CHAPTER ONE

Orientation and Context of the Study

1.1 Introduction and Overview

This study examined the environment in which open and distance learning[1] (ODL) was operating within dual mode[2] higher education institutions in Southern Africa. There appeared to be a pattern in Southern Africa where ODL seemed to be generally recording lower enrolment figures and hence appeared to contribute less towards overall institutional enrolment figures in dual mode higher education institutions compared to the full-time face-to-face mode in the same institutions. The purpose of this investigation was to shed light and create a better understanding of why ODL seemed to attract very low enrolments in some dual mode higher education institutions compared to their face-to-face mode of delivery, though ODL is purported to have the potential to increase access to higher education more substantially than the face-to-face mode. The study examined the Botswana higher education sector in general terms, as the environment within which ODL was developing at higher education level in Botswana. The University of Botswana (UB) was used as a case study to investigate what could be contributing to ODL enrolling lower figures in dual mode universities compared to face-to-face, and seemingly failing to live up to its expectations of substantially increasing opportunities for participation in higher education better than the face-to-face mode of delivery. In this study I was interested in examining ODL within dual mode institutions against the background of the concepts of the equivalency theory (Simonson *et al*, 1999).

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[1] ODL: method of learning at a distance, which can overcome barriers related to age, gender, physical distance for learners in remote locations who are unable or unwilling to physically attend a campus, time or scheduling, limited number of places, cost, and can make the best use of the few teachers available (COL, 2000a)

[2] Dual mode institution: also called bimodal; an institution that offers learning opportunities in two modes: one using traditional classroom-based methods, the other using distance methods; the same courses may be offered in both modes, with common examinations, but the two types of learner - on-campus and external - are regarded as distinct (http://www.col.org/ODLIntro/introODL.htm)

Chapter One introduces the study and puts forward the plan for conducting it. The first part of the chapter discusses the problem of low participation in higher education and training in Southern Africa generally, making synoptic comparisons of such participation with other regions. This part also indicates the different types of clienteles, with their diverse expectations, which Southern African universities had to deal with, indicating increased and diverse demands. This being an introductory chapter, it provides a statement of the problem, explains the purpose, rationale as well as the focus of the study. The chapter then presents the research questions that I wanted to find answers to in order to understand the phenomenon. The significance of the study is given, followed by the plan of enquiry, which gives indicative information about the research approach, knowledge claim and research strategy. Chapter Four, which is the methodology chapter, deals with these in more detail. Data collection sites, sample population and the data collection process are just indicated at this stage, to be discussed further in Chapter Four as well. Chapter One then discusses the theoretical framework of the study. The data analysis and interpretation to be employed in Chapter Five, Chapter Six and Chapter Seven is also highlighted here, followed by explaining about ethical considerations and issues of dependability and reliability of the study. Finally, the chapter discusses issues of contribution and strengths of the study, as well as its limitations and delimitations, before a concluding statement is made.

1.2 Participation in Higher Education in Southern Africa

There appeared to be increased demand for participation in higher education and training in Southern Africa, as was the case in all other regions of the world (UNESCO, 2007; Daniel, 2007). There was also a notable increase in participation in higher education across Africa in recent decades (UNESCO, 2007). However, the rate of increase in demand in Southern Africa did not seem to be matched by an equivalent high rate of increase in participation, as appeared to be the case in other regions.

Some universities in Africa, which were initially just contact universities, like the University of Botswana (UB), University of Namibia (UNAM), University of Zambia (UNZA), University of Nairobi in Kenya and Makerere University in Uganda, and some universities in

the developed countries, like the University of Southern Queensland (USQ) in Australia, the University of London and the University of Leicester in the United Kingdom (UK), to cite just a few examples, decided to add ODL to their usual face-to-face teaching and learning mode of delivery. Most of these universities added the ODL strategy in their delivery systems in order to expand opportunities, especially for working adults and youth who, for various reasons, were not able to access higher education through the face-to-face mode (University of Botswana, 2006; Mbwesa, 2009; Siaciwena, 2006; Hope, 2006).

