Chapter 3 Literature review on learner support in ODL

3.1 Introduction

In Chapter 2, I provided contextual background for understanding the distance learners from marginalised communities in Botswana who participated in this study. In this chapter, I review literature related to the theoretical frameworks in distance learning and learning support as a subset of learner support. The purpose of the review was to understand the conceptual and theoretical perspectives that underpin learning support in order to situate this study, interpret the perspectives and experiences of participants of this study, and build on existing research in the domain of DE.

Learner support appears to be of lesser concern in some distance learning institutions as planning strategies for learner support do not exist, (Levy and Bealie, 2003, Robinson, 2004). An absence of such plans could imply that issues related to learner support, including perceptions and experiences of learners from marginalised communities in underdeveloped contexts, may not be known. This could be due to several constraints, such as financial cost, inadequacy of appropriate human resources for learner support or, alternatively, the role of learning support may not be considered a matter that deserves attention. Empirical literature on learner support for distance learners from marginalised communities, similar to those described in the previous chapter, has been difficult to locate. This is not surprising as such disadvantaged groups generally have no advocacy and thus mainstream society commands more attention. However, literature describing learner support as provided in developed contexts is prolific and differs from what happens in developing contexts. In the latter case, available literature comprises progress reports on what various institutions are doing (Robinson, 2004, Nonyongo and Ngengebule, 2008). For instance, Nonyongo and Ngengebule casebook (2008) on learner support in Distance Education Association of Southern Africa (DEASA) institutions is primarily a collection of progress reports produced by ODL practitioners. None offer evidence of any empirical study on the perceptions and experiences of learning support for distance learners from marginalised communities in underdeveloped contexts.

I first discuss the provision of education to marginalised communities as well as the concept of open and distance learning. I then briefly examine three applicable theoretical frameworks and the literature on learner support to establish a conceptual framework for this study. I next proceed to discuss the empirical literature on learning support experiences in both developed and developing contexts and indicate what exists and what gaps my study addresses. Inter alia, my study contributes to the literature by giving a voice to adults enrolled for a secondary school certificate in isolated disadvantaged circumstances.

3.2 The provision of education to marginalised communities

Education is a basic human right (Curtis, 2009). All people including those from marginalised communities should share this. However, in practice, the right to education is not enjoyed equally by all. Marginalised groups in various regions of the world suffer disproportionately from unequal or restricted access to quality education and inappropriate education strategies (United Nations Human Rights Council, 2009). Observations by Bourne (2003) COL & COMSEC (2007) COMSEC (2009) is that education provision for marginalised communities in Africa and elsewhere does not adequately reach marginalised communities nor adequately address their needs and aspirations. In other words, adequate education provision has failed to reach nomadic populations and marginalised indigenous communities. In India, the enrolment rate for Scheduled Tribal children in 1997-8 was only 66% nationally, in Namibia - in the 1990s - the scholastic enrolment of the Basarwa was only 21% compared to a national average of 83%, in Australia in 1999, nearly half of all indigenous people aged 15 or over had had no formal education and only 5.5% were participating in years 11 and 12 at the top of the secondary school (Bourne, 2003).

The United Nations Economic and Social Council (1999) and Human Rights Council (2009) make it clear that education is an inalienable human right and is more that a commodity or a service. It is regarded as crucial for the realisation of other rights and an indispensable agency for the expansion of human capabilities and the enhancement of human dignity. Education is further regarded as critical as it plays a role in socialization for democratic citizenship and represents an essential support for community identity. It is also viewed as a means by which individuals and communities can lift themselves out

of poverty and is also a means of helping minorities overcome the legacies of historical injustice or discrimination committed against them, (United Nations Human Rights Council, 2009). It is therefore critically important that people from marginalised communities should have the right to a fully-fledged education, given that the lack of or limited education impinges on civil and political rights, as well as the rights to freedom of movement and expression. Lack of education also limits participation in public affairs, e.g. voting rights and limits the access and enjoyment of rights to employment, health, housing and an adequate standard of living. Lack of education can also result in reticence to engage with law enforcement authorities inhibiting access to remedies when human rights are violated. Lack of or poor quality of education is a barrier, in particular, for marginalised people's progress and empowerment (United Nations Human Rights Council, 2009).

The United Nations Human Rights Council (2009) further advocates for education to serve the dual function of supporting the efforts of communities to self-development in economic, social and cultural terms while opening pathways by which they can function in the wider society and promote social harmony. This therefore calls for education strategies that enhance rights and freedoms. Human rights are violated when, for instance, unwanted assimilation is imposed through the medium of education or enforced social segregation is generated through educational processes. (United Nations Human Rights Council, 2009). In the light of the rights and obligations recognised at the level of the United Nations, the right to secondary education of people from marginalised communities satisfies Article 13 (2) (b) of the Economic, Social and Cultural Rights . The said Article recognises that secondary education demands flexible curricula and varied delivery systems to respond to the needs of learners in different social and cultural settings. The United Nations Economic and Social Committee encourages alternative educational programmes which parallel regular secondary school systems (United Nations Economic and Social Council, 1999). This is again echoed by the COL and COMSEC Report (2007) that calls for inclusive education, suggesting that deliberate and positive action should be made to ensure the realization of access for all kinds and conditions of learners including those from the Basarwa and Bakgalagadi communities in Botswana. The report further appeals to educators to explore flexible and innovative approaches in education provisioning to address the needs of

marginalised communities. Open and distance learning (ODL) is one flexible and innovative approach that is capable of reaching and addressing the needs and aspirations of marginalised communities.

3.3 Open and distance learning (ODL)

Providing education to marginalised and at times nomadic communities in underdeveloped contexts is one of the most challenging and urgent issues facing education policy makers, practitioners and other role players within the field (COMSEC, 2006). The use of open and distance learning (ODL) methods to address the challenges in many countries including Botswana is now common. ODL has proved to be capable of reaching large numbers of people in developing countries (Hulsmann, 2004, Siaciwena & Lubinda, 2008)). The term open and distance learning (ODL) in the education field, has gained prominence in the past 20 years (COL, 2000).

Open learning is a system in which the restrictions placed on learners are under constant review and removed wherever possible. As a system, it entails policies that permit entry to learning with no or minimum barriers with respect to age, gender, or time constraints and with recognition of prior learning (COL, 2000). Open learning enables learners to learn at the time, place and pace which satisfy their circumstances and requirements. Open learning emphasises the opening up of opportunities by overcoming barriers that result from age, gender, geographical isolation, previous experience requirements, personal or work commitments or conventional course structures which have often prevented people from gaining access to training or schooling (Rowntree, 1992). In other words it provides learners with choices about e.g. the medium of knowledge transmission (print, on-line, television or video) or the choice of place to study (at home, workplace or on campus). It also allows learners to have a choice to pace their study and choose when to complete their courses. It allows for support by tutors, audio conferences or computer-assisted learning and also for entry and exit from the course when the learner so desires. The type of open and distance learning that is technology-based refers to systems of teaching and learning in which a technology other than print plays a major role (COL, 2000). This is the case at the University of West Indies where audio conferencing is used to link various campuses and learning centres. It is also the case at Athabasca University and at the Open

University of the United Kingdom where computer conferencing is used as a primary mode of delivery (COL, 2000). Various forms of tele-teaching via statelitte television have also been used successfully, specifically as an academic support for secondary school learners in developing countries such as Brazil, India, Mexico and South Africa (Evans, 2005, Edrishinga, 1999, Shrestha 1997)

ODL is a blanket term used for learning systems that offer varying mixes of openness and distance (DFID, 2008). Its key features include: separation of teacher and learner in time or place or in both time and place; use of mixed-media courseware that is print, radio and television broadcasts, video and audio cassettes, computer-based learning and telecommunications (Valentine, 2002; COL, 2000; DFID, 2008). ODL also includes a two way communication which allows learners and tutors to interact and the possibility of face-to-face meetings for tutorials. The language and terms used to describe ODL activities makes it difficult to have one definition (COL, 2000). The commonly used terms related to open and distance learning include correspondence education, distance learning, open learning, technology-based education and flexible learning amongst others.

Correspondence is print-based with communication through postal services or telephone. Learners pursuing correspondence education do not have to leave their homes to study. In North America many university correspondence programmes have been renamed open and distance learning programmes in the last 15 years, (COL, 2000). Distance learning on the other hand occurs when a learner learns at a distance from a teacher using pre-recorded, packaged learning materials. The learner is separated from the teacher in time and space but is still being guided by the teacher, (Rowntree, 1992; COL, 2000).

Despite the different types of open and distance learning, the delivery of ODL programmes occurs along two continua, that is, the continuum of time and the continuum of space, (COL, 2000) as illustrated in **Table 3.1.**

Table 3.1 ODL scenario

	Same time (synchronous)	**Different time (asynchronous)**
Same place	Classroom teaching, face-to-face tutorial and seminars, workshops and residential schools	Learning resource centres, which learners visit at their leisure
Different place	Audio conferences and video conferences; television with one way video, two way audio, radio with listener-response capability; and telephone tutorials	Home study, computer conferencing, tutorial support by e-mail and fax communication

Source: COL 2000

The development of ODL has generated theories that inform the field. Three of the theories are discussed in the next section with the view to drawing on them for my own conceptual framework.

3.4 Theoretical frameworks underpinning distance learning

Distance learning has evolved from correspondence education with no learner support provision to what it is today, namely, open and distance learning with learner support services. Today's technologies like video conferencing, interactive television, satellite transmission, audio-conferencing, the Internet and online learning, have made the provision of learner support services attractive and feasible to learners (McLoughlin, 2002; Wheeler, 2002). The available empirical literature addresses theoretical issues of distance learning in developed and developing contexts and appears to overlook underdeveloped contexts. The theories that explain learning at a distance include the following: Holmberg's (1983) *theory of didactic conversation,* Moore's (1990) *theory of transactional distance and* Gorsky, Caspi and Trumper's (2004) theory of *dialogue.*

Holmberg's (1983) *theory of didactic conversation* focuses on the learner. His point of departure is the formal education context whereby students express their ideas and the educator guides them by way of explaining, correcting, or redirecting those ideas. Didactic conversation plays a vital role in enhancing learning. It creates a personal rapport between the

educator and the learner. This leads to greater motivation on the part of the learner and increased learning outcomes. The learning support provided at traditional schools, for example, teacher-learner, and learner-learner interaction is the kind of learning support that distance education learners with previous conventional learning experience would expect to get during their course of study (Holmberg 1983). Holmberg (2003) has dropped the term didactic conversations in his theory and now prefers to use 'learning conversations' because the word "didactic," in many cases, is taken to indicate an authoritarian approach, the direct opposite to what was meant. The rest of his theory remains the same and he confirms it as still being valid (Holmberg, 2003). In his theory of conversational learning, Holmberg (2003) spells out factors that influence learning favourably and those that advance the learning process and empathy is one such factor.

