was not enough space for them to study.

Family members need to join hands and support students too. One way to do this would be to create a conducive learning environment that enables students to study. Such collaboration is also required among ODL students. As technology evolves, there is a plethora of online sophisticated platforms that are being introduced. Platforms such as Google Drive, Microsoft OneNote and many more are suitable online collaborations which can assist students to support each other academically and to promote interaction to conquer the problem of isolation.

The notion of time cannot be separated from learning environment. As mentioned in subsection 3.1.3.7 that ODL students who are parenting are anticipated to manage their time accordingly and share it between family, work and studies. Students who are not good in planning and in time management find it difficult to cope with their studies as they are expected to perform other family respective duties.

#### 5.3.2.5 Theme 5: Staff perceptions on academic support services

Data collected through interviews constitute that the college provides different forms of academic support to ODL students. Staff participants admitted that there were areas which needed more attention in the form of online platforms and various other technologies that could facilitate SSS.

##### i) Provision of academic support

Interviewed staff members perceived the provision of academic support as available but not sufficient. From the online applications available, the college did not use any of such resources. The college had recently introduced LMS which was new to lecturers and students. In fact, the LMS was neither used by lecturers nor students. Data revealed that students did not enjoy access to resources therefore the college should have used online resources which could be beneficial to students no matter their locations. LMS is another method used by institutions of higher learning that enables the delivery of learning content, resources and activities and also handle other administrative task. Data revealed a low rate of lecturers' interest on LMS.

##### ii) Effectiveness of academic support

The communication between students and college referred to in 2.6.2 as interaction between students and lecturers as well as between students with their peers was addressed by Holbert's theory of interaction and communication as a pillar of ODL. All forms of academic support required by students can only be attained through various forms of electronic communication. "Through communication with peers, students gain the opportunity to view opinions other than their own to perceive problems and challenges, especially in groups' discussion" (Kamarul Azla, Azman, Wan Mohd Azman, & Mohi, 2021: 132). Failure to utilise digital platforms that are available can hinder access of students to this support and can increase attrition among students

involved in ODL. In their study entitled “Developing student support for open and distance Learning”, Paniagua and Simpson (2018) revealed low output rates could be explained by multiple reasons in an online learning and they insist on the fact that it is not easy to ignore the thought that the lack of student support may be an important factor. Parr (2013) concurs with these scholars by stating that the completion rate of students in an online learning is less than 10%.

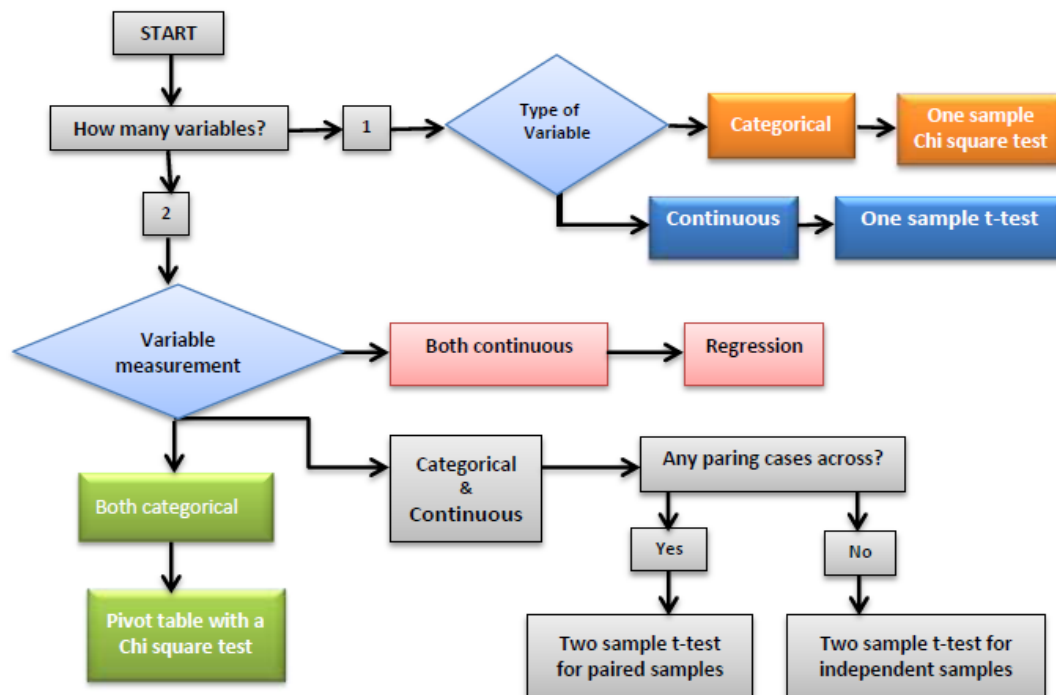
Institutions may provide support to students, but the researcher believes that accessibility is the most important aspect. Access to resources should be designed by each institution to enhance the academic potential of students. As data revealed that some students did not access services that were available at the college, it is a requirement for each institution to clarify how students can use and benefit from the support and what could be changed to make services more accessible and engaging. When it comes to the use of SSS provision, availability and accessibility need to be guaranteed by the institution concerned for the benefit of students. Therefore, availability, effectiveness and accessibility need to be guaranteed.

#### **5.4 QUANTITATIVE DATA ANALYSIS**

After the collection of all questionnaires from respondents, the researcher arranged them and assigned unique identifiers to each. In the process of quantitative data analysis and presentation, the researcher followed the structure of the questionnaire (Appendix F). Descriptive and inferential statistical analyses were employed by using computer application, Spreadsheet tables, graphs, pivots, chi-square, t-test, regression and ANOVA.

Information on support services was derived from student support frameworks and standards developed by several DE institutions such as UNISA, SAIDE and many more. Framework for student support, according to Dlamini, Rugube, Mthethwa-Kunene and Maphosa (2021: 1) “provides examples on key areas of the framework namely; orientation of new students, academic, psychosocial, technological, online learning and administrative support as well as support for vulnerable students such as those with disabilities”. Technological support relies on the question; “To what extent can college student use technology?” It is also important for the college to provide students with the latest digital skills so that they can apply such skills to access online

support available for them. Quantitative data analysis decision chart labelled Figure 5.1 was employed on numeric data analyses.



**Fig 5.1 Quantitative data analysis decision chart (Blake, 2013)**

Figure 5.1 shows the method followed by the researcher to analyse numeric data in terms of descriptive and inferential statistical analysis. This quantitative data analysis decision chart assisted the researcher to follow the relevant statistical tests for various items. Though ANOVA test was not mentioned on fig 5.1 decision chart but this test form part of analysis and was conducted in comparison of more than two means.

#### 5.4.1 Response rate

The total of 210 questionnaires was administered and the response rate was positive because it was far above 90%. A total of 195 questionnaires, making 93% response rate were returned fully and accurately completed. Table 5.3 elaborates on response rate for quantitative data collection.

**Table 5.3: Response rate**

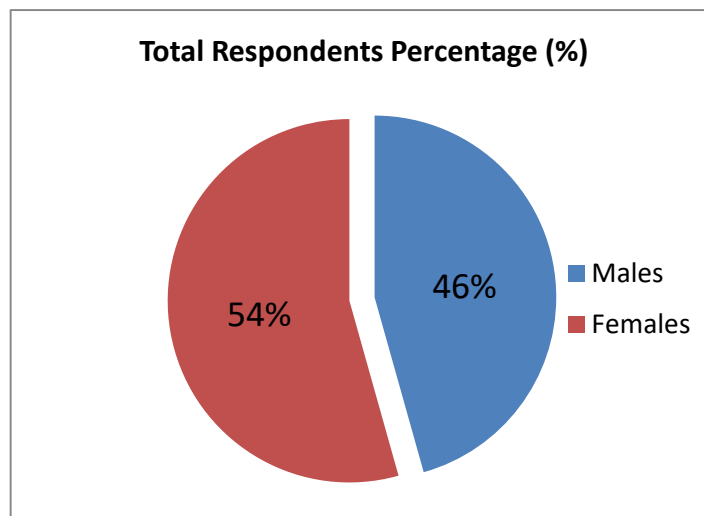
<b>N = 195</b>	<b>Female</b>	<b>Male</b>	<b>Grand Total</b>
African	102	77	179
Indian	4	5	9
White		7	7
<b>Grand Total</b>	<b>106</b>	<b>89</b>	<b>195</b>

Table 5.3 shows the response rate, which was counted as per returned questionnaires, totalling to 195 respondents made up of 106 females plus 89 males and distributed among the three ethnic groups. Tables 5.3 and 5.4 indicate distinct values between female and male. To determine female and male distribution, the test was conducted. The Chi-square test results of 0.067697834 (greater than 0.05) implies that the distribution in terms of gender was even or statistically significant. Table 5.4 presents the response rate proportion.

**Table 5.4: Response rate percentage**

<b>N = 195</b>	<b>Female %</b>	<b>Male %</b>	<b>Grand Total %</b>
African	52%	39%	92%
Indian	2%	3%	5%
White	0%	4%	4%
<b>Grand Total</b>	<b>54%</b>	<b>46%</b>	<b>100%</b>

Figure 5.2 reports on respondents' gender distribution.



**Fig 5.2: Total gender-based participants in percentages**

Figure 5.2 shows that female respondents (54%) slightly exceed males (46%) by seven percent. Data from Figure 5.2 can be compared with the data presented in Table 5.3 which shows the proportion of male and female respondents. Details of respondents are addressed in the following biographic section.

#### 5.4.2 Description of respondents' biographic data

This section presents biographic data analysis in a descriptive manner. Biographic data are concern with socio-economic data expressed statistically, including gender, racial composition of population, age group, education level, employment and more. For the purpose of this study, biographic analysis was based on gender, age distribution of the respondents, ethnicity, field of study, and duration on study.

##### 5.4.2.1 Age group distribution

The ages of the respondents are presented in Table 5.5.

**Table 5.5: Age distribution**

N = 195						
Age Distribution	Female	%	Male	%	Total	Total %
20-29	32	16%	37	19%	69	35%
30-39	49	25%	26	13%	75	38%
40-49	19	10%	19	10%	38	19%
50-59	6	3%	7	4%	13	7%
<b>Grand Total</b>	<b>106</b>	<b>54%</b>	<b>89</b>	<b>46%</b>	<b>195</b>	<b>100%</b>

Table 5.5 shows respondents' age distribution of 195 subjects (N=195) in four different categories from the age of 20-29 up to 50-59 with the mean of 34.2 and standard deviation of 9. The young respondent was 20 years old and 56 years for eldest.

Table 5.6 shows descriptive statistics of respondents' age group.

**Table 5.6: Age group descriptive analysis**

<i>Age group</i>	
Mean	34.2
Standard Error	1
Median	33
Mode	33
Standard Deviation	9
Sample Variance	75

Kurtosis	-1
Skewness	0
Range	36
Minimum	20
Maximum	56
Sum	6673
Count	195
Largest(2)	54
Smallest(2)	21
Confidence Level (95%)	1.224052521

The descriptive analysis in Table 5.6 shows the mean of 34.2 and the range of 36, standard deviation of 9 and variance of 75.11092 of respondents' age descriptive analysis. This variance (75.11092) indicates high variation of age distribution from the mean (34,2) and frequency of 195.

#### 5.4.2.2 Gender and work status

Table 5.7 indicates the respondent's work status in terms of gender.

**Table 5.7 Work status**

Studying/Working N = 195	Studying & working	Studying only	Grand Total
Female	87	19	106
Male	64	25	89
<b>Grand Total</b>	<b>151</b>	<b>44</b>	<b>195</b>

Table 5.7 shows that out of 195 respondents, 151 of them were employed yet they were studying and 44 were only studying. The Table further indicates that 87 female were working and studying, 19 of them were studying only. These analyses also show that 64 males were working and studying and 25 are only studying. Table 5.8 displays the respondents work status in percentages.

**Table 5.8: Work status in percentages**

Studying/Working % N = 195	Studying & working	Studying only	Grand Total
Female	45%	10%	54%
Male	33%	13%	46%
<b>Grand Total</b>	<b>77%</b>	<b>23%</b>	<b>100%</b>



Table 5.8 shows work status in percentages. This Table show that 77% of respondents were studying and working while 23% focused on their studies only. Once more, 45% females were working and studying, 10% were studying only. The Table also show 33% of working and studying respondents and working males of 23% studying only.

#### 5.4.2.3 Gender and field of study

Table 5.9 presents the respondents' choice of study in terms of gender.

**Table 5.9 Gender vs choice of study**

Course of study:						
Gender	Business Studies	Engineering	Human resources	Other	Public Admin	Grand Total
			%			
Female	20	15	33	4	34	106
Male	26	27	15	6	15	89
<b>Grand Total</b>	<b>46</b>	<b>42</b>	<b>48</b>	<b>10</b>	<b>49</b>	<b>195</b>

The distribution of values on course selection show that the highest preference of students who studied Engineering were males in Table 5.9, besides, females preferred Human Resources and Public administration, with 33 and 34% respectively.

Table 5.10 presents the percentages of respondents' study choice in terms of gender. The results shown in Table 5.10 are not described....

**Table 5.10: Gender vs choice of study in percentages**

Course of study						
Gender	Business Studies	Engineering	Human resources	Other	Public Admin	Grand Total
			%			
Female	10	8	17	2	17	54
Male	13	14	8	3	8	46
<b>Grand Total</b>	<b>24</b>	<b>22</b>	<b>25</b>	<b>5</b>	<b>25</b>	<b>100</b>

Table 5.11 presents the results of the underlying relationship between the two categorical variables which were gender and the course of study. This relationship was tested by means of a chi-square.

**Table 5.11 Chi-square testing association between gender and study choice**

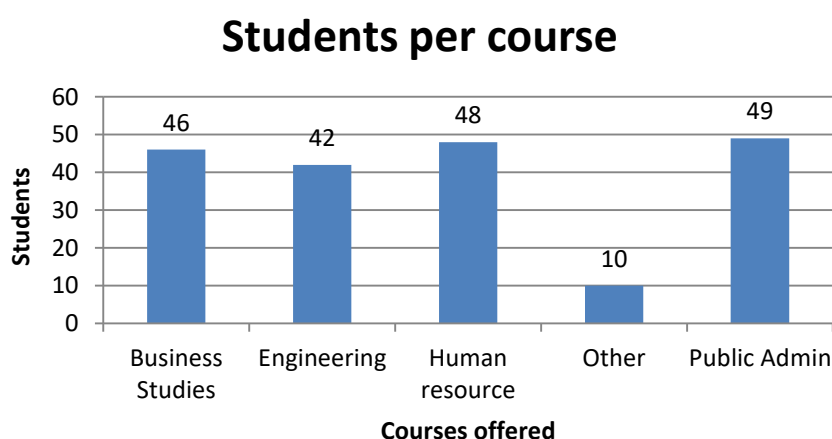
Row Labels	Business Studies	Engineering	Human resources	Other	Public Admin	Grand Total
Female	20	15	33	4	34	106
Male	26	27	15	6	15	89
<b>Grand Total</b>	<b>46</b>	<b>42</b>	<b>48</b>	<b>10</b>	<b>49</b>	<b>195</b>

To test if an association existed between gender and course of study, chi-square was conducted and the p-value shown statistical insignificance results of 0.001631495 which implies that there was no association between these two variables (gender and choice of study).