In this study, I adopted the definition that dual mode institutions are those that utilise both the traditional on-campus and ODL strategies to deliver education and training (COL, 2000a; Hope, 2006; Romiszowski, 2004; Daniel, 2002; Dence and Armellini, 2009; Bates, 2000a). A 'dual mode' institution, according to Bates (2000a) is one that as well as offering regular programmes on campus, also makes available a proportion of its courses in a distance format. Within such institutions, even though the students enrolled in the ODL mode may be taking the same programmes as the on-campus students, the university prefers to indicate a total, composite enrolment figure for all students, then goes further to reflect how many out of that total figure are ODL and how many are on-campus face-to-face or contact students. There is often a specialised Department or organ of the university that oversees the development and delivery of the ODL mode in a dual mode university set up. Rumble (1992) as cited in Hope (2006), also described conventional campus based institutions offering some distance or on-line courses as dual mode institutions. On the other hand, in a mixed mode[3] institution, the same academic staff members teach through face-to-face and ODL strategies. All students are therefore exposed to both face-to-face and ODL delivery methods and they can use them interchangeably as they go through different parts of their programmes. The different methods are mixed or blended together (Bonk and Graham, 2004). According to the Organisation for Economic Co-operation and Development (OECD), in its OECD Observer (2005), as well as Bonk and Graham (2004), in mixed mode courses, the e-learning element begins to replace some of the classroom time. Online discussions, assessment and project or

[3] Mixed mode institution: an institution that offers learners a wide choice of modes of study, including independent, group-based, face-to-face, mediated or some combination; mixed mode institutions maximise the flexibility of place and pace of study, and are the result of the convergence of face-to-face and distance modes of study (http://www.col.org/ODLIntro/introODL.htm)

collaborative work tend to replace some of the face-to-face teaching and learning. However, campus attendance remains an important part of the delivery method. Unlike in dual mode settings, there is no department or organ of the institution specifically charged with ODL development and delivery in a mixed mode setting, since any academic in any of the departments can utilise both face-to-face and ODL delivery methods as deemed necessary (Bonk and Graham, 2004). Since the different delivery methods can apply to, or be used by, any students in a mixed mode set up, there are no students referred to as ODL students, as is the case in dual mode institutions.

The arrangement of establishing a dedicated organ of the university for ODL development and delivery, as well as keeping separate records for ODL students from on-campus face-to-face students seemed to have been adopted by a number of contact universities in Southern Africa, which were also utilising ODL strategies in their delivery systems. Among these universities within Southern Africa were the UB, UNAM and UNZA. Since they fitted well into the description of dual mode that I had adopted, I referred to them as dual mode universities. Most of the universities operating in this manner were reputable institutions in the region. For purposes of this study, I referred to universities which employed both face-to-face and ODL methods of education delivery, and which had an organ of the university set up to specifically coordinate ODL activities as dual mode institutions, a description of dual mode universities also adopted by education authorities like COL (2000a) Rumble in Hope (2006), Romiszowski (2004), Dence and Armellini (2009) and Bates (2000a). Within this category I included a few examples like the UB, UNAM and the UNZA in terms of Southern Africa.

1.2.1 A Comparative Review of Gross Enrolment Ratios

A scan of the literature indicated that even though there was increased participation in higher education worldwide, when comparing participation rates across all the regions of the world, it appeared to be generally very low in developing countries (UNESCO, 2004). Comparatively, this problem seemed to be more acute in Sub-Saharan Africa (Donat, 2001; Daniel, 2007; UNESCO, 2007), especially in the Southern African region (SADC, 2006;

