# Guidelines for learning support needs of incarcerated open distance learning students in a changing education landscape

By

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Thesis submitted for the degree *Doctor of Philosophy* in Learning Support at the North-West University

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**Examination November 2017** 

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## **Acknowledgements**

#### **Dedication**

I dedicate this thesis to my late parents who were my motivation and supporters.

## **Acknowledgements**

I acknowledge and thank the following people and institutions for the assistance and support they gave to me during this journey:

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## **Abstract**

With the emergence of Technology-enhanced learning, distance education (DE) institutions increasingly print less course materials, partly due to the associated costs involved. DE institutions rely on online delivery to present courses and course resources. The delivery of online courses poses significant challenges to incarcerated students who have limited access to the internet as well as to other resources. Online courses compel students to submit their assignments via the internet; they also have to retrieve resources via the internet. This provides a challenge to incarcerated students owing to their limited internet access.

The aim of the study is to describe, explain, and understand the issues regarding the learning support needs of incarcerated students within the higher education context of the Department of Correctional Services' (DCS) correctional facilities. The research question which this study addressed was: How can the DCS manage the learning support needs of incarcerated students in a changing ODL landscape?

As the study stemmed from an interpretivist paradigm, a qualitative research methodology was used. Purposeful sampling was used to select participants at a single learning hub of the DCS. The research participants comprised offenders who were post graduate students and who studied through open distance education, as well as the DCS staff members who were allocated to the learning needs of these students incarcerated at the Breede River Management Area in Worcester. The interview questions to the research participants were developed from a systematic literature review from which six themes emerged: (i) student characteristics, (ii) scale of capacity, (iii) institutional infrastructure, (iv) technological infrastructure, (v) management of learner support, and (vi) policy for digital support. The researcher and participants partook in focus group interviews. After recording and transcription, they were analysed in Atlas.ti™ for coding and categorising. Twenty-three codes emerged from the analysis as aspects of concern. The analysis used the literature aspects as a framework for coding and a seventh important aspect—student satisfaction arose from the analysis as a pivotal aspect for success of incarcerated students. This finding relates to the literature, which also indicates the requirement of student satisfaction as important for student success when their learning needs are met. This study developed guidelines for the DCS to manage the learning support needs of incarcerated students within a changing ODL landscape which could be used while developing a policy for higher education needs of incarcerated students.

## Keywords

Distance education

Higher education

Incarcerated students

Information and communication technologies

Learning support

Online learning

Open distance learning

Technology-enhanced learning

## **Opsomming**

Namate tegnologieversterkte leer ontwikkel, maak afstandsonderriginstansies steeds minder gebruik van gedrukte studiemateriaal; deels weens die hoë koste daaraan verbonde. Afstandsonderriginstansies maak staat op aanlyn-aflewering om kursusse en kursushulp aan te bied. Aanlynprogramme bied betekenisvolle uitdagings aan studentegevangenes wat beperkte toegang het tot die internet en ook tot ander hulpmiddels. Aanlynprogramme verplig studente om opdragte via die internet in te dien, en hulle moet ook hulpmiddels van die internet aftrek. Dit bied 'n uitdaging aan studentegevangenes vanweë hulle beperkte toegang tot die internet.

Die doel van die studie is om die probleme rondom die leerondersteuningsbehoeftes van studentegevangenes binne die hoëronderwyskonteks van die Departement Korrektiewe Dienste se korrektiewe fasiliteite te beskryf, te verduidelik en te begryp. Die navorsingsvraag wat hierdie studie aanspreek is: Hoe kan die DKD na die leerondersteuningsbehoeftes van studentegevangenes omsien binne 'n veranderende OAL-landskap?

Aangesien die studie in 'n interpretivistiese paradigma begrond is, is 'n kwalitatiewe navorsingsmetodologie aangewend. Doelgerigte steekproewe is gebruik om deelnemers by 'n enkele leersentrum van die DJKD te selekteer. Die navorsingsdeelnemers was oortreders wat deur middel van oop afstandsleer (OAL) besig was met nagraadse studies, asook die DKD personeellede wat aangewys is om na die leerbehoeftes van hierdie studentegevangenes in die Breederivier Bestuursgebied in Worcester om te sien. Die onderhoudvrae wat aan die navorsingsdeelnemers gestel is, is ontwikkel vanuit 'n sistematiese literatuuroorsig waaruit ses temas na vore gekom het: (i) studente-eienskappe, (ii) skaal van vermoëns, (iii) institusionele infrastruktuur, (iv) tegnologiese infrastruktuur, bestuur van leerderondersteuning en (vi) beleid vir digitale ondersteuning. Die navorsing het fokusgroeponderhoude ingesluit. Nadat die onderhoude opgeneem en getranskribeer is, is hulle deur middel van Atlas.ti™ geanaliseer om te kodeer en te kategoriseer. Drie-en-twintig kodes het uit die analise na vore gekom as sake wat aandag verg. Die analise het die literatuuraspekte as raamwerk vir kodering gebruik, en 'n sewende aspek studentetevredenheid – het daaruit na vore getree as 'n kernaspek vir sukses van studentegevangenes. Hierdie bevinding hou verband met die literatuur wat ook studentetevredenheid as belangrik vir die sukses van studente aantoon wanneer hulle leerbehoeftes vervul word. Hierdie studie het riglyne vir die DKD ontwikkel om in die leerondersteuningsbehoeftes van studentegevangenes binne 'n veranderende OAL-landskap te voorsien. Hierdie riglyne kan ook aangewend word om 'n beleid te ontwikkel rakende die hoër onderwysbehoeftes van studentegevangenes.

### Sleutelwoorde:

Afstandsonderrig

Hoëronderwys

Studentegevangenes

Inligtings- en kommunikasietegnologie

Leerondersteuning

Aanlynleer

Oop afstandsleer

Tegnologieversterkte leer

## **Solemn Declaration**



#### **ACADEMIC ADMINISTRATION**

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Commissioner of Oaths: \_

SOLEMN DECLARATION I declare herewith that the thesis / dissertations / mini-dissertation entitled: Guidelines for learning support needs of incarcerated open distance learning students in a changing education landscape which I herewith submit to the North-West University as completion / partial completion of the requirements set for the PhD Learning Support degree, is my own work and has not already been submitted to any other university. I understand and accept that the copies that are submitted for examination are the property of the University. Matinone Signature of candidate: University number: 13173421 Signed at Vanderbiljpark this 22 day of October 2017 Declared before me on this \_\_\_\_\_ day of \_\_\_\_\_

## **Ethics Approval**



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#### ETHICS APPROVAL CERTIFICATE OF STUDY

Based on approval by the Basic and Social Sciences Research Ethics Committee (BaSSREC) on 20/02/2017 after being reviewed at the meeting held on 16/02/2016, the North-West University Institutional Research Ethics Regulatory Committee (NWU-IRERC) hereby approves your study as indicated below. This implies that the NWU-IRERC grants its permission that, provided the special conditions specified below are met and pending any other authorisation that may be necessary, the study may be initiated, using the

> Project title: Guidelines for learning support needs of incarcerated students in a changing ODL landscape. Project Leader/Supervisor: Prof Seugnet Blignaut. Ms Buyiswa Hazel Matiwane. **Ethics** N W U - HS - 2 0 1 6 - 0 1 3 4 number Application Type: Single Study Risk: Low Commencement date: 2017-02-20 Expiry date: 2020-02-20

#### Special conditions of the approval (if applicable):

- Translation of the informed consent document to the languages applicable to the study participants should be submitted to the BaSSREC (if applicable).
- Any research at governmental or private institutions, permission must still be obtained from relevant authorities and provided to the BaSSREC. Ethics approval is required BEFORE approval can be obtained from these authorities.

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  - without any delay in case of any adverse event (or any matter that interrupts sound ethical principles) during the course of the project.

    Annually a number of projects may be randomly selected for an external audit.
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- BaSSREC can be contacted for further information or any report templates via <u>Charmaine.Lekonyane@nwu.ac.za</u> or 018 210 3483.

The IRERC would like to remain at your service as scientist and researcher, and wishes you well with your project. Please do not hesitate to contact the IRERC or BaSSREC for any further enquiries or requests for assistance.

Yours sincerely

Digitally signed by Prof LA Prof LA Du Plessis Du Plessis Date: 2017.03.07

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## **Certificate of Language Editing**

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I hereby declare that I have edited the language of the thesis

# Guidelines for learning support needs of incarcerated open distance learning students in a changing education landscape

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The responsibility to accept recommendations and effect changes remains with the author

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The addenda are available on a CD-ROM at the back of the thesis.

## **List of Abbreviations and Acronyms**

AET Adult education and training

DE Distance education

DL Distant learning

DCS Department of Correctional Services

HE Higher education

HEI Higher education institution

ICT Information and communication technology

NWU North-West University

ODL Open distance learning

SLR Systematic Literature Review

TEL Technology-enhanced Learning

UNISA University of South Africa

UP University of Pretoria

## **Chapter One**

## Framing the Research Journey

### 1.1. Introduction and background

During the course of a year many incarcerated offenders in South Africa study through open distance learning (ODL), potentially preparing themselves with better qualifications, skills and values for a crime free future (Gasa, 2011:7). Information communication and technology (ICT) provides technology enhanced learning (TEL) experiences to thousands of ODL students to make their learning opportunities more meaningful, to augment communication with their peers, and also to obtain support from their respective higher education institutions (HEIs). Offenders study by means of correspondence as mode of course delivery (Pike, 2010:2). However, TEL studies of students in the Department of Correctional Services (DCS) cannot be supported due to security reasons. Although the DCS presents opportunities for the offenders to gain entry to higher education (HE), incarcerated students experience extensive difficulties to achieve positive educational outcomes while attempting courses of study at correctional facilities (Pike, 2010:2). Even though low registration and throughput are related with students' individual situations and their views in the importance of education, the confining correctional environment and the limitations to interact with online learning technologies become constraining factors (Koudstaal et al., 2009:3). The HEIs which offer DE, make additional provisions to offenders who want to further their studies and many offenders have received bachelor's, Honours, Master's and PhD degrees from these HEIs across various academic fields (Gasa, 2011:1329). However, as these distance education institutions increasingly adopt online delivery of education programmes, students without access to the internet become progressively side-lined (Farley & Doyle, 2014a:357; Hancock, 2010:2). Among these marginalised incarcerated students who do not have access to technology, the primary concerns of the DCS are breach of security, as they suffer insufficient resources and staff, implementation, maintenance, and monitoring the technology (Farley & Doyle, 2014a:357; Hancock, 2010:2). This indicates a need for support measures such as catering for the diverse needs of incarcerated students. This aspect relates to the aim of this study which is to develop guidelines for the DCS and other stakeholders to manage learning support needs of incarcerated students in a changing ODL landscape, especially focussing on the needs of incarcerated students related to eLearning needs.

In South Africa, many students are not prepared for participation in HE. They are not able to cope with the demands academic HE poses. A large number of unsatisfied students obtain their degree certificates (Nair & Pillay, 2004; Paras, 2001; Roberts, 2006). The South African HE system is characterised by inefficiencies like "low throughput rates, student dissatisfaction, unsatisfying graduation rates, student dropouts, student repetition, motivation, self-efficacy, attitude, personality differences, maturation, the retention of failing learners and unit costs" (Council on Higher Education, 2004:41). Disappointingly, poor student throughput rates and high dropouts result in the Government losing millions of Rand on student subsidy each year. HEIs suffer heavy losses with respect to subsidy income which is linked to throughput rates (Nair & Pillay, 2004:303). The success rate of HE students is crucial for the socio-economic development of the country. "Both government and the HE sectors are therefore concerned with the performance and satisfaction of students" (Fraser & Killen, 2005:26). The implementing of technology has transformed DE with the extensive emerging use of email, online learning, web sites, blogs, instant messaging, online journals, wikis, and social media, all which make it easier for students to attain their dreams no matter their geographical situation (Watts, 2010:1). It is possible for the use of ICT to provide opportunities for learning broadly and rightfully throughout the teaching environment. Using ICT for learning can improve the value and choice of the resources and support available to students, introducing students to new opportunities to develop themselves and enhance their knowledge and skills, and change the mind-set of students (Baloyi, 2014:127).

Student satisfaction involves various aspects of HE, including: "student needs, expectations, perceptions, values, learning experience, motivation, academic relationships, programme design, content of study material, resources, infrastructure, and student support" (Allen *et al.*, 2002:84; Bean & Bradley, 1986:398; Bolliger & Martindale, 2004:62; Elliot & Healy, 2001:1; Sahin, 2007:117). For universities and correctional facilities to attract and keep students, the institutions should recognise and address student needs (Elliot & Healy, 2001:1). TEL therefore enables DE students who are divided by geographical distance, to be able to communicate with one another, their institutions, and their course materials. This indicates that they can access their learning at any time, at any location, at a pace suited to their personal lives, learning preferences or plan of personal development (Baloyi, 2014:2). Enrolling students and their throughput rates in ODL are connected to the students' satisfaction and expectations (Douglas *et al.*, 2006:251; Sahin, 2007:117). Student satisfaction can be fulfilled only when student support needs are met. However, student

support needs in HE, especially for incarcerated students, have greatly been overlooked in the past (Baloyi, 2014:127). The limited acces to internet and infrastructure challenges are possible contributing factors which prevent incarcerated students from completing their postgraduate programmes, regardless of their complaints which often do not even come to the attention of the HEIs. The mix of student support needs, student satisfaction, and retention and throughput rate of incarcerated students is therefore more complex than that of other DE students. Further research is required to ensure satisfactory retention and throughput rates of DE students in general (Mdakane, 2011:2), but especially of incarcerated students.

DE and open distance learning (ODL) contexts in HE are similar in nature. In South Africa, ODL modes enable distance students to cross geographical and socio-economic barriers. ODL refers to the provision of opportunities for, and the elimination of barriers to, a diverse range of students in order to assist them to succeed in their education or training according to their specific needs and diverse learning settings. For example, DE mostly uses correspondence and printed materials to communicate with their students, and ODL uses technology as a mode of learning (Mpezeni et al., 2013:255). Many South African HEIs, for example UNISA, University of Pretoria (UP) and the North-West University (NWU) offer ODL through hybrid modes of printed means, elearning and contact sessions. A significant number of adult students and incarcerated students, whose needs would not have been met had it not been for ODL are provided access to higher education via ODL (Mdakane, 2011:2). ODL often makes use of learner support programmes, such as counselling, contact sessions, feedback strategies, administrative support, the internet, telephone calls, as well as occasional meetings with tutors and with other learners (Segoe, 2012:1). The objective of ODL is to expand involvement and to overcome geographical, social and economic barriers (Baloyi, 2014:127). The Department of Higher Education (2001) has identified DE as a system which extends educational opportunities in order to offer access to higher education for individuals who cannot study fulltime.

In South Africa, few policies exist which are promulgated to make ODL a reality. The National Plan for Higher Education (Department of Higher Education, 2001:75) promotes a growth in the overall participation level in public HE in South Africa, aiming at assisting and maintaining lifelong learning, developing the skills of students and rectifying past injustices in the provision of education. DE is a critical player in rectifying the discrepancies of the past by allowing access and success. Failure rates are not acceptable and they characterise a

vast waste of resources, both human and financial, and are likely to be a barrier in achieving the economic development goals of the Government (Department of Higher Education, 2001:18).

A critical component in DE is learner support. The term learner support is a general term referring to the services provided to ODL students to assist them to overcome difficulties to learning and to be able to complete their studies successfully (Tait, 2000:1; Thorpe, 2002:2). Learner support can be defined in different ways. While Brindley et al. (2004:9) claim that it could include "learning materials, teaching and tutoring and non-academic elements such as admission and registration, administrative aspects, guidance and counselling," Tait (2000:1) states that learner support includes a "range of services for individuals and students in groups which complement the course materials that are uniform for all learners, and which are often perceived as the major offering of ODL institutions." Tait (2000:1) posits that the role of student support is to facilitate the regular and constant essentials of course materials and other administrative services, mainly identifying different learner needs throughout. HEIs have founded online courses using online educational methods such as "chats, discussions, web-based testing or simulation sites on the internet in order to create opportunities for their students" (Al Saif, 2007:126). If offenders could have the opportunity to use TEL effectively, they could engage with DE courses, either as support to encourage learning in the traditional classroom or as a DE mode. Lecturers could also use technology to send study materials such as "syllabi, course schedule and meetings, reading materials and course requirements and interactions" (Al Saif, 2007:126).

The DCS makes an effort to establish prison programmes to assist offenders to successfully reintegrate into society after they have been released from correctional centres. Examples of such programmes include substance abuse, life skills, anger management, competency skills, and formal education. Improving the mental, physical, and social well-being of offenders, as well as creating job training and working skills for offenders, can benefit the communities at large by reducing crime and protecting the communities (Erisman & Contardo, 2005:ix). Correctional programmes encourage offenders to change their behaviour while incarcerated and to be able to go back to the communities as law abiding citizens (Erisman & Contardo, 2005:ix).

Currently, no research aimed at the improvement of the situation of incarcerated students could be identified for the DCS to make decisions on the extent, type or timing of student

support needs of incarcerated students which the increased use of ODL initiatives as HEIs bring about. The aim of this study is to examine student support needs amongst a group of incarcerated students who are already involved in or wish to enrol for formal education programmes. Because these students are incarcerated, their needs by default depend on ODL as the mode of delivery of formal education which provides more leniencies in terms of the needs of diverse students. DE has been available for incarcerated students for a long time, but the inclusion of ICT comes with an increased set of challenges, therefore, guided by my findings, the study intends to make recommendations to the DCS on the support needs of incarcerated HE students in the light of changes to delivery modes of DE by HEIs, as well as to HEIs to develop programmes for incarcerated students.

According to literature, ODL modes are mainly used for distributing HE to incarcerated students throughout South Africa (Mdakane, 2011:139). Mdakane indicates that HE, HEIs and ODL components uniformly have the responsibility for supporting student satisfaction, i.e. the degree to which students' needs and their expectations are met. Student satisfaction according to Mdakane (2011:139) relates to three main components. They are: (i) student satisfaction with the HE environment, e.g. structuring of HEIs, registering of qualifications with SAQA, quality assurance of programmes, etc. (ii) client satisfaction with the HEI environment, e.g. student administration, bursaries, accommodation and local programme prerequisites, etc.; and (iii) student satisfaction with the ODL environment, e.g. programme delivery through ODL, lecture/facilitator support; assessment of assignments and examination scripts, support at remote learning, etc. Although I do take note of the student framework of Mdakane, the aim of this study is to explore student support needs of *incarcerated students* and not to attest her findings, so as to create guidelines for the management of learner support needs of incarcerated students in a changing ODL landscape.

#### 1.2 Problem statement

Correctional facilities depend on ODL for the delivery of education for offenders who wish to study through HEIs (Gasa, 2011:1329). ODL previously depended mainly on a correspondence mode of distributing study materials to students. The development of technology was the reason for ODL institutions to increasingly print less study materials. Digital courses delivered often include interactive multimedia, internet-based resources, and computer-mediated communication, and promote interaction between students and

educators through a campus-based web portal. HEIs that provide course materials for students without internet access often employ exceptions handling processes, using large volumes of printed copies of the course materials and learning support resources (Wake *et al.*, 2013:2). It is expensive for universities to "assemble, print and post course material which is in no way interactive and also cannot encompass all the learning support resources relating to a course" (Watts, 2010:3).

South African universities, in line with those in the rest of the world, are progressively becoming dependent on the online distribution of studies and schedules. As universities increasingly make use of online course facilitation, it becomes more difficult for some students to participate in DE activities (Hancock, 2010:2). For students to complete and submit their assignments, internet research is needed. Paper-based modes are rapidly becoming less frequent. To retrieve resources, students must have access to the internet and be able to download content from websites. This reliance on the online delivery of courses, programmes and course resources poses significant challenges to incarcerated students who are not allowed direct access to the internet (Farley & Doyle, 2014b:357).

ODL institutions need to be aware of the exceptional conditions and challenges offenders live with to make sure that their learning needs are catered for in their unique situation, as this category of students form a significant body of students (Kangandji, 2010:1). Incarcerated students experience more isolation and remoteness than other DE students (Kangandji, 2010:1). Because incarcerated students have many challenges and their environment is different from the other students, they need more support for them to be able to complete their studies successfully, as few of them have experience of HE. Offering education to offenders is an effective way of rehabilitating offenders (Kangandji, 2010:1). DCS and UNISA need to make sure that the learning needs of incarcerated students are known, recognised and met so that offenders can benefit from the education provided.

## 1.3 Aim of the study

The aim of the study is to investigate and identify the learning support needs of incarcerated students in the changing ODL landscape, so as to provide guidelines for extending access to incarcerated students to advance their studies in an ODL environment.

## 1.3.1 Objectives

The general objectives of this study are to:

- investigate incarcerated students' ODL support needs as presented in the literature
- investigate the needs and challenges of incarcerated students during ODL, with special reference to eLearning delivery of HE
- identify strategies and policies which are relevant to the changed needs of incarcerated ODL students against the backdrop of the increased use of internetbased learning technologies
- provide guidelines to the DCS and HEIs regarding the critical issues in order to provide structure and policy within the organisations on student support needs of incarcerated student needs.

#### 1.3.2 Research question

From the above-mentioned objectives, the following research question arises:

How can the DCS manage the learner support needs of incarcerated students in a changing ODL landscape?

### 1.3.2.1 Research sub-questions

The research sub-questions of this research are:

- What are the policies in place to manage incarcerated learner support needs?
- What guidelines can be provided to support the learner support needs of incarcerated students in a changing ODL landscape?
- What are the learning support needs of incarcerated students in a changing ODL learning landscape?

## 1.4 Conceptual framework

For this study, I selected the framework of Tait (2000:297) to assist in conceptualising this study, contextualised for the DCS. It comprises six main themes: (i) student characteristics, (ii) technological infrastructure, (iii) scale, (iv) institutional framework/infrastructure (v) funding

of ICT tools, and (vi) ICT policy (Figure 1.2). These aspects will constitute an important conceptual framework for this study of meeting incarcerated students' learning needs and expectations, as well as improving the quality of HE delivery through ODL.

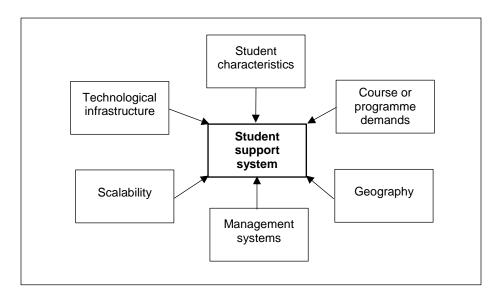


Figure 1.1: Initial framework for the development of a student support system (Tait, 2000:1)

The framework for the development of guidelines for student support services is constructed around these six core elements: (i) student characteristics, (ii) scale of capacity, (iii) institutional infrastructure, (iv) technological infrastructure; (v) management of learner support, (vi) policy for digital learner support. These are discussed according to Figure 1.2.

#### 1.4.1 Student characteristics

There is a need to have a rich opinion concerning the characteristics of the students. The students' characteristics will not only establish the courses they will want to study but also what kind of distribution and support will be needed (Rumble, 2002:25; Tait, 2000:3). The characteristics of the incarcerated students constitute a crucial and the main portion in the development of students' support needs (Tait, 2000:3). Therefore, it is important to incorporate elements of student centredness in approaches used for students whose status has been previously restricted (Tait, 2000:3). Indeed, all parts that make up a development and management instrument must talk to students' needs.

ODL systems use a broad variety of modes for their distribution (Rumble, 2002:25). It is obviously not a good idea to use a certain distribution system if most of the students who have to access the programme are not able to do so (Rumble, 2002:25). Planning for student support should begin with analysing along the lines of "Who are our students?" This simply means that, when controlling ODL, one must take cognisance of the characteristics of the students before designating resources (Rumble, 2002:26). Incarcerated ODL students cannot go to a campus to study as they are behind bars (Gasa, 2011:1333). They feel more isolated and secluded than other ODL students and also have difficulties in finding privacy to study (Worth, 1996:179). Therefore, they need more support to be able to successfully complete their studies as correctional conditions make it difficult for them (Kangandji, 2010:2).

#### 1.4.2 Scale of capacity

This element expresses the planned size of activity, and is an important factor of the manner in which arrangements should be created and controlled. For example, an establishment or organisation which plans to engage 200 students for learning through ODL mode will need to create different systems from those which might have more than 100 000 students (Tait, 2000:6).

These differences will impact considerably on the degree to which outlay is made in study materials through whatever mode, but also in the outlay in an administration of student support. Similarly, the aspect of scale will effect the ways in which review and admission are planned, and on the need for local services like study centres or regional offices (Tait, 2000:7). Thorough financial planning, flexibility, and a certain extent of diversity in the administration of services will be necessary.

#### 1.4.3 Institutional infrastructure

A concern challenging people developing a new ODL system is to agree on the kind of organisation framework which should be created. There are three basic options: (i) a purpose-built distance learning system; (ii) a distance learning embedded within a traditional institution, and drawing on it for many of its needs; and (iii) a small co-ordinating body which brings together and co-ordinates the expertise of other institutions in a network. These

models are usually referred to in the literature as the autonomous or single-mode, the mixed or dual-mode, and the network model respectively (Rumble, 2002:37).

Every single model has its advantages and disadvantages. Challenges can transpire, but only where mutual interests are not strong enough to keep the partners together, and where disagreements about academic and educational policies, or technical and financial pressures, make collaboration difficult (Rumble, 2002:39). This study will attempt to assist the DCS in choosing which model will be best for it to use for incarcerated students. The coordinating body which brings together and co-ordinates the expertise of other institutions in a network would affect this study. The reason for this is because correctional services need to work with HEIs in order to make this mode work.

### 1.4.4 Technological infrastructure

Evaluating which technologies should be used in delivering student services, it is important to make a distinction primarily between technologies which students have access to, and technologies that are available to the institution or organisation (Tait, 2000:4). Distance learning institutions have a progressively extensive variety of modes to choose from. The development of technology is increasing the variety of such modes, as well as the methods in which modes can be combined with technologies that already exist in correctional facilities (Rumble, 2002:27).

There is a difference amongst the modes which students and instructors directly interact with, and the distribution technologies which transmit them. Occasionally the methods of provision will affect the manner in which a student make use of the resources. For example, occasionally it is not important to a student whether a resource is sent by post, or any other way, but this will affect the infrastructure to present the video (Rumble, 2002:27). This fact is mostly important as HEIs are increasingly using ICT, and therefore have to think carefully who will be involved or left out by such a change. Universities are changing from DE to ODL and not considering all their students, in this case incarcerated students (Tait, 2000:5).

Managers of ODL systems should consider various factors when making a decision about which mode to use. They should use media (print, press, photography, advertising, radio and television) which their students can access (Rumble, 2002:28). This means not merely

checking on what is exactly accessible within a particular society or organisation, but also how the intended people currently make use of the mode. One also has to ask oneself whether a specific group of students, which in this case is incarcerated students, have access to the media, even though the media are available (Rumble, 2002:28). Correctional centres as safekeeping institutions have very well-organised measures for the use of ICT with severely supervised procedures. Access to ICT is extremely limited and difficult to obtain for offenders. Limited access to a laptop often involves a lot of paper work and red tape (Watts, 2010:3).

#### 1.4.5 Management of learner support

The procedure of getting events completed proficiently and successfully with and through people, is known as management and occurs in all organisations. The management of education aims to make it proficient (i.e. relationship between the inputs and outputs of the educational process are managed to minimise resource costs) and effective (i.e. it attains its goals), and it is of vital importance to those who have a stake in the sector. This includes the government (which funds significant parts of the education services), the institutions (or individuals) other than government who pay for education (parents, adult learners, sponsors), and the students themselves (Tait, 2000:7).

Management of learner support in ODL is an important issue which requires appropriate methods of communication, structured planning, well-designed courses, and administrative arrangements. Effective management is central to all ODL practices, principally because the activities involved in developing and teaching education programmes differ in key aspects such as the planning process and the methodology of how to ensure quality education to students from conventional education. Literature reveals that studies on the provision of education through ODL have not given attention to management of learner support of incarcerated students (Watts, 2010:1; Worth, 1996:183).

Rumble (2000:14) states that "the management of and dealing with information is central to the effective delivery of quality services to students." Student progress can be observed and services presented to intervene in student support, through management of information. Communication to and from components, characterises a vital part within overall management of information. It remains essential that, as in all institutions of any

involvedness, there is close management of how well the institution is doing, and a constant practice of trying to improve (Tait, 2000:10). Guidelines for the management of incarcerated student support need to revolve around six core elements:

- Student characteristics
- Technological Infrastructure/ICT
- Scale of capacity
- Institutional Framework/Infrastructure
- Funding
- Policy (Tait, 2000:3).

The institutional framework and the choice of ICT have a thoughtful outcome on the general funding of distance learning. Self-directed, organisation-centred systems using expensive technologies are likely to have expensive costs, compared to traditional institutions. These expenses result from the need to empower the instituting of an infrastructure to manage materials and student services. After the completion of this study the DCS can then be able to draw up a budget as to what will be needed and how much it will cost (Rumble, 2000:223).

### 1.4.6 Policy for digital learner support

A policy is thoughtfully created procedures and programmes which have timeframes to guide decisions and achive outcomes. This confirms to one of the essential challenges around policy, namely, "ensuring the kind of continuity required in terms of time frames that will allow for its proper and timely implementation" (Pacey & Keough, 2003:404).

ODL is considerably affected by two policy areas; education and telecommunications. These are in turn influenced by an increasing emphasis on innovation and partnership (Pacey & Keough, 2003:401). They mention that ODL experts should be attentive to the complication of the environment in which the field of ODL operates, and the possibilities of inspiration accessible to them to attain anticipated policy design.

This growth of ODL has led to the requirement for the role of a distance learning system to be defined within the setting of the national policy. Pacey and Keough (2003:405) emphasise the "importance for governments to adopt implementation strategies in line with

their national policy on education to increase access to educational programmes." They also point out the necessity of development of a National Distance Education policy guideline as a critical phase in ODL in the light of changing challenges of DE, increase of public societies and development of trans-national education.

Pacey and Keough (2003:405) note that programme completion in ODL depends on national and institutional policies which clarify staff responsibilities to avoid overlap and role conflict in service delivery. To facilitate this, seven policy areas are identified in ODL: admissions, assessment, geographical distance, governance policies dealing with tuition, and student policies dealing with academic advice, access to resources, equipment and software, and technical and philosophical policies that deal with the achievement of vision and mission statements at the institutional level.

Minnaar (2013:103) states that different policies such as policies for governing and operations, human resource polices and legal policies for ODL need to be compiled, the most imperative being the ODL policy for the institution. All other policies should be associated with this policy. ODL policies should endorse, encourage, and support the development of distance education as well as associated technologies, infrastructure and staff development. These policies should help to enhance the effectiveness and management of DE at minimal economic and social costs (Minnaar, 2013:91).

Learning technologies can provide incarcerated learners with the opportunity to obtain and retrieve information, thereby benefiting from learning while incarcerated. The same learning technologies can be dangerous when used by incarcerated students as offenders can use the technology and use the internet for committing crimes like fraud; the email for harassing or threatening their victims, and they can also access restricted websites.

## 1.5 Research design and methodology

When deciding on an appropriate research design and methodology for a study, one should consider the stance this research takes in terms of (i) scrutinising the literature to ascertain an overview and gaps which this research would address, (ii) deciding on an appropriate

world view (iii) appropriate research design, and (iv) participant selection, data collection strategies, and data analysis methods.

To have reliable voices from the academic literature, I conducted a systematic literature review. A systematic literature review is a structured and stringent procedure to identify, select, evaluate, and interpret relevant and existing research in the public domain when there is an relates to the research phenomenon. A researcher uses this method of literature choice when there is an extensive variety of research on a certain subject, so as to direct the process (Petticrew & Roberts, 2006:19-21). Systematic literature varies from usual narrative methods of randomly selecting appropriate literatures as the approach can be repeated, is of scientific value, and is transparent (Cronin *et al.*, 2008:38).

Research design and methodology encompass the entire research method: planning of the research approaches; procedures and data collection methods and analysis (McMillan & Schumacher, 2001:71). This means that the aim of research methodology is to understand the process and not the product of scientific inquiry (Cohen *et al.*, 2011:39). This study relates to the perceptions, lived experiences, and opinions of incarcerated offenders as current and proposed students who need support for ODL. It becomes clear that this study relates to social dimensions of research and that one should consider the appropriate paradigm from which the research should be conducted. The research relates to the interpretive approach because it determines the subjective contexts, experiences, beliefs, behaviours, practices, expectations, fears, and social and support needs of incarcerated students in their natural setting, which in this case incarcerational facilities (Burrel & Morgan, 1979:20). Interpretivism describes and understands the world from the point of view of those directly involved in the social process (Denzin & Lincoln, 1994:22). "It is a subjective approach concerned with how people go about the task of seeing, describing, and explaining the world" (Burrel & Morgan, 1979:32).