Given the cultural sensitivity of the distance learners from marginalised communities, a sense of empathy between those who provide learning support and distance learners is necessary for their feelings of connectedness to the institution. Furthermore, constant availability of tutors, frequency of assignment submission and short turn-around times of assignments are necessary for advancing the learning process. Given the context of my study and the attributes of participants as described in the previous chapter, I filtered my analysis of the data collected using Holmberg's theory in order to reach an in-depth understanding of how distance learners perceive and experience learning support. Other elements of Holmberg's theory that explain the expected nature of transactions include effective communication between providers of learning support and distance learners and their motivation and satisfaction. Holmberg's theory further states that feelings of personal relations between the instructor and student tend to promote study pleasure and motivation, particularly if well-developed instructional materials and two-way communication between the learner and the educator support such feelings. He argues that communication within a natural conversation can be understood and remembered easily and that the conversation concept can be successfully translated for use by media and made available to distance students. All this can be achieved, provided thorough planning and guidance on the curriculum for organised study at a distance is made. As applied to my study, Holmberg's theory holds that I must expect that learning support enhances academic performance of distance learners because, in order to achieve effective learning, his theory underscores the importance of motivation in the attainment of study goals and that an atmosphere of friendly conversation favours feelings of personal relation necessary for enjoying

study at a distance. Whilst Holmberg's theory emphasises the conversational learning Moore (1990) has emphasised the psychological and transactional distance that learners experience when they study at a distance.

Moore (1990) advanced the *theory of transactional distance* and explains that "distance" is determined by the amount of communication or interaction, which occurs between learner and instructor. He further argues that distance was also determined by the amount of structure that exists in the design of the course. In other words, when a course is more structured and has less communication (or interaction), transactional distance is experienced. In this way, Moore explains that a continuum of transactions might exist in the model from less distant where there is greater interaction and less structure, to more distant where there may be less interaction and more structure. Moore (ibid) further recommends that, when designing effective distance education courses, one should include interactions between the student and their instructor, students and students, and students and the content. Whilst Moore' theory makes sense for the context of this study given the potential communication gap arising from the remoteness and geographical distance, Gorsky and Caspi (2005) argue that the basic proposition of Moore's (1990) transactional distance theory was neither supported nor validated by empirical research findings. They dismiss the transactional distance theory as tautology and being non-scientific as they believe relations between variables were ambiguous. Whilst they acknowledge the concept of transactional distance as a historical milestone since it emphasises that essentially *distance* in distance education is transactional, not spatial or temporal, they argue that, in practical terms, as a measurable dependent variable in a theory or model, the concept has little merit. However, I do not find this argument plausible, given distance learners' experiences of isolation, need for connectedness and transactional presence in distance learning as revealed in empirical studies by Wheeler (2002) Shin (2003) and Dzakiria (2005).

Gorsky et al. (2004) have advanced *dialogue as a theoretical framework* for distance education instructional systems. According to these authors, the key element of their framework is learning not the learner, not the instructor, and not the physical or temporal distance separating them. This appears to be coming from a specific epistemological stance and view of reality, it may also imply that the actual words used to construct the dialogue are the reality. I therefore see each word they use as important for analysing and interpreting data. Gorsky et al. (2004) argue that learning is an individual activity mediated by intra-personal dialogue. Their

assumption is that dialogue is enabled by structural and human resources. These theorists (ibid), explain structural resources for intra-personal dialogue to include all materials of any kind that students may learn from, whilst structural resources for inter-personal dialogue include all available communication media and the availability of instructors and fellow students. Human resources, on the other hand, are for inter-personal dialogue and these are the instructors and students who may engage in the instructional dialogue. They are of the opinion that students can utilise resources as they see fit, in accordance with their goals, abilities, and needs (ibid). Part of the context of this study as described in Chapter 2 is the lack the structural resources as explained in this section and therefore their theoretical framework may not suit all situations. Given the limited educational resources that can enhance learning in a less developed context, like communication media, for instance, and semi-literate and illiterate population learners may not have easy access to the kind of resources that Gorsky et al. (2004) anticipated.

I chose Holmberg's theory (2003) of learning conversations as the framework of this study firstly, because I find it embraces empathy, an attribute I consider key to delivering academic advocacy. Holmberg as quoted by Bernath and Vidal, (2007:433) has this to say:

> *My modest theory simply means that a procedure that has proved helpful in traditional education is applicable also to distance education. Empathy between those who teach and those who learn is universally a good basis for learning. Easily understandable, conversation-like presentations and friendly interaction help students to learn. Empirical investigations support these assumptions.*

I secondly chose Holmberg's theory (2003) because it is the theory that explains what learners expect and experience in distance learning. To substantiate his theory, Holmberg argues that:

> *My theory is of a different kind. It implies that the application of a methodological approach – empathy-creating conversational style – leads to increased motivation to learn and better results than conventional presentation of learning matter* (Holmberg at 4th Eden Research workshop 25-26 Oct, 2006, in Bernath and Vidal 2007: 430).

However, Peters (1998) criticises Holmberg's conversational style and argues that it results in overprotecting the students and prevents them from confronting the complexity of all that academia entails. I acknowledge Peters' criticism of Holmberg's theory if applied at a higher education level. But I consider Holmberg's conversational theory an acceptable point of departure for learners at secondary school level where they come from marginalised communities, who often find a culture clash in formal education because their traditional education is informal and incorporated into their everyday lives, an observation documented by Le Roux (2002). Given that the learners from the marginalised community struggle to pass and

often dropout out of school (Hanemann, 2006), the need for empathy and a conversational style in dealing with them is more appropriate. I also chose Holmberg's theory as my theoretical framework as I consider it appropriate for examining BOCODOL's decentralised learner support system given the fact that Holmberg's theory underpins what distance learners expect and experience from their respective study centres. However, where appropriate, I draw from each theory to interpret the perceptions and experiences of distance learners on learning support. The three theories have similar concerns, for example, learning, communication, or interaction between learner and educator and between learner and learner. The similarities that exist in the three theories are summarised in Table 3.1, and include the role of communication in learning.

Table 3.2 Foci of the three distance education theories

Theory	Aspect of learning support advanced
Learning conversation theory (Holmberg,1983; 2003)	Focuses on the learner, particularly feelings of personal relations between the educator and learner to promote study pleasure and motivation. Believes that conversation creates a personal rapport between the educator and the learner and this leads to greater motivation in the learner and increased learning outcomes
Transactional distance theory (Moore, 1990)	Focuses on distance and on the amount of communication or interaction between learner and instructor, learner and learner.
Dialogue theory (Gorsky, Caspi & Trumper, 2004)	Focuses on learning not on the instructor and not on the physical distance separating them. However, takes note of the need for materials from which learners can learn, the communication media and the availability of educators and learners to engage in instructional dialogue

In the next section, I provide an explanation of the conceptual framework of learning support as situated within the learner support literature in the context of distance learning.

3.5 Learner support and learning support in distance learning

In distance learning, learner support and learning support are closely related but the two concepts do not mean the same thing. The need for learner support and learning support arises from the need to reduce the barriers to successful learning. The provision of learner support and

learning support is meant to provide an environment that improves learners' commitment and motivation to learn (Qakisa-Makoe, 2005). Most distance learners are new to the system of learning at a distance and associate learning with being taught by a teacher being present physically. They find it challenging to learn on their own without a teacher. In most cases they are not confident of their capability to learn using unfamiliar learning materials (IGNOU, 2000) and therefore they need learning support. Learning support is one of the three kinds of learner support along with personal and administrative support. Learner support is a broader term than learning support. It focuses on providing students with the assistance they need to achieve the desired outcomes in a distance learning environment (ADEA, 2002; Roberts, 2004; Usun, 2004; Ukpo, 2006). The literature also uses other terms to refer to learner support; for example, student services and student support (Simpson, 2002; Thorpe, 2002; Moore, 2003; Tait, 2004; Dzakiria, 2005).

Thorpe, (2002) reviewed learner support in on-line intensive and interactive forms of teaching and learning with specific reference to how it was conceptualised and suggested that all aspects of an institution's provision, from the enquiry desk through to the quality of the interface on the CD-ROM, should be supportive in the sense of fostering high quality learning. Thorpe's review has limited application in this inquiry as computer technology as a channel for distance education is currently not readily available in Botswana. Similar to what Thorpe suggests, Tait, (2000) and McLoughlin, (2002) describe learner support as a support system intended to enhance and improve learning. They both note that it covers a wide range of skills that come to light from the initial registration, and are evident throughout the teaching programme until the results are released. Tait (2004) explains learner support in terms of its cognitive, affective, and systemic function, similar to the explanation given by Simpson (2002). Cognitive function in this case refers to supporting and developing learning through the mediation of standard course materials and learning resources for individual learners. Affective function, on the other hand, refers to providing an environment, which supports learners, creates commitment and enhances self-esteem. Systemic support refers to establishing administrative processes and information management systems, which are effective, transparent, and user friendly. In practice little distinction is made between the three aspects of learner support, namely, academic, personal and administrative. A holistic approach is usually adopted to address difficulties learners encounter (McLoughlin, 2002; Simpson, 2002; Holmberg, 2003; Tait, 2004; Alias and Rahman, 2005; Dzakiria, 2005). The difficulties learners encounter can be unexpected, that is, cannot be

anticipated by course designers, instructors, and administrators. Some difficulties crop up unexpectedly but can only be dealt with on a case-by-case basis because one cannot predict which individual learner is likely to encounter a particular difficulty (Moore, 2003; Robinson, (2004). Difficulties experienced could be emotional or academic. Such difficulties may hinder effective learning. The role of learner support in such cases is to reduce the difficulties in order to enhance the social well-being and academic performance of a learner. In the light of the difficulties distance learners experience, learner support can also be described as a safety net for the individual learner (Robinson, 2004).

Learning support as an element of learner support refers to academic support. Alias and Rahman (2005) point out that learning support elements aid the development of new knowledge, skills, and attitudes when individual learners interact with information and the environment. The elements of learning support in distance learning include study orientation, communication and study skills, face to face tutoring, and assignment feedback (Simpson, 2002; Thorpe, 2002; Moore, 2003; Holmberg, 2003; Tait, 2004; Dzakiria, 2005; Alias and Rahman, 2005). Learning support as it relates to academic performance includes assignment marking or feedback, support that is incorporated within the course materials and the tutorial sessions. It is essential to the successful delivery of learning experiences at a distance (Robinson, 2004). However, the quality and quantity of learning support required might differ from one context to the other and from learner to learner (Robinson, 2004).

Several authors (Simpson, 2002; Thorpe, 2002; Moore, 2003; Holmberg, 2003; Mensah, 2004; Simpson, 2004; Tait, 2004; Dzakiria, 2005; Alias and Rahman, 2005) have provided evidence that suggests the need for learning support. However, I find Simpson's (2004) and Mensah's (2004) studies most illuminating. The former study (by Simpson) demonstrated the key function and the need for learning support as far as learner retention and throughput was concerned. It also showed that proactive measures, if taken appropriately, have the advantage of reaching learners who are more likely to drop out whilst reactive measures are designed to respond to learner-initiated contact or learners who are likely to be successful. The study also claims that proactive methods are more cost effective, an important consideration for any DE institution of scale. Mensah's study (2004) was on students' impressions of the learner support system in a distance education programme in Ghana. It demonstrates the need for face-to-face tutorial support and helpful and encouraging feedback on students' written assignments. I find both

studies relevant to this study given the similarities in rendering learning support to distance learners. Effective learning support is meant to help distance learners succeed in their studies. I consider learning support as conceptualised above critical for positive perceptions and experiences in distance learning.