**Table 5.12 Students enrolled per course**

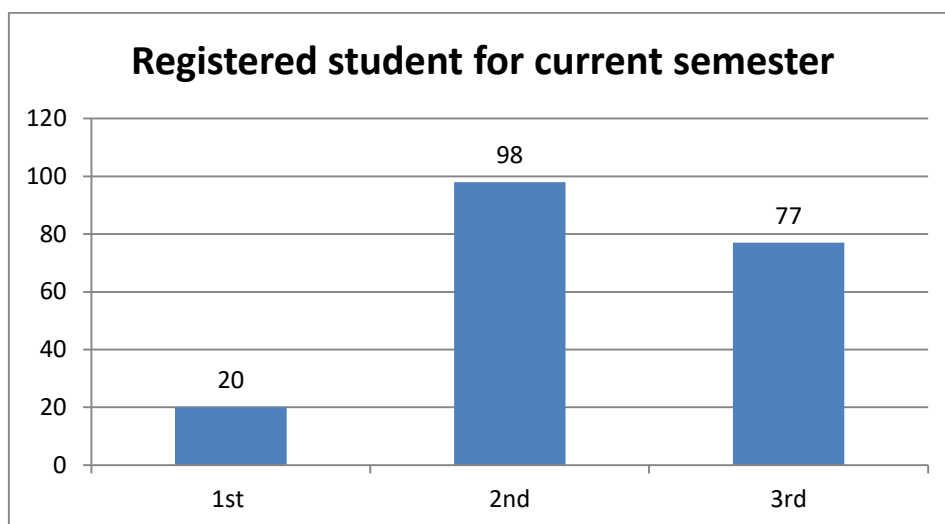
Course of study	Enrolled Students	Percentages
Business Studies	46	23
Engineering	42	21
Human resources	48	25
Other	10	5
Public Admin	49	26
<b>Grand Total</b>	<b>195</b>	<b>100</b>

Table 5.12 shows the frequency of students' current distribution per course enrolled for in the current academic year.



**Fig 5.3 Number of students per course**

Table 5.12 and Figure 5.3 show the number of students that had enrolled for each course. Public Administration had the highest enrolment of 26%, followed by Human Resource Management with 25%, and Business Studies with 23%. Other courses not mentioned on the questionnaire revealed the lowest with 10% while engineering ranked second-lowest with 42% of students enrolled. The chart Figure 5.3 presents a number of students registered for current term.



**Fig 5.4 Number of students in a current semester**

Figure 5.4 shows several students (N = 195) for the second semester of 2022. The chart indicates majority (98) of sampled respondents were doing second semester/ trimester, followed by 77 who doing third semester/ trimester. The least (20) students doing their first semester/ trimester.

#### 5.4.2.4 Application preference and work status

Nowadays, distance learning is offered through various methods of technology which include online applications such as Zoom, Google classroom, video conference, Microsoft teams and many more. It is the institution's choice to opt for any among above mentioned online platforms. The respondents were given four platforms for online learning to make their choices on applications. The raw results are presented as percentages are shown in Tables 5.13 and 5.14.

**Table 5.13 Application preference and work status**

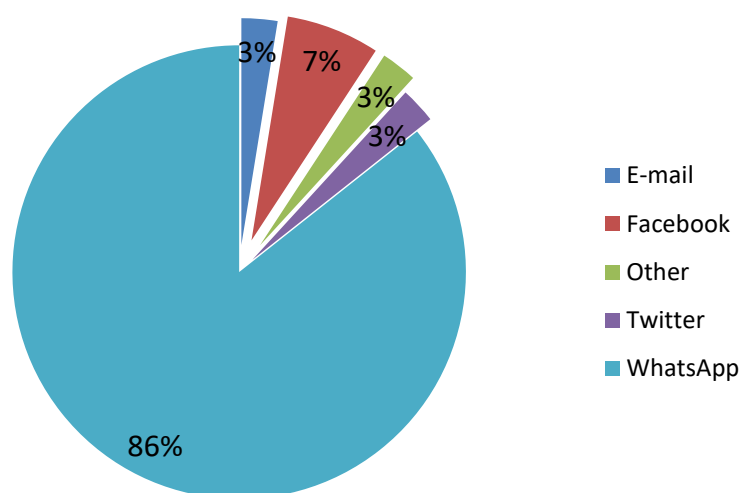
App preference N = 195	E-mail	Facebook	Other	Twitter	WhatsApp	Grand Total
Studying & working	4		4	5	138	151
Studying only	1	13	1		29	44
<b>Grand Total</b>	<b>5</b>	<b>13</b>	<b>5</b>	<b>5</b>	<b>167</b>	<b>195</b>

Table 5.14 presents the respondents preferences of online platforms.

**Table 5.14 Application preference and work status in percentages**

App preference % N = 195	E-mail	Facebook	Other	Twitter	WhatsApp	Grand Total
						%
Studying & working	2	0	2	3	71	77
Studying only	1	7	1	0	15	23
<b>Grand Total</b>	<b>3</b>	<b>7</b>	<b>3</b>	<b>3</b>	<b>86</b>	<b>100</b>

Table 5.13 shows virtual educational platforms or applications preferred by respondents. Table 5.14 displays the same data analysis in percentages. As shown in these two tables, the most preferred application was WhatsApp with 86% while e-mail, Facebook, Twitter and other share only 14% of preference. For further clarity, pie chart (Figure 5.5) next displays these data in chart slices.



**Fig.5.5 Application preferences**

As indicated in Figure 5.6, at least 3% of respondents indicated that they preferred other applications which were not listed on the questionnaire. It is inferred and

concluded that 86% of respondents preferred WhatsApp just because it was mostly used by lecturers at the college. No respondent preferred the newly developed LMS which indicates that students were not familiar with, or it was not yet viable at the sampled college. Nevertheless, there were multiple online and collaboration applications that the college could opt for. Such online applications can be more suitable to student support than WhatsApp.

### 5.4.3 Administrative support

Administrative support is said to be one among vital support services ascertaining that students receive all documents they need starting from issuing of registration proofs, examination permits, keeping records, answering telephone calls for students' enquiries to printing of academic transcripts. An ANOVA test was conducted to check is the provision of this support was adequate.

**Table 5.15 Availability of administrative support**

ANOVA						
<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Between Groups	24.3	9	2.7	0.000303044	1	2.392814108
Within Groups	178192	20	8909.6			
Total	178216.3	29				

On the questions (Likert scale) attached to administrative support provision, an ANOVA test was conducted to assess if provision of administrative support was statistically significant. As shown in Table 5.15, the results shown a P-value of 1 which was greater than alpha (0, 05). The F-value was 0.000303044, this F-value was less than F-critical (2.392814108). These ANOVA results concludes that the provision of administrative support was statistically insignificant.

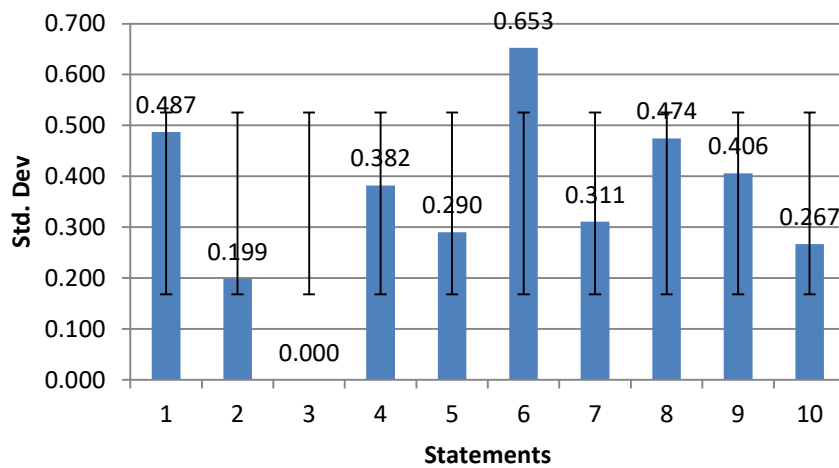
Table 5.16 shows a descriptive analysis of administrative support in terms of questionnaire statements, frequency, mean and Standard Deviation.

**Table 5.16 Scale: Administrative support**

	Statement	N	Mean	Std. Deviation
B1	The college provides us with full support during registration periods.	195	2.83	0.487
B2	The college assist us with course selection during registration periods?	195	2.96	0.199
B3	The college provides orientation to new/ fist year students.	195	3.00	0.000
B4	I use college portal to register for each semester.	195	2.12	0.382
B5	Administrative members are always helpful whenever we interact with them telephonically.	195	2.91	0.290
B6	Administrative staff has the required knowledge to answer students' questions.	195	2.32	0.653
B7	Administrative staff members are politely and amicably attending and assist students whenever they need help.	195	2.89	0.311
B8	Administrative staff members are quick on answering phone.	195	3.76	0.474
B9	Administrative staff members tend to attend quickly on my problems which pertain to my studies.	195	3.10	0.406
B10	Administrative staff members are more supportive to students than lecturers.	195	3.92	0.267

The standard deviation is calculated as the square root of the variance. If the data points are more from the mean, that implies a higher deviation within that particular data set or data point; the more spread out the data from the mean, the higher the standard deviation. The mean for statement B3 is 3.00 with standard deviation of 0.000 (grey highlighted) which indicates that data points were equal to the mean.

Figure 5.6 next present shows deviation from the means of administrative support.



**Figure 5.6: Standard Deviations for administrative support**

The column chart Figure 5.6 shows standard deviations. Standard deviation for statement number three is zero (0.000) which implies that responses or data values for this statement were equal to the mean. Data value number two follows data value number three in dispersion with standard deviation of 0.199. Besides, standard deviation for data point number six is 0.653 and that indicates high variation from the mean for this statement.

#### 5.4.4 Resources

Evolving delivery of services in the education sector and design advances students learning, therefore innovative resources which are in line with current technology play a vital role in curriculum delivery. This section provides analyses for student's access to education resources which includes library facilities, computers and connectivity to mention few.

**Table 5.17 Scale: Access to resources**

Statement Number	Statement	Scales				
		Strongly Agree	Agree	Disagree	Strongly Disagree	Frequency
C1	As a student I enjoy full access to college internet?	0	0	165	30	195
C2	The college give us full access to library at all times?	0	0	14	181	195

C3	Students enjoy anytime access to college resources such as computer venues.	0	0	4	191	195
C4	I am able to access college Wi-Fi connectivity using my own devices?	0	0	6	189	195
C5	The college provides tutors to assist students with their studies.	0	0	0	195	195
C6	Students are able to access examination results online.	173	21	0	0	195
C7	The college avail previous examination question papers and other supportive material to students for examinations preparation.	0	195	0	0	195
C8	Lecturers prepare study guides that simplify the subject contents.	0	0	10	185	195
C9	The college avails communication platform for students to interact with each other.	0	0	185	10	195
C10	The college avails online lessons to be accessed by students at any time.	12	167	16	0	195
C11	There college weekends contact sessions are supportive and very fruitful.	11	184	0	0	195
C12	The college allows students to use its resources at anytime they need.	0	0	0	195	195
C13	The college website is zero rated ( <i>does not need data</i> ), we access it freely.	0	0	8	187	195
C14	As students, we have full access to college resources, such as computer venues, internet and library services.	0	0	180	15	195
C15	The college has an orientation programme and this also assist students with digital skills.	0	0	183	12	195

Table 5.17 shows a Likert scale response pertaining to access to college resources. Respondents had to rate their access to the college resources in a Likert scale method. The rating shown in the Table responses indicates that students did not have access to the resources offered by the college. These resources include inter alia access to the library, computer venues, internet access and more. Table 5.18 below show the same scales shown by Table 5.17 in percentages. The college did not provide physical access to resources; therefore this should be done electronically on college website. Such would have offered students an opportunity to develop the skills that they needed in order to manage their studies.



**Table 5.18 Access to resources percentage distribution of the responses**

Statement No	Agree	Disagree	Strongly Agree	Strongly Disagree	Grand Total
			%		
Q1	0	85	0	15%	100%
Q2	0	7	0	93%	100%
Q3	0	2%	0%	98%	100%
Q4	0%	3%	0%	97%	100%
Q5	0%	0%	0%	100%	100%
Q6	11%	0%	89%	0%	100%
Q7	100%	0%	0%	0%	100%
Q8	0%	5%	0%	95%	100%
Q9	0%	95%	0%	5%	100%
Q10	86%	8%	6%	0%	100%
Q11	94%	0%	6%	0%	100%
Q12	0%	0%	0%	100%	100%
Q13	0%	4%	0%	96%	100%
Q14	0%	92%	0%	8%	100%
Q15	0%	94%	0%	6%	100%

Tables 5.17 and 5.18 are interrelated. Table 5.17 shows a response scale from questionnaires thus Table 5.18 converted the same responses of Likert scales into percentages with regard to access to resources. Statements number 9, 14 and 15 shows that more than 90% of the respondents disagreed. A strongly disagree response of 100% is shown by statements number 5 and 12 respectively while more than 90% is also shown by statements number 2, 3, 4, 8 and 13 respectively. These responses indicate that students did not get access to college resources.

To check the dispersion of data from the central one (mean), descriptive analysis was conducted. The standard deviation displayed on Table 5.19 and on Fig 5.6 show variety of dispersion ranging from zero, close or equal to the mean to 0.379 (highest variation). Table 5.19 was testing an association between two means for statement number 12 and statement number 13 respectively. The two-sample assuming unequal variances t-test was conducted. The high t-score in this type of test indicates the large difference that exists between two sample tests yet the small one show that there is similarity between two sample sets.

**Table 5.19: t-test: Two-Sample Assuming Unequal Variances**

	Q12	Q13
Mean	4	3.958974359
Variance	0	0.039545334
Observations	195	195
Hypothesized Mean Difference	0	
Df	194	
t Stat	2.88087924	
P(T<=t) one-tail	8	
t Critical one-tail	0.00220595	
P(T<=t) two-tail	2	
t Critical two-tail	1.65274597	
	7	
	0.00441190	
	4	
	1.97226753	
	3	

The t-test results shown on Table 5.19 indicate an equal means of 4 for statement or question 12 and 3.958974359 for statement 13 respectively with a variance of zero and 0.04. The two-tail p-value of 0.004411904 had shown statistical significance between these two means.