UNESCO, 2007; Daniel, 2007). In 2001 Donat (2001) observed that the gross enrolment ratio at university level in Sub-Saharan Africa was the lowest in the world. By 2008, even though participation had increased, studies still indicated a similar situation of comparatively much lower enrolments for Southern Africa. It was observed that many qualified potential students who wanted to pursue their studies were generally unable to access higher education (Dodds, Gaskell and Mills, 2008; Richardson, 2009). Limited resources and institutional capacity had often been cited as some of the main limiting factors constraining many contact universities in Sub-Saharan Africa from enrolling more students to match the high demands (Dhanarajan, 2001). At the time of this study, literature seemed to indicate that many developed countries like the UK, United States of America (USA), Canada, Australia and Sweden had embraced and advanced the development and growth of ODL at higher education level, much more than most African countries. Consequently, higher enrolment ratios at this level were reflected in developed countries and much lower in developing countries, especially those in Sub-Saharan Africa. It therefore appeared that ODL was generally making a larger contribution on access to higher education in developed countries as the Davies and Pigott (2004) study indicated, and less so in Southern Africa. However, there were a few exceptions, particularly with countries that had dedicated ODL universities like South Africa with UNISA (Daniel *et al*, 2007), Tanzania with the Open University of Tanzania (OUT) and Zimbabwe with the Zimbabwe Open University (ZOU). Participation in higher education in these countries was higher, compared to their neighbouring countries (SARUA, 2009; Robbins, Wilson-Strydom and Hoosen, 2009; Dodds *et al,* 2008).

A massive disparity was apparent across the world concerning participation rates in higher education of students in the 18-24 age group, usually considered to be in the Age Participation Rates (APR). At the start of the 21st century, the developed countries had an APR of more than 50%, while South Asia and Sub-Saharan Africa languished below 10% on average (Daniel, 2007). The EFA Global Monitoring Report of 2008 also reflected a 2005 gross enrolment ratio of 5.1% for Sub-Saharan Africa, compared with 10.5% for South and West Asia, 21.4% for Arab States, 23.4% for Asia, 23.8% for East Asia and the Pacific, 26.5% for Central Asia, 29.2% for Latin America and the Caribbean, 57% for Central and Eastern Europe and 70.1% for North America and Western Europe. A December 2006

Southern African Development Community (SADC) Appraisal Report for an African Development Fund Project on Capacity Building in Open & Distance Learning, also reflected participation in higher education across the SADC region as not more than 5% of the eligible population, except for South Africa with a gross enrolment ratio of 14%, Mauritius with 11.3% and Namibia with 7.5% (SADC, 2006). Botswana enrolled less than 10% of the eligible population into higher education by 2003 (Tau, 2003; UNESO, 2007; University of Botswana, 2006; SADC, 2006; Robbins *et al*, 2009). However, by 2008 the enrolment ratio for Botswana was recorded by Tertiary Education Council (TEC) as being around 11.4% (Tertiary Education Council, 2008a).

1.2.2 Coping with Increased Demands

There seemed to be a general trend in Southern Africa where there were large numbers of secondary school leavers of about 18 – 24 years who required higher education but could not find space in higher education institutions, even though they qualified for entry (Dodds *et al*, 2008; Richardson, 2009). In addition to these large numbers of secondary school graduates, there also emerged a dynamic work environment that required better skilled manpower, which demanded in-service training opportunities for continually improved service delivery (Dhanarajan, 2001; Donat, 2001; Daniel, 2007; Dodds *et al*, 2008). This indicated diverse adult populations who needed lifelong learning opportunities and entry into higher education programmes. The situation further compounded the problem of high demands for higher education. Apart from the resource challenge for some higher education institutions, it appeared that due to constraints related to family, community and personal responsibilities and commitments, inability to obtain long periods of leave from employers for full-time study purposes, as well as special circumstances like health and accommodation challenges, many potential students were unable to access higher education and training through face-to-face attendance, even where space was not a major constraint. Sewart *et al* (1983) submitted that if the number of students was seen to outgrow the resources available to a university, the university should consider exploring other ways and means of changing teaching methods in

order to optimally utilize its teaching resources. The introduction of distance education[4] and open learning[5] has generally been understood as a response to the new challenges of increased and diverse demands made on the educational sector (Dhanarajan, 2001; Ipaye, 2007; Boulard, 2005; Guri-Rosenblit, 2005, University of Botswana, 2006) and as one of the strategies through which universities and colleges could substantially open up access to higher education.