3.6 Factors that influence perceptions and experiences in distance learning

There is an abundance of literature that covers factors that influence perceptions and experiences in distance learning (Sanchez and Gunawardena, 1998; Bhalalusesa, Picciano, 2001; Fung and Carr, 2002; Gibbs and Simpson, 2002; Holmberg, 2003; Tait, 2003; Hughes, 2004; Krishnan, 2004; Stephen et al, 2004; Creed et al., 2005). The following factors are identified; proficiency in the English language, that nature of feedback, availability of educational resources, the use of familiar language or mother-tongue, the existence of policy frameworks that embrace social justice or equity and fairness. Other factors include perceived self-esteem, flexibility in the application of programmes, local partnerships and collaboration and curricula developed with the full participation of the recipients' representatives, persistence and family support. An analysis of factors among Asian-American, African-American and Hispanic students by Nickerson and Kristsonis (2005) identified parental involvement, time spent on tasks and study habits as having contributed to their success. When promoting educational experiences for learners from minority and marginalised communities emphasis on attributes of being a successful distance learner is a critical. The attributes include being able to progress through a study programme, being independent, having good learning skills and strategies, and being able to interact effectively with tutors, course materials and other distance learners at any time (Dzakiria, 2005).

Distance learners' perceptions and experiences of learning support can also be influenced positively by learning styles or approaches to learning and the contribution of tutors or distance education teachers. Certain learner attributes also influence positive perceptions, for instance, previous educational background, goals and motivations to enrol for a course. The approach distance learners use to master the course material determines the level of their perceptions and experiences of learning support outcomes. The quality of learning depends on the learning approach an individual learner adopts (Entwistle & Ramsden, 1983; Biggs, 1997; Entwistle, 1997; Alstete and Beutell, 2004). Learners may adopt three major approaches. They are

surface learning, deep learning and the strategic approach. These learning approaches or learning styles lead to different achievement levels and academic performance. Surface learning focuses on memorisation and the recall of information or content without or with little understanding. It has to do with rote learning. It leads to low achievement. On the other hand, the deep learning approach is characterised by the search for understanding, transformational development and application of knowledge. Deep learning leads to a higher achievement than the surface approach. The strategic approach involves the adoption of a learning style that is driven by a search for a desired outcome, for example, high grades, examination success and the qualification itself. It is more competitive and ego-oriented and is based on strategic planning. The strategic approach emphasises the organisation of studies around study skills, assessment and what is deemed necessary for success (Entwistle & Ramsden, 1983, Biggs, 1997, Entwistle, 1997). The strategic approach leads to academic success although the individual's learning circumstances and resources may also influence the academic performance. The provision of learning support aims to enable distance learners to adopt and apply deep and strategic learning approaches in order to enhance their academic performance.

The above approaches to learning are similar to other ideas expressed with different terminology for example, Venter (2003) talks about 'field independence' and 'field dependence'. Field independence and field dependence, as concepts, have become associated with the categorisation of learners involved in distance learning. Field independence refers to individuals who create their own means of organising and structuring learning, whilst field dependent refers to individuals who are reliant on information provided to them (ibid). The former is closer to the deep and strategic approaches whilst the latter is similar to the surface approach. The concept of 'field independence' is essentially concerned with the extent to which learners perceive analytically. Given the notions of independent and autonomous learning, 'field independence' has become particularly valuable in understanding distance learning as a particular facet of instruction (Venter, 2003).

Tutors or distance education facilitators play a critical role in equipping distance learners with learning skills that enable them to adopt the necessary learning approaches that can make them succeed. The different tutor roles in the provision of learning support are meant to improve learning outcomes. It is noteworthy that outcomes improve when

learners have regular and meaningful contact with tutors, as tutors are regarded as important for academic counselling, nurturing learners and for their role as mentors. Tutoring is thus not limited to academic advising or counselling but extends to mentoring and coaching. Tutoring should also be regular, motivational, sustained, positive, fair, unbiased, caring, and culturally sensitive if positive impact is to be realised. Other face-to-face tutoring activities like examination skills, extra tutorials and peer help can also contribute to positive learner achievement and foster social integration and academic performance.

Previous educational experience plays a major role in making use of learning support provided by the ODL institution. A study by Dearnly (2003) revealed that learners who have had a prior positive learning experience are more likely to perform better whilst learners who enter the course with negative schooling experiences prefer being told what to do and when to do something. Such behaviour stems from earlier experiences that encouraged dependency rather than autonomy in learning (Dearnley, 2003). Positive perceptions and experiences assist learners to cope successfully with the challenges of learning at a distance. My study builds on learning support experiences documented in literature in developed and developing contexts which I discuss in the next section.

3.7 Learning support experiences in developed and developing contexts

There are several progress reports that describe what open and distance learning institutions are doing in the area of learner support in Southern Africa (DEASA 2006). Research that focuses on learner support issues mainly covers the developed contexts and some parts of the developing contexts (McLoughlin, 2002; Simpson, 2002; Thorpe, 2002; Wheeler, 2002; LaPadula, 2003; Moore, 2003; Roberts, 2004; Tait, 2004; Qakisa-Makoe, 2005; Wheeler and Amiotte, 2005). The literature is not specifically on learning support but it is on learner support services. Issues of interest for my study covered in the literature from developed and developing contexts that relate to perceptions and experiences of learning support include culture, drop-outs, retention, persistence, success, social experiences, interaction and learner satisfaction.

3.7.1 Learning support experiences in developed contexts

Developed countries like the United Kingdom, the United States of America, Australia and New Zealand over the years, offered secondary education through correspondence education. Correspondence education is a form of distance education without learning support (Perraton and Lentell, 2004). . Correspondence study materials are not interactive neither does this mode of learning embrace learning support. The advent of information and communication technologies has transformed the delivery of open and distance learning, in particular with regard to learning support provision. One advantage that information and communication technologies have brought is the narrowing of the communication gap. This has the potential to reduce the psychological distance that characterises distance learning. Efficient deployment of technology, also leads to effective learning support provision, as is the case with the Open University of the United Kingdom and other similar institutions in the developed world (Perraton and Lentell, 2004).

The provision of learning support via communication technologies has been successful in many parts of the world. One online survey by LaPadula (2003) involved sixty-three women and twenty-nine men. The aim of the study was to determine how satisfied the students were with the online student services and their suggestions about the types of services they needed in future. The results were that the majority of the online students were satisfied with the services they were receiving, as it was consistently available. This, however, is not an indication that learners in underdeveloped contexts without access to information and communication technologies would respond positively to similar items on student services, as the two contexts are so different. LaPadula (2003) study is similar to Wheeler (2002) in terms of designing a research tool for assessing distance learners' perspectives and experiences on learning support. The ideas are relevant for this study in terms of the questionnaire tool described in Chapter 4 of this study.

Townsend and Wheeler's (2004) study of online distance learning in the United Kingdom, focuses on teaching assistants' experiences of learning support. The study serves to confirm that Information and Communication Technology (ICT) is merely a highly effective tool in delivering and developing learning. It reports that students

responded positively to the opportunity to manage their own learning, and they acknowledged the development of their own study skills, in presenting, analysing, reflecting and self-evaluation. The study concluded that it was the content of the course that had been important in developing the skills, rather than the method of its delivery. Their sample of thirteen students may be too small for purposes of generalisation yet the study might suggest that availability of ICT infrastructure in underdeveloped contexts and learning support may increase learner achievement rates.

Low through-put is a key issue in distance learning and has been discussed in studies conducted by Schloser, Anderson and Simonson (1994). One such study relates to a Canadian secondary school distance education programme. The study compared a group that completed a programme to a dropout group and found out that the group that completed the programme tended to have post-secondary education goals whilst the drop-out group tended to have secondary education goals. The group that completed the programme was also overwhelmingly positive in their attitude towards their tutors whilst the drop-out group held positive views. Another study was on dropping out. It found that students dropped out due to several factors such as lack of time, lack of prerequisite knowledge of the course content, lack of support from peers and family, stress, poor grades, procrastination, need for face-to-face interaction, pride, poor tutor feedback, weak goal commitment and fear of failure. The reviews do not indicate the kind of support given to students or the social experiences students had in order to avoid dropping out. The reviews provide opportunity for comparison particularly as the goals and the contributing factors for dropping out are similar to those found in my context.

The provision of an opportunity for distance learners to have social experiences appears to contribute to reducing dropping out and can possibly promote retention, persistence and success. These are issues of major concern in distance learning. LaPadula, (2003:123) has this to say:

> *Institutions' experience and research demonstrate that students' retention, completion, and satisfaction depend heavily on achieving a sense of connection with the institution.*

A sense of belonging or connection to an institution is important. The importance of feeling that a learner is a member of an academic community has also been emphasised by other authors (Tinto 1993; Ashby 2004). The perceived human connection is more

than the institution. Kember et al. (2001) studied 53 Hong Kong students' perceptions of belonging. The study revealed that students' perceptions were strongest in respect of peers and teaching staff and much weaker in respect of departments and the university. This may mean that, when students feel connected to other students and tutors, they are likely to continue studying at a distance. Retention promoted through such a sense of connection may mean that students value interaction with tutors. Academic interaction may lead to successful completion of studies.

Distance learning, requires interaction between learners and distance learning facilitators. This interaction enhances academic performance. Sherry (1996) reviews literature on issues in distance learning and explains interactivity as an aspect of learning support. She maintains that the distance education system now involves a high degree of interactivity between teacher and student, even in rural and isolated communities separated by perhaps thousands of miles (ibid). Sherry appears to be talking about a context that has information and communication connectivity. In that case, I concur with Sherry, but the context of my study needs to undergo technological transformation in order to be capable of fostering such interactivity. In the meantime, before such technological transformation occurs, appropriate strategies for remote distance learners within their marginalised context need to be found in order to promote success, retention and persistence.

Studies (Cookson, 1989; Gibson, 1990; Wright, 1991; Sweet, 1993) in distance learning indicate that learner support in particular, learner–institution contact have been empirically verified and that regular learner contact with support staff has a positive effect on academic performance, persistence and completion rates. Factors, which correlate positively with course completion rates, include the use of course assignments, early submission of the first one, short turn-around times for assignment feedback and the pacing of progress. They also include supplementary audiotapes or telephone tutorials, the quality of learning materials and reminders from tutors to complete work. When it came to reasons for withdrawing from programmes, personal circumstances and lack of time were the most common reasons given. Studies by Cain, Marrara, Pitre and Armour, (2003) reached similar findings when it came to institutional contact satisfaction level and course completion rates.