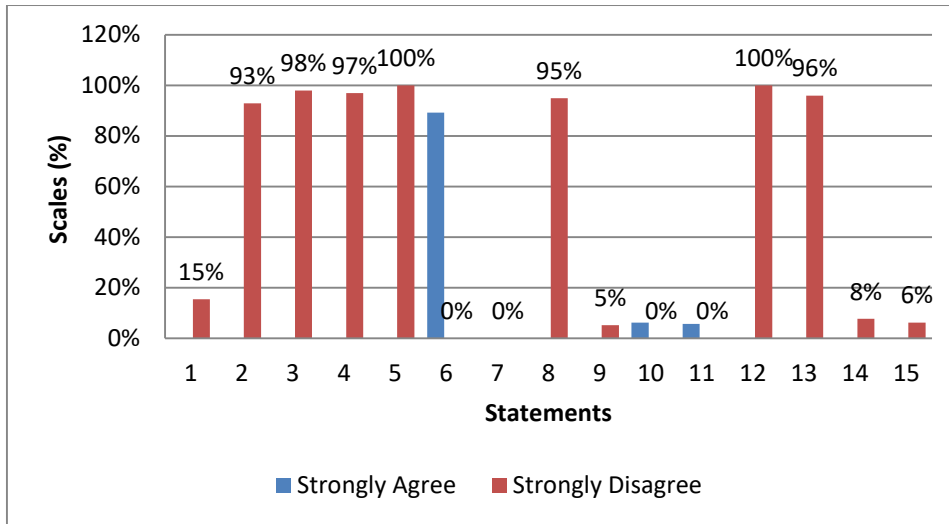
Table 5.20 presents the means and standard deviations from each data set:

**Table 5.20: Scale: Access to resources data dispersion**

Statement Number	Statement			
		N	Mean	Std. Deviation
C1	As a student I enjoy full access to college internet?	195	3.15	0.362
C2	The college give us full access to library at all times?	195	3.93	0.259
C3	Students enjoy anytime access to college resources such as computer venues.	195	3.98	0.142
C4	I am able to access college Wi-Fi connectivity using my own devices?	195	3.97	0.173
C5	The college provides tutors to assist students with their studies.	195	4.00	0.000

C6	Students are able to access examination results online.	195	1.11	0.311
C7	The college avail previous examination question papers and other supportive material to students for examinations preparation.	195	2.00	0.000
C8	Lecturers prepare study guides that simplify the subject contents.	195	3.95	0.221
C9	The college avails communication platform for students to interact with each other.	195	3.05	0.221
C10	The college avails online lessons to be accessed by students at any time.	195	2.02	0.379
C11	There college weekends contact sessions are supportive and very fruitful.	195	1.94	0.231
C12	The college allows students to use its resources at anytime they need.	195	4.00	0.000
C13	The college website is zero rated ( <i>does not need data</i> ), we access it freely.	195	3.96	0.199
C14	As students, we have full access to college resources, such as computer venues, internet and library services.	195	3.08	0.267
C15	The college has an orientation programme and this also assist students with digital skills.	195	3.06	0.241

Respondents were asked to rate access to college resources through four Likert- scale responses. Table 5.20 shows statistical analysis of resources in terms of the mean and standard deviation and statements for access to resources are presented in a frequency of 195. Statement number five, seven and twelve had shown the mean of 4.00, 2.00 and 4.00 respectively with a standard deviation of 0.000 each which implies common responses equal to the mean of each statement. Both statements number five and twelve show 100% disagree scales.



**Fig 5.7 Strongly Agree vs Strongly Disagree scales**

Figure 5.7 also indicates dominance and high percentages of “Strongly disagree” compared with “Strongly agree” with regard to resources access. Strongly disagree is of high percentages, indicating inaccessibility of respondents to college resources. To test the correlation between “Positive” and “Negative” connotation scales converted into numeric data, the results displayed a weak and negative correlation among these scales ranging within -0.08453.

Pearson correlation results indicated that there was no relationship among the variable tested. These results are supported by the display of column graph in Figure 5.7. As shown in Figure 5.7, strongly disagree was dominant in ten ratings of fifteen Likert scale indicating that access to resources is challenge for students.

**5.4.5 Efficiency of student support**

This section provides further analysis of predictor variable with regards to how they related to dependent variable. Regression and correlation analysis were used to determine how significant the relationship between the predictor variable and the dependent variable were. Regression shows the nature of variables relationship and extends its results to correlation.

**Table 5.21 Efficiency of SSS regression analyses**

<i>Regression Statistics</i>	
Multiple R	0.741375255
R Square	0.549637269
Adjusted R Square	0.324455903
Standard Error	104.1742321
Observations	10

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Sign F</i>
Regression	3	79466.77617	26488.92539	2.440864799	0.162269348
Residual	6	65113.62383	10852.27064		
Total	9	144580.4			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>
Intercept	162.2394216	357.6828454	0.453584575	0.666071131
Admin support	1.017524852	0.510923629	1.991540016	0.093516241
Resources	0.515348582	0.222533843	2.315821152	0.059790157
SSS Efficiency	0.415303372	0.302172417	1.374392062	0.218445578

As part of inferential statistics, a regression analysis was conducted to determine how significant is the relationship between the predictor variable and the dependent variable is.

In this analysis, the p-value was greater than the significance level (0.05) across all variables and these data indicates that there was not statistically significance evidence in this sample.

The regression output shown in Table 5.21 also indicates F significance level of 0.162269348 which was greater than 0,05 significance which support the above analysis, indicating lack of statistical significance. The regression analysis showed an adjusted R square of 0.324455903 which is equivalent to 32%.

To provide information about the efficiency of SSS, respondents were asked to rate the level of their agreement with four Likert scale statements. These statements and results are shown in Table 5.21. Likert scale responses were shown using percentages.

**Table 5.22 Student support scale**

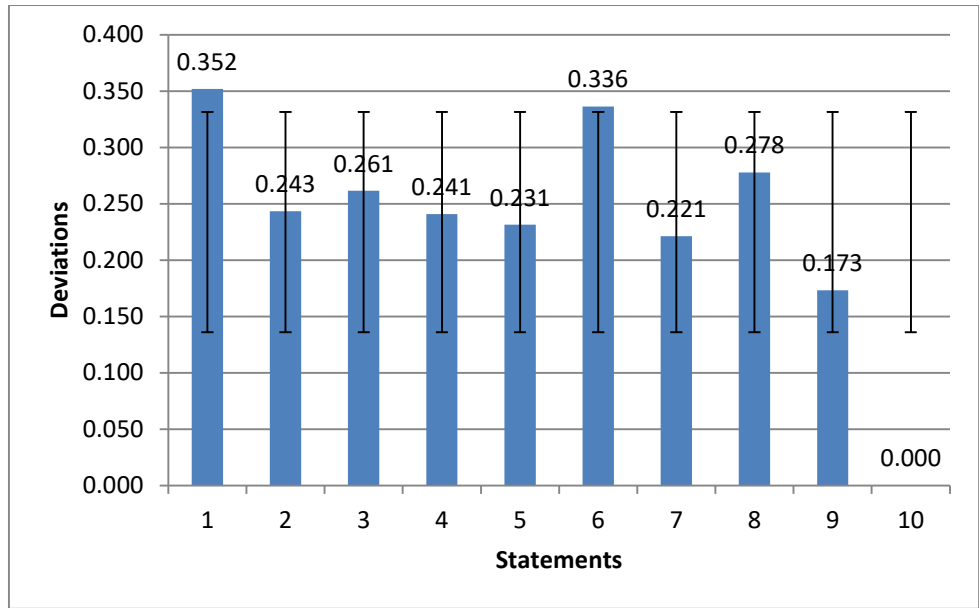
Scales	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
Agree	0%	6%	94%	0%	0%	11%	5%	92%	97%	0%
<b>Disagree</b>	<b>94%</b>	<b>94%</b>	<b>5%</b>	<b>6%</b>	<b>6%</b>	<b>88%</b>	<b>0%</b>	<b>3%</b>	<b>0%</b>	<b>0%</b>
Strongly Agree	2%	0%	0%	0%	0%	0%	95%	5%	3%	100%
<b>Strongly Disagree</b>	<b>4%</b>	<b>1%</b>	<b>1%</b>	<b>94%</b>	<b>94%</b>	<b>1%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>
Grand Total	100	100	100	100	100	100	100	100	100	100%

On the questions based on SSS provision efficiency, the analyses on Table 5.22 show 94% disagree for question one and question two, same percentage (94%) for question four and five “Strongly disagree” scale. This implies that respondents were not satisfied with the support they receive from the college or the support is not efficient. Table 5.23 reports on the mean and standard deviation of two feedback variables.

**Table 5.23 Scale: Feedback**

	Statement	N	Mean	Std. Deviation
D9	Lecturers provide us with motivational assessment feedback.	195	1.97	0.173
D10	Motivational feedback helped me to improve my performance on assessments followed.	195	1.00	0.000

Table 5.23 test a relation between motivational feedback and students’ performance which was addressed by statements D9 and D10 on the questionnaire. The mean of 1.97 and standard deviation of 0.173 was a result on statement which was based on motivational feedback provision. More statistical analysis for these two statements was extended to Figure 5.8 next.



**Fig 5.8 Feedback as part of SSS**

Fig 5.8 shows frequency of 195, focusing on statement number nine and ten statistical analyses. The mean for statement number ten was 1.00 with standard deviation of 0.000 and implied that all data set for statement number ten were equal to the mean. All respondents selected common scale “Strongly Agree” on the question or statement number ten: *“Motivational feedback helped me to improve my performance on assessments followed”*.

To strengthen these results, a correlation test was also conducted to test if variables on statement number nine and ten do correlate. Statement number nine assessed whether students receive motivational feedback from lecturers while statement number ten asked if motivational feedback does optimise students’ academic performance or not. Correlation uses statistical analysis to produce results that describes the relation of two variables. If the correlation efficient is closer to one (1) or closer to negative one (-1) it indicates that the two variables are related, if it is closer to zero, it indicates that there is no correlation between variables.

**Table 5.24 Correlation**

	Statement 9	Statement 10
Statement 9	1	
Statement 10	0.998656026	1

Table 5.24 shows strong and positive correlation results of 0.998656026 (closer to one) between these variables based on motivational feedback and academic performance enhancement. This indicates that motivational feedback to students was crucial to improve their performance.

#### 5.4.6 Academic support

Despite the fact that services are inseparable, but this section provides analyses that mostly pertain to pedagogic matters. In these sections respondents were asked to rate the provision of academic support using Likert scale rating.

**Table 5.25 Scale: Academic support scales**

Statement Number	Statement	Scales				
		Strongly Agree	Agree	Disagree	Strongly Disagree	Frequency
E1	The college has an improved academic support provided to open learning students.	0	0	195	0	195
E2	Academic support is effective and sufficient.	0	0	174	21	195
E3	The college portal is available and very useful.	9	165	19	2	195
E4	The college online registration is user friendly (easy to use).	0	24	171	0	195
E5	The college has a strategy to deal with long queues during registration/enrolment periods for students' convenience.	0	7	188	0	195
E6	SSS members as a structure set to give support to students are always available when we need them and ready to assist.	0	0	8	187	195
E7	Lecturers are always helpful, and they respond quickly when we call or e-mail them.	0	6	183	6	195



E8	The support services college provides meets all our expectations as students.	0	0	7	188	195
E9	The college tend to organise students' interaction through webinars	0	0	0	195	195
E10	The college provides students with laptops or tablets.	0	0	10	185	195

Table 5.25 indicates 9 (0.9 mean) “Agree” and 202 (20.2 mean) “Strongly agree” statements, totalling to 211 as opposed to 955 (95.5 mean) who “Disagree” plus 784 (78.4 mean) who “Strongly disagree” statements totalling to 1739 which shows a significance difference between “Agree” and “Disagree” scales.

**Table 5.26 Academic support provision presented in percentages**

Statement No	Statement	Strongly Agree	Agree	Disagree	Strongly disagree
E1	The college has an improved academic support provided to open learning students.	0%	0%	20%	0%
E2	Academic support is effective and sufficient.	0%	0%	18%	3%
E3	The college portal is available and very useful.	100%	82%	2%	0%
E4	The college online registration is user friendly (easy to use).	0%	12%	18%	0%
E5	The college has a strategy to deal with long queues during registration/enrolment periods for students' convenience.	0%	3%	20%	0%
E6	SSS members as a structure set to give support to students are always available when we need them and ready to assist.	0%	0%	1%	24%
E7	Lecturers are always helpful and they respond quickly when we call or e-mail them.	0%	3%	19%	1%

E8	The support services college provides meets all our expectations as students.	0%	0%	1%	24%
E9	The college tend to organise students' interaction through webinars	0%	0%	0%	25%
E10	The college provides students with laptops or tablets.	0%	0%	1%	24%
<b>Grand Total</b>		<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

An uneven rating of academic support provision is presented on Table 5.26 with the college portal only scoring 100% where all respondents shown “Strongly Agree” on its accessibility and efficiency. Only 21 respondents (10.82%) show positive connotation as opposed to 174 respondents (89.18) of negative scaling.

To test the significance level of academic support as provided by the college, an ANOVA was conducted as shown in Table 5.27 below.

**Table 5.27 Academic support analysis of variance**

SUMMARY						
<i>Groups</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>	<i>Std. Deviation</i>	
Strongly Agree	10	9	0.9	8.1	2.846	
Agree	10	202	20.2	2645.06667	51.430	
Disagree	10	955	95.5	8416.27778	91.740	
Strongly Disagree	10	784	78.4	9064.26667	95.206	

ANOVA						
<i>Source of Variation</i>	<i>SS</i>	<i>do</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Between Groups	61694.1	3	20564.7	4.085625325	0.013526116	2.866265551
Within Groups	181203.4	36	5033.428			
Total	242897.5	39				

Table 5.27 shows an ANOVA for academic support. The purpose was to test an association between variable responses of academic support provided through four Likert-scale consists of negative connotations (Disagree & Strongly disagree) and positive connotations (Strongly Agree & Agree) scale in order to determine the

provision of academic support significance level. The results showed that two standard deviations were greater than the mean which indicates uneven distribution of the data. The F-value of 4.085625325 which was greater than F critical value of 2.866265551 indicates statistically significance. The results are supported by p- value of 0.013526116 (1%) which was less than the p-value of 0.05 (5%).

T-test was also conducted to rate the relationship between academic support provision and its efficiency.