In order to attain the perceptions, lived experiences, social and ODL support needs of the incarcerated students, qualitative research methods (interpretivism) were used to gather data to describe their situation (which is incarceration) in the original setting (correctional phenomenology which is the study of the development of human consciousness and self-awareness as a preface to or a part of philosophy). Qualitative research methods constructively explain the findings, and postulate understanding of their ODL support needs. Qualitative research is grounded in a philosophical position that is broadly interpreted, understood, experienced, produced and constituted (Bryman, 2008:111-126).

Participation selection is the selecting of groups of the target population to be included in the research (Sarantakos, 2000:13). Participants were selected for this study as they comprised certain characteristics relating to the research question. This research involved purposeful sampling where the researcher purposefully chose participants relevant to the topic (Sarantakos, 2000:152). The Management of the DCS, i.e. Deputy Commissioner: Personal training and Director: Formal education, were purposefully selected because they are managing the education of offenders and they are the policy makers for formal education in correctional centres. Deputy Commissioner and Director Education were not interviewed as they were not available for interviews. The participants comprised offenders who are incarcerated students, and DCS staff members (Education managers) involved in HE. These participants included female and male offenders from the ten Management Areas in the Western Cape Region. The offenders who participated in this study were held for various periods of time in correctional centres. Twenty-four incarcerated students were included in the study. The number varies because some of them were released on parole and others were transferred to other correctional centres. Offenders who were enrolled in ODL through the University of South Africa (UNISA) took part in the study. The reason for using offenders studying through UNISA was because the institution had created hubs in Worcester where all incarcerated students were hosted. This made it easier than to visit them from centre to centre.

Since correctional centres are restricted areas, various problems were experienced to conduct research there. These include numerous authorisations required, difficulties inherent to visiting inmates, miscellaneous limitations imposed by the administration or the offenders themselves, and the instability of the population. Subsequently it was difficult to apply random sampling criteria. Purposeful sampling where offenders voluntarily participate was envisaged according to a matrix of prison security categories in order to include a wide range of cases. It was also possible that only a few incarcerated students might be available at a specific point in time, and care was taken to include as many inmates as possible to ensure data saturation (Merriam, 2009:61)

Interviews are the predominant method of data collection in qualitative research to establish meanings that ostensibly reside with the participants (De Vos *et al.*, 2005:285). Interviews are a useful instrument to collect considerable amounts of data in a comparatively short space of time. They are also effective to obtain in-depth data from relevant people who are able to explain and have the capacity for correcting misunderstandings and uncertainties

(Sarantakos, 2000:21). Interviews however have some limitations. The interviewee can only respond to the extent that the interviewer will allow the respondent (De Vos *et al.*, 2005:333; Henning *et al.*, 2004:104).

The analysis of data is regarded as the creating of order, structure and meaning to the mass of collected data (De Vos *et al.*, 2005:333). For this research, data analysis was performed from the verbatim transcription of the interviews and involved a qualitative content analysis procedure (Henning *et al.*, 2004:104). The aim of the data analysis is to identify specific trends and patterns in relation to the research problem and aims. A computer-assisted qualitative data analysis system (CAQDAS), Atlas.ti™ version 7, was used to assist in identifying data clusters (codes, categories and themes) pertaining to managing learner support needs of incarcerated students in a changing ODL landscape. The data were analysed in a method to establish the links between the data and the interpretations. The arrangement of verbatim citations of participants' utterances were used to reflect the range and tone of their responses. The documents (the transcribed data) were reviewed and after the reviewing process of the documents according to content analysis, data clusters were identified (codes, categories and themes) pertaining to management of learning support needs of incarcerated students in a changing ODL landscape.

Ethics can be described as a set of honest values which is extensively acknowledged as rules and behavioural expectations about the correct conduct towards participants (De Vos *et al.*, 2005:57). This research adhered to the NWU and was executed according to the university's academic policy. The North West University Institutional Research Ethics Regulatory Committee (NWU-IRERC) approved the study before the phase of data collection. The primary goal of ethical approval is to protect the participants, the researcher and the institutions (Fraenkel & Wallen, 2008:50-52).

## 1.6 Chapter division

This research will be presented according to the following chapters: (i) framing of the research journey; (ii) mapping the research design and planning the methodology; (iii) panning the literature through a systematic literature review; (iv) burrowing for incarcerated

students' learning needs in a changing ODL landscape, and (v) culmination of a research journey into a framework of learner support needs of incarcerated students.

Table 1.1: Delineation of chapters and a brief description of each

Chapters	Description
Chapter 1  Framing the research journey	This chapter provides the orientation of the study and addresses the introduction to the research, the motivation and problem statement, aim of the study; conceptual framework, research design and methodology, ethical aspects and the outline of chapters
Chapter 2  Mapping the research design and planning the methodology	The research design methodology of this study is explained in this chapter. The nature and methodology of this research is explained, the qualitative data collection method discussed and motivation given for choosing this particular research approach. Strategies applied to determine trustworthiness were presented, the data analysis process and the use of ATLAS.ti ™ defined, and the preliminary theory and codes provided. The ethical considerations were considered, and the limitations of this study were discussed
Chapter 3  Panning the literature through a systematic literature review	This chapter recognises factors in appropriate literature which influence managing the learning support needs of incarcerated students in a changing ODL landscape. I will examine South African HE, as well as incarcerated students as adult students, and how these relate with learner support needs. The seven main themes identified are: (i) student characteristics, (ii) technological infrastructure, (iii) scale of capacity, (iv) institutional infrastructure, (v) management of learner support, (vi) policy for digital support, and (vii) student satisfaction. These aspects constitute the conceptual framework for this study
Chapter 4  Burrowing for incarcerated students' learning needs in a changing ODL landscape	This chapter presents a detailed analysis of the data collected from the interviews. Data are discussed according to the research question and sub questions
Chapter 5  Culminating the research journey into a framework of learner support needs of incarcerated students	This chapter concludes the study and provides information about the summary overview of the inquiry with the summary of the key findings. The chapter elucidates the value and contributions of the study

## **Chapter Two**

## Mapping the Research Design and Planning the Methodology

#### 2.1 Introduction

Research is a methodology that permits one to, in detail, study people's experiences relating to a certain phenomenon through the use of a specific set of research methods (Hennink *et al.*, 2011:9). Fraenkel and Wallen (2008:431) describes research as "knowing and understanding. It is the process of systematic inquiry to design, collect, analyse, interpret, and use data in order to understand, describe, predict, or control an educational phenomenon or to empower individuals in such context." The purpose of research is to explore and capture interpretations of social phenomena as experienced and understood by participants (Ritchie *et al.*, 2003:32). Research in education is vital as it provides essential information and knowledge in order to make informed decisions on educational issues (McMillan & Schumacher, 2001:6).

When deciding on an appropriate research design and methodology for a study, one should consider the stance the researcher takes in terms of (i) formulating a research question which addresses a pertinent issue; (ii) deciding on an appropriate world view (§ 2.2), (iii) scrutinising the literature to ascertain a clear overview and identify gaps which this research intends to address (§ 2.6), (iii) devising an appropriate research design (§ 2.3), (iv) selecting appropriate research participants (§ 2.7), (v) planning of data collection strategies (§ 2.7), and (vi) executing of the data analysis and interpretation (§ 2.7).

This research question which underpins this study, as delineated in Chapter One (§ 1.3.2), is: How can the Department of Correctional Services manage the learner support needs of incarcerated students in a changing ODL landscape?

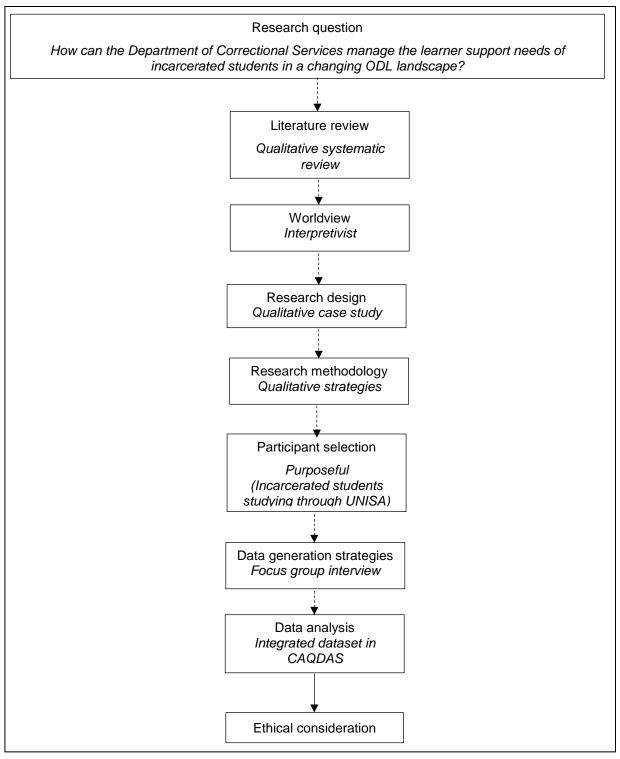


Figure 2.1: Research design and methodology for this study

## 2.2 Worldview of this study

Research design and methodology incorporate the entire research process: the planning of the research approaches, procedures and data collection methods and analysis (McMillan & Schumacher, 2001:71). Therefore, the aim of research design is to explain and understand the process and not to predict the product of scientific inquiry (Cohen *et al.*, 2011:39). This research relates to the perceptions, lived experiences, and opinions of incarcerated DL offenders—current and future incarcerated students need support for DL. This study therefore relates to the social dimensions of research and that one should consequently consider the appropriate paradigm from which the research should be conducted.

The nature of social sciences is conceptualised by a set of assumptions (Burrel & Morgan, 1979:3). As part of social theory, Burrel and Morgan (1979:20) distinguish between four distinct paradigms of organisation. They classify four assumptions on the nature of social science as the ontological nature, epistemological nature, human nature and methodological nature of a society. The resulting, subjective-objective, and regulation-radical change dimension structure comprises four paradigms which relate to social research: the interpretive, radical humanist, radical structuralist, and functionalist paradigms for the analysis of the organisations within society.

Ontology, the first assumption, is about the individual's understanding about the description of social world and the way in which it could be examined. Mack (2010:5) describes ontology as one's view of reality and being. He further states that ontology is the starting point which will likely lead a researcher to his own theoretical framework. Burrel and Morgan (1979:3) recommend that a researcher should ask himself two questions: Is reality external to me as researcher, or is the reality a given world? By addressing these basic questions, a researcher determines his ontology as either nominalist or realist (Burrel & Morgan, 1979:4). Nominalists believe that there is no real structure to the world while realists postulate that the world is made up of hard, tangible, and immutable structures.

Epistemology, the second assumption, is about how an individual acquires his knowledge (Mack, 2010:5). It can either be a conviction that knowledge is gained spiritually, by experience or insight in a subjective or a post-positivist way, or that knowledge is acquired objectively in a tangible form, a positivist way (Burrel & Morgan, 1979:7). Positivists follow a nomothetic approach because they base their research upon systematic protocol and

techniques whilst post-positivists follow an ideographic approach. Consequently a researcher's ontological, epistemological and human nature impacts his methodology and strategic approach; therefore, the researcher should have an understanding of the way in which to create, modify, and interpret the world in which his study takes place.

Studies of sociological nature consider two dimensions, i.e. subjective-objective dimension and regulation-radical change dimension, and four sets of assumptions throughout research thinking: ontological, epistemological, human nature and methodological assumptions. Each paradigm represents a social scientific reality of viewing a problem based on different meta-theoretical assumptions with regard to the nature of science and of society (Burrel & Morgan, 1979:24). Within each paradigm there is an awareness of where you are, where you have been and where you will go in the future. Figure 2.1 displays the Burrel and Morgan (1979:22) model of four paradigms relating to functionalist, radical humanist, radical structuralist, and interpretivist for the analysis of social theory.

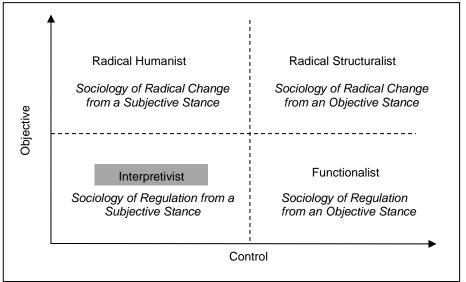


Figure 2.2 Choosing a research design according to the four paradigms of social theory

The Burrel and Morgan (1979:22) model of sociological paradigms comprises four paradigms (functionalist, radical humanist, radical structuralist, and interpretivist) according to the sociologies of regulation and radical change. The next section provides a concise synopsis of the functionalist and radical humanist paradigms, but a thorough description of the interpretivist paradigm of this research (Table 2.1).

Table 2.1: Brief overview of the functionalist, radical humanist and interpretive paradigms

Paradigm	Characteristics
Functionalist paradigm	<ul> <li>Views a problem from an objectivist point of view, entrenched in the sociology of nature and study aspects related to organisations</li> <li>Used mostly by organisation theorists, industrial sociologists, psychologists, and industrial relations theorists</li> <li>Relates to pre-dominantly realist, determinist, and nomothetic assumptions</li> <li>Is primarily regulative and pragmatic in its basic orientation, concerned with understanding society in a way that generates useful empirical knowledge (Burrel &amp; Morgan, 1979:35)</li> <li>Aims to accumulate constructive knowledge, gain practical solutions, and to solve practical problems (Burrel &amp; Morgan, 1979:28)</li> <li>Is regarded the functionalist paradigm has been the primary paradigm for organisational study Burrel and Morgan (1979:30)</li> <li>Assumes rational human action and believes one can understand organisational behaviour through hypothesis testing</li> </ul>
Radical humanist	<ul> <li>Focuses on the sociology of radical change, modes of domination, emancipation, deprivation and potentiality from a subjectivist point of view</li> <li>Is inclined to be nominalist, anti-positivist, voluntarist and ideographic of nature (Burrel &amp; Morgan, 1979:32)</li> <li>Believes that people are confined in organisations of society made and maintained by them</li> <li>Aims to create a pathway so that people could break free from the existing social patterns which trap them in the social organisation and alter the social world by adapting modes of cognition and consciousness (Burrel &amp; Morgan, 1979:36)</li> <li>Acknowledges the ontological position of the social world and has some attributes in common with the interpretivist (Burrel &amp; Morgan, 1979:32)</li> <li>Advocates the sociology of radical change from an objectivist standpoint</li> <li>Commits to radical change, emancipation, and potentiality, in an analysis which emphasises structural conflict, modes of domination, contradiction and deprivation. It approaches these general concerns from a standpoint which tends to be realistic, positivist, determinist and nomothetic (Burrel &amp; Morgan, 1979:35)</li> </ul>
Interpretivist paradigm	<ul> <li>Is informed by a concern to understand the world as it is, to understand the fundamental nature of the social world at the level of subjective experiences</li> <li>Seeks explanation within the realm of individual consciousness and subjectivity, within the frame of reference of the participant as opposed to the observer of action (Burrel &amp; Morgan, 1979:30)</li> </ul>

This study is firmly situated in the interpretivist paradigm as it ascertains to subjective contexts, experiences, beliefs, behaviours, practices, expectations, fears, and social support needs of incarcerated students in their natural setting—in this case, correctional facilities (Burrel & Morgan, 1979:20). Interpretivism describes and understands the "world from the point of view of those directly involved in the social process" (Denzin & Lincoln, 1994:22). It is a subjective method concerned with how people go about the assignment of seeing, describing, and explaining the world (Burrel & Morgan, 1979:32).

In order to attain the perceptions, lived experiences and social ODL support needs of the incarcerated students contributed to the exploring, describing and understanding of their situation in the original setting—phenomenology. Phenomenology is the study of the development of human consciousness and self-awareness as a preface to or a part of philosophy—as it constructively explains the findings, and postulate understanding of their DL support needs (Bryman, 2008:111-126).

## 2.3 Research design: A bounded case study

I studied the phenomenon at a particular correctional centre as an intrinsic case study (De Vos *et al.*, 2005:272). The correctional centre comprised a bounded system as a single case study (Henning *et al.*, 2004:13). It has a specific context and dynamic nature relating to relevant information about the learning support needs of incarcerated DL students in order to identify and analyse trends, patterns, and relationships. A reason for selecting a case study should be the opportunity to learn (De Vos *et al.*, 2005:272) and to gain in-depth insights on a particular setting (Mouton, 2002:150). The findings from the selected correctional centre, as case study, have the ability to provide rich information and a thoughtful understanding of the learning support needs of incarcerated ODL students in a changing education landscape.

The analysis of a case study focuses on a single situation (phenomenon), which the researcher selects to understand in depth regardless of the number of sites or participants involved in the study (McMillan & Schumacher, 2006:316). Case studies offer a multiperspective pool of information from stakeholders that has the ability of providing a voice to the powerless and voiceless of marginalised people—incarcerated students in this case. The ability for rich information is important to researchers to gain a deep understanding of the nature and dynamics of the phenomenon. These particular aspects are prominent features of case study research (Nieuwenhuis, 2007:75).

I used a case study to investigate the learning support needs of incarcerated ODL students in a particular correctional centre, part of a changing education landscape where the use of learning technologies are becoming standard practice. Choosing a qualitative, single case research study aimed to focus on in-depth idiosyncratic information from the participants. This specific correctional centre is also the only centre acting as a UNISA hub in the Western

Cape where all incarcerated DL students are centralised. Henning *et al.* (2004:14) state "that the single case study is suitable for theorising about issues related to particular organisations." This research therefore does not intend to generalise to a greater population, but to report on the perceptions and lived experiences of participants within a particular institution with the ultimate aim to improve the present practice.

The site selected for this research related to the Breede River Management Area in Worcester. Offenders enrolled with UNISA for post-graduate degrees were invited to participate in the research.

## 2.4 Research methodology: Qualitative research methodology

Qualitative research explores, describes and seeks to understand by examining various settings, groups or individuals (Berg & Lune, 2014:8). Qualitative researchers then are most interested in how humans arrange themselves, their settings, and how inhabitants of these settings make sense of their surroundings through symbols, rituals, social structures, social roles and so forth (Berg & Lune, 2014:8). Research on humans affect how they will be viewed. When humans are studied in a symbolic, reduced, statistically aggregated fashion, there is a danger that conclusions, although arithmetically precise, may misrepresent the people or circumstances. Qualitative procedures seek patterns among cases, but do not reduce these cases to averages. They provide a means of accessing unquantified knowledge about actual people who are observed and addressed, or how people are represented. As a result, qualitative techniques allow researchers to share in the understandings and perceptions of others and to explore how people structure and give meaning to their daily lives (Berg & Lune, 2014:8).

Researchers mainly collect data during qualitative research, they collect the data in face-to-face situations by interacting with selected participants in their natural settings. Qualitative research describes and analyses people's individual and collective social actions, beliefs, thoughts, and perceptions. The researcher interprets phenomena in terms of the meanings that people assign to these phenomena (McMillan & Schumacher, 2006:315). In a qualitative study, variables are not controlled because it is about investigating the natural development of action and representation that researchers wish to capture and share (Henning *et al.*, 2004:3). Qualitative inquiry employs different philosophical assumptions,

strategies of inquiry, and strategies of data collection, data analysis, and interpretation. Qualitative inquiry relies heavily on textual and image data, has unique steps in data analysis, and draws on diverse strategies for inquiry. The chosen strategy for inquiry in a qualitative research project has a direct influence on the procedures, which even within strategies are nothing but uniform (Creswell, 2009b:30).

While Creswell (2003:30) is of the opinion that "qualitative research methodology is suitable for research questions that require the researcher to explore," Henning *et al.* (2004:3) explain that "a qualitative approach emphasises verbal description and explanations of human behaviour." These statements support my decision to make use of qualitative research methodology. My decision to choose qualitative research was further inspired by Henning *et al.* (2004:30) who assert that "qualitative data analysis is usually based on an interpretive philosophy that is aimed at examining meaningful and symbolic content of qualitative data." The general characteristics of qualitative research are summarised in Table 2.2.

Table 2.2: Characteristics of qualitative research \*

Characteristics	Description	
Concern for	Human experience takes its meaning from social, historical, political and	
content	cultural differences	
	Reality is socially constructed and constantly changing	
Purpose	<ul> <li>To understand social phenomena of multiple realities from respondents perspectives</li> </ul>	
Rich narrative	Data are in the form of words	
description	Subjects experiences and perspectives	
	Detailed context-bound generalizations	
	Rich detailed description	
	In depth descriptions	
Sample	Small, non-random and purposeful	
Method	Interviews	
Natural setting	Takes place in natural setting	
	No attempt to manipulate behaviour	
	No artificial constraints or controls	
Human	Researcher is the primary agent for the gathering and analysis of data	
instrument	Studies human experiences and situations, requires an instrument to	
	capture complexity of the human experiences	
	Becomes immersed in social situation	
Function designs	Relies on fieldwork	
Emergent design	Design emerges as the study proceeds     Colf greatistically and the study proceeds	
	Self-questioning throughout research in order to think critically  Clavible and evaluing.	
	Flexible and evolving     Interaction and developmental	
Inductive analysis	Interaction and developmental     Deta collection and data analysis take place simultaneously.	
muucuve anaiysis	<ul> <li>Data collection and data analysis take place simultaneously</li> <li>Holistic form of analysis</li> </ul>	
	· · · · · · · · · · · · · · · · · · ·	
	Identification of recurring patterns	

Characteristics	Description	
	Proceeds from data to hypotheses to theory	

<sup>\*</sup> Adapted from Creswell (2009a); Fraenkel and Wallen (2003); and McMillan and Schumacher (2001)

### 2.5 Ethical considerations

The concepts of ethics, values, morality, community standards, laws and professionalism differ from one another without necessarily being mutually exclusive (Cohen *et al.*, 2007a; Hennink *et al.*, 2011). The term ethics means preferences that impact on behaviour in human relations, conforming to a code of principles, the rules of conduct, the accountability of the researcher and the standards of conduct of a given profession. Values indicate what is good and desirable, while both ethics and morality deal with matters of right and wrong (De Vos *et al.*, 2011:114). Ethics can be defined as a set of moral principles which is widely accepted as rules and behavioural expectations about the correct conduct towards participants (De Vos *et al.*, 2005:57). This research adhered to the NWU code of ethics and took place according to the university's academic policy (NWU-HS-2016-0134). The North West University Institutional Research Ethics Regulatory Committee (NWU-IRERC) approved the study before data collection. The primary aim of ethical approval is to protect the participants, the researcher and the institution from physical or psychological harm (Fraenkel & Wallen, 2008:50-52).

Research ethics issues are universal and complicated because the researcher has to be objective all the time. Information obtained during research should not be used at the expense of others (Strydom, 2005:56-59). Research should be based on mutual trust, acceptance, cooperation, promises and well-accepted conventions and expectations between all parties involved in a research project (De Vos *et al.*, 2011:113). As humans are the objects, or rather the research participants in a study relating to the social sciences, they bring unique ethical problems not evident in the natural sciences. In the social sciences, the ethical issues are complicated as data should never be obtained at the expense of research participants. Researchers sometimes tend to relate to their research participants from a position of superior expertise and status; thinking that the participants do not need to be fully informed about the research goals, the process or the outcomes (De Vos *et al.*, 2011:113).

The following ethical issues were considered in this study: access to the research environment; avoidance of harm; voluntary participation; informed consent from participants; privacy and anonymity, confidentiality; reciprocity; equity or justice; actions and competence of the researcher.

#### 2.5.1 Access to the research location

To gain access to the correctional facility, the researcher applied for permission to conduct research from the National office of Correctional Services (Addendum 2.1), and for ethical clearance to the Ethics Committee from the North West University (Addendum 2.2) to conduct the research (Cohen *et al.*, 2007a:129).

## 2.5.2 Avoiding harm

The essential ethical principle of social research is that the research participants should not get hurt or harmed (Ritchie *et al.*, 2003:67). Participants could get hurt in a physical and/or an emotional way. An individual may admit that injuries or damages to participants in the social sciences will be mainly of an emotional nature although physical injury cannot be ruled out entirely. All our actions could constitute some sort of harm to another, and consequently researchers should consider the dangers against the importance and potential advantages of the specific research project. I have an ethical responsibility to protect the research participants, within all possible practical limits, from any form of physical uneasiness that may emerge from the research project. Emotional harm to participants is often more problematic to foresee and to establish than physical discomfort, but often has extensive results for participants (De Vos *et al.*, 2011:114; Ritchie *et al.*, 2003:67).

I informed the participants in detail about the aims and the potential effect of the investigation. This information gave the participants the opportunity to withdraw from the investigation if they so wish. All efforts were made to avoid delicate or upsetting topics. The correctional centre and participants were anonymised to prevent harm from any adverse publicity or publications at a later date (Hennink *et al.*, 2011:67).

Permission was obtained from the Department of Correctional Services (Addendum 2.3). The guidelines for the DCS are:

- The independent data collector will accept that an internal guide, appointed by the DCS, will provide guidance on a continual basis during the research
- The guide will help with the interpretation of the policy guidelines. He /she will have to ensure that the researcher is conversant with the policy regarding functional areas of the research
- To help with the interpreting of information/statistics and terminology of the department which the researcher is unfamiliar with
- To identify issues which could cause embarrassment to the department, and to make recommendations regarding the utilisation and treatment of such information
- The work of the independent data collector remains his/hers and the internal guide may not be prescriptive. His/her task is assistance and he/she should not dictate a specific train of thought to the researcher (Addendum 2.4).

## 2.5.3 Voluntary participation

Participants should at all times take part in a study voluntarily and they should not be forced to participate in a project. Participants might still think that they are somehow forced to participate even if they are told that their participation is voluntary (De Vos *et al.*, 2011:116). DCS staff members who consider correctional management as the only authority deciding about offender participation, may not respect the right of offenders to make free and informed decisions. Thus, to ensure that their participation is voluntary, incarcerated students should understand the consequences of the research and its subsequent report; easy-to-read information sheets accompanied the consent form and the main points were discussed at length prior to the interview. Participants should be informed that they can withdraw at any stage and that they have an option of not being recorded, and that time will be given for reflection before the end of the interview (Hennink *et al.*, 2011:68).

### 2.5.4 Informed consent from participants

Getting informed consent indicates that all possible or enough information on the aim of the investigation; the anticipated time of the participant's involvement; the procedures which will be followed during the investigation; the possible advantages, disadvantages and harm to

which participants may be exposed; as well as the credibility of the researcher, may be given potential participants or their legal representatives (Cohen *et al.*, 2007b:52; Ritchie *et al.*, 2003:87). It is important to give participants written informed consent, and it should not be seen as extra work or a hindrance. Importance was placed on accurate and complete information, for participants to fully comprehend the details of the investigation and consequently be able to make voluntary, thoroughly reasoned decisions about their possible participation (Cohen *et al.*, 2007b:52; Ritchie *et al.*, 2003:87).

Participants should be psychologically competent to give consent and they must be aware that they are at liberty to withdraw from the investigation at any time (Hennink *et al.*, 2011:68; Ritchie *et al.*, 2003:87). Participants should have ample opportunity to ask questions before the study commences, as well as during the interviews. Participants may disagree to participate for several reasons. Several of the most vital reasons may be fear of victimisation. People with an inferior status and less power than the researcher—people at risk—such as children, offenders and psychiatric patients may feel obliged to participate, or participate because they are bored, or have the opinion that they will receive certain privileges (Hennink *et al.*, 2011:68; Ritchie *et al.*, 2003:87).

Roberts and Indermaur (2003:293) claim that a signed consent form may pose a threat to confidentiality, for example, to an offender's future wellbeing. However, it is not expected to be an issue as: (i) the research is focused on the learning support needs of incarcerated DL students and not their crimes committed; (ii) the incarcerated students were specifically informed that other topics are not for discussion; and (iii) a suitably confidential room for the interviews was identified.

## 2.5.5 The Privacy and anonymity

Henning *et al.* (2004:72) state that privacy implies the element of personal privacy. The When the identity of an individual is kept secret and protected from being known, that action is referred to as anonymity. This is in line with Creswell (2009b:30) who asserts that "when studying a sensitive topic, it is essential to mask names of people, places and activities." All data collected from the interviews were therefore anonymised and subject to the requirements of the data protection act. Necessary actions to guarantee the security of the data were taken. Audio files, transcripts, and other electronic data were stored in protected

files, printed material in locked cupboards, personal data kept separately from the interview schedules to protect confidentiality and preserve anonymity. Anonymity and confidentiality were stressed before and after the interview.

### 2.5.6 Confidentiality

Henning *et al.* (2004:50) assert that confidentiality indicates the handling of information in a confidential way. These authors add that "the confidentiality ethical guideline is to avoid possible harm to participants that includes putting them in a situation where they might be harmed as a result of their participation; or that it may include embarrassment or feeling uncomfortable about questions." According to Cohen *et al.* (2007b:65), there is a difference between privacy and confidentiality. Whereas privacy relates to an individual's personal privacy, confidentiality relates to dealing with information in a manner that is confidential. During the interviews, students wrote their names on the consent forms and on name tags in order for the researchers to be able to address them on their names during the interviews. All identifying information was removed when transcribing was done.

## 2.5.7 Reciprocity

Access to correctional facilities is not easy and people who are bothered or interrupted by the research may require compensation in order to agree to access to more research in the future. I made every effort to fit in with the correctional system and was guided to the participants and spaces available. I am aware that offenders may attempt to request favours but they were informed of my role. As I was functioning within the ethics code, I informed the participants that I could have no influence on anything related to their studies, nor could I provide any other privileges.

## 2.5.8 Equity or justice

Efforts were made to deal withe all participants alike within the research process and not to discriminate against or exploit anyone (Hennink *et al.*, 2011:77).

#### 2.5.9 Role, actions and competence of the researcher

As I was the person who had to collect data from the participants, I was trained and familiarised by my promoter as interviewer before I engaged in the actual interviews. For the purpose of this study I had to accept that I was not in an authoritative position but was sitting on the same table with the participants. My role was to listen to the participants and then become their mouthpiece in analysing the data. I went to the interviews as a researcher, collecting data on the participants' daily learning support needs while they were incarcerated students. I was also the facilitator of the interviews in order to capture their leaning needs. My role as researcher was therefore that of participant as observer (De Vos *et al.*, 2011:120). I went with my promoter to the site to collect data, and she reflected regularly with me, guiding me to stay objective throughout the data collection process.

De Vos *et al.* (2011:63) declare that researchers are ethically obliged to make sure that they are experienced and sufficiently skilled to undertake the proposed investigation. Related to the competency of the researcher is the making of value judgement. I am competent and adequately skilled to undertake the investigation. I understand qualitative training research methodology and was trained in conducting research and the use of Atlas.ti™. Although I am working for the Department of Correctional Services, holding a managerial post, I do not deliver any of the correctional programmes to the offenders, nor was I involved in any of their parole placements. I did not know any of the offenders, had not met them before.

#### 2.6 Qualitative systematic literature review

A systematic literature review is a structured and stringent procedure to identify, select, evaluate and interpret relevant and existing research in the public domain which relates to the research phenomenon (Petticrew & Roberts, 2006:19-21). It is a qualitative systematic literature review process which ensures the authenticity and accuracy of the document selection process (Briner & Denyer, 2010:9). It is a method to identify fully, assess and explain all acceptable and appropriate research which relates to the research phenomenon. When there is an extended range of research on a particular subject, a researcher will use this mode of literature selection to direct the process (Petticrew & Roberts, 2006:19-21). I selected qualitative systematic literature review as a process as I intended for findings rich in detail on different contexts to provide a complete picture of the experiences of the

participants (Maxwell, 2005:177). "Systematic literature differs from traditional narrative methods of randomly selecting appropriate literature, as the approach can be repeated, is of scientific value, and is transparent" (Cronin *et al.*, 2008:38). When the researcher reports on the results, there is a clear structure to evaluate, summarise, and communicate the findings and suggestions without vast quantities of data and variation of results (Briner & Denyer, 2010:11; Petticrew & Roberts, 2006:9-10; Tranfield *et al.*, 2003:208). One of the advantages of systematic literature review is that it is repeatable and that contributes towards its validity and reliability (Kitchenham, 2004:2).