Cain et al (2003) study used a control group that received neutral messages conveying general information and an experimental group that received more personal, caring messages. It was found that the group that was mentored had higher levels of satisfaction about being a member of the academic programme. Cain et al. (ibid) further indicate that another study that investigated the academic effect of online peer tutoring had results that showed that those students who received weekly peer tutoring had higher course completion rates than those who did not. Whilst these studies offer valuable experiences and lessons, they do not explain the effects of learning support in a context that lacks digital technology, although they do demonstrate that learning support does lead to improved student achievement. Robinson (2004) argues that replication studies in the area of learner support are few and frequently produce conflicting findings or fail to confirm the earlier ones. Her argument reinforces a study by Taylor et al. (1993) on student persistence and turn-around time in five institutions in four countries, which failed to produce results that had potential for generalisation and drew attention to the considerable differences between institutions and their practices, and the difficulties these create for achieving generalisations.

Other than the contextual challenge, policy meant to instil a culture of learner support practices is not being implemented in some institutions. Levy and Bealieu's (2003) study documents areas of open and distance learning in California (United States of America) that are planned and implemented in community colleges. They discovered that numerous institutions of higher learning were yet to develop strategic plans for their online distance learning programmes. For those that had plans, many key components, such as student services or learning support services, training and support were not included in the plans. Out of 108 community colleges offering online distance learning, only twenty-three colleges had plans for student services. On-campus students had full access to student services and less than half the online students had access to limited student services. The implication of this study is that student services continue to be an area that needs more attention in the planning process. Another issue for educators to bear in mind as they plan for learning support intervention is the psychological distance that learners experience.

Psychological distance is a major concern in distance education. The subject of a study by Wheeler (2002) involved understanding the nature of psychological distance in distance

learning. It was carried out with a sample of thirty respondents and explored the nature of psychological distance in distance learning in which some vital student issues were brought to light. The study revealed that distance learners who use a surface approach that is, studying with the aim of merely reproducing knowledge perceive a greater need for direction, whereas those who practise a deeper, meaning-centred approach require less direction and support from their instructors. The results also confirmed that remote students expected a great deal more from their instructors than their local peers in terms of social and practical support, probably due to the psychological distance they experienced. They expected less in terms of academic support, which may indicate that they perceive having fewer needs because of their independent learner status. Despite the fact that Wheeler's (2002) study was a pilot study, it exposes critical issues that are relevant to the context of my research participants, particularly the issue of psychological distance and learning approaches. It offers key variables that should be further explored in other contexts although the sample he used was small and the conclusions not sufficiently exhaustive. On further reflection on Wheeler's study, I assumed that remote learners in the context of my study would expect less learning support, but more affective support. I therefore tend to agree with Wheeler, (2002) when he proposes that distance learners who experience more remote transactional distance will tend to demand more social and practical support from their instructors. A question that arises from Wheeler's proposition is 'What happens if distance learners do not get the support they expect?' The findings of this study are critical in answering the question. Other than the psychological distance as a major concern in distance education, the issue of culture presents a challenge that I assume can be addressed through learning support strategies. The participants of this study described in Chapter 2 have a unique culture which learning support needs to take into account, hence the need to establish perceptions and experiences of participants of this study are critical for the delivery of appropriate learning support marginalised and isolated learners.

A study by Venter (2003) on the role of culture and coping with isolation in Europe and Asia indicates the extent to which learning is learner-centred or teacher-centred. Venter (ibid) argues that particular cultures exhibit learning preferences more suited to distance learning than other cultures. In the Asia Pacific sample, the findings were that structure, timetabling and reassurance were important so that individuals could assess their own progress and seemed to be significant. In the European sample, the emphasis appeared to be on knowing that one was cared for, that people were there to support one's particular needs and knowing that others

shared similar circumstances and could be contacted for informal support. Both groups of learners wanted academic guidance, feedback, and reassurance that they were on the right track. Few would dispute that this is a crucial part of any successful learning experience. It would be beneficial for educators to take into consideration the cultural values and past experience of the learners in the design and implementation of learning support interventions (Venter 2003). The implication of the above findings is that distance educators need to ensure that they consider the various factors, including cultural values, that impact upon preferences for particular learning strategies, to be able to support learners in adapting to, and developing self-direction for successful distance learning. In the light of the distance learning challenges just discussed, I now discuss empirical studies in developing contexts that share some similarities with my study.

3.7.2 Learning support experiences in developing contexts

In a developing context, distance education dates back to colonial days and learning support has still not been adequately addressed (Perraton and Lentell, 2004). Learning support experiences in developing contexts are varied and more experiences have been documented in higher education than at secondary school level (Venter, 2000; Pretorius, 2000; Sonnekus et al, 2006). The learning support experiences include contact, mostly face-to-face tutorials and mediated support provided in the learning materials, assignment feedback and learning strategies.

An empirical study on self-directed learning, adult learners' perceptions and their study materials by Greyling, Geyser and Fourie (2002) in South Africa reveals that learners perceived themselves as learners who took responsibility for their own learning, but they also expressed their dependence on other learners, their reliance on the lecturer to explain to them exactly what was expected of them all the time and further more that achieving good grades was more important than really understanding something. The participants in the study were in a postgraduate programme. The finding raises the question: How then would remote distance learners from marginalised communities in underdeveloped pockets of Botswana perceive and experience learning support when distance learners in a postgraduate programme have such reliance on lecturers and other learners? This provides an interesting comparison.

A similar study was carried out at the Indira Gandhi National Open University (IGNOU) by Gaba and Dash (2004). Gaba and Dash (2004) study addresses key learning support issues relevant to my study. The study found that 64% of distance learners declared that learning support in the form of learning materials had few mistakes, resource persons were helpful and 88% were satisfied with assignment feedback and indicated that it was helpful in their learning and term-end examinations. The same study found that attendance during the face-to-face contact was low because of the great distances that distance learners had to travel to centres where face-to-face contact sessions were being conducted and that some distance learners were not aware of the contact session schedules. This study provides insights into the operation of distance learning support in the context of developing countries and the need for distance learners to have learning strategies to use in order to cope with their learning activities in the event of inadequate contact learning support. A study of the successful distance learners of the Post Graduate Diploma in Distance Education of IGNOU by Biswas (2001) reveals that distance learners from disadvantaged backgrounds have inadequate learning skills for coping with the courses they select. This is more likely to be the case for distance learners in underdeveloped pockets of Botswana who are at secondary school level and learn from materials written in English, a language of instruction that they hardly speak at home. Language is critical in the education of a person because it is through language that one starts the process of understanding learning, thinking and expressing, hence a good command of the language of instruction is an important component of successful education in any community (Paliwal, 2004).

Whilst empirical literature addressing issues of learning support in a developing contexts tends to concentrate on higher education, I find the Malaysian experience in open and distance learning, documented by Dzakiria (2005), of more interest to my study. It is one empirical study that tells a story of isolation, frustration and alienation as demonstrated by the students' voices. The study focused on the role of learning support in distance learning at the Universiti Utara in Malaysia although its assessment of learning support is limited to learner satisfaction and it does not allude to academic performance or throughput rates. The strength of this study lies in its qualitative approach that effectively used the interview as a primary instrument supplemented by students' journals and photographs. I use a similar approach in this study.

The Malaysian context comprised a complex mix of cultures, languages and rural factors almost identical to the context of my study. The findings of Dzakiria (2005) suggest that hindrances to

the learning process are infrequent face-to-face meetings between distance teachers, distance learners, and learners' dependency on their teachers. These two major factors led to learners' frustrations and impeded the learning process. Some distance learners were found to be unable to cope with distance learning. They found that the new way of learning and the expectations that went with it were too great to handle. Some distance learners expected distance teachers to help them come to terms with the new way of learning. Going through the findings of Dzakiria article (2005), one hears the learners' voices that are desperate for attention, for a human face to provide immediate response to their problems and to guide their learning. One learner is reported to have said the following (verbatim):

> *I am lost most of the time. I do not really know if I have participated well, or if my contribution to the course is sufficient in the eyes of my instructors. You asked about technology and the use of it in my learning and the teaching of the instructors. That is the problem; technology lacks a human or personal touch. I just do not feel the satisfaction of being in the class physically and able to have eye contact with the instructor or to raise hands, ask a question and getting prompt response. The minute you post questions through e-mail, and do not get a reply in 5 minutes, 15 minutes, an hour or more, you feel frustrated* (Dzakiria, 2005:100)

The main challenge for open and distance-learning providers is to ensure that an effective learner support system exists to help learners make the paradigm shift from traditional learning to distance learning to stop them from expecting a teacher-centred delivery mode in distance education. Another striking finding revealed by Dzakiria (2005) was how cultural orientation may inhibit learning. Malaysian learners are reported to be more reserved and sometimes passive participants in classroom discussions and, as such, they sometimes felt at a loss when clear instructions were not given for work or assignments. Hence, they blamed their distance facilitators for a lack of knowledge or commitment as revealed in some of the students' narratives. I now turn my attention to my context.

3.8 The nature of learning support at Botswana College of Distance and Open Learning (BOCODOL)

The limited spaces in the 28 senior secondary schools discussed in Chapter 2, and the formal education system that is not flexible enough to meet the needs and expectations of the Basarwa and Bakgalagadi are a challenge. Flexible modes of delivering education in other parts of Africa include open and distance learning and mobile schools for nomadic pastoralists in Djibouti, Eritrea, Ethiopia, Kenya, Tanzania and Uganda

(Carr-Hill and Peart, 2005). In the case of Botswana, open and distance learning is the mode that has been deployed to address the Basarwa and Bakgalagadi's challenges of accessing education. The success of open and distance learning depends on the effectiveness of learner support provided to learners. Botswana College of Distance and Open Learning is currently the only provider of secondary education through the distance mode and has a decentralised learner support in place.

BOCODOL's conception of open and distance learning is premised on promotion of open access to its programmes and flexibility in learning and programme completion (BOCODOL Learner support policy, 2001). What this implies is that there are no restrictions in terms of gender, age or location. All prospective learners who have completed a junior certificate level course or have equivalent prior learning can enroll for the Botswana General Certificate of Secondary (BGCSE). The BGCSE is a two year programme, however, because of BOCODOL's open access policy, learners are allowed to complete the programme within four years. They are also free to choose six subjects from the eleven that are currently available and to write examinations whenever they are ready. BOCODOL provides learning support sessions through community study centres (CSCs) and learning satellite centres (LSCs) but attendance is not compulsory.

In order to understand the nature of learning support provided by the Botswana College of Distance and Open Learning (BOCODOL), I use historical evidence from various college reports and documents like the 1994 Revised National Policy on Education (RNPE), Botswana's Vision 2016 document, and the BOCODOL Act No. 20 of 1998. The development of distance education with a deliberate move towards the provision of a decentralised learning support system in Botswana is recent. The 1994 Revised National Policy of Education (RNPE) recommended the establishment of the Botswana College of Distance and Open Learning (BOCODOL). The BOCODOL Act No. 20 of 1998 established the College.