**Table 5.28 t-test analysis t-Test: Paired Two Sample for Means**

	<i>Variable 1</i>	<i>Variable 2</i>
Mean	32.89230769	24.79487179
Variance	0.560507534	0.699973566
Observations	195	195
Pearson Correlation	0.030385376	
Hypothesized Mean Difference	0	
df	194	
t Stat	102.2716585	
P(T<=t) one-tail	5.1339E-171	
t Critical one-tail	1.652745977	
P(T<=t) two-tail	1.0268E-170	
t Critical two-tail	1.972267533	

Table 2.28 presents the t-test analysis, testing the relationship between academic support provision and the efficiency. The t stat results of 102.2716585 and two-tail p-value of 1.0268E-170 (0%) indicate that there no statistical significance between these two means of 32.89230769 for variable one and 24.79487179 for variable two.

## 5.5 DATA INTERPRETATION

Data interpretation is defined by Creswell (2014) as steps taken by a researcher that form larger meaning about the phenomenon. This includes personal views, expediciencies and findings from previous studies revealed by desktop research. Data interpretation is also defined by Calzon (2022) as the process of using various analytical methods to review data and arrive at relevant conclusion. Since this study used mixed methods, qualitative data were analysed thematically through coding, recorded semi-structured interviews were transcribed verbatim and these were orderly

structured into certain themes and categories. During analysis, the researcher listened to audio- recordings of interviews. The responses of the participants were used to construct a new knowledge about academic support provision that can assist institutions to optimise their services for students. Owing to the fact that this was a mixed methods study, both non-numeric and numeric data were treated equally and both data types received equal priority (Terrell, 2012).

Though qualitative and quantitative data were analysed sequentially in this chapter, both types of data were finally merged. As mixed method research, qualitative and quantitative data were analysed distinctively and interpreted concurrently. In this process, the researcher categorised, manipulated, and summarized the data with an intention of answering the research questions. Different tests were conducted in numeric data analysis.

The focus of SSS is to provide academic support to students in order for them to excel and complete their academic work. It offers academic support that includes administration support, access to resources, creation of good learning environment and reliable forms of communication that minimises transactional distance between students and instructors.

Just like the desktop research, the empirical data revealed that students faced challenges with regards to accessing resources. These findings are in line with Ayonmike (2016) whose findings constitute that on the implementation of TVET curriculum in South Nigeria, material resources are of poor quality and quantity. Geda (2016) also found that lack of resources among Ethiopian TVET colleges compromises the provision of SSS as well as student success. Sometimes the college did not provide other forms of support needed by students. Various forms of support which included availability of resources and accessibility, time management skills, mental health, learning styles and more, both types of data indicated that students did not have adequate access to such support. This implies that the college needed to do more in an attempt to optimise the provisions on academic support. The college did not offer mental or psychological support to ODL students which is said to be part of academic support. The SSS structure in collaboration with student affairs did not support ODL students but only full-time students benefited from these structures.

Services such as academic support need to focus on increasing the completion rate and to reduce student attrition rate. The findings for this study constitute that SSS needed to be improved. These findings concurred with Arko-Achemfuor (2017) findings that recommend an increase of support services and insist on the importance of academic and support staff training in UNISA as well as students training on using the support services available to them.

The concept ODL is not new to various countries of the world, however the literature revealed that the enrolment of students for such programmes are increasing drastically since numerous countries had undergone lockdown as a result of the pandemic, COVID-19. The best method to keep an increasing number of students to their learning programmes and to ascertain that they complete their qualifications is to provide them with comprehensive support. The study revealed that lack of comprehensive support is a problem causing stress and students' failure to complete their qualifications in a designated period or sometimes results to attrition. Julal (2013) also find that each student in higher institution of learning is more likely to experience series of stressors. These forms of stress cannot be conquered if students are not getting relevant support from their institutions and from their own families. Qualitative data for this study revealed that the support is available for students, but quantitative data had shown that students are unable to access such services.

Data also revealed that academic support that the college provided was neither efficient nor sufficient. There is an omission of vital support which includes tutoring, exit support, psychological support and exclusion of latest technology which promotes interaction between students and lecturers. This has been revealed by the fact that the college still relied on WhatsApp (see 5.4.2.4) out of a number of options on modern online platforms they could choose from in order to simplify and to promote interaction. In this case of the selected college, SSS structure did not work for ODL students, but only full-time students were benefiting from this structure.

It is quite evident that institutions offering distance learning need to reach out to students who require personal counselling as well as those who require career counselling as all these forms part of academic support. Students need to be offered with such services throughout the period of their qualifications. Computer skills cannot

be ignored in this process since some students are unable to access available support largely because they lack digital skills. The finding of this study revealed that students did not have computing skills which made it difficult if not impossible for them to access SSS that was available online. These findings are in line with Shandu-Phetla (2017) who finds that the use of good quality technologies to support students in distance learning is vital. Nyatsanza and Mtezo (2013) also find that ODL systems typically use computer-based technology to mediate learning.

Since the findings revealed that SSS as a structure did not cater for ODL student in a selected college, but only full-time students benefitted from this structure, therefore such structures need to expand their duties to give support to all students. The findings concurred with Muchineripi (2017) who found that this structure, SSS need to adopt academic achievement through the provision of a support system that address the challenges faced by students. It was also the findings of this study that some students tended to expect more than what the college provided in terms of support. These findings are in line with Makoe and Nsamba (2019) who find that student' expectations seem to be higher in the provision of support services while perceptions are lower.

Analysed data also constitute that the sampled college used blended learning method for their ODL students but contact time was extremely limited to weekends only. As mentioned in chapter two subsection 2.3.3 that blended learning provided flexibility in education and could be counted among student support services as it was intending to provide students with different techniques to understand the course content Dewi, Ciptayani, Surjono and Priyanto (2018). Qualitative data collected through interviews revealed that the participant lecturers tended to use online platforms to support their students, besides they also used face to face contact with their students during weekends. Since this study was about student academic support, the transactional distance theory together with the theory of interaction and communication were employed. The researcher used these theories alongside the provision of academic support.

The theory, transactional distance was applied in this study as a means of explaining the importance of minimising the distance between students and instructors while the interaction and communication theory was also employed to explain the importance of

interaction in ODL. The results from both theories needed to solve the research problem by improving communication among students and instructors or even among students with their distance fellows.

The relevance of the theoretical frameworks was also indicated by virtue of the use of ICT to reduce the transactional distance via online communications. The findings shown in this study indicate the need for students to possess digital skills to gain and share knowledge with their peers, to improve their learning, to access online resources, and to achieve learning skills relevant for the 21<sup>st</sup> century. These theories also highlighted the weaknesses of the college ODL system of blended learning which relied mostly on face to face more than virtual method. The interaction and communication theoretical framework highlighted the necessity for students and instructors to acquire ICT related skills in order to enhance communication which would also minimise the distance of ODL. On contrary, the findings constitute that numerous students lacked the required digital skills.

These frameworks guided and assisted the researcher to understand and analyse the experiences of the employees of the college who were also involved in ODL in terms of student support. The same theories helped the researcher to analyse numeric data collected from students, the respondents in this research. Both theories together with the reviewed literature provided the foundation that supports the explanation of the data as presented in this chapter and the recommendations are made in chapter 6 to ascertain that the study findings are supported. The insights gained from theories helped the researcher to make a comparison between literature and empirical data which provided information to address the main research problem.

## **5.6 CONCLUDING REMARKS**

This study was motivated by the researcher's experience in higher education and over the years, noticed that students faced challenges and therefore proposed the key factors for optimising academic support services rendered to ODL students. Despite a number of published studies conducted pertaining to a variety of SSS, this single case study research was limited to academic support services but bearing in mind that services are inseparable. In an attempt to answer the research question, the researcher managed to access numerous sources with rich and reliable information in

relation to the phenomenon investigated. Comparing data obtained from secondary sources with primary data from study participants and respondents gave the researcher a clear picture of what transpires in student academic support services in ODL. This means that primary data were synthesised with secondary data and managed to produce results which are not extremely distinctive from studies of the common phenomenon. The study findings constitute that series of challenges are being experienced by distance students on their respective distance learning institutions including the sampled college, case studied in this research. The use of transactional distance theory synthesised with theory of interaction and communication, collaborated with pragmatic paradigm the researcher managed to describe staff and student's experiences and to shape and direct this study to the reliable findings.

## **5.7 CHAPTER SUMMARY**

Chapter five analysed qualitative and quantitative data distinctively and interpreted both data types concurrently. For analysing both data types, data coding for qualitative analysis, descriptive and inferential statistical analyses for quantitative data were employed. Both data types started with biographic description. This chapter provided a better picture as to how the findings of the empirical data unfolded from the data that had been collected. The findings of the data were collected revealed that the academic support the college provided to students was inadequate and was failing to meet the needs of the students. Descriptive and inferential statistical analysis which involved ANOVA, chi-square, correlation and regression were executed.

Chapter six presents the research findings, both qualitative and quantitative synthesised. These findings are followed by discussion and recommendations.



## **CHAPTER 6**

### **SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

#### **6.1 INTRODUCTION**

This research was driven by the main question: What are the key factors for optimising student academic support in ODL at a Technical Vocational Education and Training College, indicated in chapter one, section 1.5.1. In this final chapter which concludes this research, the summary of research findings, qualitative and quantitative findings were synthesized and presented. The recommendations and the need for further research based on the findings of the current study were also made. This was followed by delimitations set by the researcher and limitations experienced during the course of this study. The next section provides the summary of this research findings, study objectives were also reviewed under the same section.

#### **6.2 SUMMARY OF RESEARCH FINDINGS**

Qualitative studies are characterised by a search for social and cultural contexts which underline various behavioural patterns while quantitative studies on the other hand tend to look for correlation between variables, usually independent and dependent. This study utilised both approaches which made it a mixed method study. The motive was to obtain data that reveal experiences of the selected college participants, their perceptions and look for a relationship and differences in the academic support services offered to ODL students and other related variables. The latter aspect involved evaluating possible correlation between efficient provision of academic support and student's retention. The study constituted not one but a wide range of findings pointing to inefficiency of the academic support services provided to the students.

This study consists of six chapters, demarcated as follows: chapter one which introduced the study focusing on the background, applicability, the problem statement, the aim, objectives, and provision of the scope for the entire research. In spite of the study focusing on students' academic services, the background addressed all forms of student support services in distance education discipline, noting that services are inseparable.

Chapter two addressed student support services context in ODL by paying more attention to academic support. Two theories, transactional distance and the theory of interaction and communication which guided and formed the bases of this study were presented in this chapter. Other theories which were resonated with this study were also viewed however the two mentioned above were more suitable.

In the process of collecting secondary data, an extensive review of the existing literature concerning all forms of student support services in ODL formed part of chapter three. Numerous sources which include articles, books and previous studies related to the phenomenon were accessed. International and local studies and settings of the common phenomenon were also accessed. The literature reviewed under conceptual framework indicated that this phenomenon has been extensively studied yet the gap still exists.

The focus of chapter four was on research methodology which gave an explanation and justification of the techniques and instruments employed in data collection and analysis. A mixed approach was employed with an intention of obtaining narrative and statistical data from this study's participants. In social research, empirical data is obtained from study subjects, therefore population, sampling strategies and sample size were elaborated in chapter four.

Chapter five focused on data analysis and interpretation. This chapter reports on data collected during interviews were analysed through coding by using different themes. Data collected through questionnaires were quantitatively analysed through spreadsheet computer application, charts and tables supplemented with text gave clarity on what the study constituted. Descriptive and inferential analyses were found suitable for quantitative analysis. Various descriptive tests were conducted to test possible relationship and differences between variables. Research design and research methods, which are the techniques and tools used to gather primary data direct from participants and respondents are also incorporated in this chapter.

As a final chapter which concludes this research, the summary, conclusion and recommendations are discussed in chapter six. To give clarity of findings and analysis, key findings were also elaborated on the same discussion. Recommendations based on study findings, the need for further work, study contribution to the existing body of knowledge, delimitations, limitations and conclusion also form part of this chapter.

To refresh on the purpose of this study, it is important to recapitulate the study objectives stated in chapter one which were as follows:

- 6.2.1 To evaluate the accessibility of student support services rendered to ODL students.
- 6.2.2 To establish the perceptions of ODL students about academic support services rendered by a selected TVET college.
- 6.2.3 Explore factors that can contribute to the student's retention in their academic programmes throughout the period of their qualifications.
- 6.2.4 Assess computer skills among TVET students and to what extent can they use technology.

Objective number one was attended to and findings made it clear that the academic support services rendered by the selected college were not efficient. This was revealed by the data collected from students who were respondents in this study and registered for open learning at the college, and it was also supplemented by secondary data from literature which indicated that lack of effective student support in ODL field is an international problem. Based on literature, Simpson's (2013) study constitutes that the graduation rate in distance education, at the University of London is 15.7% and that of face-to-face mode is 61.5%. The difference between these two modes is of about 45% in favour of the conventional mode. According to Simpson (2013), graduations can be used to evaluate students' attrition and retention.

The perceptions of the students on the support services that were rendered by the college as addressed by objective two also constituted that the college was doing less than what was expected by the students. Findings revealed that students were dissatisfied with the way that the college rendered academic support services. Having to be assisted by staff personnel that were inexperienced in the field of open learning as well as the limited access to resources that students had were mentioned among other challenges being experienced by students.

Objective three which was more focused on the impact of academic services on completion of studies established a relationship between the time that students took to complete their studies and the provision of academic support services. Lack of efficient and sufficient support is among the causes of the extended time students take to complete their qualifications and dropout rate which cannot be divorced from students' attrition. This relationship is consistent with alternative hypothesis which sees a correlation between these two variables.

To quantify students' attrition rate and determine those who takes extended time to complete their studies was somehow a challenge since the institution studied did not avail all the documents the researcher was interested upon. Sánchez-Elvira Paniagua and Simpson (2018: 3) advocates that "there is a challenge associated with collection of data pertaining to student's drop out as institutions are obviously not keen for the publicity that adverse dropout rates might attract". As a result of this, objective number four encountered a challenge and was partially addressed.

In the assessment of students' knowledge and skills of ICT also addressed by forth objective, the findings constitute series of challenges being experienced by students on using modern digital technology for their education and on accessing support systems available for them. Lack of computer skills and poor ICT infrastructure in certain areas where students reside were described as stumbling blocks which hindered students' success. Expensive data bundles and expensive electronic devices were listed among the challenges in ODL discipline.

The researcher attempted to address the study's objectives which were mentioned in chapter one of this study. It is also believed that these were SMART objectives as the researcher used them to describe the purpose of this study. Through these objectives, the main aim of this study and questions were addressed.