Conducting a qualitative systematic literature review for this study ensured the same level of thoroughness to review research evidence in the first place (Hemingway, 2009:1). Furthermore "systematic literature reviewing can identify the gaps in the existing research and provide a framework to direct the research" (Kitchenham, 2004:2). Systematic reviews present the maximum range of evidence, and the expert authors search for high quality studies to address the research question (Barrat, 2009, 2011). In this qualitative approach of systematic literature review people converse, announce positions, argue with a wide range of eloquence, and describe events or scenes in ways entirely comparable to what is seen and heard during fieldwork (Merriam, 2009:150). I selected documents through a rigorous process of selecting expert authors in the field of learning support needs of ODL students as well as policy documents which relate to the integration and management of ICT in correctional centres.

The reason for choosing documents of proficient authors and evidence based policies according to a qualitative systematic literature review process for this research served multiple purposes: (i) it permitted me to include assorted theoretical perspectives of viewing a problem to support the process and outcomes of the analysis (Merriam, 2009:154); (ii) it offered access to analysed and synthesised qualitative data which allowed me to write a comprehensive literature review on the phenomena; (iii) it allowed me to export the values of qualitative data (Saldaña, 2011:49) as author's instances and to conduct an exploratory factor analysis to construct the activity systems for the research; and (iv) it allowed me to use the constructs to develop interview questions for the participants to develop guidelines for learning support needs of incarcerated ODL students in a changing education landscape (Burrel & Morgan, 1979:34; Cohen *et al.*, 2011:256).

There are six key steps in conducting a systematic literature review. Table 2.3 outlines the key steps and activities which I used during the systematic literature.

Table 2.3: Six key steps in conducting a systematic literature review

Key steps	Activities during key steps
Mapping the field through a scoping review	Compile a list of appropriate key words"
Comprehensive research	Access the electronic databases and search using exact keywords relating to the research; document the process. Refine the research. If the same authors' names keep appearing, author saturation occurs
Quality assessment	Read all the documents, and apply the quality assessment using the hierarchy of research. Assess documents by additional independent reviewers (peers in the field)
Qualitative content analysis	Conduct a constant comparative content analysis
Synthesis	Data from the Atlas.ti™ will be compiled as a single network, as well as sub-networks for use during the formal literature study
Reporting	Use the quotations, codes, categories and themes (Atlas.ti™ networks) as a basis for writing a balanced, objective and complete literature from the systematic review format

Adapted from (Friese, 2014)

## 2.6.1 Process and documentation for a systematic literature review

The systematic review conducted was based on a set of three principles: (i) the process should be able to recur at any given time; (ii) there should be a documented assessment trail of the standardised selection process and reviewers' decisions; and (iii) the researcher must have a record of assessment for exclusion and inclusion of documents according to a hierarchy of research (Briner & Denyer, 2010:11). As this process was evidence-based, the qualitative data adhered to the criteria of validity, reliability, trustworthiness (Cohen *et al.*, 2011:11) and thus minimised bias (Briner & Denyer, 2010:123; Kitchenham, 2004:9). To adhere to these criteria, I documented the process as the following: (i) search process documentation, (ii) selection process criteria documentation, and, (iii) quality assessment of primary documents.

Keywords used for the systematic review comprise the following: *learner support, learner needs, ODL, ICT and incarcerated students*. Various trial searches using a grouping of search terms (keywords) and bullions which relate to the research question were conducted

in discussion with two librarians (Kitchenham, 2004:9) of the NWU, Vaal Triangle Campus who respectively assisted me during the search of criterion based literature selection. The following databases were searched: SA e-publication ™, Web of Science ™, Science Direct ™, EbscoHost ™, North West University online library catalogue and Google scholar. In addition printed sources were used and hand conducted searching for additional relevant sources was executed.

### 2.6.2 Search process documentation

It was vital that the entire process of the "systematic review be documented in detail to ensure that the procedure can be repeated at any given time by an independent researcher" (Briner & Denyer, 2010:11). All searches through the course of conducting the qualitative systematic review were noted and justified (Kitchenham, 2004:9).

I compiled a research diary which reflects the research documentation process (Addendum 2.5). Every single search was numbered, dated, and the databases with their separate keywords and the number of hits were documented and entered. Documents applicable to the search were chosen from the hits according to the selection criteria. I conducted 119 searches in total, independently and in collaboration with Information Specialists from the NWU.

### 2.6.3 Selection process criteria documentation

I searched the above mentioned electronic databases (§2.6.1) using exact keywords relating to the research. I conducted the searches structuring the keywords with bullions i.e. (Offender\* or prisoner\* or \*inmate\*) and (\*correctional centre\* or \*jail\* or prison) and (\*learner support\* or \*student support\*). Depending on the hits, I refined the search. I screened, selected, and exported documents containing text relevant to the keywords in a Microsoft Excel™ spread sheet (Addendum 2.6). I used the citations maps from the retrieved documents in ISI Web of knowledge to find more authors in the field, and I consulted the reference list of the exported documents in the Microsoft Excel™ spreadsheet for additional authors in the specialized field. As this research included three main concepts: (i) learner support needs, (ii) ICT, and (iii) open distance learning, it was difficult to find expert authors who conducted research in all these fields. Tait Alan appeared as an expert author working

comprehensively in research relating to learner needs using ICT in open distance learning. Tait is a Professor of Distance Education and Development at the Open University in the United Kingdom, and he is also the founding editor of The Journal of Learning for Development, produced by the Commonweath of Learning. Three of his documents were included for analysis.

## 2.6.4 Quality Assessment of primary documents

The quality of the selected documents was assessed using the hierarchy of research.

Additionally, two independent reviewers (peers) who work in ODL reviewed the documents,

ICT and learner support. The criteria for final document selection aimed to include:

- documents of quantitative, qualitative and mixed-method research
- documents published in books, accredited journals and conference proceedings
- documents published between 2000 and 2016
- documents which address all, three or at least two of the key concepts of the research
- documents which address valuable information on the research topic
- government policy documents relevant to higher education teaching and learning (Jesson et al., 2011:9).

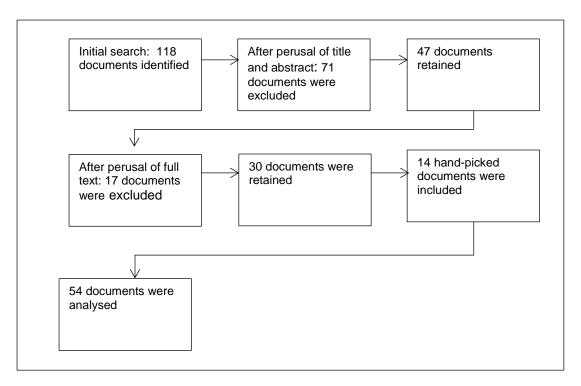


Figure 2.3 Qualitative systematic review flow diagram of document selection process

Figure 2.3 presents the qualitative systematic flow diagram of the document selection process. The initial collection for the review process had a total of one hundred and eighteen documents (Addendum 2.7): 118 documents were made up of journal articles published in local and international accredited journals, conference proceedings, reports, as well as one policy document addressing the concepts of the research problem. Once the assessment of the documents according to the above-mentioned criteria was done, seventy one documents were excluded. Forty seven documents were chosen for thorough screening, fourteen documents were handpicked and added after the process 54 documents comprised the final data for qualitative analysis (Addendum 2.8) (Hemingway, 2009:4).

I reviewed the documents according to the content analysis, and afterwards identified data clusters (codes, categories and themes) pertaining to the learning support needs of incarcerated ODL students in a changing education landscape. The purpose of analysing the data is to identify specific trends and patterns in relation to the research problem and aims. Therefore all the interview data were concatenated into a single data set.

## 2.6.5 Data analysis for the systematic literature review

I used ATLAS.ti™ to code, sort and analyse the data when I was doing the systematic literature review. ATLAS.ti™ is a computer-aided qualitative data analysis software (CAQDAS). Software such as ATLAS.ti™ offers many advantages, amongst others it: it allows for easier systematic data analysis, large volumes of data and different media types can be structured and integrated quickly; it increases the validity of research results, codes and concepts can be modified as the analysis progresses (Friese, 2014:1). "The three basic aspects of computer-assisted analysis are preparing data and creating a project file, coding the data; and using the software to sort and structure them with the aim of discovering patterns and relations" (Friese, 2014:1). Atlas.ti™ has domain-specific terminology that describes different aspects and processes of the software; this terminology is presented in Table 2.4.

Table 2.4 Domain Specific Terminology in ATLAS.ti™

Terminology	Meaning	
Hermeneutic unit	Heart of Atlas.ti™	
(HU)	Primary documents are stored in HU by assigning text, graphical, audio	
Primary document	Interface between a Hermeneutic unit (HU) and the data	
	Provides access to data source	
Codes	Used as classification devices at different levels	
	Standard code is directly linked to the quotations	
Categories	Answers to the question 'what?' as a thread throughout certain codes	
Quotation	Segment from a primary document that is interesting to the user	
Memos	Captures thoughts regarding the text	
	It is similar to a code but contains longer passages of text	
Code families	Clusters of primary documents, codes and memos	
Network views	Visual diagram connects sets of similar elements together	

Adapted from (Friese, 2014)

When working with ATLAS.ti™ there are a number of essential steps to be followed. The procedure for this study began by creating a hermeneutic unit (HU), which contains the primary documents, quotes, code words, notes, memos, links, code families and network views (Friese, 2014:15).

The workflow constitutes consequential steps, but it is not important for them to follow consecutively; reasoning dictates which can be removed out of order (Friese, 2014:24). I created the HU with the title "Incarcerated students." The 54 primary documents that were

assigned to the HU included 42 journal articles, two working papers, five theses, and five books. Applicable parts of the data were identified and coded. I did not use a predetermined list of codes, and created codes as the different themes emerged in the data. I coded the data and created memos where necessary. Quotations, codes, categories, and network views were created. I made use of inductive data analysis, since I did not have a pre-determined set of coding categories. This requires of the researcher to be immersed in the text until themes and concepts emerge from the data (Friese, 2014:24).

As described in Table 2.4, a code in qualitative inquiry is a term or phrase representatively assigned used to describe a summative aimed at salient, and essence-capturing description for a portion of language based or visual data (Saldaña, 2009:3). Codes can be developed from existing theories or concepts, or from raw data and from a project's research goals and questions (DeCuir-Gunby *et al.*, 2011:138). I created 22 codes in the process of analysing the documents (Addendum 2.8).

A codebook is the accumulation of the codes, the description of the content and a short data example for orientation. Codebooks are especially critical when multiple team members work together on a project (Saldaña, 2009:21). DeCuir-Gunby *et al.* (2011:138) use three components to describe the structure of the codebook, namely code name/label, full definition (an extensive definition that collapses inclusion and exclusion criteria), and an example (Table 2.5).

Table 2.5 The codebook as it was created for the systematic literature review of this study

Code	Explanation from literature	Example from the analysis
Acceptability	It is imperative that students and stakeholders feel that an elearning system is worth accepting as adequate or valid (Adams & Pike, 2008)	Poor perceived quality and engagement with the elearning application may impact negatively upon students' willingness to continue with an online course (P1:26) <sup>1</sup>
Access	To retrieve resources, students should have access to the internet and download them through the library	In order for them to benefit from the education provided we need to ensure that they are able to acess resources and support services that distance students need to be successful (P54:2)

<sup>&</sup>lt;sup>1</sup> The P-reference (e.g. P56:108) in the code book, as well as in the analysis section (Chapter Four) refers to the assigned number of a document in ATLAS.ti. The number(s) after the colon refers to line number where you can find the explanation of the code or the quotation.

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Code	Explanation from literature	Example from the analysis
	website (Farley & Doyle, 2014b)	
Adult students	These are students who are most likely working individuals and probably older than the average student (Mdakane, 2011)	In the South African context, students of twenty three years and up are usually regarded as adult students (P36:5-6)
Andragogy	Andragogy or adult learning focus on self-directed learning. Adults learn differently from children (Mdakane, 2011)	Adults enter classrooms with knowledge and experiences that could either enhance or hinder their learning experiences (P38:83-84)
Awareness	Relates to the awareness of the availability, applicability for different situations, work- practices, time-limitations and how others use different elearning resources (Adams & Pike, 2008)	Someone unaware of an application won't use it and, someone unaware of the potential benefits and time involved in learning and utilising an application may not be motivated to use it (P5:1279-84)
Challenges of delivery of elearning	This reliance on the online delivery of courses, programmes and research resources poses significant challenges for incarcerated students, who are not allowed direct access to the internet (Farley & Doyle, 2014b)	Owing to their incarceration, students don't have easy access to the tutors and internet which has a negative effect on their work (P4:780)
Correctional education	In correctional facilities, can participate in educational programmes outside the correctional facility whilst in the correctional facility by utilizing distance education as a delivery system (Al Saif, 2007)	If offenders have the ability to utilize technology effectively, they can use distance education courses, either as an aid to promote learning in the traditional classroom, or as a distance education medium (P2:2524-26)
Culture	Learner services should take into consideration the unique and changing needs of students being served, and the institutional context, and should be revised as appropriate to accommodate changes in student population, the institution, and the environment. Only in this way can an institution be truly responsive to its clientele (Brindley et al., 2004)	The need to initiate new academic programmes may require temporary reallocation of resources from service areas to an academic department (P5:1860-67)
Distance education	The application of telecommunications and electronic devices which enables students to receive	In correctional facilities, offenders can participate in educational programmes outside the facility, whilst in the facility by utilizing

Code	Explanation from literature	Example from the analysis
	instruction that originates from some distant location (Al Saif, 2007)	distance education as delivery system (P2:1389-91)
Funding	The size of the budget which correctional services have to give to correctional institutions to implement elearning. Not only for the initial outlay of the hardware and software that must be bought, but also for the training of the correctional institute officers that need to assist the offenders. Then there will also be running costs each month that need to be paid as well as the upkeep of the hardware and regular servicing (Greyvensteyn, 2014)	Though there will be costs associated with providing computers with internet and training tutors to meet the needs of inmates, it would be a worthwhile investment (P7:109)
Geographical area	Geographical area is the physical environment or place a student lives in. This is not limited to prescribed spaces, geographical areas or borders (Tait, 2000)	ICT diminishes geographical distance so that students who are distant from educational opportunities can gain access. Technology can be used from any location if you have access to internet (P7:1279-71283)
ICT	ICT should be used optimally to enhance teaching, learning and assessment and systems should be such that they do not create barriers for students (Wambugu, 2014)	Learning technologies are used in new ways, to advance beyond what was possible in the classroom or to combine traditional approaches with elearning in effective and worthwhile modes to meet new objectives and purposes of teaching and learning (P1:1806-10)
Incarcerated students perspective	The easier the access to ICT, the higher the rate of frequency of use for learning are, and the more limited the access to ICT, the lower the frequency of use of ICT's for learning are (Greyvensteyn, 2014)	In the correctional institution setting offenders making use of distance education and HE feel that they are taking control of their lives and this gives them a sense of power (P50:1576-1579)
Institutional framework	Within the correctional systems elearning is embedded in the organisational structures of the institutions. This could be beneficial as a motivator for students if the organisation had a positive approach to elearning (Adams & Pike, 2008)	Learner services should take into consideration the unique and changing needs of the students being served, and the institutional context, and should be revised as appropriate to accommodate changes in student population, the institution, and the environment (P5:1860-51865)
Learner support	Learner support is about the support which is provided to individual students during the process of study; support	The identity of learners, their particular needs and motivations and their progress with the

Code	Explanation from literature	Example from the analysis
	should not be uniform, but should be adapted to and responsive to the needs of each learner (Thorpe, 2002)	course; these are all at the heart of what learner support is about (P2:170-172)
Management of learner support	Distance education administrators and instructors should be aware of the means and strategies that could enable them to address the needs of distance student's through the content management system and the learning management system that they have prepared for the programme. It should be able to provide for the educational, social and emotional needs of learners in a distance learning education environment (Ustati & Hassan, 2013)	The flow of information to and from the peripheral elements, with updating a core task for both centre and periphery, represents a central element within overall management of information (P7:2519-22)
Policy of learner support	Updating policies and regulations regularly to ensure that they make sense, and being prepared to make exceptions to rules to accommodate the complicated lives of adult students (Brindley et al., 2004)	Consult with students and with staff who have regular contact with students (P9:349-51)
Capacity	This element relates to the intended volume of activity, and is a significant determinant of the ways in which systems should be constructed (Tait, 2000)	An institution or organisation which intends to recruit students on a course learning through ODL methods should construct different systems (P6:2838-42)
Security for digital ICT	Security is a big issue and the computers should be monitored and prohibited from being used for activities that can compromise the safety of the correctional institution (Greyvensteyn, 2014)	Within the correctional service the internet is perceived to reduce control and is a security risk (P8:2049)
Student characteristics	They are attracted to the flexibility that open distance learning offers; however, they present a new challenge. They come with an even wider variety of backgrounds than was the case for adult students a decade ago (Brindley et al., 2004)	Distance education students have different learning styles, abilities, academic preparedness and expectations (P6:1425-28)

Code	Explanation from literature	Example from the analysis
Technological- enhanced learning (TEL)	The emergence of new technologies, particularly ICT, "has opened up new methods of providing instruction and learner support (Gosh, 2009)	Technology in the form of the re-engineering virtual environments carried through the Web, computer-mediated conferencing and CDROM (P1:2140)
Technological infrastructure	In assessing which technologies should be used in delivering student services it is essential to distinguish firstly between technologies which students themselves have access to, and technologies that are available to the institution or organisation (Tait, 2000)	Where no adequate postal system exists outside major cities in a country, clearly delivery of materials cannot be made via the mail to rural students and another system should be used (P4:2652-60)

Coding allows researchers to involve and simplify the data, changing these into meaningful components. This permits researchers to make connections between ideas and concepts (DeCuir-Gunby *et al.*, 2011:138). DeCuir-Gunby *et al.* (2011:141) describe the steps for developing theory-driven data as generating the code; reviewing and revising the code, and establishing the reliability of the code and coders. This is the process I followed when organising the systematic literature review. I generated codes (Table 2.5), reviewed and revised the codes within the context of the data, and established the reliability of the codes and order by inviting a peer who is an expert in the field of ICT and systematic literature view to peer code my systematic literature review.

## 2.6.6 Validity and reliability of the systematic literature review

The validity and reliability of a study, to a large degree, depend on the ethics of the researcher (Merriam, 2009:228). If the ethical standards of a researcher are not acceptable, they will contradict the reliability and validity of the study. I adhered to the strict ethical standards and validity of the NWU (§ 2.5) through all the stages of the research, as well as conducted all aspects of the research in an ethical way.

It is of vital importance to produce valid and reliable results and knowledge in research (Merriam, 2009:210). Validity is an important key to effective research (Cohen *et al.*, 2011:133). The following terms are extensively embraced in qualitative research: credibility, transferability; dependability, conformability (Merriam, 2009:211), trustworthiness,

authenticity and plausibility (Merriam, 2009:220). Reliability refers to the replicability of research findings which in essence in social sciences is problematic, since human behaviour constantly varies (Merriam, 2009:220).

Reliability is often referred to as the dependability, consistency and/or repeatability of a project's data collection, interpretation, or analysis (Creswell, 2009a:203-204). To put these into practice, authors propose techniques such as spending extensive time in the field, triangulation and the use of thick description (Creswell, 2009a:203-204).

## 2.6.7 Limitations of the systematic literature review

Even though systematic literature review has many advantages (§2.6), there are constraints involved in its use as well. Most importantly, systematic literature reviews can be performed badly (Hemingway, 2009:6). In order for researchers to overcome this matter, researchers should thoroughly follow the steps documented for successful systematic literature reviews by various authors (§2.6.1). The most understandable constraint of a systematic literature review is the limited key words used in the search, the limited data bases that were selected, as well as the limited time period of publication. The systematic literature review is a complex, intensive, rigorous, and time-consuming method of doing a literature review. Regardless of these aspects, it still demonstrated to be an appropriate method for obtaining a theoretical framework for the study.

## 2.7 Qualitative strategies

Qualitative strategies refer to the gathering of data by holding interviews, analysis and observation so as to know the case under study. Creswell (2009) outlines qualitative research as describing, exploring, and understanding the views of participants from the collected data. The qualitative research for this study was as follows (i) participant selection, and (ii) methods of data generation or collection.

### 2.7.1 Participant selection

Participation selection is the choosing of units of the target population to be included in the research (Sarantakos, 2000:13). I purposefully selected participants who adhered to these criteria (Sarantakos, 2000:152). For this study, participants were selected according to specific criteria which relate to the research question. Table 2.6 indicates the selection criteria for inclusion in the qualitative strategies used during this research.

Table 2.6: Selection criteria for participants' inclusion in this study

Criterion	Description
Under and post graduate incarcerated students	Female and male offenders who are incarcerated students Students are enrolled in an ODL programme with UNISA
Formal education and training manager	Person who manages formal education and training at Breede River Management Area, the site of the research
Deputy commissioner: personal training	Managing the department of formal education in the department of correctional services
Director: Formal Education and Training	Director of formal education and training in the department of correctional services

The Management of the DCS, i.e. the Deputy Commissioner: Personal Training and Director: Formal Education, were purposefully selected because they are managing the education of offenders and they are policy makers for formal education. I submitted a letter of notice to the Management of the DCS to conduct research (Addendum 2.9). The Deputy Commissioner: Personal training and Director: Formal education were not interviewed as they mentioned that they were busy and did not have time for interviews. Attempts to reschedule the interviews for another day were made, but were not successful.

The participants comprised the offenders who were incarcerated students and officials (Education Managers) involved in HE. These participants encompassed 24 male and three female offenders from the ten Management Areas in the Western Cape Region and three officials (Education Manager and two officials who are the guards of the incarcerated students). The offenders who participated in this study were held for various periods of time in correctional centres.

Offenders who are enrolled in an ODL programme with UNISA were invited to participate in the study. The reason for using offenders studying through UNISA is because the institution has created a hub in Worcester where all incarcerated students are hosted (Addendum 2.10). This made it easier than to go to interview them from province to province.

As the correctional centres constitute a restricted area to conduct research, requiring numerous authorisations and challenges to visit inmates; because of miscellaneous constraints legislated by the administration or the offenders themselves and the unpredictability of the population, it was impossible to apply random sampling. Purposeful sampling where offenders voluntarily participate was used according to a matrix of prison security categories in order to include a wide range of cases. In the correctional centres there are offenders who are classified as maximum security, medium security and minimum security offenders. Offenders are classified according to the offences they committed and the duration of sentences they are sentenced to. The Breede River correctional centre accommodates maximum, medium, and minimum security classified offenders. There was a possibility that only a few incarcerated students were available at a specific point of time and care was taken to include as many inmates as possible to ensure data saturation and have sufficient information (Merriam, 2009:61)

I identified a gatekeeper, a person who oversees and is the link between the researcher and a potential participant (Addendum 2.11). His responsibility was to welcome everyone participating, giving the participants the content of the consent form, and informing them that they could withdraw from the interviews at any time, should they feel so. The gender and the ethnicity of the participants were difficult to determine in advance. The researcher hand-picked, with the help of the gatekeeper, the participants included and received permission to conduct research from the Regional Commissioner (Addendum 2.12).

#### 2.7.2 Methods of data generation or collection

Mouton (2002:374) states that "qualitative research may include multi-method strategies to collect data". In this regard the stated author highlights that "reality is such a complex phenomenon and experience that researchers must be cautioned not to rely on a single research method." It is therefore suitable in qualitative research to use a mixture of data collection methods. Mason (2002:3) points out that "research requires a data collection

instrument that is sensitive to underlying meaning when gathering and interpreting data". The qualitative research methods used to collect data for this study were in-depth semi-structured focus group interviews. Focus interviews were used because offenders are categorised according to their gender and age, therefore the focus groups would be women, men and officials separately.

#### 2.7.2.1 Interview schedule

An interview schedule for conducting interviews was compiled from the concepts identified from the literature review (Chapter Three). The interview schedule (Addendum 2.13) provided me with a set of predetermined questions as a suitable tool to involve participants in a narrative situation (De Vos *et al.*, 2005:297). Questions used for the purpose of interviews for this research focused on the study to make sure that responses provided relevant information consistent with the aim of the study. The interview schedules were provided beforehand to the participants to enable them to think about what the interview might cover (De Vos *et al.*, 2005:297). The questionnaire used during the qualitative research stage was submitted to the NWU Ethics committee for approval.

#### 2.7.2.1.1 Focus group interviews

Focus group interviews or discussions are an established research strategy that collects relevant data by means of facilitated group interaction on a topic determined by the researcher (Nieuwenhuis, 2007:90). Focus group interviews are regarded as a certain data collection method to understand more expansively what people know, think and how they experience a certain matter. During facilitated focus group interviews participants can simply be themselves, share information freely, and support each other. The complication and assortment of groups of participants from the selected management area required the use of focus group interviews "as planned discussions on the defined area of interest in a non-threatening environment to encourage participants to share their perceptions, points of view, experiences and concerns in relation to the central problem of this research" (De Vos *et al.*, 2005:300). I safeguarded an easy-going environment for managing the focus group interviews and encouraged participants to share perceptions, viewpoints, experiences, wishes, and concerns without any pressure on participants to vote or reach consensus.

The reason for using focus group discussions in this study was to obtain rich data from various groups of the study population, namely the incarcerated students, formal education and training manager. As a research strategy, "focus group interviews are regarded as a powerful means to explore reality and complex behaviour and to facilitate the sharing of experiences and feelings of participants in an interactive way" (De Vos et al., 2005:301). I used focus group interviews with offenders because they encompass more participants at one time and encourage less formality. I assumed that offenders would welcome a less formal situation and the semi-structured nature of questions encouraged participants to reveal perceptions and experiences they may not reveal during individual interviews (Nieuwenhuis, 2007:95). They may feel more comfortable and secure in the company of people who share similar opinions, views and behaviour than in the company of an individual interviewer (Rabiee, 2004:656). They also have the opportunity to oppose the view of another participant. I also used focus group interviews with the educators. There were four focus group discussions, the first one comprised fourteen students, the second one had seven students, the third one had three students, and the fourth one had three officials. The reason for having different numbers in the focus groups is because on arrival the first day of data collection there were fourteen students and we were told to rather take them all as it was not known how many would go out the next day; on the next day seven students were available and there were only three female students. Offenders are grouped in different categories in the correctional centres, therefore they were grouped as such for the focus group interviews, meaning that females were separated from male offenders.

Proper planning is needed when conducting focus group interviews, this is in respect to participants, the environment and questions asked (Greef, 2002:343). There are four basic steps for conducting focus group interviews, "viz planning, recruiting and conducting the focus group, as well as analysing and reporting" (Morgan & Krueger, 1998:12). Planning interviews comprises four aspects, viz. participants, number and size of focus group, group facilitation and designing the interview schedule (Morgan & Krueger, 1998:12). An important fact during a focus group session is for the researcher to create an encouraging atmosphere in order to provide for easy participative discussions, and to make sure that participants are comfortable talking to each other. The focus group interviews also helped my goal as a researcher because I could collect data from many incarcerated students (Litosseliti, 2003:75). Consequently, it was essential for me to establish a suitable group arrangement. For this study, participants were chosen on the basis of their voluntary permission and willingness to take part in the study, and also if they were studying through ODL.

Focus groups usually vary from six to twelve participants (Greef, 2002:305). Groups with more than twelve members limit a participant's opportunity to share experiences, while focus groups with four to six participants are popular, since smaller focus groups are easier to recruit and host (Morgan & Krueger, 1998:71). In this study, one focus group had fourteen students and this was because of the conditions of correctional services. I found the fourteen students together and taking all of them in one focus group was the best thing to do at that point of time becuase I might not have been able to get hold of all of them later. Two focus groups had three people, and there were only three ladies studying through UNISA and three officials dealing with UNISA students.

For focus group interviews, the moderator should be an experienced person (McMillan & Schumacher, 2001:149). The moderator should be comfortable and familiar with group processes and also possess curiosity about the topic as well as about participants. The expression of different opinions should also be encouraged, and group members should be helped to be more specific in their responses to the question items of the interview schedule (Litosseliti, 2003:59). In this study, I worked as moderator during the interview. I received thorough in-house training before the formal interviews. I experienced the interviews as educational and interesting, and learnt much from the experience, as a researcher.

The design of the interview schedule is a critical task since it establishes the agenda for the group discussion and provides the structure within which the group members may interact (Morgan, 2002:145). I first listed all possible questions about the research problem to be investigated. I brainstormed with my promoter in this regard. On completion of the list when there were no further suggestions forthcoming, the critical questions (those that capture the intent of the study) were identified (Morgan, 2002:145).

I prepared myself mentally before I began with the interviews, as a facilitator, in an attempt to lessen the risk of unforeseen demands that might limit my ability to concentrate (Greef, 2002:310). Some small talk was essential before the formal interview in order to create an atmosphere of trust, friendliness, and openness from the moment the participants arrived for a session. Morgan and Krueger (1998:37) add that small talk facilitates a warm and friendly environment and puts the participants at ease. I also arranged the group as I was the facilitator for the group. I decided to group the participants in a half moon sitting set in order to make sure there was maximum opportunity for eye contact with both the facilitator and other participants.

#### 2.7.2.1.2 Field notes

As a qualitative researcher should, I compiled field notes during the interview sessions as written accounts of things the researcher heard, saw, experienced and thought about during the course of the interviews (De Vos et al., 2005:298). Unstructured observations were used "to understand and interpret the context of utterances from the participants" (Mulhall, 2003:306). The reason for using observations during the interviews was to analyse the responses in the context of idiosyncratic circumstances that provided a fuller picture than mere capturing of the responses (Thietart, 2007:184). Immediately after an observation all observations should be written down (Polkinhorne, 2005:143; Silverman, 2000:110). The notes from the observations were integrated with the data analysis procedure of the interviews as an integrated dataset (Sarantakos, 2000:210). Unstructured observations were made. These observations were conducted throughout the research process. The reason for performing the observations is to make sure that interfering with the research site remains as minimal as possible (De Vos et al., 2005:301). All interviews were audio recorded (Nieuwenhuis, 2007:89). All the participants gave consent for their participation in the interviews as well as for the recoding of the interviews. Audio recording of interviews allows a much fuller record than only notes taken during the interviews (De Vos et al., 2005:298). Because the interviews were audio recorded I could concentrate on the interview proceedings and progression.

#### 2.8 Data analysis

Data analysis is viewed as the bringing of order, structure and meaning to the mass of collected data (De Vos *et al.*, 2005:333). Thus, data analysis is the process of making the data more manageable by organising the collected data into categories, and interpreting data, searching for recurring patterns to determine the importance of relevant information (Bogdan & Biklen, 2006:153; Marshall & Rossman, 1999:31). In qualitative research data analysis is primarily an inductive process of organising the data into categories and identifying patterns (relationships) among the categories (McMillan & Schumacher, 2001:479). They also add that in qualitative research the collection of data and data analysis take place simultaneously in order to build a coherent interpretation of the data. I conducted

several interviews and each interview was transcribed according to the questions and responses of participants in the qualitative schedule (Addendum 2.14).

The first step in the analysis of data in qualitative research was the exploration of the data (Creswell, 2009a). Exploration of data is presented through coding. Coding is the organising, classifying, labelling and indexing of data enabling the researcher to narrow data down to themes and topics (Cohen *et al.*, 2011; McMillan & Schumacher, 2006:479; Patton, 2002). Data analysis for this study started as soon as the first set of data was collected and ran simultaneously with data collection because each activity informed and drove the other activities. It continued by coding each occurrence into as many categories as possible, and as the research continued the data were then placed in existing categories or existing categories were modified, and new categories emerged (Marshall & Rossman, 1999:482; McMillan & Schumacher, 2001:479).

I transcribed all the interviews myself. Transcribing them myself gave me the chance to gain experience in transcription and I also wanted to get as well-acquainted with the data as possible (Addendum 2.15). A disadvantage of transcribing the interviews myself is that I could have been biased in the transcription process. The transcribed interviews were therefore e-mailed to the participants who were involved to check the transcriptions. This was done in order to control the advantage. All participants indicated that they were satisfied with the transcripts as true reflections of the interviews.

I relatedly read all the interviews to gain a logic of the entire and to facilitate the interpretation of small parts of data. I compared and contrasted the text sections to identify context bearing data segments while naming and classifying categories (McMillan & Schumacher, 2001:464). I used the comparative method to compare one unit of information with another, looking for recurring regularities and patterns in the data to assign the information into categories. The names of the categories reflected the focus and purpose of my study (Figure 2.4). I double checked and then refined my own analysis and interpretation to ensure validity and reliability. In order to "safeguard trustworthiness of my coding, another established qualitative researcher, not part of the study, peer-coded the codes with me until we reached a point of understanding, consensus" (Saldaña, 2011:273).