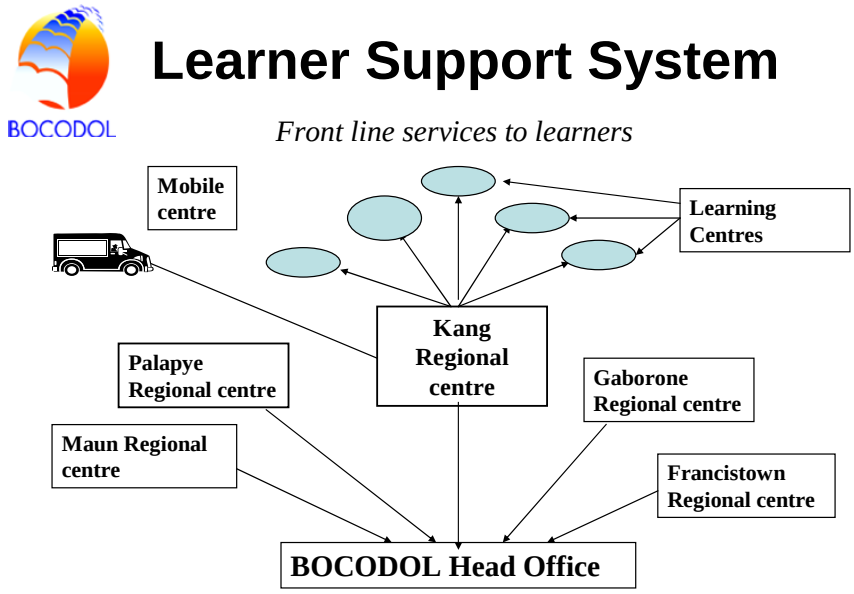
The RNPE was a product of countrywide consultation with the citizens of Botswana made by a Presidential Commission in 1993. During the consultations, the public called upon the government to improve access to basic education through distance education. The Presidential Commission recommended the establishment of BOCODOL as a response to the views expressed during the countrywide consultation. The BOCODOL Act No. 20 of 1998 stipulates

that the College Board shall authorize the creation of regional centres in appropriate locations to provide support services to learners and provide the means to establish positive relations between local communities and the College. It also states that a regional centre shall be run by a regional manager whose duty it is to oversee the establishment, resourcing, support, monitoring and co-ordination of community study centres or other learner support centres. Other duties of the regional manager indicated in the Act are the recruitment and training of part-time staff, establishing mobile centres where feasible and supervising the rendering of support to learners in remote areas where such a need is identified. The Act further outlines examples of learner support services that a regional centre should give, namely, amongst others, marking learner assignments, providing face to face tutorials, providing counselling support to learners, handling examination matters and carrying out any other activity that the College may from time to time determine (Botswana Government, 1998).

Two pilot regional centres were initially established in 2001, one at Gaborone (the capital, an urban centre) and the other at Kang (a very rural area). The pilot ran for a year and by January 2002, five regional centres across the country at strategic locations had been established, namely Gaborone, Francistown, Kang, Maun and Palapye (BOCODOL Annual Report, 2002/3). Four of the regional centres are located in urban centres whilst Kang is in the heart of the Kalahari Desert. This latter centre serves the population in the western part of Botswana. The establishment of the five regional centres was preceded by a number of consultancies that included a Learner Support Consultancy that focused on learner needs and profile. The Learner Support Consultancy designed a decentralised learner support system. This is the preferred system and is currently operational throughout the country. It uses the five strategically located regional centres to reach out to youths and adults who would otherwise not have access to secondary education. **Figure 3.1** shows the decentralized learner support system. It is premised on the open learning philosophy and on a learner-centred approach (BOCODOL Tutor Guide, 2002).

The development of a decentralised learner support system was also guided by a BOCODOL Learner Charter. The charter articulates what BOCODOL, through its Learner Support Division, commits to doing in terms of supporting distance learners. The needs of the youths and adults also dictated the kind of learner support system that the College was to develop.

Figure 3.1 Decentralised learner support system



Source BOCODOL, 2001

A decentralised learner support system meant that communities would be involved in the college initiatives and collaborate in providing resources necessary for supporting distance learners even in very rural remote areas. The decentralised learner support model was piloted in two places, Gaborone and Kang in 2001 before the other regional centres were established, (BOCODOL Annual Report, 2002/3).

In 2003 the College (Lelliott, 2002; BOCODOL Annual Report, 2002/3) commissioned a consultancy specifically focusing on how to support remote learners. The consultancy recommended a remote learner strategy. The remote learner strategy led to the establishment of learning satellite centres across the country at some primary schools in villages, which have no secondary schools. Once the decentralised learner support model and the remote learner strategy were adopted by the College in 2001 and 2003 respectively, the task of implementing the model and the remote learner strategy commenced.

The learner support division at BOCODOL, headed by a Director, is responsible for implementing the decentralised support system. The learner support division consists of five regional centres, each headed by a regional manager, with at least ten supporting staff

members. Each regional centre establishes community study centres (CSCs) and learning satellite centres (LSCs). CSCs are established at secondary schools whenever fifty or more learners have been enrolled. A memorandum of understanding is signed between the host secondary school and BOCODOL on the shared use of facilities and other resources. Each CSC is run by a part-time supervisor. Face-to-face tutoring at a CSC is carried out by part-time tutors who are subject specialists recruited by the regional centre (Tau &Gatsha, 2009).

The activities that are carried out at a CSC include pre-enrolment and enrolment of learners, tutorial sessions, marking of assignments and group and individual study sessions (BOCODOL Tutor Guide, 2002, Tau & Gatsha 2009). In each CSC, there is a Learner Management Committee (LMC). Learner leaders from the LMCs are expected to help the CSC supervisor and tutors in running the community study centre and taking care of the facilities. A code of conduct for learners at each centre is made available. **Figure 3.2** shows the activities carried out at the CSC.

Figure 3.2 Community study centre's activities

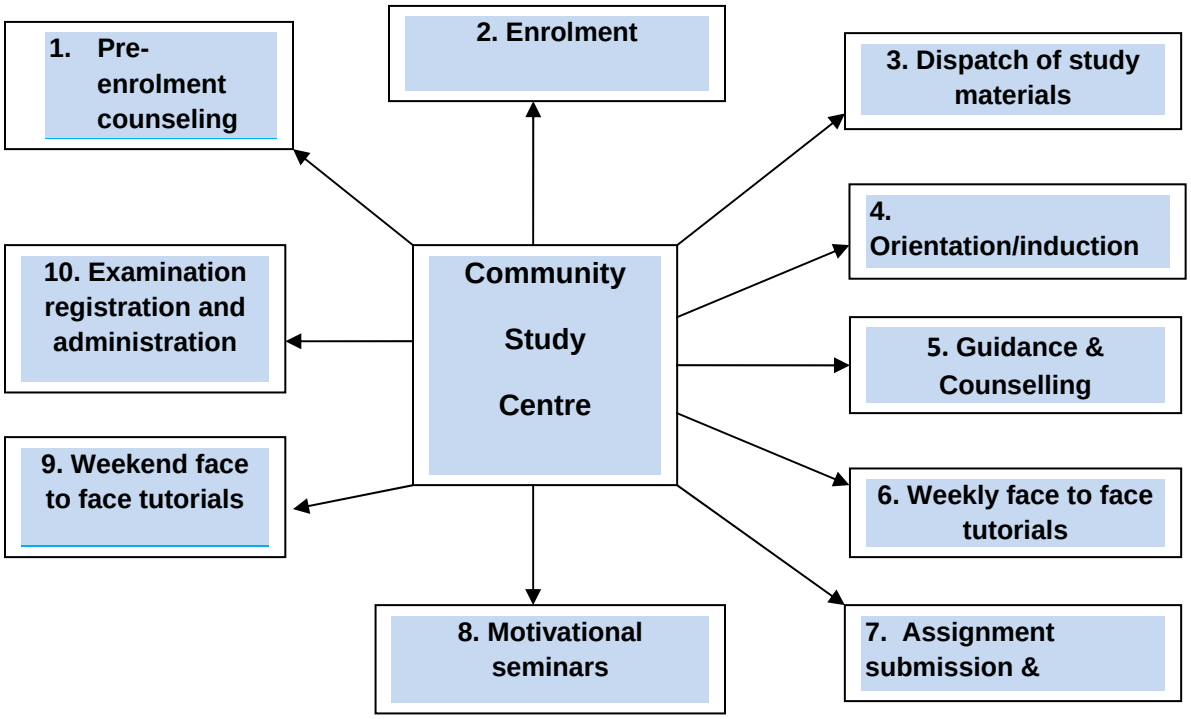
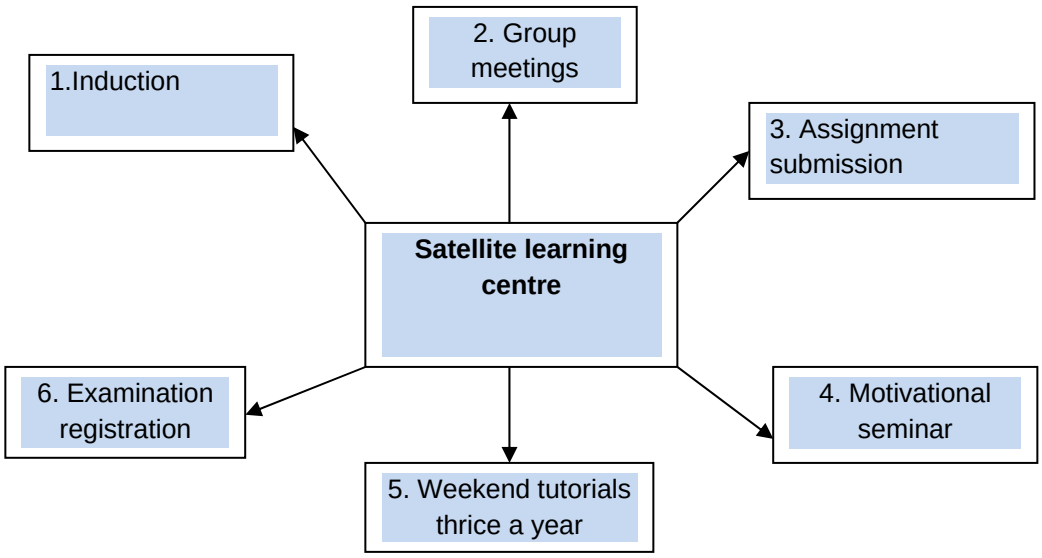


Figure 3.3 shows the activities that take place at a learning satellite centre (BOCODOL Tutor Guide, 2002).

Figure 3.3 Satellite learning centre's activities



Learning satellite centres are also established at primary schools in settlements or villages that have no secondary schools. Learning satellite centres in the Kang region where this study was conducted specifically service distance learners from marginalised communities in very remote settlements. In order to have a viable learning satellite centre BOCODOL expects at least 10 learners to have been enrolled. In a learning satellite centre, a memorandum of understanding is signed between the host primary school or community agency and BOCODOL on the shared use of facilities and other resources. A learning satellite centre is run by a part-time co-ordinator. The part-time co-ordinators are responsible for organising and supervising learners at the satellite centres. They also advise learners on group formation and discussion techniques, maintain learner records, receive assignments and pass them to the Remote Learner Advisor (RLA) who is a College official. The co-ordinators also receive assignments from the RLA and pass them on to learners (Tau &Gatsha, 2009).