There is a range of SSS provided by respective institutions of education and these services cannot be separated (Nsamba, 2016). The main purpose of SSS in education is to let students maximise their academic potential and to accomplish their academic prosperity. Moore's (1993) theory of transactional distance and Holmberg (1987) theory interaction and communication are the theories used as the basis for evaluating

the key factors for optimising student academic support services rendered to ODL students in an ODL TVET college. On the basis of these two theories of empirical study, themes were developed for qualitative data analysis; tables and charts were also used for quantitative data analysis.

The findings of this study revealed challenges associated with provision of SSS. These challenges have shown the need for enhancement of academic support offered to students. The literature in conjunction with the empirical data that was collected constitute that distance students were struggling with accessibility to such services. Surprisingly, computers, tablets, smartphones, and a wide range of other relevant digital devices on the market plus multiple communication software such as Zoom, Skype, Microsoft teams and more were able to bridge an existing communication breakdown in ODL. Some aspects which hindered the effective provision of academic support services are briefly elaborated below as key findings of this study:

#### **6.2.5 Key scholarly review findings**

This section presents findings published by other scholars under the contemporary phenomenon. The motive was to compare and contrast on the findings of this study with studies conducted prior. Findings of previous studies were discussed in chapters two and three under the context, theories and review of literature under the conceptual framework section. “The higher the academic level of your research, the more important a thorough integration of your findings with existing literature becomes” (Kumar, 2011:33). Based on this argument, empirical findings were synthesised with other scholar’s findings.

As indicated in sub-section 2.1 and 3.1.3.4, the study conducted by Julal (2013) indicates various stressors being experienced by students in distance learning which might lead to academic poor performance or even to drop out. These stressors are the results of academic hardship experienced by distance students and they are caused by a lack or insufficient support services. This also calls for the synthesis of psychological support on academic support, which insists on inseparability of student support. Hence, Arko-Achemfuor (2017) recommends an increase of SSS and insists on the importance of academic support and support staff training. In contrary, Gilardi (2013) indicates that numerous SSS were available, but they were underutilised or not

accessible at the time when students needed them. In their study, Britto and Rush (2013) concurs with Gilardi (2013) by putting emphasis on staff members training need, particularly those involved on SSS.

It was indicated in sub-section 2.1.1.4 that motivational feedback as part of academic support plays a vital role on encouraging students to carry on with their studies. On the contrary, Ngwato (2020), in subsection 3.1.3.2 postulates that the main problem facing TVET students is immaturity which is attached to the lack of motivation. To curb student attrition, Demiray (2008) insists on timely feedback as another form of motivation for distance students. These scholars share the same sentiments that the delay of feedback is another factor that led to student drop out. It was also established in sub-section 2.2 that distance students find it difficult to cope since they are isolated from their fellow students and instructors. On the other hand, digital platforms are in place and these forms of modern technology are trying by all form to simplify learning (see Subsection 3.1.2). It was also indicated in sub-section 2.2.2 that the use of computers in distance learning is becoming a mainstay to the whole world and it is a requirement for students to adapt to this modern method of learning. Furthermore, Oncu and Cakir (2011) view online distance learning as a pillar of higher education. The online academic services can be accessed by students at their convenient times.

As indicated in sub-section 2.2.2 and 3.1.4.12, COVID-19 can no longer be ignored in the field of distance learning as it became a catalyst that compelled other face to face or campus-based institutions to migrate to an online learning method. This education paradigm shift became a real challenge since numerous students were forcefully converted to distance learning, the environment they were not familiar with. This called for strengthening of academic support for students who were exposed to distance learning for the first time. Though this called for more academic support, Simpson (2012) categorised academic support services into three and Nsamba (2016) supports an idea that services are inseparable. The provision of academic support cannot leave out other forms support.

As stated in sub-section 2.6.1, transactional distance was one among the theories employed in this study with an intention of proposing factors that might optimise student academic support services. Such distance is perceived as a barrier which

prohibits students to show their academic potential. Tait (2003) further supports the use of ICT as a strategy of minimising transactional distance while Wilson (2006) study findings constitute insufficient computing skills among students. Lack of ICT resources and infrastructure were also attached to ODeL impossibilities.

The theory of interaction and communication discussed in 2.6.2 also form part of this study. Zimmerman (2012) supports the notion of learner and course content interaction and state that it plays a vital role to the prosperity of the learning outcomes and student course completion. The same idea got support from Xiao (2017) who insists on the functionality and the need for the role played by interaction in ODL, and how it affects the learning experiences of students along their satisfaction. It was evident that the interaction between the concerned parties in education resulted in acceptable academic performance and could play a vital role in motivating students to persistence in their studies. Interaction can be promoted through the usage of technology (see Section 3.2). The study conducted by Sadeghi (2019) constitutes that those students find that some instructors do not upload adequate learning and testing resources suitable for distance learning.

The literature also constitutes a high increase of students' enrolment in institutions of higher learning in South Africa with inadequate increase of funding. Insufficient funding was portrayed by indefinite student's protests, fighting for free education and the end of financial exclusion by universities and colleges (Godsell, Chikane, & Mpofu-Walsh, 2016). This indicates the need for an increase on student financial aid budget which also forms part of student support.

Through scholarly findings or literature, the researcher managed to establish some gaps that still exist in the provision of ODL SSS. The challenge is that these scholarly findings do not come out with effective and innovative strategies as to how these services can be implemented or enhanced to close these existing gaps for effective academic support provision. An existing literature constitute that SSS are not comprehensive, and it also insists on the lack of student academic support. This is said to be among the reasons of student attrition in distance learning. The mechanisms of optimising these services are neither stated nor implemented yet. The study by Kamau (2012) also indicates some strength and weaknesses of students' support

services without indicating how each weakness can be addressed and how it can be converted to strength.

## **6.2.6 Key empirical research findings**

This section discussed empirical research findings obtained through qualitative and quantitative data analysis of this study. Empirical findings were also compared with other research findings conducted by other scholars. Comparison made between desktop and empirical research allowed the researcher to come up with informed findings about key factors for optimising student academic services provision in ODL. Empirical findings are elaborated in various sub-sections next:

### **6.2.6.1 Student Support Structures**

Structures such as SSS, Student affairs, Centre for counselling and SRC are all created with the common goal of providing support to students during their academic quest (see 2.1). The challenge mentioned in connection with such structures is that they are working efficiently for full-time students and not with distance students. Quantitative data collected from respondents contradicted with qualitative data collected from the participants. The latter, collected from staff members indicates an efficient provision of student support services while quantitative data, collected from students was opposing these findings. This simply indicates that there is an efficient availability of SSS as per the knowledge of staff members, but students are not benefitting or are unable to access such services at all.

The findings of this study also resonate with the findings of another study by SAIDE (1999) about learner support practices in South Africa. SAIDE (1999) findings indicates that in the context of South Africa, a high percentage of learners are unlikely to achieve in their academic quest if they are admitted to distance education institutions because they are not provided with sufficient support (SAIDE, 1999). SAIDE findings might be outdated as it was revealed two decades ago. Yet the same findings shed some light about the incompetence of certain institutions on providing academic support to students. As indicated in subsection 3.1.4.12, this made it clear that some students are unable to portray their academic potential because of



inefficient and insufficient support services rendered by their respective ODL institutions.

Open distance learning institutions have been censured with numerous complains about poor or inefficient and insufficient student support. As a result of isolation in distance education discipline, students tend to rely more on support rendered by their respective institutions to do well on their studies. This study revealed that these institutions are very slow or sometimes they did not respond to students' enquiries. More students' dissatisfactions were about admission office staff members who did not attend to students' telephonic enquiries. As a result, students ended up frustrated and dilapidated which tend to lead into their drop out and some taking too long to complete. This study also attached this late qualification completion and drop out to the inefficiency of student support services.

#### 6.2.6.2 Access to resources

As stated in subsection 5.3.1.2 and in Table 5.18, inaccessibility to college resources such as library facilities and computers was identified as one of major challenge in the college. As described in 2.1.4, financial resource challenge was also mentioned as a common challenge among various institutions of learning in sub-Saharan Africa including South Africa (Myende, Samuel, & Pillay, 2018). Some students did not afford computers; some had no access to the institution's resources due to a physical distance between them and their institutions. As stated in subsection 3.1.4.4 that some students are residing in locations with no proper ICT infrastructure, therefore this still remains a challenge. Those who resided in remote areas are unable to connect to internet or they experience very low speed in connectivity. It was also the findings of this study that some students living in areas with no electricity at all which hindered them more to access education facilities online. Those leaving in electrified areas are victimised by continuous power cuts, also called load shedding.

#### 6.2.6.3 Digital skills challenges

Modern technology is one of the most important aspects in education which promotes communication and interaction among students and instructors and students with their fellow students. This is easily attained through the utilisation of online text and

multimedia. To ascertain if students receive quality education and all forms of support, digital skills need to be taken into cognisance. As per quantitative data collected from students, the findings revealed that many students are lacking on digital skills and knowledge. This result from the fact that numerous schools in basic education did not offer computer related subjects in South Africa, hence students had no computer background. This is viewed as a serious challenge since distance education today is based on digital platforms than pen and paper correspondence of the past. These findings are in line with Shandu-Phetla's (2017) study findings where usage and the importance of good quality technologies to support students' learning in ODL were highlighted.

As indicated in subsection 2.2.2, COVID-19 is portrayed as a catalyst which brought a new paradigm in education system, both local and global. Unfortunately, this change found numerous students without required ICT skills which perpetuate their poor performance on academic work. It was quite evident that this pandemic also increased the urgency of South African plan to implement the 4IR (Modiba, 2021). Students in all walks of life should adapt to the new platform of curriculum deliverance which is modern digital knowledge and skills. The results constitute that student are not familiar with new online environment. It is clear that special computer skills training is required to equip all students as part of academic support.

A study that assessed the attitudes of teachers on computer technology training, professional development, integration, experience, anxiety, and literacy was conducted by Asan (2003) and revealed that numerous teachers in Turkey were not using computers. The study also established that they lack basic computer literacy background. The study also indicates that the use of computer and related technologies was not routine part of their teaching and learning environment. The findings are also consistent with Kardipah and Wibawa (2018) study entitled "How to improve students' computer Skills? A Flipped-blended Instructional Model for Economics' students in higher education" insists on the essentiality of computer skills which requires to be mastered by Indonesian workers, other than the basic skills.

The findings also revealed that digital platforms were excluded from the selected college mode of transmission until the pandemic; COVID-19 compelled the college to

implement the emergency remote teaching during country's lockdown (see 5.3.1.3). Certain institutions started to use a blended form of learning during the lockdown in the year 2020. A series of challenges associated with new form of learning, which was more electronic were also experienced. It must be indicated that based on qualitative findings of this study, even some lecturers are struggling with this transition. These findings highlight that it is not only students who that struggle with digital skills, even certain lecturers or instructors shared the same sentiments with their students. This simply indicates that there is a need for staff to be trained on matters pertaining to modern technology. This is consistent with one among four of Nsamba's (2016) dimensions relevant to the context of the UNISA as an institution offering distance education which is 'assurance', the knowledge and competence of the staff; staff possession of necessary and required skills; staff courtesy and ability to inspire trust and confidence. As mentioned by participant number eight in subsection 5.3.1.3, this simply means each instructor employed in distance learning institutions should possess the relevant and the required ICT knowledge and skills in order to engage and equip students to cope with the requirements of digital world.

#### 6.2.6.4 Learning environment

Learning environment was also mentioned as one among important factors for ODL students (see 3.1.3.4 and 5.3.1.4). Qualitative data obtained through interviews made it clear that some students did not have access to or enjoy studying in an environment that can be considered as conducive especially in their respective residences. These students have a responsibility to create a favourable learning environment for themselves. This is sometimes not possible for some students owing to the different conditions under which they live or rent. Lastly, it should not be made the sole responsibility of the institutions of higher learning to create a favourable learning environment, the students, families and/or landlords ought to collaborate.

#### 6.2.6.5 Feedback

Feedback in teaching and learning is considered as guidance offered by instructors to students based on the latter's performance on a particular assessment and such is perceived as an appropriate form of interaction and communication between the two. As mentioned in 2.3.2, 3.1.2.3 and 5.3.1.5, motivational feedback keeps students on

their academic programmes through to completion of their studies. The results of this study have shown that students complain about low marks that they obtain on their assignments especially when their instructors would not have made comments on the scripts on their performance. Constructive feedback is good especially to students who study through distance learning because it encourages them to work hard also, it infuses self-confidence. In this study, some students expressed their disappointment at receiving feedback that was discouraging from some of their instructors and this was among serious concerns. Apart from negative feedback, at times, students receive feedback on their assessment later than expected, also known as late feedback and this was another concern by the interviewed students. Findings of this research reveal that students also complained about not getting a response or sometimes a delayed response or feedback on inquiries that they send to instructors via e-mail. As per the findings of this study, delayed feedback leaves students frustrated, not knowing how to prepare for their examinations or not knowing areas that need improvement. Quick feedback that is specific on particular areas that need a student to improve on is perceived as one of constructive support (see 2.3.2). Effective feedback is said to be dependent on communication skills (Hardavella, Aamli-Gagnat & Saad, 2017), which mean that the recipient needs to understand the message from sender.

#### 6.2.6.6 Motivation

Apart from feedback, there are other forms of motivation that might motivate students to persist on their academic programmes. Their personal driven education curiosity on education leads them to enrol is among intrinsic motivation. This form of motivation needs a supplement of extrinsic motivation from institutions, family members and friends. This study employed Holbert's theory of interaction and communication stated in subsection 2.6.2 because continuous interaction between students and their instructors was also labelled as a motivational factor. Unfortunately, this was not happening between students and instructors of the selected college. Participants three, four and seven mentioned in subsection 5.3.1.5 that feedback that is sent to students was another form of motivation which promotes continuous interaction between them and their instructors. Therefore, constructive feedback is perceived as a form of motivation that contributes to the retention of students to complete their academic qualifications.

Distance education is associated with a serious lack of motivation largely because the communication or interaction between students and instructors is not timeously. It is unlike in the face-to-face approach of teaching and learning where students get continuous and timely motivation from instructors and from other fellow students. This study found that the participant students were not motivated and they indicated that nothing motivated them except various challenges that they encountered on a daily basis while learning.