Many traditional contact universities in the region, using only full-time face-to-face approaches, generally appeared not to cope with high demands for higher education and training from their environments (Dhanarajan, 2001). There were quite a number of predominantly contact universities, which had introduced ODL as one of their strategies to deal with increased and diverse demands. However, through their ODL initiatives, these universities seemed to enrol very low numbers of students into their programmes, compared to their enrolments on their full-time face-to-face delivery mode. On the other hand, the few dedicated ODL higher education institutions in the region appeared to be able to enrol larger numbers into their various programmes. Comparatively, the contact institutions, both dedicated full-time on-campus face-to-face, and dual mode universities, seemed to take many years to increase their enrolments substantially. Another worrying fact was that at some dual mode universities, although the faculties that increased their delivery modes to include ODL seemed to achieve a huge hike in student enrolment, such universities had only a few programmes offered through ODL. Looking at the entire university, it was not clear why the other faculties would not adopt ODL, though its potential to increase access to higher education had been proven by the few faculties using it.

Table 1.1 below indicates the disparities in enrolment between contact and dedicated ODL universities in the SADC region.

[4] Distance education: "planned learning that normally occurs in a different place from teaching and as a result requires special techniques of course design, special instructional techniques, special methods of communication by electronic and other technology, as well as special organizational and administrative arrangements"(Michael Moore and Greg Kearsley, 1996)

[5] Open learning: “policies and practices that permit entry to learning with no or minimum barriers with respect to age, gender, or time constraints and with recognition of prior learning.” (Farrell, G. (ed.), 2003)

Table 1.1: Comparative Enrolments between Contact and ODL Universities[6]

Name of University	Year Established	Type of University	Enrolment Figures		
			Contact students	ODL students	Academic and research staff
University of Botswana	1982	Dual mode	12,602	3,108	827
University of Namibia	1992	Dual mode	6,259	2,119	340
University of Zambia	1966	Dual mode	7,893	1,785	472
University of Witwatersrand (Wits)	1922	Dedicated contact	25,101	N/A	1,231
University of Dar-es-Salaam	1970	Dedicated contact	18,100	N/A	1,323
University of Zimbabwe	1952	Dedicated contact	12,316	N/A	N/A
University of South Africa (UNISA)	1946	Dedicated ODL	N/A	227,538	1,393
Open University of Tanzania (OUT)	1992	Dedicated ODL	N/A	26,164	206
Zimbabwe Open University (ZOU)	1999	Dedicated ODL	N/A	19,676	158

Source: Extracted from SARUA Handbook (Robbins et al, 2009) – most figures are 2006 and 2007 figures

A glance at Table 1.1 seems to indicate that dedicated ODL universities were able to enrol more students in a shorter period compared to contact universities. If we take the example of the two universities from South Africa used in the table, for example, Wits was established about twenty four years before UNISA, which was established as a teaching institution in 1946. Prior to 1946, UNISA appears to have been just an examining body (Robbins *et al*, 2009). However, UNISA's enrolment figure appears to be much higher than that of Wits. It is of course a fact to acknowledge that UNISA's merge with Technikon SA definitely had an undeniable impact on their numbers. Furthermore, factors like classroom capacity and the allocation of resources from government, amongst others, also had an influence on their enrolment levels. However, a similar pattern where dedicated ODL universities had larger enrolment figures than contact universities seemed to emerge in the case of Tanzania and Zimbabwe, where, even though the contact university was established two or more decades before the ODL university, enrolment of the ODL university turned out to be substantially

[6] It should be noted that these figures reflect enrolment for the entire university and that enrolment in specific faculties might reflect a significantly different picture. The total number or percentage of ODL students reflected might reside at only 1 faculty (where ODL would have made a significant difference to access).

more than that of the contact university in the same country, presumably addressing similar demands for higher education.