The activities carried out at the learning satellite centres focus mainly on learning support but do also address issues of personal support. The focus of this study is on how remote distance learners have perceived and experienced learning support at both CSCs and LSCs. These

perceptions and experiences are assessed through perceived satisfaction with the types of learning support; stories of distance learners' experiences and other anecdotal evidence; percentages (or grades) achieved in assignments and examinations and course completion.

3.9 Conclusion

In this chapter, I described the provision of education to marginalised communities, open and distance learning concept and then discussed learner support and learning support in distance learning. I identified and explained three distance learning theories applicable to this study. I also discussed factors that influence perceptions and experiences in distance learning and examined learning support experiences in developed and developing contexts. I further discussed the nature of learner support offered by the service provider at the sites under investigation. In the next chapter, I present, explain and justify the research design and methodology of this study in the light of the research questions and rationale for this study stated in Chapter 1, the uniqueness of the participants as described in Chapter 2 and the related literature as reviewed in this chapter.

Chapter 4 Research design and methodology

4.1 Introduction

In this chapter, I provide an explanation of the research process and justify the methods I have selected to explore the perceptions and experiences of remote distance learners from marginalised communities in Botswana. I explain the major paradigms in research that is; the positivist and interpretivist paradigms. I justify my choice of using the interpretivist paradigm and mixed method approach by indicating my need to gain an in-depth understanding of distance learners' perceptions and experiences of learning support. I used quantitative data collection methods where appropriate as a way of complementing my qualitative methods. My aim was to allow readers to arrive at a reasonable judgment in the event of transferability to similar contexts hence the thick description provided in Chapter 2 of this study and detailed descriptions and justifications of my data collection methods, tools, procedures, my role as the researcher and the analysis. This chapter therefore facilitates replication and confirmability. I explain ethical considerations and steps I undertook to ensure trustworthiness of this study. I also indicate steps I took to minimise the constraints of this study. The research design and process described in this chapter made it possible to collect data for answering the following research question:

> *How do distance learners from marginalised communities perceive and experience learning support?*

I explain the traditional research orientations in the next section in order to situate the research process I undertook.

4.2 Research paradigms

Two traditional orientations common to educational research are the positivist paradigm and the interpretivist paradigm. I chose the interpretivist paradigm because the research question focuses on distance learners' perceptions and experiences of learning support. An interpretivist paradigm involves taking people's experiences as the essence of what is real for them in their natural setting (LeCompte and Preissle, 1993; Creswell, 1994, Leedy and Ormrod, 2001). It is thus necessary to interact with them and to listen carefully to their voices in order to gain an in-depth understanding of their perceptions and lived experiences. An interpretive paradigm sees people as primary data sources, explores perceptions, attitudes, opinions, behaviour and

experiences using methods such as semi-structured interviews or focus groups, hence fewer people take part in the research compared to the positivist approach (Patton, 1990; Jacobs and Razavieh, 1996; Struwig and Stead 2001; Dawson, 2002; Mason, 2002; Chilisa and Preece, 2005; Creswell 2005). It recognises that reality can be known in an imperfect way because of the researcher's human limitations, hence the researcher can discover reality within a certain realm of probability (Creswell, 2005). It rejects knowledge being presented as a single objective reality as is the case in the positivist orientation, and sees knowledge creation as subjective or multiple perspectives of realities (Patton, 1990; Jacobs and Razavieh, 1996; Struwig and Stead 2001; Chilisa and Preece, 2005; Creswell, 2005). The interpretivists believe that perfect objectivity cannot be achieved, but with rigour in research methods, it is possible (Chilisa and Preece, 2005). They recognize that theories, hypotheses and background knowledge held by the researcher can strongly influence the research process or what is being observed or studied (LeCompte and Preissle, 1993; Creswell, 1994; Leedy and Ormrod, 2001; Chilisa and Preece, 2005). This may have been the case in this study given my background as a distance learner and practitioner as well as the influence of the distance education theories, particularly that of Holmberg (2003) that I described in Chapter 3.

I did not choose the positivist paradigm as a quantitative stance would not answer the research question of this study. Firstly, the positivist paradigm assumes that the nature of reality is single, tangible and relatively constant across time and in different settings. Secondly, it sees the researcher's role as that of discovering objective reality independent of the researcher's interest. Thirdly, it states that all inquiries should be value free in order to achieve objectivity and neutrality during the inquiry (Jacobs and Razavieh, 1996; Struwig and Stead 2001; Creswell, 2005, Chilisa and Preece, 2005). The positivist paradigm assumes that social objects can be studied as facts and the relationship between these facts can be established as scientific laws (Dawson, 2002; Chilisa and Preece, 2005; and Creswell 2005). This paradigm begins with a theory and is biased towards statistical responses. The positivist researcher considers it a form of conclusive research in that it involves large representative samples and tests a hypothesis as its primary role, seeking to discover principles that govern the universe and to predict behaviours and situations (Chilisa and Preece, 2005, Dawson, 2002, Struwig and Stead 2001, Jacobs and Razavieh, 1996). This study seeks an in-depth understanding of distance learners' perceptions and experiences in their context and deals with realities, which can only be fully explored by using an interpretivist paradigm. Both research orientations concur that

reality exists but differ when it comes to what each emphasises. Positivist research emphasises objectivity, and interpretive research focuses on subjectivity or multiple realities as indicated in **Table 4.1** (Gillham, 2005). Both research orientations permit case study research methods (Gillham, 2005). A case study is an intensive investigation concerned with pertinent aspects of a particular unit (distance learners from marginalised communities, the focus of this research) in a given situation (Botswana, in my study) (IGNOU, 2009).

Table 4.1 Difference in foci between positivist and interpretivist paradigms

Positivist Paradigm	Interpretive Paradigm
Experimental methods	Non-experimental methods
Deductive theorising i.e. hypothesis testing	Inductive theorising i.e. hypothesis seeking
Objectivity	Subjectivity
Detachment	Participation
Quantitative data to determine significance of results	Qualitative data to give meaning to results
Significance or otherwise of outcomes	Meaning of processes that lead to outcomes
Demonstration of changes that have occurred	Meaning of changes that have occurred
Data for generalisation of data sought	Generalisation regarded as suspect: context; specificity of data is recognised
Isolating the elements of behaviour for investigation	The importance of context in shaping behaviour
Constructing evidence	Searching for evidence

I used mixed methods to collect data although the qualitative techniques were dominant. The use of mixed methods is acceptable for instance, Leedy and Ormrod (2005) indicate that researchers often combine approaches in what is often called mixed-methods design. Qualitative and quantitative techniques have complementary strengths and they can be used sequentially or simultaneously (Neuman (2000). The mixing of methods also provides the breadth and depth necessary in understanding and interpreting learner perceptions and experiences and helps in the triangulation when data are merged in order to use the results to understand the research problem (Creswell, 2005).

I find a case study an ideal research strategy for this study because it offers the greatest promise of making a significant contribution to the knowledge base and practice of learning support in a context that is an underdeveloped and it allows for the use of varied strategies and data sources (Merriam, 1988; Descombe, 1998). A case study seeks a range of different kinds

of evidence out there in the case setting, which has to be abstracted and collated to get the best possible answers to the research questions (Gillham, 2005). It is an empirical inquiry that investigates a contemporary phenomenon within a real life context using multiple sources (Chilisa and Preece, 2005; Gillham, 2005). In a case study a particular individual or one group of students, programme or event is studied in-depth for a defined period of time (LeCompte and Preissle, 1993; McMillan and Schumacher, 1993; Creswell, 1994; Leedy and Ormrod, 2001; Yin, 2003.) I therefore used a case study strategy to find answers to the research question by following a research process which I outline in the next section.

4.3 Research process

In 2005 when I registered for my doctoral studies, (see *Addendum 3*) I decided to investigate how distance learners from marginalised communities perceived and experienced learning support that was provided to them by the BOCODOL Kang Regional Centre. After I successfully defended my research proposal in August 2006 and had my ethical application clearance approval on 1 December 2006, I then conducted a pilot study.

4.3.1 Pilot study

The purpose of the pilot study was to check the clarity of the questionnaire and semi-structured interview schedule of items that I had developed. I conducted the pilot study from the 3rd to 31st December 2006 using twenty-one participants who had at least one year's experience in distance education. I considered them well informed for the purposes of the pilot study.

I administered the questionnaire and semi-structured interview items to these distance learner participants and part-time tutors whilst they were at Kang for the end of year examinations. I also met with co-ordinators in their offices in Maun and Gaborone. I selected participants purposively as I desired to use only those who had the necessary experience to share. All the distance learners who were participants came from the settlements within the Kang region. I selected participant co-ordinators of learning support from outside the Kang region to avoid using those who were part of this study. Two part-time tutors and two co-ordinators were amongst the participants I chose for the pilot study. The research tools that I used in the pilot were peer reviewed.

Two colleagues at the college and my supervisor critiqued the questionnaire that I developed for this research before I administered them. There was a 100% return rate for the questionnaire. The items appeared to be fine except for two questions in the questionnaire that needed minor amendments. One of the items attracted a response in which participants struggled to come up with a definition of learning support and gave the impression they were looking for a dictionary meaning instead of providing a meaning from their own experience. The other item required that I separate issues from the item statement so that participants could respond to each issue without leaving any out. I therefore had to separate the terms I had combined before, namely, persistence, retention, completion rates and academic achievement. The amended questionnaire was shared with the supervisor and the statistician and, on their advice; it was refined technically and given a professional appearance.

Whilst the purpose of the pilot study was to check the clarity of the questionnaire and semi-structured interview items, it also raised a few pointers. It gave a rough indication of the underlying reasons for low academic performance and throughput and it highlighted the need for more rigorous data collection methods. I therefore decided to use multiple data sources and mixed data collection strategies as elaborated on in section 4.4.2 to triangulate and ensure trustworthiness. I was personally involved in carrying out the interviews. During the month of January 2007, I posted 20 questionnaires with a self-addressed and stamped envelope and letters requesting consent to participants. Sixteen were completed and returned with signed consent letters. I personally administered 24 questionnaires during my visits to the research sites in February 2007. Altogether, 40 participants completed the questionnaire. I conducted interviews with part-time tutors during March 2007. The interviews lasted between 25 and 30 minutes. I studied the interview notes I made with part-time tutors before conducting semi-structured interviews with distance learner participants during April and May 2007. I also kept a journal in which I recorded my observations, biases and reflections whilst in the field.

4.3.2 Participants

In order to answer the research question, I needed participants who were representative of the marginalised Basarwa and the Bakgalagadi communities, resided in remote settlements, and had been studying for the BGCSE programme for at least a year. The selection of participants was thus purposive. I chose distance learners who had at least over a year studying at a distance as these were likely to be ‘information rich’ in terms of

experiences (LeCompte and Preissle 1993; Creswell, 1998; Leedy and Ormrod, 2001; Henning et al., 2004; Creswell, 2005; Blanche et al., 2006). I invited the distance learners I had identified as suitable participants to participate in the study and followed all the required ethical procedures. Forty distance learners participated in this study, 29 females and 10 males with one not indicating personal information on gender. The age range of the participants was between 18 and 45. The participants spoke either Sesarwa or Sekgalagadi and were selected from four research sites. I had planned for ten participants from each site but two sites had fewer participants as those who matched the criteria had either migrated to bigger villages or moved to farms to seek employment. The other participants were eight part-time tutors who conducted tutorial sessions and marked assignments. Altogether, there were 48 participants. This number was large enough to generate adequate data given the fact that I spent long periods of in-site investigation.