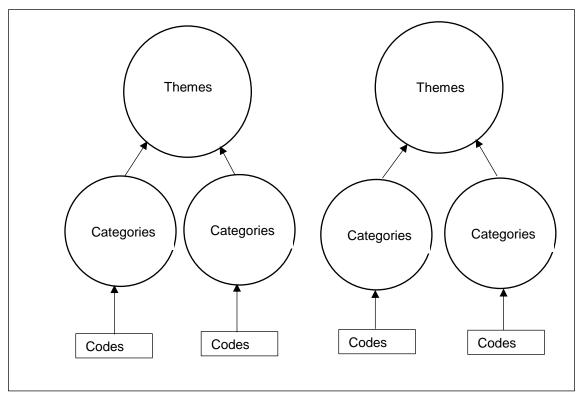


Figure 2.4 The building patterns of meaning

# 2.8.1 Using ATLAS.ti™ for data analysis

I used Atlas.ti™ to code each interview. Atlas.ti™ is a computer assisted data analysis software (CAQDAS) programme. Table 2.7 elucidates on the Atlas.ti™ terminology.

Table 2.7: Terminology used in Atlas.ti™

Terminology	Description
Category	Addresses the question "what?" as a thread throughout certain codes
Code	Used as classification devices at different levels
	Standard code is directly linked to the quotations
Family	Clusters of primary documents, codes and memos
Hermeneutic Unit	Heart of Atlas.ti™
(HU)	Primary documents are stored in HU by assigning text, graphical, audio
Memo	Captures thoughts regarding the text
	It is similar to a code but contains longer passages of text
Network view	Visual diagram connects sets of similar elements together
Primary document	Interface between a Hermeneutic Unit (HU) and the data

Terminology	Description
	Provides access to data source
Quotation	Segment from a primary document that is interesting to the user
Sub-category	A cluster of codes with common thread
	Has the same function as the code family
Super code	Query that consists of several combined codes

Adapted from (Kitchenham, 2004)

There are six essential interactive steps conducting the inductive analysis with Atlas.ti™. I applied these procedures interactively and not sequentially. The workflow constitutes six individual, but not necessarily consequential steps (Kitchenham, 2004:3; Saldaña, 2011:7):

- Opening a hermeneutic unit: I named the hermeneutic unit *Guidelines for learning* support needs of incarcerated ODL students in a changing education landscape which is the title of this study.
- Assigning of primary documents: I assigned six primary documents to the HU.
   They were the three focus group interviews and three individual interviews.
- **Discovering of relevant passages:** I emphasised the segments that contained information important to the study.
- Creating of codes and memos for the relevant passages: The key areas listed in Chapter Three guided my selection of codes. The memos related to the theoretical background from Chapter Three. Merriam (1998:183) states that "categories should reflect the purpose of the research." I did have pre-determined codes. In effect, categories are the answers to your research questions. As the codes materialised I created the memos to define the meanings of the codes within the context of the study. I "applied my own subjectivity, ideas, and predispositions to the analytical process" (Saldaña, 2011:7). Preliminary themes (identified from reviewing the literature and codes (relating to the contents of the six primary documents) were identified. The coding structure consisted of codes.
- Creating and using printing characters: I used some of the printing characters to remind myself of the meaning and categorising of codes and categories.
- **Building theory:** I clustered the codes into sub-categories.
- **Visualizing and writing-up results:** I created visual networks that guided me during the writing of the findings (Chapter Four).

A code in qualitative inquiry is a "word or phrase that symbolically assigns a summative, salient, and essence-capturing description for a portion of language based or visual data. For this study, data consisted of interview transcripts and documents" (Saldaña, 2009:3). Table 2.6 describes the structure of the code of density of this study.

#### 2.9 Trustworthiness

When qualitative researchers speak of research validity and reliability, they usually refer to research that is credible and trustworthy (Nieuwenhuis, 2007:80). Trustworthiness refers to the demonstration of integrity and competence in qualitative research by adherence to detail and accuracy to assure authenticity and soundness of the research (Babbie, 1998; Tobin & Begley, 2004; Twycross & Shields, 2005). The trustworthiness of this research methodology relates to the planning and implementation of this research design which was conducted in a logical and systematic manner to ensure the trustworthiness of procedure according to the criteria of credibility, dependability, authenticity and confirmability (Freeman *et al.*, 2007:27; Roberts *et al.*, 2006:9; Tobin & Begley, 2004).

#### 2.9.1 Validity

Validity is the important key to effective research as it refers to the truth (or inaccuracy) of presuppositions generated by research (Cohen *et al.*, 2007a:133). Denzin and Lincoln (2008:302) define validity as a test of whether the collected data accurately gauge what is measured.

Bogdan and Biklen (2006:26) and McMillan and Schumacher (2001:393) point to strategies that enhance validity in the conduct of qualitative inquiry and which the qualitative researcher can use as a combination to ensure validity:

 Lengthy data collection period: I provided sufficient opportunities for all participants to contribute during interview sessions, I was patient when they responded to the questions as the lengthy data collection provided me with the opportunity for sound data analysis.

- Participants' language: I obtained verbally exact statements from participants to provide concrete evidence of my findings.
- Field research and observation: I conducted the research in a natural setting to promote the reality of life experiences of the participants more accurately than a contrived setting would.
- Disciplined subjectivity: I monitored and submitted all phases of the research process to continuous and rigorous questioning.
- Triangulation: I used multiple literature resources to confirm and enhance findings.
- Participant review: I requested some participants to review the transcribed interviews to check for accuracy of presentation.

## 2.9.2 Reliability

Reliability refers to the consistency of measurement, data obtained during interviews measuring that which they are supposed to measure, and the techniques used to gather data (McMillan & Schumacher, 2001:385). McMillan and Schumacher (2001:385) add that in qualitative research reliability "refers to the consistency of the researcher's interactive style, data recording, data analysis and interpretation of participant meanings from the data". Qualitative research is more valid when multiple codes are used and when high inter- and intra-coder reliability is obtained. Inter-coder reliability "refers to consistency among different coders, while intra-coder reliability refers to consistency within a single theory" (Nieuwenhuis, 2007:114). I made use of several coders to ensure that a high inter-as well as intra-rater reliability was achieved.

For this research I documented the systematic literature procedure to show that the process was systematic, it was transparent for others to duplicate, and it was consistent with the data collected (Merriam, 2009:221). I used the following approaches (Fraenkel & Wallen, 2003:52; McMillan & Schumacher, 2001:385; Merriam, 1998:70) to ensure that my findings were reliable. Table 2.8 provides the strategies I used to ensure the reliability of the research procedure.

Table 2.8: Strategies for reliability of document analysis

Strategy	Description
Researcher's role	My stance as a researcher was clarified and my biases relating to the data collection and analysis were acknowledged
Informant selection	It was explained to the participants how they were chosen and why the decision to use purposeful sampling was used
Social context	I arranged and communicated the specific time of the interview, the purpose of group meetings, the people and setting of the events to the participants in order to assist in data analysis
Triangulation	I used more than one method of data collection and continuously ensured my understanding of what was presented
Member checking	I asked one student from each focus group and the individuals to review the accuracy of my transcription of the interviews to contribute towards the reliability of this research
Code-recode strategy	I coded the data over an extended period of time to ensure consistency of coding strategy

### 2.10 Limitations of this study

Merriam (1998:20) states that "the human instrument is as fallible as any other research instrument." The researcher as human instrument is limited by being human: mistakes are made, opportunities are missed, personal bias may cause interferences (Merriam, 1998:20). Institutions such as correctional centres are public enterprise and are influenced by the external environment (McMillan & Schumacher, 2001:24).

Participants see views differently and the situational essentials also have to be measured; these show the intricacy of the research. The participants unknowingly utilise certain words to direct thoughts, and these are used as a pointer of their learning support needs.

### 2.11 Chapter summary

This chapter exhibited the research design and methodology for this study. The research question created the groundwork of the method that was chosen. I explained my viewpoint as an interpretivist and expressed the suitability of selecting to do a qualitative study. I

clarified the methodology of qualitative design based research as well as the suitability thereof in this study. The strategies used to determine trustworthiness were also highlighted. I explained in detail the narrative of the systematic literature review process as well as the qualitative inquiry. I discussed the rationale behind participation selection, data generation methods, and the process of analysis. The data analysis process and the use of ATLAS.ti<sup>TM</sup> were outlined, and the preliminary theory and codes were given. I also explored my role as researcher. The ethical considerations were taken into account and the limitations of this study were outlined. The next chapter gives us the systematic literature review of this research.

# **Chapter Three**

Panning the Literature through a Qualitative Systematic Literature
Review

#### 3.1 Introduction

This chapter presents the review of literature with regard to the learning support needs of incarcerated ODL students in a changing education landscape. Chapter Two described how ATLAS.ti™ was used during the SLR in order to methodically uncover aspects relating to learning support of incarcerated students. From this analysis of the literature, seven themes emerged: (i) student characteristics, (ii) management of learner support, (iii) policy for digital learner support, (iv) scale of capacity, (v) technological infrastructure, (vi) institutional infrastructure, and (vii) student satisfaction. The delineation of the themes aims to shed light on this issue which is not well-documented in the literature. Figure 3.1 is a capture from ATLAS.ti™, depicting the seven themes which occurred from the systematic literature review.

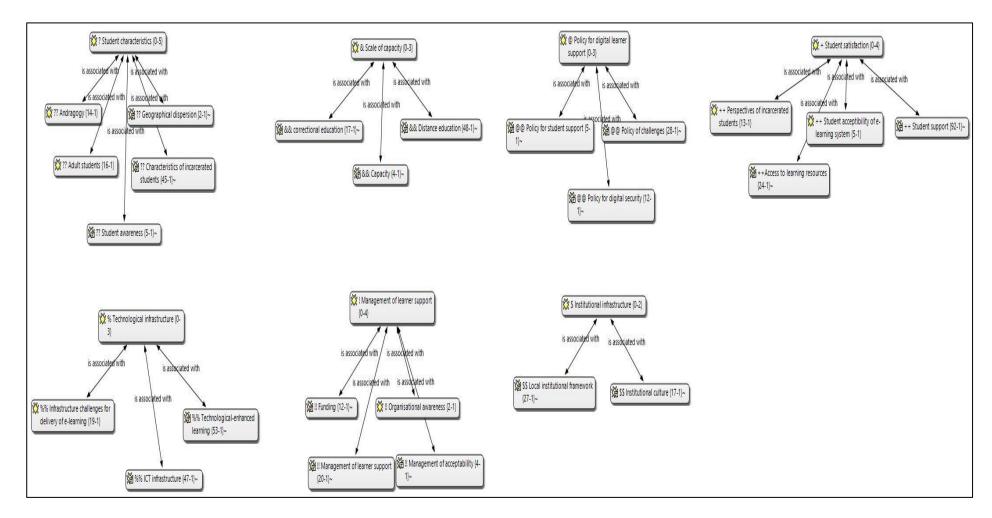


Figure 3.1 Framework for student support

#### 3.2 Student characteristics

The theme of student characteristics emerged from the SLR (Figure 3.2). Five codes were grouped to this theme: (i) adult student, (ii) characteristics of incarcerated students, (iii) andragogy, (iv) geographical dispersion, and (v) student awareness.

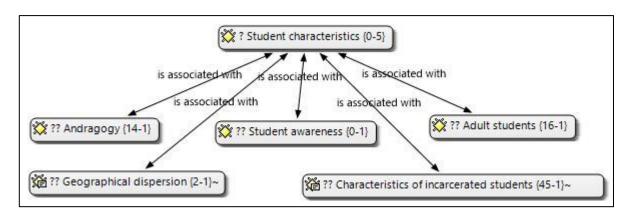


Figure 3.2: Components of student characteristics

#### 3.2.1 Adult students

Most students studying at HEIs comprise adults who have a purpose to develop their education. It is thus important to clarify the concepts of adulthood and an adult student. Adulthood is one of the main stages in the life cycle of the developing individual (childhood, adolescence, adulthood, maturity, and old age) (Cronje & Clarke, 1998:3; Mdakane, 2011:15). Adulthood is associated with "identity, responsibility, self-improvement, and ambition, integrity and authenticity", and includes status and acceptance by society as adults (Bester, 2014:30). Adulthood is not directly connected to age, but it sets in when maturation is reached in various spheres of an individual's life related to biological, legal and psychological behaviour (Bester, 2014:30).

Most adult students are probably working individuals, and are possibly older than the regular residential higher education student. Some of the adult students did not have access to higher education studies after completing grade 12 due to social, financial or other reasons (Mdakane, 2011:15). Mdakane (2011:15) views the adult student as a person not enrolled for a full time course in school or college, who assumed characteristics of adult status, for

example he/she is employed, married, or is a parent. Castles (2004:168) describes the adult student as not entering HE "straight from school, who may be working, or is older than the average student." He continues that "adult students carry adult responsibilities through their economic, family or community commitments." "They bring complex life experiences to the learning environments and their time is constrained due to their multiple roles and responsibilities" (Castles, 2004:168). In the case of this study, the offenders are incarcerated which interrupted their studies, or the incarceration prevented them from entering higher education.

Literature presents debates on what it entails to be an adult student besides chronological age (Buchler et al., 2007:8). In general, they have been out of school for a period of time, and their age varies from 24 years and older (Buchler et al., 2007:8). Adult students are attracted to the flexibility that ODL offers (Brindley et al., 2004:41). Adult students have the knowledge of being in control in many features of their own lives and they are therefore capable of directing their own learning. Students who were the research participants in this study were older than full-time students. Some are married, are incarcerated, and are part time students. Adult students are disturbed by aspects such as time management, family and work responsibilities, economic barriers, incarceration and logistical challenges (Mdakane, 2011:16). Adults meeting such related challenges need extra support to allow academic change and allow them to focus on their role as students. An example of such services is assistance with regard to the access and use of computers and access to the internet (Brindley et al., 2004:41). Adult students require alternatives to full time study such as the opportunity to study independently, creative financial aid, flexible payment plans, and tuition reimbursement (Mdakane, 2011:16). Adult students enter into learning environments, bringing along their own beliefs, prior knowledge, attitudes, and concepts gained from different situations. It is therefore essential for HEIs and course facilitators to be fully aware of the characteristics and factors that influence the academic performance, needs and satisfaction of adult students (Mdakane, 2011:16).

#### 3.2.2 Characteristics of incarcerated students

All elements which contribute to the planning for the implementation of ICT in correctional centres, should "take into account the needs and capacities of incarcerated students" (Tait, 2000:1). This may include students:

- coming from diverse backgrounds
- having different prior learning experiences
- voluntarily participate in learning
- integrating newly learned concepts with their prior knowledge
- who are unemployed
- who have barriers to learning
- who have diverse connectedness to technology.

It is essential to consider the articulation of individuals for whom a learning programme is planned when designing student support services. Within a cohort, there may be some students who have characteristics requiring individual attention stemming from the various geographical circumstances in which students find themselves. The analysis of student characteristics should be worked into the improvement systems that sincerely support them. Planning for a learning programme asks, "who are our students? before asking "what are we going to teach them?" (Bester, 2014:30; Thorpe, 2002:3).

This study is premised on adult offenders with the intention of acquiring an understanding of the needs of incarcerated students studying through ODL while using ICT. The evaluation of learning experiences of incarcerated students should take into account the challenges that incarcerated students face on a daily basis. Such challenges include competing demands from the correctional facility, work, family or other responsibilities. Incarcerated students are individuals who come into the educational setting "with a variety of personal characteristics and experiences that contribute to their behaviour in courses" determine their support needs (Brindley, 1995:7). However, these characteristics are often treated as marginal (Dzakiria, 2005:1). Students who are sufficiently supported are more likely to achieve success (Dzakiria, 2005:2). It is therefore essential to take into account the nature of adulthood, the manner in which adults learn (Mdakane, 2011:16), and the circumstances of incarceration when planning for the learning needs of incarcerated students.

## 3.2.3 Andragogy

Adults learn in a different manner than young students. This has been appropriately recorded in literature according to the two models of andragogy and pedagogy. While andragogy refers to the art and science of the teaching and learning of adults, pedagogy

refers to the art and science of teaching children (Mdakane, 2011:23). The discipline of andragogy emerged in the 1800s, but grew in popularity during the 1960s. Andragogy therefore sets out the scientific fundamentals of the activities of students and teachers in planning, realizing, evaluating, and correcting adult learning (Bester, 2014:30). Andragogy offers a set of expectations for planning education with students who are self-directed and not teacher directed (Bester, 2014:30). The responsibility of the instructor is therefore that of an organiser of learning, instead of a spreader of knowledge.

Knowles (1973) introduced the concept of "andragogy on the rationale that adults represent a unique population of students with distinct needs and preferences." The merging of two self-sufficient tendencies made andragogy particularly applicable to education in the 21st century: (i) adult students constitute the fastest growing population in HEIs (Bester, 2014:30), and (ii) the accelerating demand for ODL in HEIs (Mdakane, 2011:24). ODL has become established as a mode of formal instruction and it is no longer regarded as an option, but a necessity (Mdakane, 2011:24). Many HEIs make use of ODL continuously in order to save time and cost and deal with space limitations connected with conventional classroom practices. The studying practices of ODL students have not been properly documented, but as most adult students are working, they cannot attend fulltime classes, and therefore they rely on ODL. In this case, incarcerated students do not work, but they are also unable to attend on-campus classes. "In reality, not all adults are self-directed students" (Bester, 2014:31).

### 3.2.4 Geographical dispersion

Geography comprises the population density in rural and urban areas, the availability and cost of transport, and the cultural dimension to movement outside the home (Tait, 2000:7). The common significances of geography relate in meaningful ways with technology, and are jointly important elements of the manner in which support can be provided to students. These factors will particularly affect the possibilities for students and tutors to meet, and may also be important in overall student needs (Tait, 2000:7). The changing landscape of higher education includes the use of new ICTs which reduces geographical distance to the selected HEI fundamentally. However there are enormous differences in delivery of services (Tait, 2000:7).

#### 3.2.5 Student awareness

The use of new learning technologies and the use of extensive varieties of modes in ODL may enhance the experiences of distance learners experience who are obliged to take part in new ways of learning. Certain students accept these new modes and easily adapt to them, but others plead for the continued presence of a teacher (Dzakiria, 2004:3). Students' awareness of the availability of elearning and the application thereof "for different situations, work practices, time limitations, and how others use elearning resources, should be monitored (Adams & Pike, 2008:4). Within correction facilities, low priority is given to the use of elearning, resulting in educating staff facing a dilemma of how to support students (Adams & Pike, 2008:4). Although there are some correctional centres in Europe that allow elearning, it also takes place with compromises (Adams & Pike, 2008:4).

## 3.3 Scale of capacity

Scale of capacity refers to the intended volume of activity, and it is an important factor of the manner in which services should be created (Tait, 2000:2). This section discusses the (i) capacity, (ii) correctional education, and (iii) distance education.

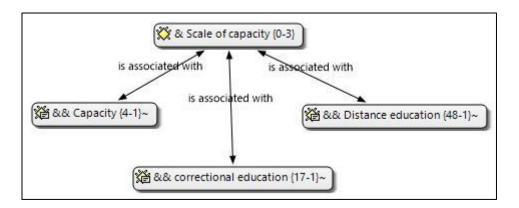


Figure 3.3 Components of scale of capacity

#### 3.3.1 Scale of capacity

It requires substantial investment to deliver courses through media, from the organisation as well as from student support. Institutions have to decide if they are supporting students through the minimal time of full time teachers, or part-time tutors from the outside, who are dispersed everywhere the country in order to be closer to the students. The aspect of scale influences the ways in which enquiry and admission are organised, as well as the need for facilities like study centres or regional offices (Tait, 2000:4). Small and big scale schedules have a similar student support structure, although they may differ in terms of economies of scale. Careful costing, flexibility, and some degree of differentiation in the management of services are required in order to serve students best (Tait, 2000:4).

#### 3.3.2 Correctional education

Education for offenders is important, not only as a basic human right, but in order to break the cycle of reoffending by providing qualifications and skills for employment on release and by providing social and human capital (Chigunwe, 2014:2). Strategies and methods to align the use of elearning in correctional facilities should be developed in order to promote formal education of offenders (Greyvensteyn, 2014:7).

Within a correctional centre setting, an individual's learning could be influenced in different ways; both the correctional system and the community can play a role (Adams & Pike, 2008:1). Students regularly require laptops, mobile phones and a varied choice of other learning technology tools to gain access to information for learning. As correctional facilities cannot provide these learning technologies to incarcerated students, offenders fall behind students not incarcerated (Greyvensteyn, 2014:9). eLearning could be an answer to offenders who do not have means of communicating easily with the community, but they often experience barriers to acquiring access to such learning technologies (Greyvensteyn, 2014:19).

In correctional centres, offenders can partake in learning programmes that are rendered in the community whilst they are in the facility through the use of ODL (Al Saif, 2007:126). Once they have mastered the use of learning technologies, they can do ODL courses. Instructors can utilise learning technologies for instruction, to forward study materials,

learning schedules, course material, reading materials, and course requirements. They can also utilise learning technologies to assess students' learning, and provide instant feedback. The use of distance learning as a delivery system in correctional centres elucidates many advantages like offenders' increased confidence, engagements with communities, and obtaining degrees as access to employment (Al Saif, 2007:126).

The wide choice of courses and learning materials available provides many opportunities for incarcerated students to study. With communication via the internet, students can also obtain information and address problems with studies by contacting their lecturers or tutors at the HEIs to assist them in solving their problem. A facilitator in a correctional facility does not have to be qualified in any of the professional fields that offenders are studying. They have to know how to use the various learning technologies used for instruction. Course content associated questions will be addressed by the particular HEI outside the correctional institution. However, slow responses from the HEI may result in frustrating delays which may demotivate the incarcerated students (Greyvensteyn, 2014:41).

## 3.3.3 Distance learning

Over the years, distance education has been explained from different viewpoints. A defining feature of DE is that the student, lecturer and the learning content are separated (Gosh, 2009:70). Haghighi and Tous (2014:54) and Wambugu (2014:11) view ODL as a mixture of methods and modes of delivery which communicates the curriculum to students without the lecturers and students all in the same place at the same time. ODL can be acknowledged as the answer to the continuous challenges of rightful access to education, equality of opportunities as well as an alternative way to provide a second chance for those who had been in the system but dropped off due to various reasons which includes imprisonment (Gatsha, 2010:38).

ODL is capable of providing another possibility to those who were studying, but could not continue owing to different reasons, including imprisonment (Chigunwe, 2014:2). Students can study at their own pace (Potter, 2013:60). Numerous learning technologies enable students and the lecturers to communicate with one another (Dzakiria, 2005:2). ODL is also a medium for teaching and learning. It allows students to receive education and transcend the physical barrier of imprisonment (Kangandji, 2010:2). Haghighi and Tous (2014:55) and

Potter (2013:60) state that ODL is not limited to prescribed spaces and geographical areas or borders, but ODL can be delivered over a distance, as students are separated from lecturers in time and space, ODL could be viewed as a society of learning where students cannot employ face-to-face teaching and learning (Potter, 2013:60).

ODL is a solution for instructional problems in educational environments such as correctional facilities (Al Saif, 2007:126). ODL has progressed in numerous modes, away from conventional postal delivered modes to the use of developing technologies for the delivery of ODL programmes. ODL provides students with flexibility to use learning technologies and modes for instruction to improve delivery of programmes (Potter, 2013:60; Ustati & Hassan, 2013:293). Students are provided with choices to successfully take part in teaching and learning at their own pace, in their own time at any place, even though they are in diverse geographical areas (Gatsha, 2010:39). Because of students' various situations, asynchronous learning should be accessible to students in order to retrieve the learning content and teaching and learning tools. Dzakiria (2005:2) and Haghighi and Tous (2014:55) describe asynchronous communication as communication that occurs outside of "real-time" in "delayed" time. This means that students can retrieve teaching and learning opportunities at a time, place, and pace to suit their individual lifestyles, learning preferences and personal development plans (Dzakiria, 2005:2). Synchronous online courses enable students to access use online discussions and review course materials independently (Haghighi & Tous, 2014:55). Issues of asynchronous learning impact on learners' motivation and feedback, perceptions of isolation, instructional design, and timely communication (Dzakiria, 2005:2). Asynchronous learning gives support to students with additional learning methods, as students are able to utilise additional methods to retrieve content for learning. Using media is important in ODL in order to ensure both asynchronous and synchronous communication. "Synchronous communication takes place in real time when all peers and instructors must be present at the same time; however they may not be present at the same physical place" (Haghighi & Tous, 2014:55). Synchronous communication performs the part of a thinking tool and promotes learners' creative abilities. "Both asynchronous and synchronous can be used to facilitate learning in DE" (Haghighi & Tous, 2014:55).

An important beneficial aspects in the delivery of ODL programmes is flexibility (Wambugu, 2014:11). "Refining flexibility in the delivery of ODL programmes encourages course development and student support" (Gosh, 2009:70). Successful delivery of DE requires communication and interactivity to be in place. ODL providers should realise that their educational services are to support students and offer positive educational experiences to

students (Dzakiria, 2005:2). Using ICTs for the "delivery" of ODL will develop flexibility in ODL schedules and assist HEIs to intersect with geographically diverse students (Potter, 2013:60). Making ODL flexible and interactive makes it easier for students to retrieve learning resources, and overcome challenges like time, distance, and location (Dzakiria, 2005:2). Convenience then also provides regarding the quality of teaching and learning of ODL programmes by improving communication between students and lecturers.

Improvement in flexibility networking utilised for the forwarding of ODL programmes can be developed through the use of up-and-coming communication and communication tools (Potter, 2013:61). ICTs are now often used for studying purposes. Location and time for students in various geographical areas become irrelevant as they now have additional options and means to access resources through various technologies (Dzakiria, 2005:2). An asynchronous mode for delivering content and resources can be established for communication among students and between students and institutions through emerging communication technologies with interactive capabilities (Haghighi & Tous, 2014:56).

Access to resources can be enhanced through flexibility and interactivity, while accessibility as a barrier to DE is diminished (Haghighi & Tous, 2014:56).

Improved access to ICT improves and enhances interactivity in ODL programmes. Access to learning technologies lays an important role in ODL as it supports the intellectual bridging, geographical and cultural gaps (Gatsha, 2010:39). Excellent delivering of teaching and learning of ODL can increase ODL students' access to appropriate resources. ODL students are generally geographically separated from their institutions and they require transport to access resources (Salane, 2008:8). Learning technologies aid in the forwarding of ODL programmes. Students can be in charge of their studying and setting, acquiring information when, how and where they prefer, and making use of a variety of means and devices to access information (Buchler et al., 2007:10). The barrier then is to use all possible resources for students to access all factors of their studying. When access is planned it should take into consideration the needs of the student, as well as the ease with which the digital resources can be used to contribute towards an effective learning environment (Chigunwe, 2014:2). Using ICT allows students to form a society of studying which jointly improves their contact with resources and communication with lecturers (Adams & Pike, 2008:2). Potter (2013:60) states that success in ODL can only be achieved when sufficient support is provided to students once situational and institutional barriers have been removed. Conditional challenges result because of the "individual's life situation, and include issues

such as students' work commitments, domestic responsibilities, as well as problems of childcare, finance and transport" (Buchler *et al.*, 2007:134). Institutional challenges include "physical location, entry requirements, timetabling problems, as well as practices that hinder participation" (Buchler *et al.*, 2007:134). Removing situational and institutional challenges, students have continuous right of entry to resources that could end up enhancing the quality of studies. Challenges can only be minimised when access to all resources is provided, using a plethora of available technologies (Buchler *et al.*, 2007:134). Providing students extra access to take part in ODL by means of new learning technologies and resources will increase transparency to the delivery of ODL programmes. Advanced utilisation of learning technologies could initiate a learning culture amongst students and furthermore increase the level of interactivity (Adams & Pike, 2008:2).

### 3.4 Institutional infrastructure

Within the prison services, elearning is founded in the organisational structures of the institutions. This could be beneficial as a motivator for students if the organisation had a positive approach to elearning (Adams & Pike, 2008:2). Figure 3.4 represents the theme of institutional infrastructure with its sub themes as categorised in the SLR.

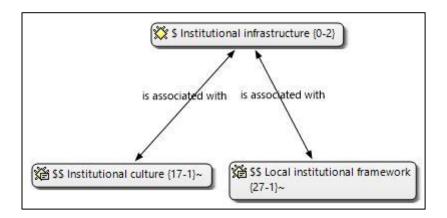


Figure 3.4 Components of institutional infrastructure

#### 3.4.1 Institutional culture

ICTs are positioned within a culture which defines characteristics of its use. Specific technologies may work perfectly in an environment of trust, but fail in an atmosphere of distrust like correctional facilities (Adams & Pike, 2008:2). Many elearning programmes rely on educational principles encompassed in wikis, blogs and forums. However, the use of these learning technologies within correctional facilities may bring about distrust within organisational culture of control (Brindley *et al.*, 2004:50). If a correctional facility has the intention of implementing elearning, it will have to create an institutional climate and culture where it is practice to develop policies for independent learners into all academic programmes and services. They therefore require:

- a review of the institutional mission statement
- strategic plan
- departmental operational plans to ensure that there is consistent rationale for activities (Brindley et al., 2004:50).

Learner support services should consider the exceptional and changing needs of the students being helped and the institutional background, and should be amended as properly to cater for changes in student population, the institution, and the environment. It is only in this way that an institution can be truly responsive to its clientele (Brindley *et al.*, 2004:50). An evaluation of the current, or the improvement of new methods of learner support to undoubtedly characterise the function of services and how they impact on the support on the encouragement of independent learning is needed.

Changing the culture and practice within HEI and DCS is difficult. The struggle to implement elearning necessitates a mixture of carefully planned strategies in decision, policy-making and creating of conducive conditions to the organisational structure (Buchler *et al.*, 2007:135). The correctional institution environment is unique. Unauthorised entry or access to their environment and information is protected from outside interference (Greyvensteyn, 2014:36). The correctional facilities have to retain offenders from acquiring illegal access from and to the outside world (Adams & Pike, 2008:2). Offenders can legally and controlled communicate with the outside world, with friends and family, e.g. access to telephones at certain times, and in and outgoing letters are censored (Adams & Pike, 2008:2). Offenders are permitted to receive contact and non-contact visits in a controlled environment

(Greyvensteyn, 2014:37). People visiting the offenders, as well as offenders, are searched before and after the visit to prevent the smuggling of illegal items (Greyvensteyn, 2014:37).

Offenders are not studying courses provided by the correctional facility when studying through ODL. Communication with the HEI takes place through telephone or emails with the assistance of the DCS staff members. Telephones are only available at specified days and times and controlled to a certain number per inmate. These constraints contribute to making it difficult for offenders to participate in ODL (Greyvensteyn, 2014:38). Some offenders, studying computer related courses, are allowed to have their own computers. Further restriction also affect access and offenders can face disciplinary actions if caught:

- No computer with a built in modem is allowed
- No computer with a web cam is allowed
- No USB memory sticks (USB flash drives, micro SD cards, or SD cards) are allowed
- No external hard-drives are allowed
- All computers are searched before they are allowed from outside
- No music or any type of videos are allowed on the computers
- Only software that must be used for studies are allowed on the computer
- No games are allowed on the computer
- No wireless modems are allowed
- All computers are checked periodically by the IT specialist of the correctional institution to check for unauthorised data or actions being performed
- A very strict policy on no pornographic materials (Greyvensteyn, 2014:38).

In South African correctional facilities offenders' laptops are either kept in a secure place where they can only have access to it at certain times, or offenders are housed in single cells so as to be able to use their laptops. Offenders can lose the opportunity of using their own laptops when they do not obey the rules and regulations of the correctional facility; this can be for a short period or permanently, depending on what the offender did wrong (Greyvensteyn, 2014:38).

#### 3.4.2 Local institutional framework

In DCS elearning is embedded within the organisational structure. This could be useful as an inspiration for students if the institution has an encouraging attitude towards elearning

(Adams & Pike, 2008:36). Dzakiria (2004:2) states that HEIs have to bring about some changes and new ways of teaching. The institutions have to know what is contained in ODL. There is a need for a major change, the reassessment, and re-engineering of ODL (Dzakiria, 2005:2). It is not absolutely about introducing emerging technologies of communication but to realise what the processes of learning at a distance are.