#### 6.2.6.7 Student's experiences and perceptions

Students have different experiences and perceptions about the support services rendered by the college. Empirical data obtained from respondents in a quantitative manner indicate a large number of students who ended up enrolling for non-preferred method of study which distance learning is because occupational reasons (see Table 5.5). This was consistent with subsection 3.1.1.3 which indicates that some students enrolled at ODL institutions are struggling to get their studies on track because of unpreparedness and inability to access SSS. The study's findings indicate that most of the students ended up enrolling for distance learning due to certain circumstances inter alia, employment, financial constraints, distant located institutions and overcrowded institutions. As indicated in the introduction, chapter one, section 1.1 of this study that students enrolled for ODL at a selected TVET college are divided into two categories: those who started as ODL because of employment reasons and those who were full-time and failed to meet the requirements of progressing to the next level. The findings constitute a wide range of reasons why students opt for distance learning. The results of this study indicate that certain students ended up abandoning their studies as a result of frustration caused by lacked comprehensive and quality support. These findings are also in line with that shown in Oliveira (2018) that insufficient student support is one among causes of high dropout rates in distance education.

Despite certain contradictions that have been shown in published qualitative and quantitative data, this analysis made it clear that the perceptions of participants and staff as well as their experiences pertaining to provision and efficiency of SSS were also contradicting. The study concludes that the SSS at the college was not efficient.

Furthermore, there was a poor relationship, shown in this study as correlation, between inefficient student support and the academic performance of students.

#### 6.2.6.8 Contact sessions

Contact sessions that occur in ODL are viewed as an important opportunity that provides live interaction between students and instructors. Interaction can be offered through various methods which includes among other things webinars, portal (see Table 5.26) and contact sessions. The findings of this study established that the selected college used to organise contact sessions during weekends which gave students an opportunity to meet their fellows and their lecturers. The findings also constitute that the participant students had different perceptions about these sessions. In particular, they revealed that the time allocated to and/or number of occasions on which the sessions took place, were not sufficient and they did not meet the expectations of the students. They said the time they spend with each lecturer was too short and those among the students who reside far away from the college did not benefit at all because it was expensive for them to attend. In contrary, the qualitative data revealed that the contact sessions were effective and useful as they allowed direct communication between students and their lectures. It was also found that some students were unable to partake on the weekends selected for the contact sessions because of multiple and various reasons which included weekend's family commitments. It was agreed that the usage of a webinar could be a better instrument to supersede the face-to-face contact sessions.

#### 6.2.6.9 Student's relaxation

The findings of this study suggest that students are responsible for their own failure. As indicated in subsection 2.4.2, Simpson (2013) argues that there is little point in providing student support services if students themselves do not value the service they require. Since there is no class attendance in ODL, some students tend to relax and sometimes failing to honour dates on which assignments ought to be submitted. The study conducted by Arko-Achemfuor (2013: 122) about learner support services in a distance education context at the UNISA adult basic education department highlighted that "Despite the fact that adult students are regarded as matured people who take

responsibility for their learning, they are equally overburdened with multiple responsibilities which call for support for them to succeed in their studies”.

### **6.3 RESEARCH CONCLUSIONS**

The researcher has drawn a number of conclusions from the findings of this study. The conclusions are based on the answers to the four research questions that guided this study (see Section 1.4). The main research question of this study was: What are the key factors for optimising student academic support in ODL at a Technical Vocational Education and Training College (see Subsection 1.5.1).

While addressing the main research question, the following sub-questions formed the bases of this study and questions asked on data collection instruments were also formulated under these four research questions which were in line with the study objectives. The same questions drove and directed the researcher to relevant empirical data. The answers on the following sub questions were the building blocks towards the process of answering the main question.

#### **6.3.1 How accessible are students’ academic support services rendered to ODL students?**

The data showed that students encountered a number of academic hardships and they were not able to access academic support services that the college claimed to offer. Given that they were ODL students, they had to access support services through online platforms however, this was a challenge for a significant number of them. Data revealed that some students resided in areas that experienced interruptions in network coverage. This is not a surprise as some areas in South Africa do not have ICT infrastructure. Some of the students were unable to access the particular support services as they lacked knowledge and skills on ICT and they struggled with computer related skills and some could not afford to buy expensive digital devices. Some respondents said that expensive data bundles served as a barrier that limited them from accessing support services. As a result of these challenges, it became impossible for certain students to benefit from the support services that the college offered. Overall, these factors contributed to the frustrations that the students had and in some cases led to their withdrawal from studies.

### **6.3.2 What are the perceptions of ODL students about academic support services by the selected TVET College?**

Responses to this question reveal that there were numerous criticisms as respondents indicated their dissatisfaction in the way that the academic support services were offered. Numerous respondents indicated that they were not benefitting from college support services: some responses indicated college incompetency in this matter while some indicated that as students, they were not even familiar with such services. The respondents indicated that they do not receive even financial support from the college, yet they believe that financial support should form part of support to be offered by the college. According to them, the financial aid was discriminatory as it was approved only for their counterparts who studied on a full-time basis that is, campus-based students. They also indicated that the college did not provide them with psychological support which they believed ought to have formed part of the academic support too. They mentioned that the anxiety that they found themselves on as a result of their being students along that related to challenges from family called for psychological support.

### **6.3.3 Which factors can retain students on their academic programmes till to qualification completion?**

The purpose of this question was to establish if the college was able to retain students as opposed to attrition. This research's findings showed that there are factors that may retain students on their academic programmes up to completion. These factors are divided into student factors and institutional factors. Development of learning skills, time management and creation of good learning environment are mentioned as student factors.

#### **6.3.3.1 Student factors**

As mentioned in subsection 3.1.3.3, students need to be taught ways through which they can manage their time effectively. Students tend to procrastinate the completion of their assignments until they end up unable to complete such assignments. This is a result of multiple factors which include family commitments, job related matters, over relaxation or sometimes being disorganised. Since this is an ODL, some students are lacking learning/ study skills. Since education is about attainment of knowledge and



skills, students need develop such skills as individuals and extend such skills to collaboration with their fellows. Family support cannot be ignored to the success of each student. Creation of learning environment suitable for learning play a significant role. Each student can succeed in this with a support from family members.

#### 6.3.3.2 Institutional factors

Communication, technological skills and motivation were mentioned as institutional factors. Each ODL institution needs to create affordable communication platforms for students. This can simplify interaction between students and instructors or student to student. Communication is said to be the factor that reduces distance between students and their institutions, and it is able to conquer the stress created by student isolation from others. For effective communication, technological skills are also required. Institutions need to equip students with digital skills so that they can use relevant software or electronic communications platforms to access any form of support they need. It is also important to note that some students are not computer literate, and some come from poor backgrounds and would not have been taught about how they could use computers. As mentioned in subsection 3.1.3.2, motivation is another factor that can be used by students for their academic programmes. The findings revealed that motivational feedback is a tool or support to be used by instructors to encourage their students. Even if some students are self-motivated but some factors might demotivate them, therefore extrinsic motivation is an important factor.

#### **6.3.4 How computer literate is TVET students and to what extend can they use technology?**

Lately, ODL encompasses technology through ODeL, this means that computer skills cannot be left out in education. Therefore, this question intended to assess whether the students had acquired computer skills and/or possessed knowledge as well as other 4IR digital skills among students. The purpose was to find out whether students possessed the required ICT skills which form bases of education today or they are unable to access SSS as they might lack technologically required skills. Digital literacy is part of ODL or ODeL and it was propelled by an unprecedented pandemic, COVID-19 that disrupted education globally. In answering this question, ICT related questions which include knowledge about certain computer software, knowledge of devices and

techniques were included in a questionnaire and such data were quantitatively analysed to establish the existence of required knowledge about student's possession of required computer skills and whether students can use such skills for their educational prosperity. The findings indicate that numerous students are struggling with ICT skills which makes it a challenge for them even to access and utilise online services availed for them. Empirical findings constitute that some students come to the college without basic computer skills at all and they use computers at college for the very first time. It was because of this that the CMT decided to introduce subjects like Introductory to Computer Practice (ICP) to be learnt at the entrance level before students could proceed to Computer Practice. The purpose was to equip them with basic computer skills or computer literacy to those students who would not have been introduced to computers before. Next section 6.3.5 addressed the main research question.

### **6.3.5 Answer to the main research question**

This study proposed key factors that could optimise the academic support services offered to students at the TVET College. Non-completion of studies and the lengthy period it took ODL students to complete qualifications at the selected TVET college was the problem which underpinned this study. The analysis of qualitative data collected from staff members collaborated with that generated through the quantitative approaches from students (respondents) who made it clear that the support services offered by the college were neither efficient nor sufficient. The findings along the cited literature also revealed that ODL institutions do have supports services meant for students in place however, these were rarely accessed by the students at times due to the students' inabilities. This denotes that institutions do make support services available but students are unable to access these services. It was also revealed that the selected college had a documented the type of student support services however, they lacked implementation.

Owing to the fact that academic writing is about standing on shoulders of giants, literature got reviewed and comparison made between findings of this study and that of previous studies sharing the same phenomena. Findings of this study were consistent with that reported in previous studies on similar phenomenon. Nsamba's (2016) research finds the quality level of distance learning SSS unacceptable and

failing to meet the needs of the students at the UNISA. Besides, in the study conducted by Shikulo and Lekhetho (2020), entitled “Exploring student support services of a distance learning centre at a Namibian university,” high rates of repetition, drop out and attrition among distance students as mainly due to the student-lecturer separation was also established, which is typical in ODL institutions. Just like previous studies, this study also established some discrepancies in the manner in which the selected college rendered support services to students. The same discrepancies were attached to student’s attrition and the lengthy time it took the students to complete their qualifications. It was evident that students tend to expect more than what institutions offer. All these distance learning challenges experienced by students create commotion and frustration among students which make them feel abandoned and neglected. Inability to access institution resources was found to be a serious challenging matter in this research.

It was the findings of this study that ODL students tended to experience challenges pertaining to their studies which included inter alia that psychological and unfavourable learning environment in their respective locations. This study therefore found student support services inseparable. Psychological related support cannot be separated from academic support so as other forms of services as all can retain students to completion. Availability and accessibility to SSS is the responsibility of each higher learning institution offering distance or campus base form of education.

The use of technology in ODL was found to be a key factor in the process of optimising student academic support. The use of ICT is a better method of reducing academic related costs through the new and sophisticated applications such Microsoft Teams, Zoom, Skype and many more where students can interact with each other and with instructors in real time communication. Instructors can occasionally organise webinars and sometimes video conferencing sessions to interact with students in real time communication. This method of communication is capable of minimising the distance between students and institutions which sometimes lead to students’ attrition in various ODL institutions. Delayed communication associated with the use of e-mail is a method of communication which was found ineffective.

Currently, most institutions of higher learning teach and train students through the use of technology yet empirical and desktop data revealed that students enrolled in various institutions did not possess skills on digital or computing. These institutions should include digital literacy on their curriculum in order to accommodate all students including those who would be from disadvantaged schools. Digitisation of SSS is also encouraged. Digitisation should include library services, enrolment process, psychological support and access to students' academic feedback and results.

Accessing students' feedback via online platforms is quick, convenient and it can motivate students timeously since it is a fast method of accessing feedback. Instructors need to understand that constructive feedback is another form of support required by students. All these can be achieved through the implementation of 21<sup>st</sup> century digital skills brought by 4IR.

At times, students lose their digital devices through theft due to the high crime rate. As a result, the use of cloud storage could be a safe option that students can use to save their academic work and such stored files can be accessed anytime, using any digital device where access to internet is available. Institutions need to familiarise students about such safe storage facilities available online. Through this technique, students cannot lose their stored files even if they lose their devices.

The authenticity of the findings in this study is ascertained by treating both data types, qualitative and quantitative equally. Shorten and Smith (2017) maintain that the use of mixed methods approach also improves the validity of the study findings and enable the researcher to gain a better picture or correlation and inconsistencies between these two types of data. Based on the fact that the cited literature collaborated with the primary data obtained from the study's participants, the findings of this study can be generalised or transferred to other settings which are ODL institutions.

There are three main strategies of ensuring trustworthiness and credibility of the study (Creswell & Schumacher, 2014). These scholars mention member checking, auditing and triangulation as strategies to be employed in a process of providing authenticity to the study. Member checking is about verifying the accuracy of collected data with participants (Bryman, 2012). This calls for more work from the researcher. Auditing is

associated with qualitative studies and it entails an oversight and review the conduct of the study. To ensure authenticity of this study, triangulation which is the use of multiple sources of ensuring trustworthiness and credibility (Bowen, 2009) was utilised. Robson (2007) concurs with Bowen by indicating that triangulation is about collecting data from more than one perspective which might be the colleagues, other person, or other stakeholders. Robson (2007) further contends that more than one data collection technique enhances credibility.

Based on this study's results, it is quite evident that distance learning instructors need to undergo training that would equip them with certain skills and knowledge on how they could work with ODL students. This was revealed by students' dissatisfaction about the low response rate they received when they tried to interact with their instructors electronically. Students stated that instructors did not respond to their queries on time or sometimes they did not respond at all. These findings were also consistent with that of Möwes (2005), who in her study entitled "An evaluation of student support services in Open and distance learning at the University of Namibia" stated the need for distance education tutors to be retrained.

## **6.4 RECOMMENDATIONS**

Various organisations tend to conduct research when they need solutions to certain problems. Recommendations are categorised into government and institutional level.

### **6.4.1 Governance level**

Recommendations emanate from the findings of this study and can be considered as possible solutions to the problem being investigated. In this section, governance recommendations are made. For this research, recommendations were made to optimise the provision of academic support provision.

#### **Recommendation 1**

As a result of high costs of data in South Africa, in order for students to connect and access all the services they require online, this study recommends that the government zero-rate websites for all academic related websites for public colleges and universities. All websites of academic institutions as well as online libraries should

be accessed by students at no cost. The government or the department of higher education in collaboration with companies that provide mobile network need to ascertain that students are not deprived their right to quality education because of poor background, inequalities and injustices of the past.

#### Recommendation 2

A reliable ICT infrastructure that can be utilised by the public and students should be establishment in especially remote villages. Disadvantaged rural areas and schools need to be offered with a high-speed internet so that students can start using internet at their early age of schooling. Poor ICT infrastructure needs to be attended to so that all students can access education facilities or services wherever they are and without having to relocate.

#### Recommendation 3

The DHET officials and other stakeholders need to ascertain that institutions of learning are resourceful and that the resources include current and innovative equipment which is in line with 4IR and 21<sup>st</sup> century requirements.

### **6.4.2 Institutional level**

This section addressed the recommendations on institutional level.

#### Recommendation 4

It is also recommended that at the commencement of each academic year, institutions of higher learning should organise orientations through face to face or webinars for all students. This might be the best method of equipping the students with all forms of services available for them and teach them as to how to use such services. The reason for recommending the option of a webinar is the fact that since this is distance learning, some students cannot afford to travel and could likely not see the need to spend money for the purpose of attending campus orientations. Such orientations can also give students a good exposure to post matric education life and get a clear picture on what is expected from them and what they can expect from their institutions. This can be a motivation on its own and it can provide a platform for students to express themselves by asking questions on matters pertaining to their studies and other tertiary education related matters. The findings of Shikulo and Lekhetho (2020) showed that

34.9% of the respondents had been studying for more than three years without passing an academic year. These findings established that “It is likely that most of these students did not attend the orientation programmes designed to support new students as they start their academic journey and address their anxieties and questions so that they could cope with their studies” (Shikulo & Lekhetho, 2020: 7).