4.3.3 Research sites

The four research sites that I chose were located in small and remote settlements away from BOCODOL headquarters in Gaborone. The sites were Inalegolo (476 km[4]), New Xade (910 km), D'Kar (840 km) and Kang, (420 km). All the sites are in the western part of Botswana as shown in Chapter 2 **Figure 2.1**. Of the four research sites, only Kang has the status of community study centre and the other three are satellite-learning centres with Inalegolo and New Xade operating from primary schools whilst D'Kar operates from the premises of a non-governmental organisation (NGO). The activities of community study centres and satellite-learning centres are indicated in Chapter 3 (3.6) of this study. **Table 4.2** summarises the state of the research sites at the time I conducted the study. The administrative link for all the four learning centres was at Kang Regional Centre. Only Kang centre had a library nearby and weekly tutorial sessions. The other centres were not easily accessible except by 4x4 vehicle and had no weekly tutorial sessions except weekend tutorial sessions that were held only thrice a year. The distances of the learning centres from the capital city, Gaborone range between 420km and 910km. A description of each research sites is presented after Table 4.2.

[4] It is the distance from BOCODOL Headquarters, at Gaborone the capital city of Botswana.

Table 4.2 Research sites (2007)

	Kang	Inalegolo	New Xade	D'Kar
Distance from Gaborone	420km	476	910	840km
Administrative link	Kang Regional Centre	Kang Regional Centre	Kang Regional Centre	Kang Regional Centre
Tutorials	4 times weekly	Thrice yearly	Thrice yearly	Thrice yearly
Tutors	Ten	Nil	Nil	Nil
Library	One library	Nil	Nil	Nil
Telecommunication	Available	Nil	Nil	Nil
Accessibility of site	easy	Difficult only by 4x4 vehicle	Difficult only by 4x4 vehicle	Moderate

Kang Learning Centre

Kang Learning centre is located at the BOCODOL Kang Regional Centre. It provides learning support to all the sites using part-time tutors who are university graduates. Part-time tutors are recruited from the two secondary schools in the village. Part-time tutors facilitate the face-to face tutorials four times a week and mark learner assignments including from distance learners in remote settlements such as Inalegolo.

Inalegolo Learning Centre

The Inalegolo Learning Centre is 76 km away from the Kang learning centre and 476 km from Gaborone. It is not easy to reach. It is linked to Kang learning centre by a very difficult sandy road. One can only access Inalegolo in a 4X 4 wheel drive vehicle. Unlike Kang, it has no weekly tutorial sessions except three weekend tutorials a year conducted by tutors who are university graduates. Tutors are transported from Kang to Inalegolo on these occasions since public transport between Inalegolo and Kang is not available. There is neither a library nor telephone communication system in place at Inalegolo settlement.

New Xade Learning Centre

The New Xade Learning Centre is 910 km from Gaborone and 381 km from the Kang Learning Centre and is linked to Gantsi Township, 110km to the southwest, by a dust road and it has no telecommunication network or library. It has no weekly tutorial

sessions but weekend tutorials are offered there thrice a year by tutors who are diploma holders and are transported by the Regional Centre from Ghanzi Township.

D'Kar Learning Centre

The D'Kar Learning Centre is 840 km from Gaborone and lies 311 km from Kang where there is a regional office and 40 km from Gantsi Township and is located in a church farm. It has neither public transport nor a library. There are no weekly tutorials but weekend tutorials are facilitated thrice a year by tutors who are diploma holders.
In the next section, I explain my role as the researcher for the reader to appreciate steps taken to avoid being bias in my interpretation of the findings.

4.3.4 Role as the researcher

I conducted my research as a well-informed insider and experienced distance learner and practitioner. In preparation for my PhD study, I did my undergraduate and post-graduate degrees through distance learning with the University of South Africa (UNISA) and the University of Botswana (UB). I carried out the research as a doctoral student independently. However, I was in constant touch with my supervisor. I consulted her through regular briefings during my visits to Pretoria, by telephone, and text messaging (sms) and e-mails. She also supported me through a visit and I took her to all the research sites so that she could appreciate the context. I also had assistance from a University of Pretoria statistician when it came to refining my research tools before administering them. I was also responsible for fulfilling the ethical requirements for clearance by the Faculty of Education Ethics committee (Addendum 5). My role as a researcher in this study was that of being more of a human videotape recorder (LeCompte and Preissle, 1993) that is, I was the main research tool for data collection in this study. I observed, interviewed, recorded, analysed and interpreted as faithfully as possible what participants said and did as I interacted with them during the data gathering phase. Having explained my role as a researcher and the benefits both parties would derive, I ensured that I addressed ethical issues more comfortably and directly.

Being known as a researcher also enabled me to request access to the selected participants at the learning centres and to negotiate the collection of data by interviewing

participants and recording data during and after tutorial sessions. The fact that I was accepted as a participant observer also enabled me to seek feedback from participants on my data interpretation. Despite advantages of being an insider, I was aware of the possibility of researcher bias, hence I used colleagues who independently peer-reviewed my interpretations. I also held debriefing sessions with participants and wrote accounts of these debriefing sessions in my journal for reflection and analysis purposes. All participants knew me as a regional manager for BOCODOL and were familiar with my regular monitoring and evaluation visits at their learning centres. I explained in writing and verbally, my role as a researcher to all participants. I carefully detailed the purpose of my research stressing how it would benefit them as far as the future provisioning of better learning support services that would cater for their needs, was concerned. I shared with them how I would also benefit in terms of my improved understanding and management of learning support for all distance learners in similar circumstances and of course, my attainment of an enhanced qualification in the field of education. My close involvement on site did not come as a surprise to them.

4.4 Data collection strategies

Before I engaged in data collection, I revisited the issue of ethics in research given the fact that my investigation focused on learners from marginalised communities. Below I present the ethical considerations introduced to ensure that this study complied with international norms.

4.4.1 Ethical considerations

The importance of research ethics cannot be overemphasised given the fact it provides the moral values and principles that guide and underpin any research process (Litosseliti, 2005), particularly where human respondents are involved. I first requested permission from the Director of the Botswana College of Distance and Open Learning (BOCODOL) to conduct my research (*see Addendum 4*). I only started collecting data after 1st December 2006 when I had the ethical clearance from the Faculty of Education Ethics committee (*see Addendum 5*). I was conscious of my position as a regional manager for distance learning within the community in which I was going to carry out my research. Before I began the data collection process and to eliminate any sense of coercion that could result from my position at BOCODOL, I availed all participants with a consent letter which each read and signed before participating in the study (*see Addendum 6*). In the consent letter, and before each interview, I guaranteed the research

participants confidentiality and anonymity. No traceable identification methods were used during data collection and I ensured that participants would not be adversely affected or experience loss of dignity. I pointed out that it could be through the purposefully designed research that a positive development could be expected as policy makers would be better informed and measures put to place to improve the provision of learning support. Finally, I admitted that I would also benefit personally from the inquiry by obtaining a research experience as doctoral student in distance education. I therefore endeavoured to adhere to widely accepted ethical considerations for social science research such as voluntary participation, informed consent, safety in participation, privacy, confidentiality, anonymity, trust and withdrawal of participants at any stage. I protected anonymity by assigning aliases to the research participants in my analysis and reporting, a technique recommended by Creswell (2005) Gregory (2005) and AERA (2006). Since I was sensitive about my participants being from marginalised communities, I took pains to explain - in Setswana and English - the purpose of my research and the implications of their participation (Chilisa and Preece (2005). I used tools described in the next section to collect data.

4.4.2 Research tools

The research tools I designed for this study were influenced by the literature study on learning support found in both developed and developing contexts. My work experience in an underdeveloped context had an influence too. The tools I used were the questionnaire, the semi-structured interview schedules, document analysis, research journals and observations.

Questionnaire

I collected data from distance learner participants by means of a once-off questionnaire, which I developed and gave to two experienced colleagues to review. (see *Addendum 7*). Section A of the questionnaire had five items meant to establish participants' biographical data. Section B, had ten Likert-type of items and focused on how satisfied distance learners were with various types of learning support and their perceptions and experiences of learning support on their academic performance. It also had four open-ended items that invited qualitative responses. Apart from addressing learning support issues, other questions pertained to why learners had enrolled for distance education (DE) courses, what they were doing for a living and what they thought could improve their academic performance. The questionnaire was piloted at Kang

using distance learners who had come to write their final 2006 BGCSE examination. I personally administered the questionnaire from the 3rd to 31st December 2006 to twenty-one participants who had at least one year's experience in distance education. This was done to ensure that the items were valid, clear, and precise. The items were later refined with the assistance of my supervisor and a UP statistician. The questionnaire was designed to take between 15 and 20 minutes for participants to complete in order to avoid participant fatigue. The questionnaire was answered by 40 distance learner participants. Initially the data were analysed manually in order to inform and refine the interview schedules and for the researcher to get a general feel of the responses and sense the tone of the inquiry.

Interviews

Interviews are indispensable in a case study and, if particularly well done, semi-structured interviews can be the richest single source of data in a specific setting (Gillham, 2005) (*see Addendum 8*). I share Mason's (2002) view that knowledge and evidence is contextual, situational and interactional. I thus ensured that the interviews I conducted were at the research sites where participants lived and studied. A semi-structured interview technique was chosen owing to its flexibility, standard nature and for being 'unique' and personal and yet able to cover essentially the same ground for all interviewees (Gillham, 2005). I carried out semi-structured group interviews with learner participants during February and May 2007 at the four research sites (*see Addendum 9*). Groups were made up of males and females. There were more females than males. Groups have an element of flexibility and adaptability in terms of the setting and the participants (Litosseliti, 2005). The method offers the benefit of allowing insight into the world of the research participants in their own language, and one gains information on participants' views, motivations and perceptions on why people think and feel the way they do (Litosseliti, 2005). The group conversations were tape-recorded and lasted between 30 and 45 minutes. **Table 4.3** gives a guide and focus of the group interviews that I carried out. Participants preferred being interviewed as a group rather than as individuals. This is probably because culturally, they emphasise group co-operation and achievement unlike Western communities (Sanchez and Gunawardena, 1998). They therefore felt more comfortable in groups. Even their cultural activities like songs and dances, hunting and gathering are done in groups and when they travel, the tendency is to move as a group (Tlhalefang and Oduaran, 2006). Concentration by the interviewer during an interview is of critical importance (Gillham, 2005) and I thus recorded all interviews in order to get a comprehensive account, and I did not

want to be distracted by taking down notes and possibly missing what the interviewees were saying. I was able to listen to the tape-recorded views several times as I did the transcriptions. An unanticipated methodological constraint I encountered while conducting interviews was that participants were reluctant to provide information individually. I therefore accepted their wish to be interviewed in groups.