Motivated students will complete their learning; even incarcerated students while they are in the correctional facilities. The results the instructors expect from the offenders will affect the students' desire to succeed (Rubie-Davies, 2010:122). "If the bar is set low, then the anticipated results will also not match the desired outcomes" (O'Brien, 2010:35). Using ICTs for learning could develop learning especially when it is paired with a learner-centred approach (O'Brien, 2010:35). Technology can provide for various methods and manners of teaching and this can be a determining aspect to encourage offenders to study. eLearning may motivate students by providing them with a more interesting way of learning (O'Brien, 2010:35).

Facilities are required for elearning. This comprises more than just buying computers and setting them up in a room for offenders to use (Greyvensteyn, 2014:37). A great deal more is needed to accomplish efficient elearning: access to the internet, specialised software, and support in accessing courses and using the technology (Greyvensteyn, 2014:37).

### 3.5 Technological infrastructure

Figure 3.5 represents the theme technological infrastructure with its sub-themes as categorised in the systematic literature review, which are: (i) ICT infrastructure, (ii) infrastructure challenges for delivery of elearning, and technology-enhanced learning.

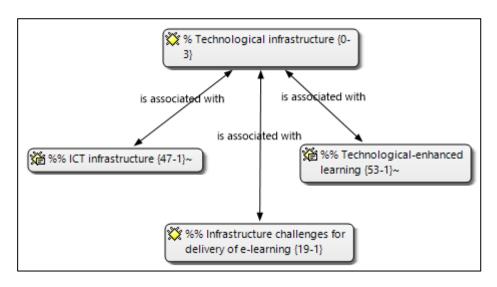


Figure 3.5 Components of technological infrastructure

#### 3.5.1 ICT Infrastructure

The implementation of elearning is more and more reliant on a demarcated infrastructure that can mobilise technical resources, knowledge, and other inputs essential to the implementation process (Tait, 2000:2). This infrastructure consists of foundations of knowledge and technical knowledge, focusing on research and development that improves opportunities for implementation by providing knowledge about new scientific discoveries and applications (Greyvensteyn, 2014:106). When in position, these concentrations of infrastructure enhance the capacity for implementation as their respective regions develop and specialise in particular technologies (Tait, 2000:3).

It is important to know ICTs which students have which they can retrieve information from, and ICTs that are obtainable to an institution or organisation so as to assess which ICTs should be used for the for forwarding students services (Tait, 2000:3). This point is most important as institutions seek to use ICT, and need to consider who will be included and excluded by such a move (Tait, 2000:3).

Adams and Pike (2008:8) state that "there are contrasting arguments around technology solutions for effective learning programmes." They continue that emerging electronic modes have reduced the offender's absolute separation from society. The internet is seen by many as online elearning programmes engaging isolated communities within wider learning societies (Wambugu, 2014:20). Nevertheless, internet security risks and threats led to

intranet solutions that increase stakeholders perceived control yet allow student involvement in larger learning communities (Adams & Pike, 2008:8).

As ICTs turn out to be more and more commonly utilised decisions have to be taken about the extent to which it will be used as a supplement to students' services variously available face to face, by phone or by letter, or the extent to which it will replace them entirely (Tait, 2000:3). There are a many essential questions to be asked: "Is the progress along the technology adoption cycle in any particular context seen as a simple transition, with the end result likely to be the complete replacement of face to face or telephone in favour of virtual meeting? Will the local face to face retain a place within an overall varied range of media (as has been the case in the move from correspondence to ODL)" (Tait, 2000:3).

The existing technological infrastructure within an organisation is a key aspect in guiding the choice of mode selection, for example if an existing broadcast network is under-used it is much easier to introduce television for distance purposes (Wambugu, 2014:20). One of the things that need to be done when building a computer laboratory, is to make sure that it is safe and secured. In a Correctional Centre the laboratory has to be protected so that no unauthorised offender can gain access to the centre to damage or steal the equipment, or use it for unauthorised purposes (Greyvensteyn, 2014:105).

#### 3.5.2 Infrastructure challenges for delivery of elearning

One of the biggest challenges encountered by the ODL is feelings of isolation, which makes the possibility of a trusting relationship between the students with the teachers, and with other students difficult (Cronje & Clarke, 1998:6; Dzakiria, 2005:2). Kangandji (2010:2) states that the challenge in providing effective DE in correctional facilities is complicated by the uniqueness of correctional culture. She continues that peer pressure may discourage attendance or achievement of incarcerated students. Incarcerated students as opposed to any other students have restricted control to change their situation and are prone to many influences beyond their control.

Not only are incarcerated students powerless, but they also have limited resources in correctional environment to access educational opportunities (Salane, 2008:11). It is not easy for them to get into contact with the HEIs they study through, or with the lecturers

(Kangandji, 2010:2). Salane (2008:11) also states that because of incarcerated students depending on a third person to make contact with the institution, this means that the students live in a state of constant deprivation as well as exclusion from the educational community. DE therefore discovers itself in this situation to be unreal. This therefore is in absolute disagreement to the primary goal of distance education having been deemed to be the most suitable way of customizing offenders study path and adapting it to their individual needs.

In a secure environment there are many more challenges to learning than anywhere else. Security itself hinders movement and reduces access to study space, study material and support, crowded conditions necessitate sudden transfers and disruption (Pike, 2009:3). Many officials resent the studying of the offenders, yet the day-to-day running of the facilities depends on them: access to computers, storage media and the internet dependent on the officials (Pike, 2010:12). Haghighi and Tous (2014:55) mention that the most appropriate method of instructional delivery to students does not mean the newest and most expensive technology tools.

## 3.5.3 Technology-enhanced learning

Several technologies support in the delivery of DE programmes are available to students and institutions (Gosh, 2009:75). Implementing and using several learning resources in delivery of DE programmes could progress the quality of learning, allowing all role players more chances that could give students support and perhaps develop the quality of learning. Manouselis *et al.* (2013:25) state that TEL cover all technologies that could support any form of teaching and learning activity.

Use of learning technologies in the delivery of DE programmes could eradicate barriers to learning such as time and distance constraints (Adams & Pike, 2008:2; Al Saif, 2007:126). Connection between students can happen at any time, and they can get access to resources that are available through a collection of technologies. TEL can bring education to people instead of people to education. It will also bring learning-teaching processes as easily accessible and covering a large population of people living in remote areas, even offenders in incarceration (Gosh, 2009:75). TEL can accelerate the mass education. Brindley *et al.* (2004:10) state that TEL also has an huge influence on the manner in which learner support is conceptualised and practised.

Effective communication is important to the DE mode, communication between all role players involved in delivery of programmes could be improved through TEL (Bester, 2014:35; Dzakiria, 2005:2). Communication is internationally seen as an important element in the delivery of distance education (Dzakiria, 2005:2; Tait, 2000:2). Dzakiria (2005:2) emphasises the fact that the use of TEL on DE could promote a stimulating relationship between students and lecturers and enhance the attempts at building a better learning support to facilitate ODL.

## 3.6 Management of learner support

The theme management of learner support emerged from the SLR (Figure 3.6). Four codes grouped to this theme were: (i) funding, (ii) management of acceptability, (iii) management of learner support, and (iv) organisational awareness.

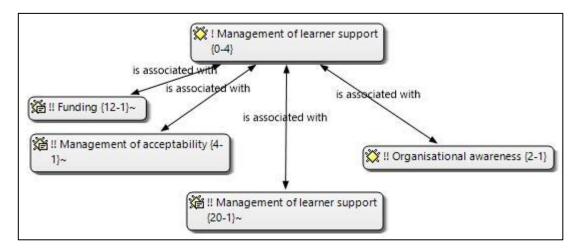


Figure 3.6 Components of management of learner support

## 3.6.1 Funding

Few issues and barriers could affect the decision when implementing elearning of which finance would be the first (Greyvensteyn, 2014:18). The question to ask is: How can scale customized support services be scaled in a cost effective way? This is to meet the varied needs of ODL students as support services should be individualised (Lee, 2003:184).

Offering such support is an expensive initiation, and the core idea is that the greater the input to the provision of learner support services, the greater the completion rate and/or learning outcomes (Lee, 2003:184).

The mission and vision of an institution dictates the matter of cost effectiveness in providing learner support services (Lee, 2003:185). The costs of elearning draw much more awareness and challenges than the investment in more traditional learning infrastructure (Salmon, 2005:204). The choice and requirements of learner support services offered by an institution will be ultimately decided by whether it is more concerned about supporting the students or generating earnings from offering distance education programmes. The matter in any case is that there is important support that the organisation has to give to the students irrespective of how much it costs. The minimum quality of education is often imposed by accrediting agencies through national standards, and it is entirely up to each institution to decide whether or not to offer services beyond the required minimum level (Lee, 2003:185).

An applicable way of offering quality services is by providing broader access and cutting the expenses on support staff training and maintenance by delegating the services to specialists (Lee, 2003:185). eLearning requires more up-front investment but offers a low cost and sustainable model over several years if large numbers of students continue to register (Salmon, 2005:204). The cost of elearning is frequently more expensive than that of teaching in a conventional classroom. This is because communication between the students and the lecturer increases. More employees need to be employed and trained in the use of the elearning (Greyvensteyn, 2014:18).

Although there will be costs associated with providing computers with internet and training tutors to meet the needs of inmates, it would be a worthwhile investment (Kangandji, 2010:2).

### 3.6.2 Management of acceptability

Stakeholders and students need to accept elearning as suitable and effective for learning. Acceptability is often governed by social norms and relates to issues such as information and technology trustworthiness, repute, quality, aesthetics, fun and ownership, as well as social structures, perceived expertise, ethics and privacy (Adams & Pike, 2008:4). However, there

is a possibility for discussion between the distinctive levels of ideas and over time. This can annoy or displease users' emotional plans and therefore influence the willingness to overcome access, awareness, and further acceptability issues. Redesign requires pinpointing if these are aesthetic, social norms or trust related issues (Adams & Pike, 2008:4).

Students reasonably exchange seclusion contrary to other factors grounded on expectations, but when they become aware that their expectations are not met, tend to reject the learning resource. If a specific elearning application has a high acceptability, the acceptance of poor usability may increase complex authentication procedures, hidden information, and the likelihood of incurring privacy risks (Dzakiria, 2004:2). Low acceptability may lessen the readiness to work with these factors. An important challenge to operative elearning utilisation depends on the stakeholders. In DCS fears are caused by poor observation of the resources and the fear of risking security. Many of these doubts are caused by incorrect knowledge of technology. This in turn highlights several problems with the importance attached by governing bodies to elearning programmes (Adams & Pike, 2008:3; Dzakiria, 2004:3).

#### 3.6.3 Management of learner support

Detailed matters with which control of students' support systems need to involve will include a number of important factors (Tait, 2000:2). The centre-periphery nature of more than small scale ODL systems, where services are to a significant degree delivered away from any central location or campus, is a significant element in terms of organisation and management (Tait, 2000:2). Frequently there can be convincing and undesirable features of hierarchy in a centre periphery model. It is possible to work towards a partnership model between production and presentation, where the concept of a distributed model may be preferred, and opportunities offered by ITC environment may be particularly helpful in this regard (Tait, 2000:2). The control and handling of information is essential to the successful delivery of quality services to students. Due to the administration of information, student progress can be supervised and services introduced to intervene in its support. Assessment of facilities will also depend in critical manners on the information that has been gathered. The flow of information to and from the peripheral elements, with updating a core task for both centre and periphery, represents a central element within overall management of information (Tait, 2000:2-3).

At some stage it is important to review the question as to what should be focused upon in an elearning environment (Ustati & Hassan, 2013:293). Three keys to success in an elearning environment, i.e. access to information, comprehensive approach that is reliable, accurate, complete, organised and labelled for easy retrieval and use and a complementary balance between training and information (Ustati & Hassan, 2013:293). Students should be taught continuously on how to use the elearning information provided. Therefore, teachers should be well prepared and equipped in compiling the study material for the students. Besides online support and assistance should be made available so that students could fully utilize this support system throughout their online experience (Ustati & Hassan, 2013:293).

A complete absence of student support within an ODL system contributes to high dropout, there is no easy formula for assessing how much drop out will be reduced and persistence enhanced by a particular investment (Tait, 2000:3). The variables of educational preparedness of students, quality of course materials, reliability of institutional and extra institutional systems, and life circumstances of a particular student cohort are so great that each case has to be constructed independently (Tait, 2000:3). While a minority of students in any institution regard themselves as almost entirely autonomous it is clear that a majority welcome student support services, and in fact always demand more (Tait, 2000:3).

ODL administrators and instructors should be aware of the means and strategies that could enable them to address the needs of distance students through the content management system and the learning management system that they have prepared for the programme (Ustati & Hassan, 2013). It should be able to provide for the educational, social and emotional needs of learners in a distance learning education environment (Ustati & Hassan, 2013:294).

We have to understand the contexts within which elearning is embedded to identify problems and to find appropriate solutions (Adams & Pike, 2008:8). The more students are recruited, the lesser the unit costs of course materials in whatever medium. With student support however, costs rise with student numbers, as these are directly student number related over and above a threshold of fixed costs (Adams & Pike, 2008:8). In addition, therefore to whatever is thought to be the minimum level of services to students, it will be necessary to estimate, in accordance with the culture education and training in a particular system, and what is adjudged from the student and institutional perspective to represent a good quality of

learning experience, how much resource to commit to the student support system (Tait, 2000:3).

The success of a distance learning programme is determined by the way in which the programme is structured so as to provide maximum benefits to the learners (Ustati & Hassan, 2013:293). Taking into account the distance education philosophy, objectives and methodologies of the institution, as well as the characteristics of its distance education client base, institutions need to plan in a strategic way the support services offered to distance learners (Potter, 2013:77).

In order for the incarcerated to benefit from education provided institutions need to ensure that they are able to access resources and support services that distance students need to be successful (Kangandji, 2010:2).

### 3.6.4 Organisational awareness

It is important to understand students and stakeholder's awareness of elearning, applicability for different situations, work practices, time limitations, and how others use different elearning resources (Adams & Pike, 2008:8). Awareness can seriously impact upon a user's uptake of resources in obvious and unclear ways (Adams & Pike, 2008:8). Poor awareness by stakeholders and students of their cognitive need for help in query formulation demotivates their use of an online ODL support application (Adams & Pike, 2008:8).

### 3.7 Policies on digital learner support

The theme of *policies on digital learner support* emerged from the SLR (Figure 3.7). The three codes grouped to this theme were: (i) policy for digital security, (ii) policy for challenges, and (iii) policy for student support.

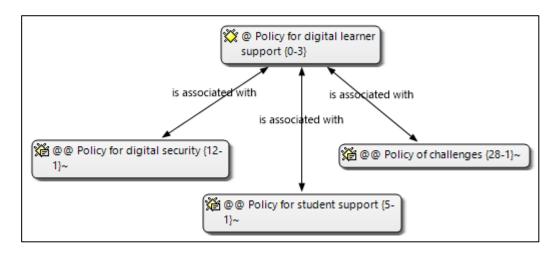


Figure 3.7: Components of policies on digital learner support

### 3.7.1 Policy for digital security

Distance learning and particularly elearning has a past of inspiring those who are left out from learning. However, the education and technology that support that learning can be seen as a threat by the DCS (Adams & Pike, 2008:8).

Security is a major matter; computers have to be monitored and certain activities which could compromise the safety of the correctional institution have to prohibited (Greyvensteyn, 2014:39). But because ODL is done through the use of ICT, it is important to come up with guidelines to assist offenders to be able to study. Appropriate policies could be of great assistance. It would also be beneficial to the motivation of incarcerated students if the institution had a constructive method to elearning.

Correctional facilities encompass many challenges relating to security requirements and have low consideration for education, which makes it difficult for incarcerated students to study. Facilities' security requirements are often in conflict with elearning initiatives. Adams and Pike (2008:6) report on a correctional facility which has been provided with a new computer room, but with computers without CD drives as they were not allowed due to security protocols. The security protocols also limited internet access which consequently limited course choices and reduced students' capability to finish their chosen degrees. It is however doubtful if these conflicts were always appropriate to real security aspects, or poor consciousness from stakeholders regarding the demand of delivering affective elearning as a graphics calculator is viewed as a security risk. Incarcerated students destructive attitudes of

information security and management was acknowledged as impending the placement of elearning programmes (Adams & Pike, 2008:2). Therefore educators foresee challenges with the delivery of elearning due to such monitoring systems. Educators are not IT specialists and inmates with necessary technological know-how could possibly abuse the elearning system for their own purposes (Greyvensteyn, 2014:38). Because of this challenge, incarcerated students do not have "access to the tutors and the internet, which has a negative effect on their work" (Kangandji, 2010:2).

## 3.7.2 Policy for student support

The question of the right to education in general draws one's attention to the specific situation of the incarcerated students: (Salane, 2008:2). They are not allowed to execute some of their rights, for example the right to freedom, but all their other rights, including the right to education may be implemented. Distance education has a special place within those provisions; particularly in regard to facilitation of access to post graduate education (Salane, 2008:2).

According to the current formal education and training policy education programmes refer to programmes offered in formal education i.e. AET, mainstream, literacy tuition and correspondence studies. With regard to HE, there is no specific regulation on the application of ODL (Linardatou & Manousou, 2015:3). Policies have to be revised often to make sure that they are still in line with emerging technologies, and are able to make allowances to rules to assist within the complicated lives of incarcerated students (Brindley, 1995:9). Buchler *et al.* (2007:133) state that effective learning support requires a combination of successful managing strategies in decision making and policy making, and beneficial conditions related to organisational structure and context. Consultations with students and the staff who work regular with students are important.

## 3.7.3 Policy of challenges

One of the challenges that ODL students experience, is the "feeling of isolation, which makes the possibility of a trusting relationship between the students with the correctional officials, other offenders, and other students difficult" (Dzakiria, 2005:6). Offering successful ODL programmes in the correctional centres is complicated by the exceptionality of the

correctional culture, i.e. routines such as lock downs and head counts, offenders' hearings or meetings with lawyers, which all disrupt regular studies routines (Kangandji, 2010:2). In addition, the correctional environment is unlikely to be rich in verbal and sensory stimuli. Critically offenders, as opposed to ODL in the community, have limited power to change their environment and are subject to influences beyond their control (Kangandji, 2010:2). The dehumanising nature of these situations—which are relatively common in correctional centres—contributes to incarcerated students being unable to make contact with their HEI and they are obliged to rely on the willingness to help of third parties. Such remote access to studying means the students live in a state of constant deprivation as well as exclusion from the academic community (Salane, 2008:11).

Studying in a correctional facility presents various challenges. The security regime itself hinders movement and reduces access to study space, study material and support; overcrowding necessitates sudden transfers and disruption (Pike, 2010:12). Brigham (2001:2) states that challenges encountered in the delivery of learning support of incarcerated students include the provision and allocation of resources, the availability of appropriate technological infrastructure, organizational structures, and procedures, service quality, student access, and policies on academic honesty.

Challenges of accessing information, the means of communication and documentation mount up in correctional centres (Salane, 2008:12). Furthermore, the necessity of assigning the pursuit for information and documentation to persons outside actually keeps the offender in a state of dependency which ODL is supposed to overcome (Salane, 2008:13). This is in disagreement to the primary goal of ODL which is supposed to provide a personalised study path which is tailored it to their individual needs. It has turned out to be an inhuman impersonal system which is incapable of adaptation to the constraints of the correctional context (Salane, 2008:11).

Limited resources in correctional facilities appeal for well-organized ODL interventions. There is a need to give recognition to the value of applicable use of ICT to learning in the correctional centres. The uncertainties of using ICTs in correctional centres should be acknowledged and dealt with. Also the different training requirements of incarcerated students may be problematical due to a long history of academic failure (Kangandji, 2010:2).

The current formal education policy stipulates that all offenders have a right to basic education (Department of Correctional Services, 2008:2) which simply means that offenders eligible to study can study while incarcerated. The offenders have then to approach the DCS staff members to submit a request to study. What or in which level the offender is going to study will be regulated by the subjects or courses which the offender wants to study, whether it is AET or external education or an academic institution. The reason for this is in the correctional facilities offenders are allocated studies according to their precise requirements. The facilitation of these studies is combined and associated as far as possible with the education system of the country.

During exam times, the arrangements regarding examinations are the responsibility of a person identified in writing by the Manager Education and Training (Department of Correctional Services, 2008:2). Even though education is the right of the offenders, and they are assisted by the educators, offenders have to do the courses on their own and pay for their studies (Department of Correctional Services, 2008:2). The reason for the DCS to allow correctional education is to improve the "education level" of the offenders so that their integration back into the community can be smooth and strong. Table 3.1 provides a summary of the policy aspects which emerged during the analysis of the policy.

Table 3.1 Policy aspects which impact on distance learning of incarcerated students



## **Policy aspects**

- All offenders have a right to basic education (P62:4)
- All administrative arrangements regarding examinations are the responsibility of a person identified in writing by the: Manager Education and Training (P62:3)
- Offenders who wish to embark on education and training programmes should approach prison administrators with requests (P62:12)
- Higher Education and Training band deals with diplomas, occupational directed certificates degrees, higher diplomas, professional qualifications, higher degrees and doctorates and is offered through the medium of correspondence (P62:1)
- These courses have to be done by offenders in their own time and at their own expense (P62:2)
- Management will in these cases only offer administrative support and study guidance (P62:9)
- Formal education programmes in the Department of Correctional Services are provided to offenders according to their specific needs (P62:6)
- The Department of Correctional Services aims to enhance the education level of offenders so that their integration into society can be strengthened (P62:5)
- Provision of these programmes is integrated and aligned as far as possible with the educational system of the country (P62:7)

- Programmes are also informed, regulated and guided by the Policy on Formal Education within the DCS (P62:7)
- Admission requirements are determined by the level of the learning/subject area for which the offender wants to enter external educational/academic institution (P62:11)

#### 3.8 Student satisfaction

Satisfaction is a state of mind, i.e. an attitude that reflects an individual's preferences or apathy with regard to certain aspects (Elliot & Healy, 2001:2). Four codes were grouped to this theme: (i) Access to learning resources, (ii) student acceptability or elearning, (iii) perspectives of incarcerated students, and (iv) student support.

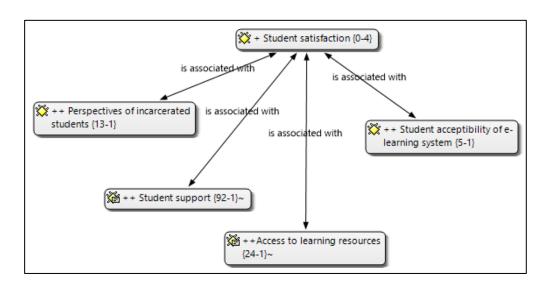


Figure 3.8: Components of student satisfaction

### 3.8.1 Access to learning resources

Adams and Pike (2008:2) elucidate that it is important for students to have access to elearning, that is that they find it easy to approach, enter, or use an elearning system and the learning within. This view is frequently associated with conventional educational elearning methods, usability issues, and accessibility by disadvantaged groups (Adams & Pike, 2008:2). Nevertheless, at different levels of abstraction, accessibility can impact upon students' usage by relating to issues of technology, location, authentication, system design and usability and training (Adams & Pike, 2008:2).

HEIs become increasingly reliant on the online delivery of courses for DE, and students without access to the internet are increasingly marginalised (Farley & Doyle, 2014b:357). For students to retrieve resources, they must have access to the internet and download study material through websites (Farley & Doyle, 2014b:357). Offenders have little access to the telephone, no email communication with tutors and no or limited internet access (Chigunwe, 2014:2). The fact that the incarcerated students do not have contact with their tutors and limited access to the internet, has a negative effect on their studies (Kangandji, 2010:2). The choice of courses for incarcerated students is limited; this is also aggravated by insufficient internet access (Salane, 2008:8).

For incarcerated students to obtain information, they have to request that DCS staff members bend the rule, by copying DVDs onto CD and offering personal laptops for them to utilise (Adams & Pike, 2008:4). Adams and Pike (2008:4) continue to state that the reason for such strictness in correctional facilities is that open access to internet for incarcerated students is a security risk. However, for the incarcerated student to benefit from the education provided, they need to be competent in accessing learning tools and support systems so as to be effective and satisfied. It is therefore important to find a safe and harmless way for offenders to retrieve information.

## 3.8.2 Student acceptability of elearning system

Negative emotive responses may impact negatively upon students' willingness to continue with an online course (Adams & Pike, 2008:4). It is crucial that students and stakeholders feel that an elearning system is worth accepting as adequate or valid, acceptability is often governed by social norms and relates to issues such as information and technology trustworthiness, repute, quality, aesthetics, fun and ownership, as well as social structures, perceived expertise, ethics and privacy (Adams & Pike, 2008:4). Nonetheless, there is potential for discourse between the different levels of abstraction and over time (Adams & Pike, 2008:4). This can anger or aggravate users' emotional strategies and thus willingness to overcome access, awareness, and further acceptability issues. Redesign requires pinpointing if these are aesthetic, social norm or trust related issues (Adams & Pike, 2008:4).

Students while reasoning, give away privacy against other aspects based on expectations, but when students become aware that their expectations are not correct they persuasively reject the technology (Brindley *et al.*, 2004). If a certain elearning method is highly accepted we may increase acceptance of poor usability, complex authentication procedures, hidden information and the likelihood of incurring privacy risks (Brindley *et al.*, 2004). Conversely when the method is poorly accepted it can reduce the willingness of students to work with these aspects. An important challenge which curbs effective elearning, is with the stakeholders, whether they accept it or not. The fears of stakeholders are driven by poor knowledge about technology and the aspects they see as being able to jeopardise security. This, in turn, shows numerous challenges with the meaning associated with management of elearning

### 3.8.3 Perspectives of incarcerated students

In correctional facilities inmates making use of ODL and HE feel that they are taking control of their lives and this gives them the sense of power (Adams & Pike, 2008:6). The struggle for inmates to master all the roadblocks in their way to study is a valuable life skill that they learn and can use as motivation once they are released from the correctional facilities (Adams & Pike, 2008:1). Incarcerated students and all stakeholders need to know what elearning is and what can be achieved by using it. Access is then required in order to access learning resources. In correctional facilities security plays a role. All stakeholders must accept the concept as beneficial and provide all the necessary help in implementing the elearning programme (Adams & Pike, 2008:4)

From the perspective of offenders in correctional institutions, the obvious benefit is that if allowed, elearning could assist them to obtain an education which prepare them for the outside world (Greyvensteyn, 2014:38). It also permits them to connect with external teachers. This would allow them to obtain a much-needed education and help to prevent recidivism (Greyvensteyn, 2014:38). Offenders see elearning as a way to recreate themselves to what they want to be when they leave the correctional institution, and also as an aid to their rehabilitation (Adams & Pike, 2008:4).

Offenders studying through ODL complain that receiving results after submission is a challenge. They highlight that occasionally they only get feedback after they have already

written their examinations. It is realistic to expect offenders "to study at their own cost, in their own time, without any face to face help, and expect to pass their subjects receiving feedback in a timely manner to prepare for exams" (Adams & Pike, 2008:5).

Another concern of incarcerated students studying through ODL is administrative issues. They complain about their registration with the HEI which was always late, and by the time they have received their study material, the first assignments were due. Although incarcerated students regard this as a serious problem, many correctional institutions do not regard this as an important issue (Greyvensteyn, 2014:38).

## 3.8.4 Student support

Thorpe (2002:1) describes learner support as all the elements capable of responding to a known student or group of students, before, during and after the learning process. Usun (2004:1) states that learning support relates to the resources that learners can access in order to carry out the learning process. Learning support focusses on the real-time feature of learner support, the fact that it happens during the actual time period that a student studies, and that the identity of the students and of learning groups, as well as their location and contexts is the focus for what learner support is, and what it must achieve Thorpe (2002:1). Tait (2003:2) elucidates that learning support, in contrast to the study resources, should not be uniform, but should be adapted to and responsive to the needs of each student. The role of learner support is to act as intermediaries between institutions and their administrations, and the needs and approaches of each student, remote from the institution (Tait, 2000:2).

The explanation of learning support makes us aware of the importance of learner support, and the reasons why assessment of the quality of learner support is important in ODL (Brindley *et al.*, 2004:40). The identity of learners, their particular needs and motivations and their progress with the course are at the core of what learner support is about (Brindley *et al.*, 2004:40). The quality of a learner support system can impact very positively or negatively on students' learning experience, and either help or sustain the learner in studying the course, or, on the contrary, leave the learner isolated and liable to stop studying at the first major hurdle" (Thorpe, 2002:1).

Learning support is mostly because various HEIs, perhaps for the first time, are faced with a new learning landscapes and the expectation that incarcerated students will have independent learning skills and the capacity to engage in activities which require self-direction and self-management of learning (Dzakiria, 2005:3). A learner who has left the educational setting for many years, may feel incompetent and lacking in the learning skills needed to complete his studies (Dzakiria, 2005:3).

Learning support could influence distance learning—constructively if designed thoroughly, or but harmfully if no consideration is given to the circumstances under which learning best happens. Effective learning support should be planned to allow incarcerated students to focus on their studies, away from disturbing environments. It is essential that distance teachers have comprehensive knowledge of the influence learning support has on the incarcerated student and the learning process as a whole, as well as "understanding of the context of the courses being taught" (Dzakiria, 2005:3).

## 3.9 Chapter summary

The importance of learning support needs of incarcerated students cannot be stressed enough; especially when looking to the barriers that the students meet in the course of the completion of their studies while being incarcerated. This chapter emphasised what literature has to present with regard to learning support needs of DE students. The incarcerated student characteristics, scale and capacity, institutional framework, technological framework, management of learner support, policy for digital support and student satisfaction were described.

# **Chapter Four**

Burrowing for Incarcerated Students' Learning Needs in a Changing ODL

Landscape

#### 4.1 Introduction

The research question which underpins this study is: How can the DCS manage the learner support needs of incarcerated students in a changing ODL landscape? The worldview of interpretivism, as discussed in Chapter Two, indicates the underpinning worldview of this investigation: an interpretivist study, and stipulates how I engaged with the study on the phenomenon of the learning support needs of incarcerated students at grassroots level in a correctional facility. This chapter presents the incarcerated students' learning support needs as they expressed them through their original utterances of their perceptions and experiences.

In order to understand the complexity of the study, I have to explain my personal context as researcher. I am the Chairperson of the Parole Board in the Department of Correctional Services in another part of the country where I consider offenders for parole placement. For this study, I had to make a purposeful mind shift in my approach to the study. People that I daily meet as offenders, have now become my research participants. I had to accept that I was, for the purposes of this study, not in an authoritarian position, but the person who sat on the same side of the table as my research participants, where I listened to their stories, and walked in their shoes. I was not on the other side of the table as I was in my professional life. I had to ensure that I did not wear a calculating, or even a judgemental hat, but I had to listen in an unbiased manner to their nuances of the student learning support they needed. I had to evolve into this position of becoming their voice—their megaphone—on their student learning needs while enrolled for a post-school qualification in an institution very different from their peer ODL students. I went into the interviews as a researcher, collecting data on their daily learning support needs while they were incarcerated students housed in a correctional facility for extended periods of time. I realised that this hat could not shift during the entire duration of this investigation. As I was also the facilitator of the interviews to firsthand hear their learning support needs, my role as researcher could therefore be

summarised as that of *participant as observer* (De Vos *et al.*, 2011:120). While considering my position as qualitative researcher for the current study, I scrutinised the literature and became aware of Fikfak *et al.* (2004:276) who state that "when qualitative researchers become fluent in struggling with the issue of 'voice' when representing their research findings, they will find yet another means of protecting human dignity." Scientists know their research environments and therefore they are able to acknowledge their assumptions and personal standpoints pertaining to the research analysis (Given, 2008:60).

As I became aware of the possible bias relating to my professional position versus my position as a qualitative researcher—investigating the very same people I have to manage on a daily basis—I could also not let sympathy or zealous compassion take over my cognitive and rational interaction with the data. I had to remain neutral in my interaction with the research participants, and yet become the mouthpiece of incarcerated students on their learning support needs. My work relationship with similar people at another site had to take the back chair while concatenating the participants' voices into guidelines with the aim to better address the learning support needs of future incarcerated students.

I therefore acknowledge that it is difficult to be free from bias (Chenail, 2011:257; Walliman, 2011:244). Maree (2008:114) warns that the more a researcher becomes "involved with the research participants and with the study, the greater the risk of bias creeping into the study." Yet, Maree (2008:115) continues to say that bias can be controlled if a researcher ensures the trustworthiness of every aspect of the study. Consequently, in order to safeguard trustworthiness of my coding, another established qualitative researcher, not part of the study, peer-coded the codes with me until we reached a point of understanding and consensus (Saldaña, 2011:190-191). I also regularly reflected with my promoter who guided me in staying objective throughout the data collection analysis. My promoter participated in the data collection procedure as an observer to diminish bias and acted as co-analyser to provide consistency to the study.