#### Recommendation 5

It is equally important for ODL institutions to keep training their staff members particularly those who work in the discipline of ODL. Staff members who are experienced in the field of distance learning are the ones who work better with distance students. In order to address challenges associated with distance education, rotating staff in this discipline is discouraged because students find it hard to work with new personnel or trainees.

#### Recommendation 6

It is as well recommended that ODL institutions should have structures that facilitate and keep on reviewing the relevancy and effectiveness of student academic support services. As technology evolves, everything keeps on changing. The curriculum is changing, and it should be kept relevant and in line with current innovation. The methods used by institutions to provide SSS need to adapt to current technology.

#### Recommendation 7

As per COVID-19 pandemic disturbances, it is additionally recommended that institutions of higher learning should start evaluating alternative innovative strategies on how their curriculum can be delivered so that these systems could withstand likely challenges that can be brought by unforeseen events. Since certain students struggle with digital skills, an implementation of blended learning is also recommended. Reason behind this is the fact that no one knows what would likely disturb our education once more in future which might also lead to the disruption or suspension of activities related to teaching and learning. Training students on among other skills being able to understand computers is crucial. Also, it is important to development and maintain ICT infrastructures because it becomes readily available to be of service to students. The required computer skills and distance education possibilities are based on comprehensive student support services efficiency in each institution.

#### Recommendation 8

The scholarly and empirical findings of this study exposed some loose ends that had not been addressed by certain settings which involved the collection of collected data; it is therefore recommended that further empirical research should be conducted using case study and survey in various institutions offering distance learning.

#### Recommendation 9

This study additionally recommends that other researchers conduct and publish results on studies related to this in order to optimise student academic support provision. The findings of recent studies combined can minimise or close an existing research gap in the field of ODL student academic support services enhancement.

#### Recommendation 10

Distance learning institutions need to organise strategic plan gatherings that would address challenges faced by students. Various institutions can share some ideas as to how SSS can optimise in order to retain students.

### **6.5 AVENUES FOR FURTHER RESEARCH**

As per the findings of this study, lack of adequate student academic support in ODL might not be the only contributing factor to: student's attrition, lengthy period they take to complete qualifications, and other distance learning related challenges. Therefore, there is a need for further studies that would investigate other challenges facing students in the discipline of ODL. This would ensure that almost all challenges that hinder students' access to quality education are taken care of and students' retention attained. More studies that would investigate aspects of students' persistence are required. It is of cardinal importance to develop a mechanism that would manage and keep students on their academic programmes through to the completion of their studies. In this case, action research per institution might mitigate this challenge of attrition.

Based on what transpired in this research, it is also envisaged that researchers should make critical analysis on the role played by requisite skills on digital technology, that it, how and at what stage should institutions impart them to students among students



and whether that possessed by instructors should be improved to meet needs of modern platforms of electronic communications in distance education. The motive behind the need for further research in this discipline is a lack of required electronic communication skills among users themselves as per the findings of this study. The majority of students in South Africa are deprived access to modern communication by the high price rate of data bundles, lack of electricity in certain locations, expensive hardware/ software, lack of technical ICT skills, lack of technical support, lack of computer subjects in schools, particularly previously disadvantaged schools and other challenges. Lack of computer skills is a challenge to numerous students and it impacts them negatively on their endeavours of accessing information they need. Some students are unable even to access support services availed online by their institutions of learning. Required studies need to address the gap which exists in digital communication.

Starting from basic education, the system allows students to do their HEI applications via Central Application Office (CAO). Since this is no longer a paper and pen-based technique, it can be understood by individuals who possess the required digital skills. Introduction of computer subjects is a fiasco to many schools in South Africa and it is worse to those schools victimised by injustices of the past. Such schools are even required to review their curricular at large. Curriculum review or total change of curriculum might be a panacea on fast tracking the process of decolonising South African education system, the kind of education that continues to offer a curriculum which is irrelevant to South African economic resources.

## **6.6 STUDY CONTRIBUTION TO THE BODY OF KNOWLEDGE**

The success of any study can be determined by its contribution to the body of knowledge and practice (Missa, 2013). Without a doubt, this study added to the existing body of knowledge and shed more light upon the key factors for optimising student academic support services in ODL discipline. The findings of this study will add to literature on student support in distance learning. As the findings of this study were compared with previous studies, it is vital to ascertain that study results demonstrates a link to the current literature (Kay, 2012). Institutions of higher learning are facing a challenge of high volume of an influx of full-time students each year. These institutions, including TVET colleges and universities are unable to enrol all students

to study on a full-time basis. Distance learning play a significant role on minimising the influx of full-time students which is difficult for institutions to enrol because of limited floor space and limited resources among other things. Distance learning is beneficial to both students and institutions. Students are able to save money as this form of learning exclude travelling, accommodation and other costs associated with full time students. Institutions also benefits in terms of physical resources, floor space and human resources.

This study contributes to the body of knowledge of distance education by drawing institutions management teams to challenges experienced by ODL students and also shed a light on mitigation strategies. It is anticipated that results of this study will be an eye-opener to students at large by dragging their attention to distance education because institutions are dedicated to support services which will assist them during their academic quest. Student will know that apart from academic support, there is a variety of support services available for them in each institution.

This study is also anticipated to make a positive contribution to this world of technology where globalisation seems to consume the world through digital skills brought by 4IR in this 21<sup>st</sup> century. Challenges associated with accommodation of students which includes high cost and shortage of accommodation can be solved by ODL. Provision of comprehensive support services to students which can be accessible online can minimise students' challenges and let them complete their studies in a record time. This also calls for ICT skills and knowledge.

Nowadays, the concept of e-learning (electronic learning) cannot be divorced from ODL. E-learning is a virtual form of learning offered through a computer in a campus-based or distance learning course (Virtual College, 2012). Mchombu (2013) further contends that e-learning mode as opposed to face-to-face traditional mode is valuable because it is flexible and cost effective. For ODL students to receive a good academic support, e-learning need to be incorporated.

Scholars through their studies tend to produce a substantial amount of information in relation to challenges that students face when embarking on distance education, yet the existence of these challenges is not yet conquered. The question is, do institutions of higher learning use such information to enhance their student support services

provision? What about series of research findings, are they getting implemented? If not, what does it takes for such findings to be implemented?

## **6.7 STUDY DELIMITATIONS**

Delimitations are parameters created before the research is carried out and these boundaries are set by a researcher in order to control the range of a study. Delimitations serve as techniques which circumvent an inclusion of unrelated or unnecessary material which can consume time on irrelevant matters. According to Simon (2011), delimitations are features used to determine the parameters or scope of a study. Delimitations aim at narrowing the scope of a study. Apparently, student support is neither sufficient nor efficient to ODL students at a selected TVET college and other institutions of higher learning offering distance learning. It is evident that the study cannot address everything at once. Therefore, parameters which determine the scope of the study have been set. There is plethora of support services such as enrolment or registration, advisory services, learning support services (academic), counselling, career guidance, access to Open Educational Resources (OER), social, psychological, emotional, provision of study centres and financial assistance required by students to accomplish their goals through education. Since this is a single case study for a selected college, the main focus was on academic support rendered specifically by Open Learning Unit of the college.

## **6.8 LIMITATIONS**

Yin (2009) points out that every research is limited by the constraints placed upon the researcher while Maree and Van der Westhuizen (2007) are of an opinion that it is important to recognise the challenges and limitation of the study. The above ideas are supported by Best and Kahn (2003) who establish that limitations are conditions that pose restrictions on the study outcomes. Unlike delimitations which are controlled by the researcher, limitations are beyond researcher's control, and they cannot be avoided. Limitations associated with data collection were also experienced whereby the rate of questionnaires return was not as expected. Another limitation was on content analysis since the researcher did not manage to acquire all documents pertaining to students' enrolment and completion. This is a procedure if not a policy of

institutions to protect and maintain their reputation. Fortunately, the limitations did not negatively affect the research process.

## **6.9 CONCLUDING REMARKS**

The ultimate goal of this study was to propose key factors of management and teaching for optimising the student academic support services in ODL. Proposals that are made concern digital skills. Students need to be equipped with digital skills at the early age of schooling. The Department of Basic Education need to ascertain that all primary schools introduce computer literacy for all learners. The motive is education is digitised in the current 21<sup>st</sup> century and therefore all students should be able to use computers and other electronic devices to succeed on their education quest. Therefore, digital skills brought about by 4IR are required in all fields of life today.

It is the researcher's wish to expand the findings of this study to schools' principals and all Schools Management Teams (SMT) plus all education stakeholders out there so that they can see how they disadvantage their students by failing to introduce computer subjects in their curricular. It must be clear to all of us that the 21<sup>st</sup> century with its 4IR brought multiple changes on our lifestyle which includes artificial intelligence, Internet of Things (IoT) and digitised education. As a result, digital skills need to be taught in all education institutions to meet the requirements of this digital world.

It was explicit from this study that the ultimate goal was to optimise the provision of academic support to ODL students. ODL was introduced to cater for those students who cannot attend on full-time bases because of occupation and other reasons. This was a best method for them to upskill themselves for their respective careers. Today ODL caters for many students as a method of minimising some costs which include travelling, time and accommodation expenses.

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## APPENDIX A: ETHICAL CLEARANCE CERTIFICATE



### UNISA COLLEGE OF EDUCATION ETHICS REVIEW COMMITTEE

Date: 2021/10/13

Ref: **2021/10/13/54019362/07/AM**

Dear Mr GP MBAMBO

Name: Mr GP MBAMBO

Student No.: 54019362

**Decision:** Ethics Approval from  
2021/10/13 to 2026/10/13

---

**Researcher(s):** Name: Mr GP MBAMBO  
E-mail address: 54019362.mylife@unisa.ac.za  
Telephone: 078 303 3964

**Supervisor(s):** Name: Prof. EC DU PLESSIS  
E-mail address: dplesec@unisa.ac.za  
Telephone: 012 429 4033

**Title of research:**

**Optimising student academic support in a Technical Vocational Education and Training College Open Distance Learning.**

**Qualification:** PhD Curriculum Instructional Studies

---

Thank you for the application for research ethics clearance by the UNISA College of Education Ethics Review Committee for the above mentioned research. Ethics approval is granted for the period 2021/10/13 to 2026/10/13.

*The **low risk** application was reviewed by the Ethics Review Committee on 2021/10/13 in compliance with the UNISA Policy on Research Ethics and the Standard Operating Procedure on Research Ethics Risk Assessment.*

The proposed research may now commence with the provisions that:

1. The researcher will ensure that the research project adheres to the relevant guidelines set out in the Unisa Covid-19 position statement on research ethics attached.
2. The researcher(s) will ensure that the research project adheres to the values and principles expressed in the UNISA Policy on Research Ethics.



3. Any adverse circumstance arising in the undertaking of the research project that is relevant to the ethicality of the study should be communicated in writing to the UNISA College of Education Ethics Review Committee.
4. The researcher(s) will conduct the study according to the methods and procedures set out in the approved application.
5. Any changes that can affect the study-related risks for the research participants, particularly in terms of assurances made with regards to the protection of participants' privacy and the confidentiality of the data, should be reported to the Committee in writing.
6. The researcher will ensure that the research project adheres to any applicable national legislation, professional codes of conduct, institutional guidelines and scientific standards relevant to the specific field of study. Adherence to the following South African legislation is important, if applicable: Protection of Personal Information Act, no 4 of 2013; Children's act no 38 of 2005 and the National Health Act, no 61 of 2003.
7. Only de-identified research data may be used for secondary research purposes in future on condition that the research objectives are similar to those of the original research. Secondary use of identifiable human research data requires additional ethics clearance.
8. No field work activities may continue after the expiry date **2026/10/13**. Submission of a completed research ethics progress report will constitute an application for renewal of Ethics Research Committee approval.

*Note:*

*The reference number **2021/10/13/54019362/07/AM** should be clearly indicated on all forms of communication with the intended research participants, as well as with the Committee.*

Kind regards,



**Prof AT Motlhabane**  
**CHAIRPERSON: CEDU RERC**  
motlhat@unisa.ac.za



**Prof PM Sebate**  
**EXECUTIVE DEAN**  
Sebatpm@unisa.ac.za

## APPENDIX B: INTERVIEW SCHEDULE WITH STAFF MEMBERS

The following interview questions were directed to staff participants: the researcher will add follow up questions if necessary.

Que. No.	Question	Notes/Responses
1	How does the college support students academically?	
2	How does the college assist students with course selection during registration periods?	
3	How do lecturers provide assessment feedback on time to students?	
4	Do you think the students receive constructive and motivational feedback to? Elaborate.	
5	Do lecturers prepare study guides that simplify the subject contents? Elaborate.	
6	How do administration staff members assist students?	
7	What form of communication platform the college has for students to interact with each other?	
8	How the online lessons assist students?	
9	The college has contact sessions in place during weekends. Do you think how are students benefitting from these sessions? How?	

Que. No.	Question	Notes/Responses
10	How are students assisted with library activities and access?	
11	How and when students get access to college resources such as computer venues?	
12	Which platform is in place for students to interact with their lecturers at any time when they need help?	
13	Do students enjoy college Wi-Fi connectivity using their own devices? Elaborate.	
14	Does the college provide tutors to assist students with their studies? Elaborate.	
15	Are the students able to access their examination results online? Elaborate.	
16	Does the college avail previous examination question papers for students to prepare for their examinations? Elaborate.	
17	Do lectures provide students with assistance and guidance to complete their assignments? How?	

Que. No.	Question	Notes/Responses
18	What do you think the college can do to improve the academic support being provided to open learning students?	
19	Is an academic support the college provides effective and sufficient? Why do you say that?	
20	As a staff member, do you think students have sufficient access to college resources, such as computer venues, internet and library services?	
21	Does the college have a portal available where students get all forms of assistance they need? Elaborate.	
22	Does the college have online registration? Is it user friendly (easy to use)? Elaborate.	
23	How does the college deal with long queues during registration/enrolment periods?	
24	Does the college have an e-mail where students can send their questions? Elaborate.	
25	What is your perception on support services the college provides?	

**END OF INTERVIEW**

## **APPENDIX C: LETTER FOR CONSENT TO HOD**

### **Dear Prospective Participant**

My name is Goodwill Phezulu Mbambo and I am doing research with Professor. EC Du Plessis, a senior lecturer in the Department of Curriculum and instructional studies towards PhD degree at the University of South Africa. I am inviting you to participate in a study entitled “Optimising student academic support in a Technical Vocational Education and Training Open Distance Learning College”.