Table 4.3 Interview Guide

Participants	Selection Process	Purpose	Number of interviews	Area of focus
20 distance learners	Purposively selected	To gain their perceptions and experiences of learning support	One group interview per research site lasting 30- 45 minutes	How they perceive and experience learning support? -What do they do for a living? -Why did they enrol for DE courses? -What types of learning support do they get? -What impressions do they have of learning support? -What challenges do they face as DE learners? -What works for them if they are to improve their academic performance?

Documents

Consultation and close reading of the following official documents was made:

- Guidance and counselling policy (BOCODOL, 2001 and 2005)
- Learner handbook, (BOCODOL, 2004)
- Learner charter (BOCODOL, 2000) (*see Addendum 10*)
- Learner study guides (BOCODOL, 2004)
- English learning material (2001)
- Setswana learning material (2001)
- Learning support monitoring and evaluation reports written by regional staff who regularly visit learning centres
- Minutes of academic meetings
- Sampled assignment reports

The evaluation reports were based on randomly selected assignments that had been marked and were written by the tutor co-ordinator who supervises assignment marking. The reports are part of the quality assurance process. Reports on the examination results since 2003 were written by the learners' tutor co-ordinator, who also acts as the chief invigilator and runs the examination. I used the first four official documents listed above, to assess the implementation of the learning support strategy. All documents were used to verify claims made by research participants. The use of multiple documents helped with the triangulation procedure and validation of the data. The consultation of the official documents involved a close reading of the text. I specifically examined the appropriateness of the content that is, readability, examples used, and the quality of learning support embedded in the texts in terms of distance learners from marginalised communities and their context.

Research journals

Two journals were kept in this study. One was my personal journal where I documented my own reflections (December 2006 – May 2007) during the research process in order to reflect on later and to detect any biases that I might have had. I also noted my impressions of learning support activities, my observations during the face-to-face tutorials, that is, reactions, and responses during interactions between learner and tutor and between learner and learner and the extent to which these enhanced learner participation in their learning. The other was a set of participants' journals in which they recorded critical incidents related to their experiences of learning support. For journal input from the participants, I identified eight tutors who taught English, Setswana, Mathematics (Maths) and Human and Social Biology (HSB) as these are the four most popular subjects with distance learners. I also requested five learners to keep journals for two months and four days as this constituted the first term of their academic year, 1st February 2007 to 4thApril 2007. Over 160 entries were made by participants *(see Addendum 11))* Both tutors and distance learners were requested to make entries immediately after the tutorial session, after marking assignments and after receiving assignments. Each entry ranged from one to three paragraphs handwritten text. A paragraph was at least five lines of A5 notepad. I considered the number of participants and the duration manageable to sustain participants' interest given the disciplined task of keeping a journal whilst busy with their academic work and other domestic chores. In the journals, tutors were encouraged to record critical incidents related to the learning support rendered and the immediate contribution of such learning support. Tutors were also encouraged to record their impressions on the effect of their

face-to-face tutorials, assignment feedback, and informal conversations with learners. On the other hand, learners were encouraged to record their impressions after receiving learning support, for example, face-to-face tutorials, assignment feedback, and conversations with tutors.

Observations

I watched distance learners and listened to what they said during their weekend tutorials. They were comfortable with the arrangement because I had a long-established rapport dating back to before they even enrolled when I carried out enrolment campaigns in their communities and visited their settlements. During the four tutorial session observations, I was aware of the observer effect, that is whether my presence made participants behave differently, especially given my role of managing learning support in the area. A researcher is a research instrument and like any other instrument used, contributes and has some effect on what is found (Gillham, 2005). I therefore checked privately with tutors and some distance learners as to whether what happened when I was present during their tutorial sessions, was characteristic of what usually occurred and they confirmed that it was. I also took photographs depicting their context and some of their activities *(see Addendum 14).*

4.5 Data analysis

Data analysis implies making sense of the data I collected. It involves sifting data to determine individual responses and then putting it together, representing it in tables, figures, and pictures and drawing conclusions from it. It requires one to explain the conclusions drawn in words that provide answers to the research question (Creswell, 2005). I analysed data in two formats qualitatively and quantitatively, with the latter complementing the former. I coded the data from the closed-ended questionnaire items using numbers and analysed it quantitatively and the data from the open-ended items were analysed qualitatively using Atlas.ti®, along with the data I collected through interviews, journals, and observations. In the first phase of analysing data, I coded the data manually using numbers and the same statistician at the University of Pretoria who had helped me refine the questionnaire gave me further assistance. She captured the questionnaire details and generated a computer report using a statistical package SAS Version 8. I then went through each questionnaire item and response checking the correctness of data captured. I presented the data in percentages, tables, and graphs. This allowed me to see the trends in the different types of learning support in terms of biographical information. The process of analysing qualitative data from interviews, journals, and observations started during

the initial data collection phase and continued until all data were collected. I analysed data as I collected it since I feared that it could be too great a challenge if I allowed it to accumulate. In qualitative studies, the researcher does not wait until all data has been collected before beginning to interpret. Data analysis is an on-going process once collection has begun (LeCompte and Preissle 1993; Creswell, 1998; Leedy and Ormrod, 2001; Henning et al., 2004, Creswell, 2005). This iterative process is time consuming as it requires reorganising data. I first reflected on the notes made from interviews I held with distance facilitators and compared the reflections with responses from the questionnaires given by the distance learners. It was from these initial reflections that I developed hunches or working propositions about what the data I had collected meant. I sought to confirm or disconfirm the intuitions in subsequent interviews, journals and through official records. This process of data analysis was inductive.

I transcribed the subsequent interviews with the help of my secretary and a part-time co-ordinator. The part-time co-ordinator is a linguist with over 17 years' experience working with the Basarwa and has helped the community to develop and encode their language. Both persons helped with the translation of data from interviews and journals, where distance learners had used their first language and in areas where there was code switching. I personally transcribed interview data that was in English. I read the transcripts several times, reflecting on the meanings and developed codes using the exact words in the transcripts or words that were appropriate in describing what participants meant. Mbatha (2000) explains that data coding involves the way one differentiates and combines data that have been retrieved as well as the reflections one makes about the information. Data coding facilitates the categorising and connecting of themes to interpret data sensibly and is necessary for efficient analysis (Cooper and Schindler, 2001). Following Mbatha (2000) and Cooper and Schindler (2001), I regrouped the data I had coded into families or themes, for example; reasons for enrolling, expectations, perceptions and experiences. I repeated the process of coding and categorising data I had initially done manually, electronically using ATLAS.ti®. I identified statements that were related to the topic by separating the relevant information into small segments (codes) for instance, phrases or sentences that reflected a single specific thought (Henning et al., (2004). The relevant information was then grouped into categories that reflected the various families or themes related to the participants' perceptions, experiences and definitions of learning support. The codes generated through ATLAS.ti® were similar to the ones done manually but were more enhanced by the use of ATLAS.ti® because they had specific references. I therefore decided to

present the findings in Chapter 5 by using the code references generated through the use of ATLAS.ti®. The use of ATLAS.ti® helped to triangulate the data analysis. I also used evidence from official records like assignment marks, examination results, minutes, reports and field notes to validate claims that I make as a result of drawing conclusions from the interpretation of codes.

4.6 Trustworthiness

To ensure trustworthiness of this study, I have provided a detailed description of the research context and participants in Chapter 2 and briefly in this chapter under the section on research sites. I also had prolonged engagement at the sites, (both as a researcher and an employee of the distance education provider) that enabled me to achieve data saturation and to carry out member checks. This procedure required that I return to the participants who were available and presented to them the interview transcripts and interpretation derived from the interviews in order to confirm the accuracy and credibility of the findings (Rudestam and Newton, 2001, Cook, 2006). The data collection at the sites was spread over eight months of which the last three months were intensive, as my employer had granted me study leave. Other than the eight months of data collection, I lived on the property of a learning centre for over six years managing learning support activities in the region. My regional staff made monitoring and evaluation visits to all sites at least once every three months and on each visit compiled a report. I was also responsible for the management of the delivery of learning support to all the sites. I consider such prolonged engagement as adequate for the purposes of this study, as it allowed me to check the different perspectives of participants. Moreover, it also allowed participants to become accustomed to me and enhanced the research findings, as I could unearth some of the hidden insights as participants' volunteered sensitive information. I made the monitoring and evaluation visit regularly which Krefting (1991) suggests is an important aspect of this form of data analysis.

To enhance the dependability of this study I maintained an audit trail of the data collected that documented the rigour with which I conducted this study. My use of multiple data collection strategies facilitated triangulation as a process of corroborating evidence from either different sources or methods as suggested by various authors (Lincoln and Guba, 1985; LeCompte and Preissle 1993; Jacobs and Razavieh, 1996; Creswell,1998; Leedy and Ormrod 2001; Struwig and Stead 2001; Dawson, 2002; Henning et al, 2004; Chilisa and Preece, 2005; Creswell,

2005). Triangulation was meant to enhance the probability that propositions and interpretations were credible. In other words, I investigated whether the data collected with one procedure or tool confirmed data collected using a different procedure or tool. I wanted to find evidence to collaborate my observations and conclusions in more than one way as recommended by Razavieh (1996). Triangulation is important when it comes to the verification of accuracy and credibility of data. By so doing, I sought to achieve trustworthiness (Lincoln and Guba (1985). Apart from member checks as already discussed, my supervisor was actively instrumental in playing the role of "devil's advocate," , (Rudestam and Newton, 2001:100), as she challenged my research questions, propositions, data sets, analysis and interpretation as a way of making me engage honestly with my research. **Table 4.4** summarises the strategies I used to establish trustworthiness.

Table 4.4 Summary of strategies for trustworthiness

Strategy	**What was done in this study**
Credibility	Prolonged and varied experience of over 4 years; Field journal - for my thoughts, motives and decisions; Member checking -to confirm or disconfirm; accuracy of data captured; Peer examination- to review the various stages of my research
Transferability	Dense description of context- research sites and participants; Comparison of participants to the demographic; Data – in two age ranges that constitute the main participants; Time sample
Dependability	Dense description of research methods; Triangulation; Peer examination; Code and recode procedure
Confirmability	Triangulation; Reflexivity Confirmability audit

4.7 Conclusion

In this chapter I have outlined the research design and the methodology used in the study. Data collection involved the use of both quantitative and qualitative methods. However, qualitative methods were more dominant as I used interview schedules, journals, observations, and the quantitative method was limited to the use of a once-off questionnaire. The motivation for collecting quantitative data was to complement the qualitative data collection methods. A case study research strategy in which I mixed data collection methods was used. The actual fieldwork or data collection was spread over six months from December 2006 to May 2007. However, documents retrieved and reflection notes date back to 2002 when a learner support strategy for remote learners that included distance learners from marginalised communities,

was conceived. Given the research approach, strategy and the various data collection tools described in this chapter, I managed to build an in-depth picture of learners' perceptions and experiences of learning support. In the next chapter, I present the findings based on the evidence from the collected data using the research design and methodology described and justified in this chapter.