The integrated dataset which also includes the analysis of relevant literature, encompasses the captured data from four focus group interviews relating to 27 participants: 21 male students, three female students, and three DCS officials (two males and one female). Students studying with UNISA who were held at the correctional centre in Worcester comprised thirty males and three females. While 21 male students voluntarily participated in the study, all three the female students willingly participated in the interviews. The interviews

took place in the facility where they regularly met for their studies, which was observably not conducive to studying: (i) the male students studied in a temporary container structure, which was also leaking. Buckets on the floor collected drips from the roof of the container; and (ii) the female students used a classroom in the correctional facility, which was also used for a skills-development room for other offenders. Worcester happens to be very hot in summer and extremely cold during winter. On the days of data collection, there was snow on the surrounding mountains and a piercing wind howled around the corners of the correctional facility.

When the transcription and analysis were completed, the integrated hermeneutic unit comprised seven themes which collectively addressed the student needs of incarcerated ODL students. These themes are: (i) student characteristics, (ii) scale and capacity, (iii) student satisfaction, (iv) institutional infrastructure, (v) technological infrastructure, (vi) management of learner support, and (vii) policy for digital learner support. Each of these themes constituted an array of codes which are elucidated on in detail in the consecutive sections. These seven themes and their relating codes are presented in Figure 4.1. The exposition of findings from the four focus group interviews commences with a discussion of the characteristics of the participating incarcerated students.

### 4.2 Student characteristics

Owing to compliance with the POPI Act<sup>2</sup> (Republic of South Africa, 2013:2), I did not have access to the exact number of incarcerated students housed in correctional facilities across South Africa. At the correctional centre in Worcester, there are about forty such students of whom I interviewed 27. Due to this issue of privacy, I did not search for information on how many more students there were at other centres.

The incarcerated students were offenders who come from different places across South Africa and who decided that, whilst being incarcerated, they wanted to study through DL. These students (male and female students) were sentenced for different offences which I

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<sup>&</sup>lt;sup>2</sup> An act to promote the protection of personal information processed by public and private bodies and to provide for the rights of persons regarding unsolicited electronic communication and to regulate the flow of personal information across the borders of the (Republic of South Africa, 2013:2).

cannot report on in this thesis due to my compliance with the POPI Act, as well as the conditions of my ethical clearance for this study. Their sentences varied from two years to life imprisonment. However, they shared one attribute, they all studied through DL, and in this case, they were enrolled at UNISA for a post-school qualification. Table 4.1 summarises some demographical aspects of these incarcerated students as research participants.

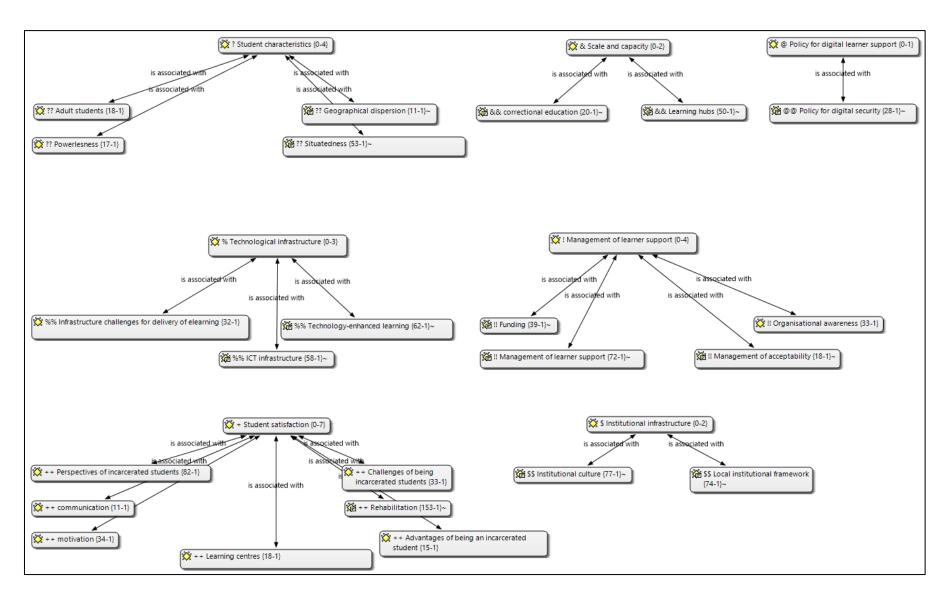


Figure 4.1 Structuring of themes and codes from the Atlas.ti™ hermeneutic unit as components of a framework for student support

Table 4.1: Summary of the biographical information of research participants

Aspect	Number
Age group (years):	
20-29	2
30-39	20
40-49	02
Gender:	
Male	21
Female	03
Qualification enrolled	
for:	
Diploma	03
First degree	18
Honours	02
Masters	01
Experience of DL:	
Yes	05
No	19
Access to internet:	
Yes	24
No	00
Limited	24
Total:	27

The majority of the participants (twenty) were from the 30-39 age group and two were from the 40-49 age group. One student was registered for a Master's qualification; two for honours; eighteen for their first degrees, and three for different diplomas. Five of the students had previously studied through DL, but DL was a new experience for most. During the interviews, one student revealed that he was studying for his fourth degree of which he had attained most while being incarcerated. They all had, to some extent, access to internet.

Figure 4.2 indicates the outcomes of the coding relating to the participants' student characteristics. I grouped four codes to this theme: (i) adult students, (ii) situatedness, (iii) powerlessness, and (iv) geographical dispensation. The following section discusses their student characteristics as incarcerated students in a correctional facility.

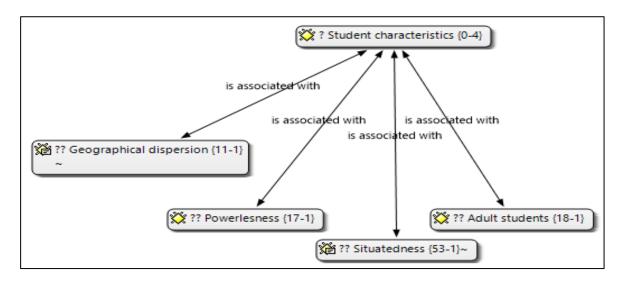


Figure 4.2: Components of student characteristics

#### 4.2.1 Adult students

In general, adult DL students "are most likely working individuals, probably older than the average student" enrolled at comprehensive universities, and they are likely to provide for their families while studying (Mdakane, 2011:15). Although these incarcerated students adhere to most of the adult learner characteristics, they do not earn a living, and they are not able to take care of their families, financially or otherwise. In fact, their families have to make do without any of their support. Some are single, some are married, others are parents, and others have parents. Their families are always in their minds as they are not able to see them regularly. This causes depression, because they miss their families and these circumstances seem to impact on their studies:

In my case, during the Christmas holidays, I could not see my children as I was writing exams in January. It absolutely affected my concentration (P56:164).

But while I am in here, maybe my mom is going through a bad time. Whatever. I know about it; it affects my higher education studying a lot because there is nothing I can do about it (P56:166).

#### 4.2.2 Situatedness

Bester (2014:28) mentions that planning for a programme of study should start with an analysis of "who are our students." The research participants are individuals who came into the educational setting with a variety of personal characteristics and experiences. Although these characteristics and needs are sometimes treated as marginal, they are central to DL

(Dzakiria, 2005:1). Tait (2000:1) describes incarcerated students as people coming from diverse backgrounds; with different prior learning experiences; participating voluntarily in learning; integrating new concepts with prior knowledge; are often unemployed, experience study barriers, and have issues with technology connectedness. These factors are also true for the participants of this study:

We are in rooms or cells that has thirty plus people in a room. People are from different nationalities and have different mannerism (P58:26).

We are on our own. There is no instruction from the department. We decided that we are on our own (P56:24).

They can recognise we are incarcerated students. We have different hours of operation (P56:64).

If you did not have some form of experience on how to study distance learning through the post, or through online studies, it will definitely be a big challenge for you (P57:46).

You know how to navigate and probably get there; do you know what button to click and how to send your message and wait for a return and do you know how to use to access your laptop properly because me personally, I'll be honest with you, I don't know I'm just doing what the other guys are doing. When I don't know, then I have to ask around. So definitely, we need a qualified person before you start with your study. Maybe for six months or so to help you to learn those navigating skills with the laptop: how to go in there how to go out there; how to look for this; how to get that. Stuff like that (P57:54).

The participants are restricted to access only certain internet services which they need as students. For example, it is difficult for the participants to register at UNISA. They need the assistance of the officials, or from their families, as they cannot access the internet at any time, or visit any website they could gain information from. Internet access depends on the times allocated to them and the availability of the officials to guard and assist them:

When it comes to a point when you need to register at first in a HEI, we have difficulties to access those things and you feel the need of being outside (P56:2).

Even if you have access to technology, the access to technology can be denied you anytime (P56:46).

When an HEI plans to deliver its programmes to diverse students—like incarcerated students—there is a range of considerations to contemplate during both the planning and delivery of a programme. UNISA designs the programmes for students in general and does not necessarily take into consideration the situatedness of incarcerated students who are not able to regularly check in online or attend tutorial sessions:

I think it was a huge mistake on the side of the DCS. This was not a UNISA thing. It was a huge mistake on the side of the DCS to decide they want to bring all students across a particular province to one centre. I believe there are seven or nine hubs across the country. The facilities are not equal or adequate (P56:64).

I'm not sure that a specific person would be allocated to a specific hub. We have heard numerous times where you could contact them [UNISA] by email. But you do not get response at all. Zero response (P56:65).

Although some participants felt neglected and they experienced that they received no support from UNISA, others experienced some consideration. They retained the hope that one day they will be regarded as fully-fledged students, also by the DCS:

The department is to become more and more geared for HE and they are obviously on their way because slow slowly but they are on their way (P56:25).

I do not know if this was available many years ago (P56:25).

#### 4.2.3 Powerlessness

Powerlessness is the emotion one experiences when circumstances are beyond one's control (Bunker & Ball, 2009:268). Dryer (2007:30) defines powerlessness as a perception that no action on your side will affect any outcome to a situation and therefore, you have no control over a current situation or its outcome. Bunker and Ball (2009:268) refine powerlessness as the person's belief that he or she is unable to influence the outcomes of or for another person. The person in charge holds all the power and the victim is trapped and open to exploitation. The participants in this study felt powerless and frustrated. They felt like they were no longer acknowledged as human beings—their views and opinions counted for nothing. They reported that they could not defend themselves against the officials and they were unable to defend themselves against the outcomes of the improper actions of the DCS staff members:

It is frustrating because your power is taken away from you in a way you feel powerless (P56:99).

When you need to make an urgent call to your professor or whatever, then its dependent on a member's mood that day (P56:109).

These all these human factors that actually take our power as students away from us we are powerless we are not in control of our studies (P56:112).

It's all just dependent; it's just too much dependent on other people (P56:113).

These feelings were caused by different circumstances. The management and the correctional officials were often the reason for their deep emotions of powerlessness. Management of the correctional facility was supposed to ensure that the student support needs of the incarcerated students were addressed within the boundaries of the Formal Education Policy of Offenders of 2004 (Republic of South Africa, 2004:2). However, the officials often appeared to be the cause of the participants' frustrations:

We have difficulties with the management. Hence you know it does not depend on you for you to be registered, or even apply to a HEI (P56:101).

I had the unfortunate incident where the member who was in charge of education for us and UNISA. We, students were completely anti-development. I suffered the misfortune where for two semesters in a row, this particular guy kept study material locked in his cupboard and went on leave, and only gave it to me two days before the assignments were due. I missed out an entire year of my studies because of that kind of nastiness (P56:108).

The strong emotions of powerlessness are detrimental and potentially threatening to the incarcerated students' sense of achievement, competency, and self-worth (Bunker & Ball, 2009:269). Powerlessness is not conducive to easy and comfortable relationships" (Dryer, 2007:31). The relationship consequences of powerlessness include grudge-holding, withdrawal from active participation in the relationship, and desire to retaliate (Bunker & Ball, 2009:269). The relationship between the participants and the officials is often one of mistrust. The participants mention that they have lost trust and faith in the officials because they are not taken seriously when they communicate their student support needs to the officials:

I am now in the fifth year and in these five years I have been in five different centres. So, the constant relocation is very disruptive. We are about to be relocated again to another centre without any reason. It is not up to us, the students (P56:116).

There is no access to the internet. You don't even mention that to a member because you then are starting a joke here (P56:129).

I've lost my ID. As my ID document was not with me, so it was difficult for them at the centre to allow me to go and do a new ID. It took me four years of talking with one person. It took me four years, but at last I've got it (P57:72).

The DCS Emergency Support Team (EST) has the task to search offenders' rooms for items which are not allowed. These search teams enter offenders' rooms any time of the day or night; without any advance notice. Participants asserted that during such a search, these search teams often destroyed incarcerated students' study material and they had no choice but just to watch:

Just being in this environment... Because you sleep, you don't know what is going to happen tomorrow. Anything might happen. There might be lockdown. There might be anything (P57:65).

Because you don't know actually what tomorrow is going to bring (P56:147).

They can come anytime and take our time. If there's a search, there's a search. Maybe they will search two hours from eight o' clock at night, maybe till ten o' clock or eleven o'clock. Anytime they want, they can take that time (P57:74).

People experiencing powerlessness tend to have low motivation to improve their attitude or behaviour, and tend to readily give up. Powerlessness has a large impact on the person's

perception as a human, which can be improved by giving back control to the person and encouraging positive self-esteem (Dryer, 2007:32). Self-worth is a motivating force that enables people to persist in their effort to complete a task, despite facing challenges and failures. Even though the participants felt powerless, they looked forward to attaining their qualifications and they wanted to rehabilitate themselves through this endeavour. This emotion of self-worth seemed to give them strength to fight for what they see as their right to a future:

We were not allowed to phone during the week and you are writing an exam the next day and you are not allowed maybe something that you find difficult in your module you are not allowed to phone you had to fight for those rights (P57:66).

## 4.2.4 Geographical dispersion

The meanings of geography relate in significant ways with technology—they are both important in the ways in which student support services could be provided to students (Tait, 2000:7). The delivery of student support services creates the possibilities for students and UNISA tutors to meet, and also caters for their overall student needs (Tait, 2000:7). Participants experience that, owing to the distance between them and the HEI, they generally have additional challenges with registration. Not only registration is a challenge, but also the issue of not being able to enrol for degrees of their choice. For example, many degrees include practical work which they are unable to participate in:

You cannot just register. If you register, the theory automatically forms part of the practical. You cannot pass one and not pass the other. I do get some assistance in the practical, but had I been closer to head office because negotiating to go and do practical at an institution that is closer (P56:78).

I won't be able to finish my B. Tech because I am doing engineering. Until I get closer to the institution so my case is very disadvantageous (P56:78).

Students need books for their studies in order to complete assignments, prepare for tests, and examinations. The participants therefore have either to buy books, or borrow them from the HEI's mobile library, which is challenging. Consequently they do not always have the required learning material to complete their assignments. The participants experience this situation as aggravating because they are dispersed from the HEI and they are incarcerated:

There are times when there is stormy weather. We only access library through the mobile library which is offered by UNISA. It could not come because the weather was so stormy. Automatically now we are penalised because the books were not brought in back before the due date. Because we are incarcerated, we can't go to them and give the books back; so those are the other challenges and the outcomes that come with the long distance (P56:79).

To us it's hard to get to the library because it comes here once a month, but it is not always once a month, maybe after two months (P57:50).

Offenders do have visiting privileges at the facilities with their families whilst incarcerated. However, as they are studying through UNISA, they had to sacrifice family visits as they were moved to a centralised facility in order to receive so-called support for their studies. In many cases, they are placed so far away from their families that it becomes impossible for their families to visit them:

I just add on to that because we are UNISA students, we seem to be changing geographical distance from our institution regularly whereas maybe studying ODL through North-West University, we would have stayed or could have chosen or request to go closer to North-West University (P56:83).

For example, if you study through Damelin, or Oxbridge, or any of the other correspondence institutions, we could have chosen where we want to be geographically, but as UNISA students we are forced to be here in one centralised location (P56:83).

DL students often feel lonely and isolated due to the fact that it is not easy for them to meet with other students to share their ideas and learn from each other. Cronje and Clarke (1998:5) maintain that during DL, the "distance is dark and lonely." The participants in this study also affirmed that they experience these emotions while they are incarcerated and they cannot meet with other students, share ideas, and learn from them. They mentioned that attending classes or tutorial sessions once in a while could be helpful, but that was not possible, not even during examination times:

In terms of geographical distance, I think if we were allowed to attend the classes especially before exams will definitely benefit us, so for me, that is to be closer and to be able to attend those classes (P57: 47).

It is difficult analysing things on your own because you can get somebody else's perspective on something. It will give you a broader spectrum of what the subject is all about so that would be great to be able to interact with somebody with regards to assignments and study buddy in other words (P58:17).

Despite all the challenges and difficulties that these participants face, some of them understood that they faced similar challenges as other DL students. They also acknowledged that their decision to study implied certain hardships and that they would not be able to attend contact sessions provided by UNISA. However, even though they recognised their situation, they still believed that if the challenges that they faced at the correctional facilities could be addressed, they would be able to study more effectively:

You know that you are not at resident varsity where you have to go to classes so you know about all these challenges of distance learning so I think it does our geographical

... does not determine how effective this whole system can be because everything is done either by post or email so does not really matter (P56:81).

I don't think we have to go to UNISA to the campus so if only UNISA could like now as we are moving to a world of technology to assist us in that way that's all (P57:49).

The above theme related to student characteristics, described the incarcerated students as adult students, their situatedness, their powerlessness, and the fact that they were removed from regular contact with their families, because of their choice to study while being incarcerated. Table 4.2 presents an inventory of aspects which emerged during the analysis of the interview data.

Table 4.2: Inventory of aspects of students' characteristics which influences incarcerated student satisfaction

	Aspects
	Enrolment as higher education students diminishes opportunities for interaction with family and loved ones as a motivational aspect
- 4	Little consideration from non-studying offenders for studying offenders in terms of privacy and time to study
	<ul> <li>Limited understanding of the needs of incarcerated students from offenders from different nationalities and value systems</li> </ul>
	DCS staff members' negative attitude towards offenders in general demotivate incarcerated students to study
	<ul> <li>Inability of incarcerated students to defend themselves against irregular actions of DCS staff members</li> </ul>
	Offenders and DCS staff members regard studying of low value and not a worthwhile endeavour
	<ul> <li>Inability of incarcerated students to make effective contact with the distance education higher institution</li> </ul>
	Relocation causes inconsistency and poor continuity in studies
	Participants feel lonely and isolated

## 4.3 Scale and capacity

Participants discussed aspects that related to their learning whilst incarcerated in a correctional facility and studying through distance learning. The theme of scale and capacity comprises two aspects: correctional education and distance education. Figure 4.3 indicates the coding structure for this theme.

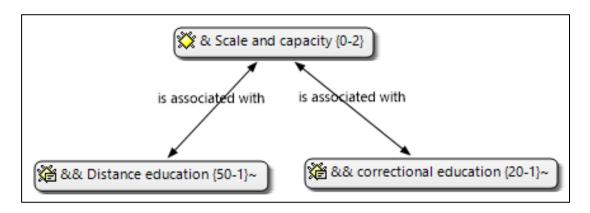


Figure 4.3: Components of scale and capacity

#### 4.3.1 Correctional education

Within a correctional centre setting an individual student's learning could impact in many ways on the correctional system and society (Adams & Pike, 2008:1). Because of the physical constraints these participants experienced as students, the only way they could study was through DL. The UNISA hubs were invented in order to create a central centre and examination venue where all DL students could study and write examinations. According to the participants, this initiative was not to their advantage. The participants mentioned the fact that they were taken from centres where they were close to their families and brought to a centre for the purpose of centralisation. The unfortunate part of this situation was that the hub did not function optimally nor contributed towards effective learning:

It was a huge mistake on the side of the department of correctional services to decide they want to bring all students across a particular province in one centre (P56:152). Disband the hubs forget about the centralisation of the UNISA studies (P56:151).

### 4.3.2 Learning hubs

DL adds flexibility to students' access to higher education as well as a practical solution to many of the challenges of higher education. It also provides a second chance to those who have previously been in the higher education system, but dropped out owing to reasons of which imprisonment is an example (Chigunwe, 2014:2) where incarcerated students could study at their own pace (Potter, 2013:60). The learning hubs were created with the expectation to provide much needed support to the incarcerated students to foster their studies. The participants commented that the idea of the learning hubs seemed a good idea

to be able to foster DL, but they also held the strong opinion that UNISA was not adequately involved in the planning of such hubs. Centralising DL students in one centre, could be advantageous only if they could obtain their study material on time, which could improve their DL study needs and make it easier to study through DL:

The centralisation of hubs: the idea might have been good in the sense of if UNISA had been involved in the process from the beginning (P56:158).

I think mam, we are studying at UNISA. We know its distance learning, so whether you are sitting in Worcester or Bushbuckridge or you are sitting in Cape Agulhas, just as long as you can get your material and everything on time. You can have all these sorts of things, I don't think you have an issue. I was at a centre previously that was two hours from Cape Town. It was physically located on the field somewhere. I don't know where but I never had an issue, because you know that you are not at resident varsity where you have to go to classes. So, you know about all these challenges of distance learning. So, I think it does not determine how effective this whole system can be, because everything is done either by post or email. So, does not really matter (P56:81).

The theme of scale and capacity of education related to the codes of correctional education and distance education. Table 4.3 summarises the aspects which emerged from the analysis.

Table 4.3: Inventory of aspects of scale and capacity which influences incarcerated student satisfaction



## **Aspects**

- Incarceration provides the opportunity to access higher education learning
- In spite of centralised support at learning hubs, the constraints of the learning hub override the advantages
- Poor planning of learning centre facilities contributes towards the motivation of the incarcerated students

### 4.4 Institutional infrastructure

Two codes emerged from the data relating to the theme of institutional infrastructure: (i) the institutional structure, and the (ii) local institutional framework. Figure 4.4 graphically illustrates the codes as they were identified in the Atlas.ti™ hermeneutic unit.

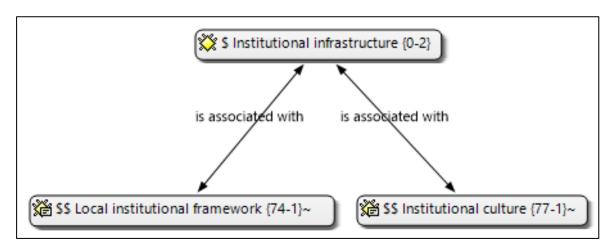


Figure 4.4: Components of institutional infrastructure

#### 4.4.1 Institutional culture

An institution's culture comprises the attitudes, beliefs, traditions, symbols, ceremonies and prejudices of current staff, the character of the surrounding community and work environment, the history of the operations and the events in the institution and the personalities and ethics of leaders, formal and informal, both past and present (Wall, 2013:3). The participants perceived that there was a negative attitude towards them as students, and that mistrust existed between them and officials, as well as amongst high ranking officials. This continuous mistrust demotivated them and continuously chipped away at their confidence to study effectively:

The Director of education for DCS came here in 2015. She came here and when the question was posed to her about some of the challenges we were facing. Initially she said to us, you must remember you are prisoners first, and then students. So, that whole culture is still inculcated in these people here (P56:19).

In the environment where participants live, a culture of disrespect for one another prevails.

Offenders seldom make space for or grant opportunities to one another. For example, it was difficult to make a phone call to a lecturer in privacy and quiet:

Yes, you get access to the public phone to phone. To phone the lecturers, but if the lecturer says, ok phone around about this time, and you need to utilise that time in order to communicate with the lecturer. On the background, there is a lot of inmates standing behind you, making noise, so they care less about your education, because they don't know what's happening. They take it as just a normal phone call (P56:4).

You need to make an urgent call to your professor or whatever, then its dependent on a member's mood that day (P56:17).

If we not personally phoning the professor, or the lecturer, or whoever, it's all just dependent. It's just too much dependent on other people (P56:22).

The participants stated that the non-studying offenders do not show consideration to the studying offenders, like being silent during study time or when they are doing their assignments. They therefore felt that they should be given facilities to study away from other offenders:

This particular centre where we are at now is now geared towards un-sentenced offenders and so their needs come first. Some of us are being incarcerated in single cells right next door to un-sentenced offenders. So, when they want to make a noise, they are not considering us as students. There is actually no control (P56:22).

One participant asserts that being placed together as enrolled students could create a positive study environment as they could assist and motivate each other, and study together:

When you look past noise and structural support from the department etc. You've got time. I sleep in a room where there is social cohesion and the idea towards our studies is taken very seriously. We allocate on our own there. No instruction from the Department. We decided on our own that we will allocate time for studying where there will be quite time, where we will respect each other (P56:24).

#### 4.4.2 Local institutional framework

An institutional framework refers to a set of formal organisational structures, rules, and informal norms for service provision (Brindley *et al.*, 2004:5). Such a framework is a precondition for the successful implementation of elearning (Brindley *et al.*, 2004:5). Learner support should consider the exceptional and changing needs of diverse DL students, as well as the institutional context. Learner services should be adapted when required to accommodate the needs of the incarcerated student population (Brindley *et al.*, 2004:5). In this case, it seemed as if neither the students, nor the learning environment was taken into consideration. An utterance from a participant, when asked about the infrastructure, came as a question:

What infrastructure? (P56:69)

DCs goes through this whole model where they want to bring students from all over the province to this centre that they built. It was going to be technologically advanced and all this was, was a whole house of cards. They brought us here to a place that could not accommodate students (P56:15).

I think that by being brought us here from all the other centres, they actually they seriously disadvantaged us. They put us in this centre that is just fit for holding cattle (P56:15).

Infrastructure, mam, it is a problem the side of infrastructure. I'll focus on is the side of the building itself...if this container is leaking now and is not even been standing here for about a year, how is the conditions there in this stormy weather of Cape Town

whereby we have to keep text books that we pay exorbitant fees to buy. Infrastructure I really don't know (P 56:76).

Not only did the participants regard the hand-me-down container as inadequate study facility, but they also considered the shortage of DCS staff members to assist them with their studies as challenging:

If it was this department's intention to make it easier for students who study, then surely, they would have infrastructure in place, they would have staff in place to deal with these sort of things (P56:16).

Like for me. Like for example, now we are in this room. We are studying there sometimes, something is happening. At this table, they are busy with the leather, making noise we don't have. A space for us that you can study on our own. We are interrupted by people coming in and out talking doing other things. As my colleague said, there is no specific person that can be with us all the time (P58:11).

Mam, I think infrastructure would be obviously a main thing. When I say infrastructure, In am talking about the support infrastructure we've got from the members that are allocated to support us. We cannot go to the post office; we cannot go to UNISA offices, or whatever. We cannot quickly pick up the phone and phone...think because that's the main issue that I've seen. What I've experienced here, are delays and delays and delays caused by this support that we've got on and off in here (P56:56).

Participants mentioned that the infrastructure challenge could be solved by treating the UNISA students like other students in the facility. For example, the Adult Education and Training (AET) level students who were given a designated area:

I've noticed that UNISA students aren't really considered as the Levels are like Levels 1, 2 and 3 and we seem to not have anybody specifically or any building or room or specific person that is for UNISA student (P58:10).

If they can just investigate it and get it right once and see this is what we need let's keep this and see how it works and try to control it from there be a good idea (P56:72).

As far as the physical infrastructure of this particular centre I think maybe it can't get worse that what it is. As I have said, coming from other centres, I am not trying to be you know critical specifically of this centre. This centre is built the way it is. There is nothing we can change. It will be much better for us at a different prison where there will be more care towards students. This entre is more geared towards like a holding facility, so I mean say, for instance you had an area here that was allocated, say just for students, instead of just trying to just lump everybody together in one room (P56:73).

The officials agreed with the students that actions should be taken to improve the situation for incarcerated students as far as the infrastructure was concerned. They believed that the buildings should better suited to the learning needs of students:

The prison must, if it was built for it, that because if they have single cells for all of them, that would be nice, but this is not built for the guys studying, like XXX big prisons they are (P59:24).

The theme of institutional infrastructure comprised two aspects. Table 4.4 summarises the aspects that emerged relating to the theme of institutional infrastructure.

Table 4.4: Inventory of aspects of institutional infrastructure which influence incarcerated student satisfaction

	Aspects
	DCS staff members abuse their power to detriment of the incarcerated students
×	Mistrust between students and DCS staff members exists which diminishes motivation to study
	Inadequate educational infrastructure provides physical challenges to incarcerated students
	Insufficient DCS staff members diminish opportunities to obtain dedicated support
	Incarcerated students are in need of educational support to enhance their learning
	ICT infrastructure equipment and auxiliary study materials are kept in storage and not unpacked owing to unclear reasons

# 4.5 Technological infrastructure

Three codes were grouped together to form the theme of technological infrastructure: (i) ICT infrastructure; (ii) infrastructure challenges for delivery of elearning, and (iii) technological-enhanced learning. Figure 4.5 indicates a graphical summary of the participants' views with regard to technological infrastructure.

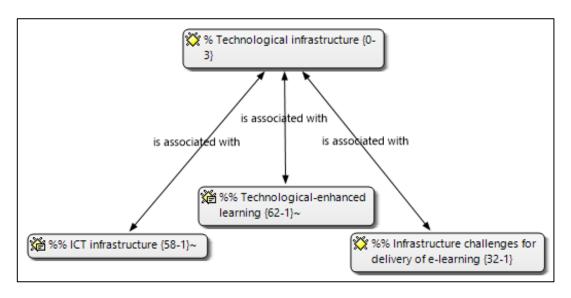


Figure 4.5: Components of technological infrastructure

#### 4.5.1 ICT Infrastructure

The delivery of elearning is increasingly dependent on a demarcated ICT infrastructure that is capable of mobilising technical resources, knowledge, and other inputs essential to the implementation process of elearning (Tait, 2000:4). According to the participants there is no demarcated environment prepared for ICT which they could have access to. The laptops which they used, were their own. There was also no provision made for ICT infrastructure in the container that they are housed in as learning facility:

We need technology, time and space and this institution does not have those resources (P56:166).

Even though some participants mentioned that there was no ICT infrastructure in place in the container where they studied at Worcester, this seemed not to be the case at all the other centres across the country. The centres where some of the participants were transferred from, had laptops and internet dongles available which the students could make use of:

The first guy we met was the principal of education, my goodness, that guy was shocked at me to hear that we had our laptops. We came from a centre where we had our own dongles (P57:89).

It is essential to distinguish between technologies which students have access to and technologies that were available to an institution so as to assess which technologies should be used in the delivery of student services (Tait, 2000:4). At this particular centre, no ICT

infrastructure was available for the incarcerated students to use. As a result, the students grappled with internet access and access to printers, scanners and photocopy machines (§4.8.3).

### 4.5.2 Infrastructure challenges for delivery of elearning

The challenge of delivery of elearning is made complex by the uniqueness of the facilities, culture and routines of an institution (Kangandji, 2010:2). eLearning cannot be effectively delivered if there is no infrastructure in place. According to the participants (§4.4.2), there was no suitable infrastructure in place. This was supported by a DCS staff member who stated that ICT equipment had been purchased, but it was never installed for use. He also mentioned a hub system at another correctional facility which provided hardware, software, and access to incarcerated students. The DCS staff member at the DCS head office would not grant the researcher an interview on this issue. Therefore, we could obtain no information on why the equipment was never unpacked, installed or made available to the students:

We are having all the equipment at logistic. We procure the equipment: the notebooks brand new as well as the trolley itself, it is still there and the warranty is running out. Never used (P59:6)3.

### 4.5.3 Technology-enhanced learning

There are various technologies which assist in the delivery of DL programmes to institutions. Implementing and using various technologies for delivering DL programmes can enhance the quality of learning and afford all role players with more opportunities, and could provide students with support and improve their learning experiences (Manouselis *et al.*, 2013:30). The participants mentioned that their own laptops and tablets assisted them and motivated them to study:

But at the same time, we have tablets. We have access to tablets so that was something that motivated us (P57:33).

Technology is very important for us; this thing is an e-reader, it is a big privilege that we have here inside because we can download PDF files here inside when we have the time here in the container; so, it makes things easy for us (P56:167).

<sup>&</sup>lt;sup>3</sup> Tegnologie dit vir ons is baie belangrike ding. Dis 'n e-reader. So dit is n baie groot voordeel wat ons het hier binne het. Ons kan PDFs kry hier binne terwyl ons die tyd het by die container het. So dit maak dit baie makliker vir ons (P 56:167).