### **What is the purpose of the study?**

The aim of this study was to propose key factors for optimising the student academic support services in ODL at a selected TVET college by evaluating these services in order to enhance the provision of student support for ODL students.

### **Why am I being invited to participate?**

The scientific community could benefit from your participation, and will as such contribute to the existing field of knowledge in educational research.

### **What is the nature of my participation in the study?**

The aim of this study was to propose key factors for optimising the student academic support services in ODL at a selected TVET college by evaluating these services in order to enhance the provision of student support for ODL students.

### **Can I withdraw from the study having agreed to participate?**

Participating in this study is voluntary and you are under no obligation to consent to participation. If you do decide to take part, you will be given this information sheet to keep and be asked to sign a written consent form. You are free to withdraw at any time and without giving a reason.

### **Are there any negative consequences for me if I participate in the research project?**

The researcher does not foresee any risks or discomforts.

**Will the information that I convey to the researcher and my identity be kept confidential?** Although the semi-structured interview will be tape recorded, your responses will remain anonymous and no names will be mentioned in the research report. Your name will not be recorded anywhere and no one will be able to connect you to the answers you give. Your answers will be given a code number or

a pseudonym and you will be referred to in this way in the data, any publications, or other research reporting methods such as conference proceedings. A report of the study may be submitted for publication, but individual participants will not be identifiable in such a report.

**How will the researcher(s) protect the security of data?**

Hard copies of your answers will be stored by the researcher for a period of five years in a locked filing cabinet for future research or academic purposes; electronic information will be stored on a password protected computer.

**Will I receive payment or any incentives for participating in this study?**

There is no compensation for participation and the data collected will be used for the sole purpose of the study.

**Has the study received ethics approval?**

This study has received written approval from the Research Ethics Review Committee of the College of Education, Unisa. A copy of the approval letter can be obtained from the researcher if you so wish. If you would like to be informed of the final research findings, please contact GP Mbambo on +27 78 303 3964 or by e-mail at mbambogp@yahoo.com. The findings are accessible for five years. Should you require any further information or want to contact the researcher about any aspect of this study, please contact GP Mbambo on the abovementioned phone or e-mail address.

Thank you for taking time to read this information sheet and for participating in this study.

Thank you.

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G.P. Mbambo



## **APPENDIX D: LETTER FOR CONSENT TO STAFF MEMBERS**

### **CONSENT TO PARTICIPATE IN THIS STUDY (Return slip)**

I, \_\_\_\_\_ (participant name), confirm that the person asking my consent to take part in this research has told me about the nature, procedure, potential benefits and anticipated inconvenience of participation. I have read (or had explained to me) and understood the study as explained in the information sheet.

I have had sufficient opportunity to ask questions and am prepared to participate in the study. I understand that my participation is voluntary and that I am free to withdraw at any time without penalty (if applicable). I am aware that the findings of this study will be processed into a research report, journal publications and/or conference proceedings, but that my participation will be kept confidential unless otherwise specified. I agree to the recording of the semi-structured interview.

I have received a signed copy of the informed consent agreement.

Participant Name & Surname ..... (Please print)

Participant Signature..... Date.....

Researcher's Name & Surname ..... (Please print)

Researcher's signature.....Date.....

## APPENDIX E: AN EXAMPLE OF INDIVIDUAL INTERVIEW WITH STAFF

The following interview questions were directed to staff participants: the researcher will add follow up questions if necessary.

Que. No.	Question	Notes/Responses
1	How does the college support students academically?	The college have a SSS which is a structure created to provide students with various forms of support.
2	How does the college assist students with course selection during registration periods?	We have bronchus stating all courses offered by the college as well as the entrance requirements. We use to distribute these before and during admission periods.
3	How do lecturers provide assessment feedback on time to students?	Open learning students have contact sessions during weekends, that is how lecturers communicate directly with students and they receive their assessment scripts.
4	Do you think the students receive constructive and motivational feedback to? Elaborate.	I am not sure of that because it depends on each lecturer.
5	Do lecturers prepare study guides that simplify the subject contents? Elaborate.	Far as I know there are no study guides but they rely on prescribed textbooks.
6	How do administration staff members assist students academically?	Anything which is academic related is a burden of lecturers. Admin staff assists students with other forms of support such as registration or admission.
7	What form of communication platform the college has for students to interact with each other?	As per my knowledge we don't have such platform.
8	Do the college have online lessons? How the online lessons assist students?	The college started to develop online lessons during lockdown, which was a COVID-19 results. Some students do commend this form of support.
9	The college has contact sessions in place during weekends. Do you think students are benefitting from these sessions? How?	Yes, they do. This is a good time for them to get clarity on subjects' content matters and they get time to meet their fellow students.

Que. No.	Question	Notes/Responses
10	How are students assisted with library activities and access?	Our library is open during the week and they don't have full access of such facilities.
11	How and when students get access to college resources such as computer venues?	They access college resources during class times only.
12	Which platform is in place for students to interact with their lecturers at any time when they need help?	Nothing in place but lecturers make their own arrangement with their students sometimes they interact via WhatsApp groups.
13	Do students enjoy college Wi-Fi connectivity using their own devices? Elaborate.	Not for now, we are still having some challenges with college Wi-Fi.
14	Does the college provide tutors to assist them with their studies? Elaborate.	Not at all. Students rely on their lecturers for academic support.
15	Are the students able to access their examination results online? Elaborate.	Yes, that is a recent development made by the college through its portal.
16	Does the college avail previous examination question papers for students to prepare for their examinations? Elaborate.	Yes, we keep previous question papers for lecturers concern and they are the ones who distribute question papers to their students.
17	Do lectures provide students with assistance and guidance to complete their assignments? How?	As per my knowledge they do but I don't know how.

Que. No.	Question	Notes/Responses
18	What do you think the college can do to improve the academic support being provided to open learning students?	I think it is important to hire tutors or lecturers that will focus only to open learning students. Right now the college use the same lecturers who work with full time students.
19	Is an academic support the college provides effective and sufficient? Why do you say that?	No the support to students is not enough. I'm saying this because some students end up looking for academic assistance outside the college.
20	As staff member, do you think students have sufficient access to college resources, such as computer venues, internet and library services?	Not at all. As open learning students, they come to the college on weekends only. So they don't get access to college resources.
21	Does the college have a portal available where students get all forms of assistance they need? Elaborate.	The portal is there but they are struggling to utilise it properly as some of them are struggling with computer related issues.
22	Does the college have online registration? Is it user friendly (easy to use)? Elaborate.	Yes we do have online registration which is still new and students are still facing some challenges with it.
23	How does the college deal with long queues during registration/enrolment periods?	Lectures and admin staff work together during those times to fast track the process.
24	Does the college have an e-mail where students can send their queries? Elaborate.	The e-mail is there but not effective as it is supposed to be.
25	What is your perception on support services the college provides?	The support given to open learning students particularly is not enough and some students end up failing to complete their studies.

## APPENDIX F: QUESTIONNAIRE

Greetings:

My name is G.P Mbambo; I'm conducting a research with professor E.C Du Plessis titled "**Optimising student academic support services in open distance learning at a Technical Vocational Education and Training College**". The aim of this study is to propose key factors for optimising the student academic support services in Open Distance Learning (ODL)/ Open Learning Unit (OLU) at a selected TVET college and to enhance the provision of student academic support for ODL students.

The questions on this questionnaire are based on your own personal experience as a distant/ open learning student. There is no wrong answer as all questions are based on your experience, belief and opinion.

**PLEASE NOTE:** Your participation in this research is voluntary. Be assured that all collected information will be kept secret by the researcher and will not be attached to your name as a respondent. **Do not write your name on this questionnaire.**

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### **SECTION A:** Demographic Details

Please make a tick  on an appropriate box:

**A1. State your gender:**

Male

Female

---

**A2. State your race:**

African

Indian

Asian

Other

---

**A3. Choose your age group:**

15 – 20

21 – 25

26 – 30

31- 35

36 – 40

41- 50

Above 50

---

**A4. What is your field of current study?**

Business Studies       Engineering   
Public Administration       Human Resources       Other

---

**A5. How long have you been a student at this college? Including current year.**

1<sup>st</sup> year       2<sup>nd</sup> year       3<sup>rd</sup> year   
4<sup>th</sup> year       More than 4 years

---

**A6. I am working or studying.**

Studying only       Studying and working

---

**A7. I prefer this platform to interact with my lecturers.**

WhatsApp       Facebook       E-mail   
Instagram       LMS       Twitter       None

**SECTION B:** Availability of administrative support services

Please make a tick on an appropriate box:

**Example**

1	2	3	4
	✓		

**1= Strongly Agree      2= Agree      3= Disagree      4= Strongly Disagree**

Question No.	Question/ Statement	Options			
		1	2	3	4
B1	The college provides us with full support during registration periods.				
B2	The college assist us with course selection during registration periods?				
B3	The college provides orientation to new/ fist year students.				
B4	I use college portal to register for each semester.				
B5	Administrative members are always helpful whenever we interact with them telephonically.				
B6	Administrative staff has the required knowledge to answer students' questions.				
B7	Administrative staff members are politely and amicably attending and assisting students whenever they need help.				
B8	Administrative staff members are quick on answering phone.				
B9	Administrative staff members tend to attend quickly on my problems which pertain to my studies.				
B10	Administrative staff members are more supportive to students than lecturers.				

**SECTION C:** Accessibility to academic support services (Resources)

Please make a tick on an appropriate box:

**Example**

1	2	3	4
	✓		

**1= Strongly Agree      2= Agree      3= Disagree      4= Strongly Disagree**

Question No.	Question/ Statement	Options			
C1	As a student I enjoy full access to college internet?	1	2	3	4
C2	The college give us full access to library at all times?	1	2	3	4
C3	Students enjoy anytime access to college resources such as computer venues.	1	2	3	4
C4	I am able to access college Wi-Fi connectivity using my own devices?	1	2	3	4
C5	The college provides tutors to assist students with their studies.	1	2	3	4
C6	Students are able to access examination results online.	1	2	3	4
C7	The college avail previous examination question papers and other supportive material to students for examinations preparation.	1	2	3	4
C8	Lecturers prepare study guides that simplify the subject contents.	1	2	3	4
C9	The college avails communication platform for students to interact with each other.	1	2	3	4



C10	The college avails online lessons to be accessed by students at any time.	1	2	3	4
C11	There college weekends contact sessions are supportive and very fruitful.	1	2	3	4
C12	The college allows students to use its resources at anytime they need.	1	2	3	4
C13	The college website is zero rated ( <i>does not need data</i> ), we access it freely.	1	2	3	4
C14	As students, we have full access to college resources, such as computer venues, internet and library services.	1	2	3	4
C15	The college has an orientation programme and this also assist students with digital skills.	1	2	3	4

**SECTION D:** Efficiency of student support services

Please make a tick on an appropriate box:

**Example**

1	2	3	4
	✓		

**1= Strongly Agree      2= Agree      3= Disagree      4= Strongly Disagree**

Question No.	Question/ Statement	Options			
D1	The academic support service the college provides is very effective and helpful.	1	2	3	4
D2	We do not get any academic support from the college at all.	1	2	3	4
D3	Lectures/ tutors provide us with their contacts.	1	2	3	4
D4	Librarians give us full support when we are using the college library.	1	2	3	4
D5	Student Support Services (SSS) members are always available to assist us as students.	1	2	3	4
D6	We work on our own without receiving any support from the college.	1	2	3	4
D7	The college should create structures that will give academic support to distance students.	1	2	3	4
D8	Lectures provide us with assistance and guidance to complete our assignments.	1	2	3	4
D9	Lecturers provide us with motivational assessment feedback.	1	2	3	4
D10	Motivational feedback helped me to improve my performance on assessments followed.	1	2	3	4

**SECTION E:** Academic support services students' perception and expectations

Please make a tick on an appropriate box:

**Example**

1	2	3	4
	✓		

**1= Strongly Agree      2= Agree      3= Disagree      4= Strongly Disagree**

Question No.	Question/ Statement	Options			
		1	2	3	4
E1	The college has an improved academic support provided to open learning students.				
E2	Academic support is effective and sufficient.				
E3	The college portal is available and very useful.				
E4	The college online registration is user friendly (easy to use).				
E5	The college has a strategy to deal with long queues during registration/enrolment periods for students' convenience.				
E6	SSS members as a structure set to give support to students are always available when we need them and ready to assist.				
E7	Lecturers are always helpful and they respond quickly when we call or e-mail them.				
E8	The support services college provides meets all our expectations as students.				
E9	The college tend to organise students' interaction through webinars				

E10	The college provides students with laptops or tablets.	1	2	3	4
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**END OF QUESTIONNAIRE – THANK FOR YOUR PARTICIPATION**

**APPENDIX G: LANGUAGE EDITING CERTIFICATE**



**STMbondvo editing services (Pty) Ltd**

**148 Aramburg (Mpumalanga) Cell: 060 346 7091**  
**email:mhlekazist@gmail.com**

**Proof of editing**

STMbondvo editing services  
148 Aramburg  
Mpumalanga  
South Africa  
Cell.: 0603467091

Date: 20 February 2023

This is to certify that I have re-edited the PhD thesis of the following candidate:

**Names and Surname:** Goodwill Phezulu Mbambo

**Student number:** 5401-936-2

**Title:** Optimising student academic support in open distance learning at a technical vocational education and training college.

**Dr ST Maseko**  
**Director**  
**STMbondvo editing services**

**Confidentiality:** *In editing academic documents, I understand that I have access to confidential data, that information contained in documents is confidential and for that, I agree not to divulge, publish, make known to unauthorized persons or to the public the data in documents.*

# APPENDIX H: RESEARCH PERMIT

DHET 004: APPENDIX 1: APPLICATION FORM FOR STUDENTS TO CONDUCT RESEARCH IN PUBLIC COLLEGES

FOR OFFICIAL USE

DECISION BY HEAD OF COLLEGE

*Please tick relevant decision and provide conditions/reasons where applicable*

Decision		<i>Please tick relevant option</i>
1	Application approved	<input checked="" type="checkbox"/>
2	Application approved subject to certain conditions. <i>Specify conditions below</i>	<input type="checkbox"/>
3	Application not approved. <i>Provide reasons for non-approval below</i>	<input type="checkbox"/>
SIGNATURE		
DATE		

*Handwritten signature and date: 02/09/2021*

**MAJUBA TVET COLLEGE**  
 CENTRAL OFFICE  
 HR DEPARTMENT  
 2021 -09- 02  
 TEL: 034 326 4888  
 PRIVATE BAG X6602  
 NEWCASTLE 2940