The above theme is about the technological infrastructure of the correctional facilities which entails the structure of ICT, challenges encountered when delivering elearning and TEL. Table 4.5 presents the aspects which emerged and were grouped as the theme institutional infrastructure.

Table 4.5: Inventory of aspects of technological infrastructure

Aspects
Absence of ICT infrastructure and resources create stumbling blocks for incarcerated students to study effectively
<ul> <li>Incarcerated students only have limited access to internet despite the requirements of the elearning system which demands almost fulltime access</li> </ul>
Incarcerated students have limited availability of auxiliary study resources

## 4.6 Management of learner support

Four codes emerged relating to the theme of management of learner support: (i) funding, (ii) management of acceptability, (iii) management of learner support, and (iv) organisational wellness. They are graphically depicted in Figure 4.6.

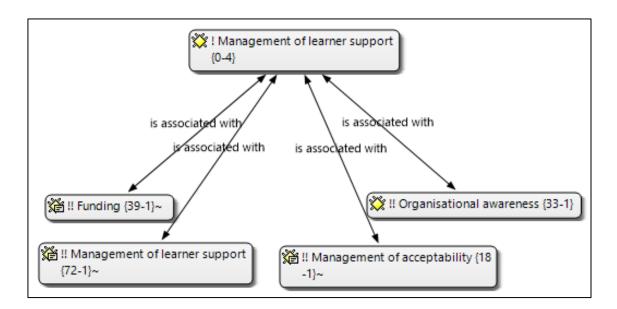


Figure 4.6: Components of management of learner support

### 4.6.1 Funding

There are a number of factors and challenges that influence the implementation of elearning of which an important one relates to finance (Greyvensteyn, 2014:18). There are some basic services that the institution should provide, regardless of the costs, to guarantee the quality of elearning (Lee, 2003:184). The research participants reported that the DCS staff members of the correctional facility told them, as much as they would like to study, they would experience challenges in order to procure funding: The study centre provided no financial assistance to the incarcerated students, or even attempted to assist them in any way in finding funding on their own. The participants mentioned that they did not earn a salary and could therefore not pay for their studies, and that it was not possible to obtain any financial assistance from the DCS:

Learning is a voluntarily journey that one take; it is the need that might help you in terms...toward rehabilitation, in terms of funding we struggle (P56:8).

You do need the technology in term that we see now that some of us have laptops and these e-readers but not everyone of us afford those (P56:7).

To assist us maybe with finances... (P56:63).

Funding, funding it's an issue. We are incarcerated here we are not earning an income we rely on our people outside (P56:67).

The female participants shared that there are many other female offenders who would like to study and further their education, but due to insufficient funding, they cannot study. Besides registration fees, it was difficult for them to afford books that they need:

One of the biggest challenges that we are facing here with ourselves, and many other women who want to study, is the upheaval with getting finance for studying (P58:22).

Prescribed books it's very difficult to get hold of them the library doesn't always have them and they are very expensive (P58:23).

For one financial issues I am paying my fees and then hence I am paying my fees I don't have a bursary I don't have anything supporting me except myself paying my own fees but now I told myself no maan I'm not going to study next year because I'm taking out the money that's supposed to look after my children outside but so if I don't get anything for next year financial assistance a bursary or a loan or NSFAS then I'm not going to study (P58:21).

All the participants—the male, female incarcerated students and the officials—emphasised the issue of financial constraints:

Working on the tight budget to access this information its really challenging for them (P59:10).

The financial problems that is also a barrier to them (P59:26).

The participants also requested administrative assistance from the DCS staff members when they applied for student loans (e.g. NSFAS), and pleaded for some financial assistance from the DCS:

I know we might be asking for a lot, cause other people that are outside are struggling also as well that have not committed crime, but even if it is a form of scheme of a loan (P56:68).

Appreciate what the centre organisation called XXX is doing, it did wonders for some guys there were guys that have been funded here for a couple of years (P56:86).

### 4.6.2 Management of acceptability

It is important that students and the DCS feel that continued education is worthwhile for higher education DL (Adams & Pike, 2008:4). According to the participants, the officials do not accept them as higher education DL students but regard them as offenders only:

They look at us students and think ah, you just another piece of rubbish. They cannot distinguish the student from the prisoner. You always have that tag about you of being a bandit first (P56:18).

You are still dealing with some members. Not all of them who view a person studying at university as some sort of threat (P56:11).

### 4.6.3 Management of learner support

Ustati and Hassan (2013:295) request a revisit of what an elearning environment for incarcerated students should entail. The participants assert that the support they receive from the management of correctional facilities as well as the attitude of the DCS staff members of the facility impacts on their progress. They believe that when they were accepted as incarcerated students, they earned the support from the DCS and the officials:

They have this kind of attitude...if you need to do something, let's say listen, I need to contact my professor...some of them may have this attitude (P56:11).

The controlling and dealing with of information is important for the actual distribution of quality support services to students. Through the management of information, student progress can be monitored and in-time support could be introduced to ensure the success of students (Tait, 2000:7). It is therefore important to have planning and strategies in place

managing the elearning initiative. Participants felt that the container, as learning facility, was not appropriately planned and equipped and therefore not adequate to support their learning:

XXX goes through this whole model where they want to bring students from all over the province to this centre...and all this was a whole house of cards they brought us here to a place that you cannot accommodate students (P56:15).

I think that by being brought us here from all other centres they actually they seriously disadvantaged our progress as students (P56:15).

Planning and then managing the implementation of an elearning strategy is important. As the online learning strategy was not properly planned and managed at DCS at Worcester, the participants felt that the system did not cater for their learning needs:

You have to be very vigilant because the system is not actually catering to your needs so you have to look after your studies yourself (P56:54).

In terms of on the department's side, maybe if they could just investigate to see what would be the most advantageous for the offenders in order to study (P56:71).

If the infrastructure can just be investigated a little bit and then brought up to a degree where it is still manageable for them but with us in mind (P56:71).

## 4.6.4 Organisational awareness

Awareness can seriously impact upon a user's acceptance of resources in many ways (Adams & Pike, 2008:3). The participants perceived that the DCS wanted to assist them during their studies, but they took a long time in doing so. Even though there were challenges to meet their learning needs which were not fully met, the participants were aware of the effort that the DCS was making to ensure success of the elearning plan:

I think the idea of the department is to become more and more geared for HE and they are obviously on their way because slow slowly but they are on their way there (P56:25).

This theme is about the management of learner support which related to the codes of funding, managing acceptability and learner support, and organisational awareness. Table 4.6 presents the aspects which emerged from the data analysis of the interviews.

Table 4.6: Inventory of aspects of management of learner support

 Aspects
<ul> <li>Unavailability of financial support from DCS constrains incarcerated students' enrolment for higher education studies</li> </ul>
 <ul> <li>Inability to access public educational funding and private loans hamper progression</li> </ul>
<ul> <li>Negative perspectives of DCS staff members of incarcerated students demotivate incarcerated students</li> </ul>
<ul> <li>Negative attitude of DCS staff members and other offenders contribute towards incarcerated students' lower self-esteem</li> </ul>
Learning system not aligned to the needs of incarcerated students
A need for researched elearning strategy to address incarcerated students' learning needs

## 4.7 Policy for digital learner support

One code related to the theme of digital learner support: (i) policy for digital security. It is graphically depicted in Figure 4.7.

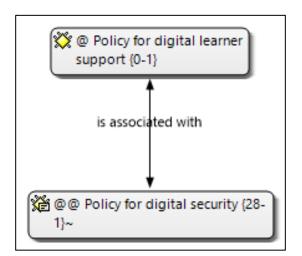


Figure 4.7: Component of policy for digital learner support

## 4.7.1 Policy for digital security

Security is an essential issue in correctional services and the computers used at their facilities need to be monitored and prohibited from being used for activities that could compromise the safety of the correctional institution (Greyvensteyn, 2014:39). Because of

ICT's key support role in DL, it is important to provide guidelines to assist offenders to be able to study while also addressing security issues. A well-structured policy could be of the essence. When the member participants were asked whether there is a higher education policy, they responded that there was a policy, but that the policy did not address all the aspects e.g. the use of digital equipment, learning support, security, and challenges that the students encountered:

There is a policy not supporting, but guiding the tertiary students. If you are looking at the policy on formal education, there is a policy on formal education that infact speak of tertiary students. Unfortunately, it's not supporting or denying, it just guides as to how we can manage the tertiary students (P59:1).

Policies should be reviewed regularly to ensure that they make sense, as well as be able to make exceptions to rules where necessary, in order to accommodate for the complicated situation of incarcerated students (Brindley, 1995:9). Incarcerated students requested consultations with the DCS staff members who regularly interacted with them, in order to communicate their learning needs. The DCS staff member who supported the students stated that they, as Education Managers, felt that there was a need to amend the existing policy in order to address the technological issues of HE. However, this never took place:

I think mem you will remember the time when this so called UNISA hub concept came about which then XXX become or was earmarked as one. It's a good concept and we felt as manager's education and training that we need to amend the policy because the policy at this moment is not talking on the technological issues that tertiary students need to be involved with like research, you know accessing the information over the internet (P59:2).

According to the DCS staff members, not only did they agree to the idea of amending the formal education policy, but they suggested that it be referred to a higher level. This did not happen as post-graduate learning was not high on the management agenda:

I have suggested to XXX on when she was still on the directorate that we need to sit down to amend the policy in such a way that it talks as to the management of the UNISA hubs themselves involving those management areas that were involved with, because at this present moment its only that small part that speak of the computers and laptops, how should laptops look like what must they have, what must they not have (P59:3).

This theme on policies for digital security comprised one code; learner support. Table 4.7 presents the aspects that came up in the theme policy for digital learner support.

Table 4.7: Inventory of aspects of policy for digital support



#### **Aspects**

- Insufficient standardised policies on higher education and ICT for elearning correctional centres hamper incarcerated student progression
- Previous policies do not address elearning aspects in correctional centres

#### 4.8 Student satisfaction

Student satisfaction is a short-term attitude that results from an evaluation of a student's educational experience and results when the actual performance meets or exceeds the student's expectations (Elliot & Healy, 2001:2). It is recognised as a core element for defining the areas in need of improvement of student support. Satisfied students are more likely to be successful; particularly in higher education, as evidenced through students completing their studies (Noel-Levitz, 2009:1). Figure 4.8 displays a summary of the issues of student satisfaction as outcomes of the coding structure. I allocated seven codes to this theme: (i) communication, (ii) advantages of being incarcerated students, (iii) challenges of being incarcerated students, (iv) student motivation, (v) perspectives of incarcerated students, (vi) students' acceptance of elearning systems, and (vii) student support. The following section considers the student satisfaction of incarcerated DL students in a correctional facility.

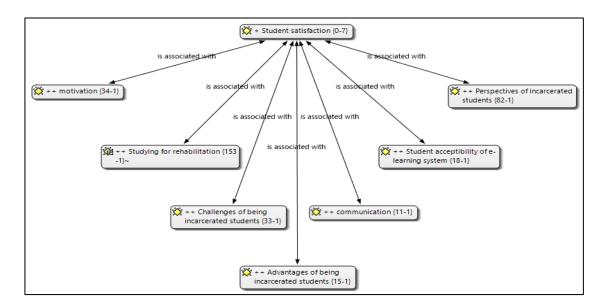


Figure 4.8: Components of student satisfaction

#### 4.8.1 Communication

Communication can be defined as the process of carrying forward information and common understanding of pertinent issues from one person to another (Lunenburg, 2010:1). Mutual understanding is derived from the exchanging of information. If not so, no communication or miscommunication results (Lunenburg, 2010:2). Communication is important, because every administrative function and activity involves some form of direct or indirect communication. This means, for incarcerated students, that the most important barrier to effective DL delivery could be inefficient communication (Lunenburg, 2010:1).

When communicating there are two common components: the sender and the receiver. The sender, who has a necessity or wish to send an idea or message, initiates the communication. For the purposes of this study, the participants are regarded as the senders. The receiver is the person to whom the message is sent. For the purposes of this study, the receiver is the academic community (Lunenburg, 2010:1). The participants mentioned that miscommunication was one of their main challenges in order to succeed in their studies and mainly comprised the two involved institutions, i.e. DCS and UNISA:

The two facilities do not communicate the department does not communicate with each other, I don't know this big communication gap (P56:168).

It is not easy for the participants to communicate with UNISA; and it seems even harder to receive communication from UNISA. The participants described this issue as one of complete miscommunication which negatively impacted on their studies:

Somebody who can directly get involved and say this might work and somebody who will also involve the students because we get told somebody is responsible for us somebody will assist with us I've sent about eight different emails since February last year I never got a response (P56:62).

I'm not sure that a specific person would be allocated to a specific hub. We heard now and I've also heard numerous times where you contact them by email and you do not get response at all. Zero response, not even a recognition of listen, we have received your email and we are not interested in what you say (P56:65).

We are normal, plain students, but with a bit of an obstacle when it comes to communicating with them. They could appoint maybe a person or one telephone number at a call centre that is dedicated to students that are incarcerated that they can in contact with whoever our member the member in charge is here that is on the level with us (P56:65).

When there is no response from the receiver, the communication process becomes a one-way communication. Two-way communication occurs with feedback and is desirable (Lunenburg, 2010:2). In the case of the participants, they reported that they did not know whom to directly communicate with in order to receive feedback on their assignments, enrolment issues, prescribed books, etc. They perceived that their incarceration was the reason for not receiving feedback. They have no perception of the many UNISA students who experience problems because of the same issues. They also do not understand why a spokesperson from DCS could not be their middleman who could communicate directly with someone from UNISA:

Somebody who can be a direct link so that cause some problems are new and you phone everybody and the phone is not answered the emails are not answered and all sort of student just to have some direct link so that somebody is helping maybe that could assist (P 56:62).

I would like to request from them [UNISA] to give us a direct link when it comes to registration (P56:156) 4.

Like I said if we had some person from UNISA straight we can talk to help us with that, it would be very nice (P59:18).

We do not have in consistency at the moment is communication methods that can be the link between us and our various institutions whatever with regard to our studies (P56:148).

One of the DCS staff members opined that such a liaison person should be a UNISA staff member. It would be of great assistance to the incarcerated students. Conversely, the participants requested that it should be one of the DCS officials tasked with education matters to be the liaison person, with the aim to improve the communication between DCS, the students, and UNISA:

If maybe they can give us a UNISA guy from UNISA to help us straight, it will be very nice. Then most of these problems will be solved (P59:5).

The guy who is here with us, he can also be a communications officer on their behalf and on DCSs behalf so that there is a flow of information at least between us and them that would be advantageous (P56:65).

Mr XXX can also have some access to UNISA somebody to talk to at UNISA (P 56:62).

A guy like Mr XXX can also have some access to UNISA somebody to talk to at UNISA not somebody who says I know UNISA somebody who can be a direct link (P 56:155).

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<sup>&</sup>lt;sup>4</sup> Ek sal net graag van hulle wou gevra het om vir ons n direkte link te gee na daar in terme van registrasie (P56:156).

## 4.8.2 Advantages of being an incarcerated student

Answers from the participants specified that they perceived that there were some advantages to being incarcerated students. These responses referred to the time that they have available while incarcerated and living inside the facility, time to study, and compile their assignments:

You have time to study. There is nothing else that keeps you busy. I do not have to go to work. I do not have to take my kids to school. I do not have to honour an appointment with whomever or whatever (P56:120).

I found it very easy to allocate time for my studies in here because on fact that we've got basically nothing else to do (P56:121).

The time is an advantage that at least you are here. At least you get a bit of time rather than outside. Outside is mos busy. I think that is the only thing that I can think about at the moment (P57:18).

Time is your biggest advantage (P57:76).

In contrast, some participants had their doubts about time being an advantage. They attributed these doubts to the fact that even though they had time, they could not make use of the time when they wanted to, and how they wanted to. Participants explained that optimal use of time was also related to their daily routines and challenges which were not always predictable:

Really here there is no advantage of cause you think you have time to look after your books and then you get something which is negative taking you out of your books. So, if you go for if, you are supposed to go to eat, even if you don't need food. You say ok, just want to finish this chapter and then the member will just come in and force you to take your food although you say no I don't want to take the food (P57:23).

Other thing is this we face: people think you have a lot of time in here to devote to our studies, but there's a lot of other challenges that we face you know we go through our ups and downs emotionally. You know depression and all that stuff outside stresses you like family problems and stuff (P58:19).

When you are outside you can go to the library at any time you like, but here you can't go to the library. So, like I said before, they say when you are here, you've got all the time in the world but for me it's not like that. Ya, there is time, but it's not easy to just open a book (P 57:19).

Access to internet, even though limited, was an advantage to the participants because it allowed them to download information, get their study material, and download e-books. However, this is an advantage that comes at a price as incarcerated students pay for studies out of their own pockets, and obtaining data is a recurring cost which they cannot always cover:

Talking about the advantages; ok here now we are at Worcester. Now we have internet access so when you if you have a laptop then you can go to my UNISA (P57:20).

But at the same time, we have tablets and we have access to tablets. That is something that motivates us (P57:33).

A participant regarded the provision of essential needs (food, housing, and clothes) as catered for by the DCS, as providing him with support as they were aspects he did not need to provide for:

Because you are in a correctional facility, they do provide you with food, clothing and shelter. To a certain extent this is an advantage to you which relieves you not from providing for your own basic and medical needs. There's a medical facility; so, to a certain extent they do provide you with what you need. This is an advantage (P57:25).

Yet, other participants differed from him by asking how it could be an advantage when it does not meet the standards of their expectations:

It depends on your mindset on your mindset do you see it as an advantage because the food can be bad also or your peer who's studying with you can be a nuisance as well so you have to make sure you know that your mind-set is right you have to see those things as an advantage for you to really have an advantage (P57:26).

Although DL is a lonely and isolated journey for the student (Cronje & Clarke, 1998:4-5; Nagel *et al.*, 2009:5), the participants, centralised at this point, could do group work and assist one another. However, though some indicated that it was advantageous for them to study in groups, some were of the opinion that it was not really advantageous as they were not enrolled for the same courses and could therefore not really assist one another. However, the moral support for one another was mentioned as an important aspect:

To a certain extent, it is an advantage that we are a group; that are studying, can motivate each other to a certain extent (P57:26).

There's a guy that came. We are doing the same module. But you will find maybe that it is only module that we share. Sometimes he is a bit in front of me or I'm a bit front of him. The advantages are a few (P57:24).

### 4.8.3 Challenges of being an incarcerated student

The system of correctional services life involves cell searches and lockdowns which, while necessary for security, make studying more difficult (Greyvensteyn, 2014:76). According to the participants the officials could decide to do their searches at any time without even informing anyone. When they do the searches, they sometimes find the participants busy

with their studies and then they disrupt them. As if the disruption were not enough, they would take long hours doing the search; subsequently by the time they finish, the participants are not inclined to continue with their studies. While searching, they also do not respect the possessions of the students; or anything else. Their rooms are trashed and their study papers are thrown around; not caring whether or how it affects their studies:

Sometimes the EST come at night, maybe you have a lot of paper with you, they don't care whether it is your study material they just throw it away (P56:183)5.

Being in prison is just a stressful situation just being in this environment because you sleep you don't know what is going to happen tomorrow anything might happen there might be lockdown there might be anything and now you still have a book to open so ok it becomes a challenge and the time like the time you can't just open a book anytime when you like to open a book (P57:10).

The students were not the only ones who highlighted the challenges which they experienced inside the centres. The DCS staff members also referred to some challenges. They mentioned access to internet, DCS staff members' attitude, access to laptops and psychological issues as some of the challenges they observed the students encountered:

The main barrier is firstly accessing the internet. Secondly, like the members, thirdly the families because there is a lot of offenders that I sit with. They have many psychological problems (P59:25).

The other thing that I want to mention is: When the offender registers then you find out that the offender does not have a laptop of her own, then she had to access the internet because there is information that she has to download on the internet, or she has to type her assignments, then there is nowhere that she can type her assignment. So, it's very difficult because she is not allowed to use the department's computers (P59:7).

The participants need auxiliary study material like printers, scanners, and photocopiers to copy books and articles, and scan documents as PDF formats in order to submit their assignments to the HEI. However, it is not easy for the participants to get access to these pieces of equipment and it causes many frustrations. They grapple to find access to printers, scanners, and laptops: they have to buy them from their own funds and many do not have the means to do so. When they have access to another student's printer, they then have to pay for the copies with money which is always in short supply:

You get to be told a page is R1.50. When you want to make a copy, you know how much it is to print one page. Somethings you do not even think that you do not have R1.50, but it is not in your pocket and it has become a challenge (P57:16).

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<sup>&</sup>lt;sup>5</sup> Partykeer kom die taakmag in die aande in nou het jy miskien n klomp blaaie of iets soos daai. Hulle gee nie om of dit jou studiematerial is of whatever nie. Hulle laat die goed netso waai en al jou blaie is weg (P56:138).

Some of the participants experience DL for the first time whilst being incarcerated. They might have heard of DL, but how to use ICT for the purpose of accessing online material was something completely new to them. Since there is nobody to provide support in using ICT, it becomes a challenge to access online study material, as well as how to use the online learning management:

If you didn't have some form of experience on how to study distance learning through the post or through online studies it will definitely be a big challenge for you (P57:46).

You'll find the guys with matric done a few years ago maybe outside at the school and he was not exposed to having internet access or he was not exposed to any kind of technology now he's registered for UNISA and there's a computer and he is not computer literate (P57:46).

There was not an equipped person to help me understand that laptop good and understand how to study online (P57:54).

You know how to navigate and probably get there do you know what button to click and how to send your message and wait for a return and do you know how to use to access your laptop properly because me personally I'll be honest with you I don't know I'm just doing what the other guys are doing when I don't know then I have to ask around so definitely we need a qualified person before you start with your study maybe for a six months or so to help you to learn those navigating skills with the laptop how to go in there how to go out there how to look for this how to get that staff like that (P57:54).

The participants face many challenges that they have to deal with on a daily basis. One participant mentioned that with the little they had to their avail, he had learned to be appreciative of life. Peace and quiet between lock-downs were some of the things he was grateful for. Lock-downs, room searches, auxiliary study material, and being first-time DL students were some of the challenges mentioned by the participants. They also mentioned that the attitude from the officials and their own emotions could be challenging. The female participants pointed out that they had no privacy:

You need to make an urgent call to your professor or whatever then it's dependent on a member's mood that day (P56:109).

Being disadvantaged just because we are UNISA students. That to me, is such a sore point (P56:153).

In the room to study with 31 other females, with their own tantrums and stuff, it's a big, big challenge (P58:19).

There's a lot of people and there's a lot of different cultures in the prisons. There is lot of different morals and ways of behaving when you live in a room with a lot of people that's very crowded (P58:6).

For the incarcerated student, helplessness to change the dehumanising aspects of incarceration, i.e. alienation from their families and communities, boredom, loss of individuality and loss of freedom, is a threat to their existence (McCormick, 1989:2). The

participants in this study affirmed that the fact that they were incarcerated and therefore not able to do what they want when they want, made them feel helpless:

The biggest challenges that a person faced with is being incarcerated. You don't have the freedom to do what you want to do, you know (P58:5).

If offenders do not surrender to the system—becoming a non-person and totally abiding by institutionalised mentally—it could result in them being labelled as "unruly" (McCormick, 1989:2). It is not an easy thing for the participants to be in the environment in which they find themselves, and that is because of the institution's rules and regulations which they have to obey:

Just being in this environment; because you sleep, you don't know what is going to happen tomorrow. Anything might happen there might be lockdown there might be anything (P57:65).

We turn to have difficulties with the management. Hence you know it does not depend on you for you to be registered even apply to a HEI (P56:101).

Relocation is very disruptive. We are about to be relocated again to another centre without our approval. It is not up to us, the students (P56:116).

#### 4.8.4 Motivation

Students need motivation to succeed in learning. In the case of this study, without motivation, offenders do not find it easy to study. Motivation works in two ways, the facilitator's anticipated results from the students will affect the students' desire to succeed and achieve the overall educational outcomes (Rubie-Davies, 2010:122). If the participants set the bar too low—not setting their own goals—then the anticipated results do not match the desired outcomes. The participants mentioned that meeting with and having positive people in their lives assisted them by making their self-motivation strong:

I had the pleasure of meeting a very well-known political figure when he came to XXX correctional centre and his words to me was never let prison determine who you are and I faced a lot of challenges in these fifteen years, but many times I actually cast on to those words and those were the words that have been an inspiration to me (P56:89).

The members the head of centre Mr XXX and the members who have been assigned to us to assist us have bent over backwards and have done 200 to 300% actually of what their duty supposed to be (P56:159).

We have to say that there are some people who influences our studying process positively and a far outweigh the negative that you also do experience in the centre (P56:161).

It appeared as if the extrinsic motivation—e.g. additional internet time—in the life of the participants, contributed towards their intrinsic motivation and this made the participants want to study. They stated that self-motivation brought about self-worth in them and they realised that studying assisted them to become more positive people. The feeling of developing themselves made them feel good about themselves as human beings:

If you are set up to achieve something in life especially here it kind of enhances that sense of self-worth to feel better about yourself (P56:124).

To you as a person who is studying in terms of realising that I'm reaching my goal of in terms of self-actualisation whatever the goal I intended to fulfil it also gives a sense of comfortability (P56:125).

I will never let the prison environment and people who work for the department determine who I am going to be at the end of the day that is how motivated I am and that is why my studies has helped me to do it (P56:128).

Being self-motivated and feeling good about oneself, makes it easy to influence and motivate another person because you as an individual are motivated. This seemed to be what happened with the participants. Because they were self-motivated they could then motivate one other and the outcomes of that were for them to obtain good results:

As a community that we formed as students we also motivate ourselves seeing someone graduate is a big motivation because we've starting now seeing someone going out to graduate he comes back wearing a gown ok I want that so you now put pressure on yourself saying I also want to graduate (P57:57).

By this time now we do encourage each other and you can see it when you look at the results that the guys get in the exams (P56:162).

We motivate each other seeing someone going to graduate there are two guys in our room who graduated now big motivation for us because we also want to be there (P57:56).

The opposite of motivation is demotivation. The length of the participants' sentences was demotivating to them. The idea of not finding employment after completion of their studies, or on release of the correctional facilities, also demotivated the participants:

We are sentenced. The view of time on the other side also demotivate you are serving thirty years of forty years and you want to study and you keep on postponing. I still have time. I still have time... (P56:95).

We are pursuing these degrees, these formal qualifications. We are pursuing, but there's this level of uncertainty. Am I going to fit in the work place environment outside with this criminal record? (P56:127).

## 4.8.5 Perspectives of incarcerated students

In the correctional setting, offenders making use of DL "feel that they are taking control of their lives and this gives them a sense of power" (Adams & Pike, 2008:1). The participants mentioned that because they are studying, it gives them the feeling of self-worth which makes them feel better about themselves as they are playing a role in their own rehabilitation. Feeling worthless and less of a human being is diminished as soon as they start studying and they start feeling like real people:

I feel the HE we are doing and especially if you are set up to achieve something in life. Especially here it kind of enhances that sense of self-worth to feel better about yourself and that's also important in this environment because we were put here to rehabilitate ourselves but we are faced with a lot of negative various and factors but that think kind of thing keeps you positive (P56:33).

Also, it makes you feel like less of an offender because most of the time you are just someone who has committed a crime and you hear and you suffering punishment and you have to think about your family and how much you miss them, but it gives another aspect where I am a student also and now I can be studying forward towards my future and there's that hope (emphasis) instead of being just an offender like the people who are not studying I am a student who has got prospects (P58:2).

HE it takes actually your mind set away from prison you don't focus on prison you focus on your future you see and there are guys inside they are busy with negative things like the number or whatever this takes us away from that because it is easy for the number to influence you as an individual but this HE it takes our focus away from that so we can actually focus on our future (P56:37).

According to the participants, the officials do not give them the recognition as students and they feel that they are treated worse than the other offenders. This contributes towards the inmates' struggle to overcome the hurdles placed in their way to study. Overcoming the emotions of being treated as rubbish, this is valuable once they are released from the correctional institution (Adams & Pike, 2008:1).

And then you get the people that are in not just at ground level but they are completely anti-development and they look at us as students and think, ah, you just another piece of rubbish they can't distinguish the student from the prisoner you always have that tag of you are a bandit first (P56:18).

Adams and Pike (2008:4) state that offenders view elearning as a way to recreate themselves to what they want to be when they leave the correctional institution, and they also regarded learning as an aid to their rehabilitation. Participants see their lives as a never-ending journey in the correctional facilities and yet, they have to prepare themselves for the life outside the facilities:

Sometimes and you think ah it's not necessary sometimes to study let me just leave but on the other side I need to study when I go out at least I've got something you understand (P56:9).

The interviewed participants saw completing their studies and passing their courses and qualifications as a miracle due to the challenges they have to overcome:

Incarcerated life impacts negatively on your studies if you are not a highly motivated individual and that itself can only be a struggle (P56:22).

To be able to participate in studies is already a credible hurdle to overcome and then you find yourself in environment that is completely not conducive to HE in terms of the infrastructure the manpower the educational resources the technology the access to internet communication ICT all of that it is very hard. So, the few people that do reach their educational goals; it is almost a miracle (P56:23).

The DCS should ensure that the participants get all the possible support to enable them to complete their studies. This should involve getting communication from the distance education institution in an appropriate and safe way, as well as enabling them to make use of the studying equipment. Participants highlighted that it would be a big advantage if equipment like printers and scanners could be made available to them:

It would be very nice to have like a designated area where we can sit and just study concentrate on studying also with what you said access to we do have access for printing and that but like have our own printers, scanners and stuff like that where XXX assist us with having our stuff scanned and staff just she runs around to do our things for us basically just have the proper tools to aid us in making it easier to aid us in doing our studies here (P58:14).

### 4.8.6 Learning centres

Poor support for elearning may impact negatively on the students eager to engage with an online course (Adams & Pike, 2008:4-5). In this study participants assert that studying is important to them, but they struggle to fully engage with the courseware and they feel that elearning support should be available to them:

This was a new world for us because now we come to the computer but then you realise there is still cracks we do not have the access as we need it because we do not keep office hours eight o'clock to five o'clock Monday to Friday. Two o'clock in the afternoon we get locked up so if you need to speak to your professor. He is only available after three o'clock mostly so you are not going to speak to him. You have to pre-arrange with him. As I see here, the number had to pre-arrange way ahead of time to speak with his professor. So access to technology, it impacts our studies (P56:41).

They currently planning now for us to only access my UNISA of which is a website where you can submit your assignments and stuff. We cannot do research on my UNISA, but now if now you are provided now with a computer that can only access

my UNISA, then you do not have access to information. That means you are being deprived now of that privilege (P56:45).

It is important that students and stakeholders (e.g. DSC and UNISA) feel that an elearning system is adequate and valid. Acceptance is often administrated by social norms and reports issues such as information and technology trustworthiness, repute, quality, aesthetics, fun and ownership, as well as social structure and perceived expertise (Greyvensteyn, 2014:50):

Access to technology has certainly made our studies much easier. Previously I mean, I had to submit written assignment posted, and now I can just submit it online and so it has had a very positive impact (P56:47).

The technology. I appreciate at least its better, as especially that we've got these ereaders and access to interne—supervised internet on daily basis (P56:52).

The internet has really helped me because I can look at you tube and I can look at online art websites and then learn from there (P58:16).

Participants affirmed that they found it hard to accept that they were different from other DL students due to their incarceration. It was difficult for them to accept that they could not fully make use of the available study material:

At XXX you are not allowed to have a SD card in your possession. You will receive an extra six months because its contraband. However, it's a requirement and if you studying at XXX. It is also a requirement, but its contraband so an SD card is to keep memory to keep documents or whatever but there its contraband (P56:41).

It is like the guy said. The environmental challenges that a student face as an inmate is definitely more challenging than what a normal inmate will face. You take on the responsibility of HE in prison. It is definitely more challenging because you have now your goals that you set out for yourself as a normal inmate (P57:15).

#### 4.8.7 Rehabilitation

Rehabilitation should be about the whole person, which involves the situation and activity (Adams & Pike, 2008:2). Learning support needs to be understood within the situation within which it is embedded (Adams & Pike, 2008:2). The participants mentioned that from their side, they were trying their best to study in order to rehabilitate themselves. However, they do not receive financial support, or other assistance when they need it:

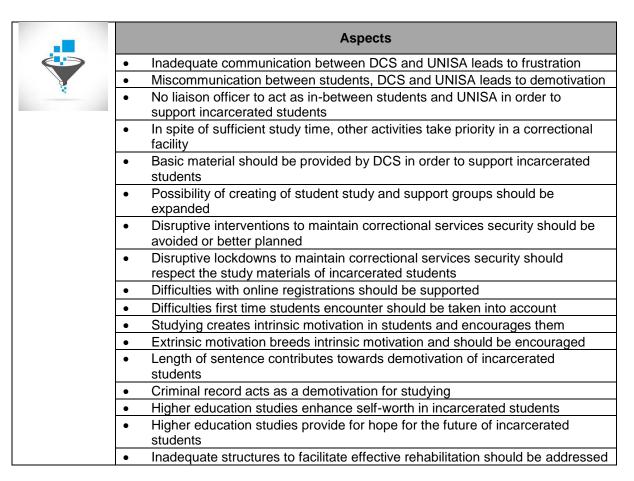
As much as that you are doing hand in hand in terms of rehabilitating ourselves and as the mandate of the centre itself to rehabilitate us there is not much of assistance that you are getting from the DCS because the bursaries that they have are only allocated for the members (P56:8).

I'll speak on the factors of when it comes to a point when you need to register at first in a HEI we turn to have difficulties to access those things and you feel the need of being outside by yourself and being able to go to these institutions just so you know you are registered (P56:2).

You do need the technology in term that we see now that some of us have laptops and the e-readers but not everyone of us afford those (P56:7).

This theme of student satisfaction encompasses the issues of communication; advantages of incarcerated students; the challenges they encounter; motivation, student perceptions and acceptance of e-earning and rehabilitation. Table 4.8 presents a summary of the aspects that emerged during the analysis of the interviews.

 Table 4.8:
 Inventory of aspects of student satisfaction



# 4.9 Chapter summary

My personal position as researcher is that on a daily basis I work with offenders as a parole chairperson. For this study, I purposefully made a mindshift in order to ensure that I could

understand the story of the incarcerated students. I went into the interviews as a researcher, collecting data on the daily learning support needs of incarcerated students. I was also a facilitator of the interviews to first-hand incarcerated students learning support needs. My role as researcher in this study was that of participant as observer (De Vos *et al.*, 2011:120).

Literature points out that it is possible to support the learning needs of incarcerated students in a changing landscape of HE learning, but then it requires proper planning and management. This chapter provides a detailed analysis of the interview data in order to establish the learning support needs of incarcerated students studying through DL. From the analysis, seven themes emerged relating to the characteristics of the incarcerated students, the scale of capacity of education, the institutional and technological infrastructure, managing the learner support needs and policies available and issues relating to student satisfaction. An important issue that emerged was the link between the family ties and student success, and also the way mixed housing arrangements impacted on the ability of incarcerated students to be successful in their studies. The challenges posed by the correctional facility also emerged as contributing towards the motivation and success of the incarcerated students. The analysis also highlighted the availability of infrastructure conducive to learning at the correctional facility, as well the formatting of the technological infrastructure which should provide support to incarcerated students while they engage with modern learning technologies. The correctional structure and procedures also posed challenges to the research participants. Participants mentioned a lot of challenges, but even though there were many challenges, there were also advantages for their studies.

Table 4.9 presents a summary of the aspects which emerged from the analysis of the interviews.

Table 4.9: Summary of the Inventories of aspects on student learning support needs which emerged from the interviews



# Aspects

#### Student characteristics

- Enrolment as higher education students diminishes opportunities for interaction with family and loved ones as a motivational aspect
- Little consideration from non-studying offenders for studying offenders in terms of privacy and time to study
- Limited understanding of the needs of incarcerated students from offenders from different nationalities and value systems

- DCS staff members' negative attitude towards offenders in general demotivate incarcerated students to study
- Inability of incarcerated students to defend themselves against irregular actions of DCS staff members
- Offenders and DCS staff members regard studying of low value and not a worthwhile endeavour
- Inability of incarcerated students to make effective contact with the distance education higher institution
- · Relocation causes inconsistency and poor continuity in studies
- · Participants feel lonely and isolated

#### Scale of capacity

- Incarceration provides the opportunity to access higher education learning
- In spite of centralised support at learning hubs, the constraints of the learning hub override the advantages
- Poor planning of learning centre facilities contributes towards the motivation of the incarcerated students

#### Institutional infrastructure

- DCS staff members abuse their power in detriment of the incarcerated students
- Mistrust exists between students and DCS staff members, which diminishes motivation to study
- Inadequate educational infrastructure provides physical challenges to incarcerated students
- An insufficient number of DCS staff members diminishes opportunities to obtain dedicated support
- Incarcerated students are in need of educational support to enhance their learning
- ICT infrastructure equipment and auxiliary study materials are kept in storage and not unpacked because of unclear reasons

### Technological infrastructure

- Absence of ICT infrastructure and resources create stumbling blocks for incarcerated students to study effectively
- Incarcerated students only have limited access to internet despite the requirements of the elearning system which demands almost fulltime access
- Incarcerated students have limited availability of auxiliary study resources

## Management of learner support

- Unavailability of financial support from DCS constrains incarcerated students' enrolment for higher education studies
- Inability to access public educational funding and private loans hamper progression
- Negative perspectives of DCS staff members of incarcerated students demotivate incarcerated students
- Negative attitude of DCS staff members and other offenders contribute towards incarcerated students' lower self-esteem
- Learning system not aligned to the needs of incarcerated students
- A need for researched e--learning strategy to address incarcerated students' learning needs

#### Policy for digital learner support

- Insufficient standardised policies on higher education and ICT for elearning correctional centres hamper incarcerated student progression
- Previous policies do not address elearning aspects in correctional centres

#### Student satisfaction

Inadequate communication between DCS and UNISA leads to frustration

- Miscommunication between students, DCS and UNISA leads to demotivation
- No liaison officer to act as in-between students and UNISA in order to support incarcerated students
- In spite of sufficient study time, other activities take priority in a correctional facility
- Basic material should be provided by DCS in order to support incarcerated students
- Possibility of creating of student study and support groups should be expanded
- Disruptive interventions to maintain correctional services security should be avoided or better planned
- Disruptive lockdowns to maintain correctional services security should respect the study materials of incarcerated students
- Difficulties with online registrations should be supported
- Difficulties of first time students encounter should be taken into account
- Studying creates intrinsic motivation in students and be encouraged
- Extrinsic motivation breeds intrinsic motivation and should be encouraged
- Length of sentence contributes towards demotivation of incarcerated students
- Criminal record acts as a demotivation for studying
- Higher education studies enhance self-worth in incarcerated students
- Higher education studies provide for hope for the future of incarcerated students
- Inadequate structures to facilitate effective rehabilitation should be addressed

The analysis described in this analysis resulted in seven themes (Table. 4.9) and 23 codes. Table 4.10 indicates the coding structure and the coding density (the 23 codes emerged during the interviews). From this table, one can deduct that data saturation has been reached (Saldaña, 2011:20). Data saturation contributes towards the issue of trustworthiness which is always an important aspect in qualitative research. It indicates that a certain issue emerged frequently, which also indicates reliability of the data.

Table 4.10 Coding structure and coding density of analysis

Themes and codes	Number
Student characteristics	
Adult students	18
Situatedness	53
Powerlessness	17
Geographical dispersion	11
Scale and capacity	
Correctional education	20
Learning hubs	50
Institutional Infrastructure	
Institutional culture	77
Local institutional framework	74
Technological infrastructure	
ICT infrastructure	58
Infrastructure challenges for delivering elearning	32

Themes and codes	Number
Technology-enhanced learning	62
Management of learner support	
Funding	39
Management of acceptability	18
Management of learner support	72
Organisational awareness	33
Policy for digital learner support	
Policy for digital security	28
Student satisfaction	
Communication	11
Advantages of being an incarcerated student	15
Challenges of being an incarcerated student	33
Motivation	34
Perspectives of incarcerated students	82
eLearning systems	18
Rehabilitation	153

The framework for the development of a student support system which I initially used (Figure 1.2) indicated six themes. From the current analysis, seven themes emerged, of which student satisfaction was an important aspect of the analysis. The code of student satisfaction provided information on the communication between students, DCS and UNISA; advantages that incarcerated students had, the challenges that the incarcerated students encountered in the correctional facility; intrinsic and extrinsic motivation; perspectives that incarcerated students had; learning centres in correctional facilities, and rehabilitation. These were clearly important issues to consider when compiling guidelines for framework for the development of a student support system for incarcerated students in correctional facilities.

Chapter Five elucidates on the issues addressed so far in the study, and provides the framework for the development of a student support system for incarcerated students in correctional facilities.

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# **Chapter Five**

Culmination of the Research Journey into a Framework for Learner
Support Needs of Incarcerated Students

#### 5.1 Introduction

This chapter provides the culmination of the research. It (i) succinctly overviews the previous four chapters, (ii) addresses the research question as introduced in Chapter One, (iii) provides a discussion of the implications of the research, (iv) describes the contribution of the study, (iv) postulates on the limitations of the study, (v) poses questions for future research, and (vi) delineates my research journey.

### 5.2 Overview of previous chapters

The study is presented as five chapters. They are: (i) framing of the research journey; (ii) mapping the research design and planning the methodology; (iii) panning the literature through a systematic literature review; (iv) burrowing for incarcerated students' learning needs in a changing distance learning landscape; and (v) culmination of the research journey into a framework for learner support needs of incarcerated students. The following sections provide a summary of the previous four chapters.

#### 5.2.1 Chapter One: Framing the research journey

Chapter One provides an orientation for the study as well as an outline of the research design and methodology. It sketches the research problem that needs investigation and provides a motivation for the research based on the gaps identified from an initial literature search. This discussion culminates in six themes: (i) student characteristics; (ii) scale of capacity; (iii) institutional infrastructure; (iv) technological infrastructure; (v) management of learner support; and the (vi) policy for digital learner support. The chapter also poses the

research question and the purpose of the research. The chapter includes a list of terminology and clarifications.

### 5.2.2 Chapter Two: Mapping the research design and planning the methodology

Chapter Two in detail delineates the research design and methodology. It again refers to the main research question, presents the world view which underpins the research question, explains the research approach and methodology which was followed. In short, the chapter provides a roadmap of the research. The essential ethics considerations are documented. As a systematic literature review was selected to structure the literature review, I present a comprehensive explanation of the SLR process which I followed. It also explains how project data were analysed with the assistance of ATLAS.ti™. The codebook which culminated from the SLR contributed towards the trustworthiness of the qualitative analysis. The chapter also explains the trustworthy issues (validity and reliability) relating to this study.

#### 5.2.3 Chapter Three: Panning the literature through a systematic literature review

Chapter Three provides an account of the SLR pertaining to the learning support needs of incarcerated students in a changing DL landscape. The systematic literature review revealed seven themes: (i) student characteristics; (ii) scale of capacity; (iii) institutional infrastructure; (iv) technological infrastructure, (v) management of learner support; (vi) policy for digital learner support; and (vii) student satisfaction. From the analysis of the interviews an additional theme emerged—student satisfaction. The analysis indicated that all the themes relate to the aspect of student satisfaction when compiling guidelines for leaning support of incarcerated students in a changing distance learning landscape.

# 5.2.4 Chapter 4: Burrowing for incarcerated students' learning needs in a changing ODL landscape

In Chapter Four I reported on the data that were gathered through the focus group interviews with the students and DCS staff members. The purpose of gathering these data was to assemble sufficient information to answer the research question: How can the DCS manage the learner support needs of incarcerated students in a changing distance learning

landscape? The data were coded in ATLAS.ti™ in the same HU as the systematic literature review, which means that the same codes as well as some additional codes were used for this process. All seven main themes from the systematic literature review were addressed in the analysis and were discussed. I centred the discussion on the learning support needs of incarcerated students.

The purpose of Chapter Five is to address the main and sub research questions. The following section will address the four research questions.

# 5.3 Addressing the research questions

To address the main research question which underpinned this study, I posed three additional sub questions to guide the thinking and the analysis of the data. The addressing of the four questions contributed towards the culmination of understanding of the issue of the learning support needs of incarcerated students. I again present the questions here for the benefit of the reader. The main research question was: How can the DCS manage the learner support needs of incarcerated students in a changing ODL landscape? The three additional sub questions were: (i) What are the policies which are in place to manage incarcerated learner support needs?; (ii) What are the learning support needs of incarcerated students in a changing ODL landscape?, and (iii) What guidelines can be provided to support the learner support needs of incarcerated students in a changing ODL landscape? The following section addresses each of the sub-questions.

# 5.3.1 What are the policies which are in place to manage incarcerated learner support needs?

This sub-question was addressed in detail in Chapter Three. The two formal documents, the Formal Education Policy for Offenders (Department of Correctional Services, 2000) and the Educational Services for Offenders (Department of Correctional Services, 2008:2) were analysed in detail as part of the SLR and eleven aspects emerged from the Atlas.ti™ hermeneutic unit. They are available in Table 5.1.

In summary, the DCS allows offenders to study with the aim of enhancing their education level to smooth their reintegration into society. The above-mentioned official documents state that (i) all offenders have a right to basic education, (ii) education programmes are available at the correctional facilities which vary from AET, FET, and programmes on higher education level, (iii) offenders base their choices on their needs, (iv) they approach the correctional administrators to assist them with registration, (v) their HE studies are paid from their own resources, and (vi) educators are available to guide them and assist them where there is a need.

# 5.3.2 What are the learning support needs of incarcerated students in a changing distance learning landscape?

Chapter Four addresses this sub question. Twenty three aspects emerged as codes from Atlas.ti™ hermeneutic unit which outlined the student support needs. They are available as Table 4.10.

The 23 aspects provided a scope of understanding on the learning support needs of the incarcerated students which I categorised as seven themes were: (i) student characteristics, (ii) scale of capacity, (iii) institutional infrastructure, (iv) technological infrastructure, (v) management of learner support, (vi) policy for digital learner support, and (vii) student satisfaction. The findings encompassed in the seven themes elucidated on the learning support needs of the incarcerated students studying through distance learning.

The theme of **student characteristics** relates to the issue of when offenders enrol for HE, they diminish their opportunities to meet with their families due to the constraints of studying and examinations. Non-studying offenders give little consideration to incarcerated students' privacy and studying time. As offenders come from different backgrounds, nationalities and value systems, they often do not make space for one another. The DCS staff members' attitude towards offenders is negative in general, which demotivates the incarcerated students. Non-studying offenders and DCS staff members regard studying to be of little value and not a worthwhile endeavour. The incarcerated students grapple to make effective contact with the HEI where they are enrolled. Relocating incarcerated students from one centre to another disrupts their rhythm to study and they lose continuity. In general,

incarcerated students feel lonely and isolated due to the challenges they endure in the correctional facility.

Scale of capacity describes the access to study facilities and materials which offenders access during incarceration. Learning hubs were invented for UNISA students in correctional centres in order to create central examination and studying venues, but their disadvantages outweigh the benefits to the incarcerated students. DCS does not additionally cater for the students' studying as they are of the perception that the learning hubs were created in order to provide learning support to the incarcerated students. However, the concerned correctional facility did not have an optimal facility prepared for the use of elearning where the incarcerated students could obtain access to the internet and other resources. The learning facility is a recycled container which is not ideal due to the extreme temperatures experienced at Worcester.

The **technological infrastructure** did not accommodate the learning of incarcerated students. Auxiliary study material and access to the internet were available to the students, but limited and unpredictable. The inadequate ICT infrastructure hampered the learning of the incarcerated students as they need adequate access to internet to communicate with the HEI, get access to learning materials, be able to enrol for their qualifications with less difficulty and allocate additional learning material.

Management of learner support is needed as incarcerated students face many burdens in order to further their studies due to insufficient funding. They often have to re-register due to the fact that they struggle to secure funding. The DCS does not provide the incarcerated students with bursaries or loans, and the offenders experience many barriers to obtain funding from private and other public organisations. The learning systems of the DCS are not aligned to the needs of the students; hindering the progress of the students during their studies.

**Current policies** available to formal education in the DCS mainly focus on basic education. When elearning was implemented in correctional centres, the current policies were not amended to meet the support needs of the incarcerated students. Without clear guidelines, it is also unclear to DCS staff members to provide adequate learning support to incarcerated students.

**Student satisfaction** is the most important aspect which emerged from in this study, as satisfied students are better able to succeed in their studies. Miscommunication between incarcerated students, UNISA and the DCS remains a constant challenge to the students. The absence of a liaison DCS staff member to assist the incarcerated students with their challenges, contribute towards restricted communication with the HEI. Incarcerated students need motivation in order to study. Intrinsic as well as extrinsic motivation plays a major role in the rehabilitation of the offenders and for incarcerated students to study effectively and become rehabilitated, they should receive study support which will contribute towards student satisfaction.

# 5.3.3 What guidelines can be provided to support the learner support needs of incarcerated students in a changing ODL landscape?

A comparison of the current policy aspects compared to the support needs of incarcerated students will contribute towards the compilation of a set of guidelines to be presented to the DCS in order to amend their Formal Education Policy for Offenders (Department of Correctional Services, 2000:2) and Educational Services for offenders (Department of Correctional Services, 2008:2) to ensure effective support for incarcerated students to further their higher education learning. Table 5.1 presents the comparison of the current policy statement with the qualitative findings of the current study in order to ascertain the gaps in the current policy statements.

Table 5.1 Comparison of the current policy statement with the findings of the current study

Policy statements	Themes from current study
<ul> <li>All offenders have a right to basic education (P62:4)</li> </ul>	Inadequate structures to facilitate effective rehabilitation should be addressed
<ul> <li>All administrative arrangements regarding examinations are the responsibility of a person identified in writing by the: Manager Education and Training (P62:3)</li> </ul>	Incarcerated students are in need of educational support to enhance their learning
<ul> <li>Offenders who wish to embark on education and training programmes should approach prison administrators with requests (P62:12)</li> </ul>	Incarceration provides the opportunity to access higher education learning
<ul> <li>Higher Education and Training band deals with diplomas, occupational directed certificates degrees, higher diplomas,</li> </ul>	Incarceration provides the opportunity to access higher education learning

Policy statements	Themes from current study
professional qualifications, higher degrees and doctorates and is offered through the medium of correspondence (P62:1)	
<ul> <li>These courses have to be done by offenders in their own time and at their own expense (P62:2)</li> <li>Management will in these cases only offer administrative support and study guidance (P62:9)</li> </ul>	<ul> <li>Unavailability of financial support from DCS constrains incarcerated students' enrolment for higher education studies</li> <li>Inability to access public educational funding and private loans hamper progression</li> <li>Negative perspectives of DCS staff members of incarcerated students demotivate incarcerated students</li> <li>Negative attitude of DCS staff members and other offenders contribute towards incarcerated students' lower self-esteem</li> <li>DCS staff members' negative attitude towards offenders in general demotivate incarcerated students to study</li> <li>Inability of incarcerated students to make effective contact with the distance education higher institution</li> </ul>
Formal education programmes in the Department of Correctional Services are provided to offenders according to their specific needs (P62:6)	<ul> <li>Enrolment as higher education students diminishes opportunities for interaction with family and loved ones as a motivational aspect</li> <li>Relocation causes inconsistency and poor continuity in studies</li> <li>In spite of centralised support at learning hubs, the constraints of the learning hub override the advantages</li> </ul>
The DCS aims to enhance the education level of offenders so that their integration into society can be strengthened (P62:5)	<ul> <li>Higher education studies provide for hope for the future of incarcerated students</li> <li>Higher education studies enhance selfworth in incarcerated students</li> <li>Criminal record acts as a demotivation for studying</li> </ul>
Provision of these programmes is integrated and aligned as far as possible with the educational system of the country (P62:7)  Provision of these programmes is integrated and aligned as far as possible with the educational system of the country (P62:7)  Provision of these programmes is integrated and aligned as far as possible with the educational system of the country (P62:7)  Provision of these programmes is integrated and aligned as far as possible with the educational system of the country (P62:7)  Provision of these programmes is integrated and aligned as far as possible with the educational system of the country (P62:7)  Provision of these programmes is integrated and aligned as far as possible with the educational system of the country (P62:7)  Provision of these programmes is integrated and aligned as far as possible with the educational system of the country (P62:7)  Provision of the country (P62:7)	<ul> <li>Inadequate communication between DCS and UNISA leads to frustration</li> <li>Miscommunication between students, DCS and UNISA leads to demotivation</li> <li>Incarcerated students have limited availability of auxiliary study resources</li> <li>Incarcerated students only have limited access to internet despite the requirements of the elearning system which demands almost fulltime access</li> <li>Absence of ICT infrastructure and resources create stumbling blocks for incarcerated students to study effectively</li> <li>ICT infrastructure equipment and auxiliary study materials are kept in storage and not unpacked due to unclear reasons</li> </ul>
Programmes are also informed, regulated and guided by the Policy on Formal Education within the DCS (P62:7)	Insufficient standardised policies on higher education and ICT for elearning correctional centres hamper incarcerated student progression

Policy statements	Themes from current study
	Previous policies do not address elearning aspects in correctional centres
Admission requirements are determined by the level of the learning/subject area for which the offender wants to enter external	<ul> <li>Difficulties with online registrations should be supported</li> <li>Difficulties of first time students encounter should be taken into account</li> </ul>
educational/academic institution (P62:11)  Study findings not addressed i	in the current policy statements
, ,	Little consideration from non-studying
	<ul> <li>offenders for studying offenders in terms of privacy and time to study</li> <li>Limited understanding of the needs of incarcerated students from offenders from</li> </ul>
	<ul> <li>different nationalities and value systems</li> <li>Inability of incarcerated students to defend themselves against irregular actions of DCS staff members</li> </ul>
	Offenders and DCS staff members regard studying of low value and not a worthwhile endeavour
	<ul> <li>Participants feel lonely and isolated</li> <li>Poor planning of learning centre facilities contributes towards the motivation of the incarcerated students</li> </ul>
	DCS staff members abuse their power to detriment of the incarcerated students
	Mistrust between students and DCS staff members exists which diminishes motivation to study
	Inadequate educational infrastructure provides physical challenges to incarcerated students
	Insufficient DCS staff members diminish opportunities to obtain dedicated support
	Learning system not aligned to the needs of incarcerated students
	A need for researched elearning strategy to address incarcerated students' learning needs
	No liaison officer to act as in-between students and UNISA in order to support incarcerated students
	In spite of sufficient study time, other activities take priority in a correctional facility
	Basic material should be provided by DCS in order to support incarcerated students
	<ul> <li>Possibility of creating of student study and support groups should be expanded</li> <li>Disruptive interventions to maintain</li> </ul>
	correctional services security should be avoided or better planned
	Disruptive lockdowns to maintain correctional services security should respect the study materials of incarcerated students

Policy statements	Themes from current study
	<ul> <li>Studying creates intrinsic motivation in students and encourages them</li> <li>Extrinsic motivation breeds intrinsic motivation and should be encouraged</li> <li>Length of sentence contributes towards demotivation of incarcerated students</li> </ul>

Literature portrays the picture that the DL mode is predominantly used for delivering education to incarcerated students. This study indicated that learning support needs met are liable for supporting student satisfaction, i.e. the level to which students needs and expectations are met. While Table 5.1 compares aspects indicated in the official policy statements (Department of Correctional Services, 2000:2; Department of Correctional Services, 2008:2) with the findings of this study, Table 5.2 provides an initial set of guidelines which could be presented to DCS in order to amend their policies. These guidelines comprise the seven main components of student support needs: (i) student characteristics, e.g. scheduling the visiting times during examinations, not relocating students from one correctional centre to another, etc; (ii) scale and capacity, e.g. planning of learning centre facilities, etc.; (iii) institutional infrastructure, e.g. providing adequate educational infrastructure, building trust between students and DCS staff members, etc.; (iv) technological infrastructure, e.g. creating ICT infrastructure and resources, providing students with auxiliary study resources, etc.; (v) management of learner support, e.g. aligning the learning system with the needs of the incarcerated students, make funds available for incarcerated students, etc.; (vi) policy for digital learner support, e.g. draft policies to guide students, etc. and (vii) student satisfaction, e.g. create study groups for incarcerated students, support online registrations, etc.

Table5.2 Guidelines for the support needs of incarcerated students

Prevalent themes of this study	Guidelines for the support needs of incarcerated students
Student characteristics	<ul> <li>Create a schedule for incarcerated students for family visits</li> <li>Arrange a sleeping cell for incarcerated students separate from non-studying offenders</li> <li>Plan training sessions for DCS staff members about higher education and treatment of incarcerated students</li> <li>Assign a DCS staff member as in-between between students and UNISA</li> <li>Plan relocation of incarcerated students according to their study schedule</li> </ul>
Scale of capacity	<ul> <li>Develop student support services and study centres close to where the incarcerated students come from</li> <li>Cluster students into groups based on their physical or geographical locations</li> </ul>

Prevalent themes of this study	Guidelines for the support needs of incarcerated students
Institutional infrastructure	<ul> <li>Assist in building good relationships between the DCS staff members and the incarcerated students</li> <li>Provide adequate educational infrastructure for the incarcerated students</li> </ul>
Technological infrastructure	<ul> <li>Develop student support services in the correctional centres</li> <li>Cluster the students into groups based on their physical or geographical locations</li> <li>Use the ICT infrastructure equipment and auxiliary study material purchased for the learning of the incarcerated students</li> </ul>
Management of learner support	<ul> <li>Put a plan in place to ensure that incarcerated students are able to get financial support</li> <li>Sign a memorandum of understanding with public educational funding organisations and private loans</li> <li>Assign DCS staff members in the research component to research a strategy which will align the learning system to the incarcerated students' needs</li> </ul>
Policy for digital learner support	<ul> <li>Develop policy guidelines that will address digital learner support needs</li> <li>Amend existing policies in order to address elearning in correctional centres</li> </ul>
Student satisfaction	<ul> <li>Compile, interpret, and implement a memorandum of understanding between DCS and UNISA, and define the performance expectations for each stakeholder and how this performance is to be monitored in order to ensure the provision of effective student support needs</li> <li>Create rules and regulations for incarcerated students which are different from the ones for non-studying offenders</li> <li>Provide support courses for first time students</li> <li>Apply for scraping off of criminal records for incarcerated students</li> <li>Build adequate structures to facilitate effective rehabilitation</li> </ul>

# 5.4 How can the DCS manage the learner support needs of incarcerated students in a changing ODL landscape?

In the comparison of the current policy statements, the findings of the current study indicate areas where the policy statement does not provide sufficient learning support to incarcerated students. Although the policy states that all offenders have a right to study (Department of Correctional Services, 2008:2), yet they experience problems in the following areas: (i) student characteristics, (ii) scale of capacity, (iii) institutional infrastructure, (iv) technological infrastructure, (v) management of learner support, (vi) policy for digital support, and (viii) student satisfaction. Without addressing these issues, the chances of students completing their qualifications and becoming fully rehabilitated are slim. Also, as offenders have to pay for their own studies, contribute towards the drop-out rate of these incarcerated students. The aim of the DCS is to enhance offenders' readiness for reintegration in society, but the students regularly face negative attitudes from the DCS staff members, which demotivates

them in their studies. The programmes provided by the DCS are according to the policy integrated and aligned with the educational system of the country, and yet there is much miscommunication between the students, UNISA and the DCS as the policies are not aligned with studying requirements via DL.

While Table 5.2 provides the detail of guidelines for the DCS to improve their learning support for incarcerated students in a changing distance learning landscape, Figure 5.1 provides a framework of how the DCS could manage the requirements for learning support.

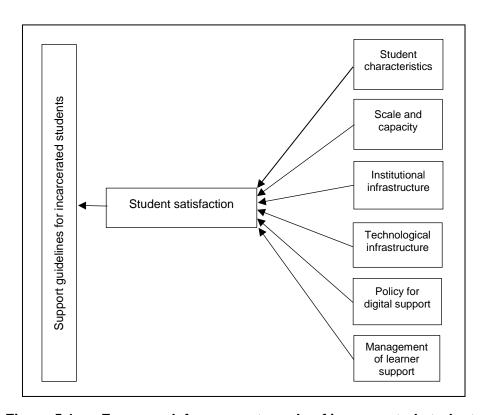


Figure 5.1: Framework for support needs of incarcerated students

# 5.5 Implications of the research

This research determined how the DCS could address support needs of incarcerated students by recognising the needs, characteristics, and satisfaction aspects. The study provides an authentic research framework (Figure 5.1) that can be widely used in DCS and higher education institutions to address the complex issues of support needs of incarcerated students.

# 5.6 Contribution of the study

This study contributes to various areas of improving delivering elearning to incarcerated students. It provides:

- insight into the support needs of incarcerated students in regard to studying through distance education
- guidelines and meaningful indicators emerged which could be used for developing policies
- potential to start of a project in the DCS where incarcerated students could be supported in their studies through DE
- an opportunity to change to existing policies in order to identify strategies for the effective delivery of elearning in the changing distance education landscape
- incentives to improving institutional and technological infrastructure at the correctional facilities in order to support the learning of incarcerated students with regard to access to courses and resources.

#### 5.7 Recommendations

The following recommendations are made on the basis of the findings in the astudy:

- Create computer rooms for incarcerated students in their management areas
- DCS staff members should receive training to capacitate them in supporting incarcerated students
- Formal education policies should be reviewed and amended
- HEIs should support incarcerated students according to their needs as they are in a different situation from other students

### 5.8 Limitations of the study

Even though careful planning and implementation of research methods was done, all research fundamentally has limitations which could relate to choices of theoretical limitations, selection of methodological approaches and encountering of constraints during data collection and analysis. The limitations of this study relate at two levels: (i) a methodological level, and (ii) a practical level.

Firstly, in terms of methodology, this study was a qualitative study executed from an interpretivist paradigm. This meant that it accounted for one perspective. Making use of a mixed-method approach could have produced other insights to the research problem as the extent to which the issues of learner support of incarcerated students occur was not measured.

Secondly, in terms of practical aspects, the current study was framed as a bounded cases study, indicating the investigation of only a single unit of correctional services. The situation in other hubs could have differed. Therefore, the findings of this study cannot be generalised to the national situation, but could be used as change in the concerned correctional facility, as well as be used as discussion document on national level when policy change is discussed.

## 5.9 Questions for future research

As this study has by no means covered the entire spectrum of issues relating to further development of offenders, I have identified some issues which could be researched in the future:

- How could the learning-support needs of incarcerated students for HE be met without having to centralise the incarcerated students?
- How to provide incarcerated students with funds to continue with their higher education learning?
- How to develop an official policy to assist incarcerated students with (i) funding registrations, (ii) auxiliary study materials, (iii) internet access, (iv) visits from HEIs as

tutorial sessions, and (v) enabling incarcerated students to have a wider choice of qualification to enrol with as many qualifications demand practical work from students?

### 5.10 My research journey

I am a passionate teacher, aiming to always support learners and students to fast forward their learning journeys and improve their learning experiences. About six years ago, I was employed by the DCS as Parole Board Chairperson. As Chairperson, I met many offenders, on a daily basis and listened to their life stories and heard how much they would like to study further, but could not do so owing to the stringent rules and regulations of DCS. A particular offender caught my attention. He used to be an attorney by profession, and because of being incarcerated, he knew that he would not be able to practice again. He badly wanted to study to be able to again provide for his family when he left the correctional facilities. He applied to study, but because of the challenges he could not further his studies. When I heard his story, I developed a desire to become involved with offenders in their efforts to study.

My first formal experience with research was when I studied my Master's degree when I conducted a qualitative study. I would have liked to do a mixed-method study this round, but due to the vulnerability of the participants and the nature of the research, I again embarked on a qualitative study. In a sense it was advantageous as I already could interact with Atlas.ti™ for the analysis of the data. During my Masters', I was introduced to Endnote™ but did not master it well. I was reintroduced to Endnote™ and experienced it as a structured and organised way to develop, compile, and manage literature references for my study.

It was my first experience with compiling a literature review through a systematic literature review methodology. I found it interesting and informative. It assisted me to structure the literature Information effectively and from there I could write the literature chapter and analyse the data. It was interesting how the literature data and interview data all became part of a single integrated hermeneutic unit in Atlas ti™. My promoter again trained me and guided me in the deeper use of Atlas ti™ which was a valuable tool for the analysis of large volumes of data. The use of a codebook was completely new to me and it contributed

toward the trustworthiness of my study as it was easy to check if a quotation really matched the description of a code.

Performing the focus group interviews at the correctional facilities was scary. I did not know what to expect and how the participants were going to react. However, they were disciplined and were eager to share their lived experiences with someone who would listen to their stories.

The study not only enabled me to fulfil my dream to complete a PhD dissertation, but also enhanced my growing as a person and a researcher. The hardship students experience when studying as a distance student completely surpassed my expectations. I experienced the journey of this research as fascinating, rewarding, enriching, enlightening, and worthwhile.

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