Table 1.1 further indicated that although in theory dual mode universities would have adopted the ODL strategy to increase participation in their programmes (University of Botswana, 2006), enrolments through their ODL provisions tended to remain low compared to their full-time face-to-face enrolments, at the level of the whole university and not just within one faculty. Fewer programmes through the ODL mode appeared to be a pattern in many universities in Southern Africa that employed both ODL and face-to-face strategies. Consequently, when looking at these universities without comparing them with dedicated ODL universities, it would appear as though compared to the face-to-face mode of delivery, in general ODL could not make a significant contribution towards increasing opportunities for participation in higher education. However, performance of the dedicated ODL institutions in terms of their potential to increase enrolments substantially indicated that ODL provision might be able to address the challenges of high demands for higher education, with their incumbent diversified clientele needs more adequately than the full-time face-to-face provision, unlike the situation in some dual mode universities seemed to indicate. With increased use of information and communication technologies in ODL, this assumption seemed to be even more apparent (Farrell, 2003, Davies and Pigott, 2004; Bates, 2005; McIntosh and Varoglu, 2005; Pityana, 2008).

Although more resources than just academic and research staff are needed in the delivery of education and training, looking at just this one resource, one is tempted to agree with proponents of ODL that after a heavy capital outlay inherent in both ODL and face-to-face provision, ODL might actually be considered a more cost effective mode in the long run (Peters, 1967; Daniel *et al*, 2007; Pityana, 2008). This seemed to be more the case for dedicated ODL than it was for dual mode universities.

It would appear that in practice, expansion of ODL in many dual mode universities continued to lag behind and for the mode to make very little impact on increasing access, compared to the full-time face-to-face strategy, as demonstrated by examples from the three dual mode

universities cited in Table 1.1, and in comparison with enrolments in the three open universities in the region. This pattern seemed not unique to Southern Africa, since it had been observed in Kenya (Mbwesa, 2009), Nigeria (Ipaye, 2007), Uganda (Jegede, 2002) and generally in Africa as a whole (Dodds, 2002). Though there was evidence that there were increased and diverse demands for higher education and training, fewer students seemed to access programmes through the ODL mode in many dual mode institutions. As indicated above, where faculties adopted the ODL mode of delivery, there was a noticeable increase in student enrolment. However, the problem remained that in dual mode universities, only one or a few faculties would utilise ODL as another mode to deliver their programmes. Consequently, ODL seemed not to improve access significantly compared to the face-to-face mode in dual mode institutions. The UB's Annual Report (2006) reflected an enrolment of 15710 students in the 2005/2006 academic year, of which 2265 were classified as continuing education students through ODL and part-time evening classes. If it wasn't for ODL provision, the 2265 students who managed to enrol during 2005/06 would not have gained access to higher education through UB. However, this picture caused concern for me because I knew that ODL was supposed to expand access opportunities significantly more than the face-to-face provision (Ekhaguere, 2000; Hope, 2006; Daniel *et al*, 2007; Davies and Pigott, 2004; Morgan, 2000; Pityana, 2008). Expectations would be that more students would enrol through ODL, considering its flexibility and ability to address the growing diverse demands. But the reverse seemed to be true in the case of some of the Southern African dual mode institutions and the few examples cited from the rest of Africa. My concern was to understand why in some dual mode universities ODL seemed to be making an apparently low contribution to increased enrolment when compared to the face-to-face mode, especially that evidence indicated that student enrolment increased dramatically in the faculties that used the ODL mode of delivery (University of Pretoria, 2009). One of my concerns therefore was to understand why dual mode universities appeared to be slow or reluctant to expand ODL to all their faculties in order to provide opportunities for more students to access more of their programmes.

1.2.3 Link between High Skills and Economic Development

Recent research clearly made a close linkage between the attainment of high skills through higher education and economic advancement and high rate global competitiveness (Bloom *et al*, 2006; World Bank, 2008a). Low participation in higher education and training was assumed to be a limiting factor to human resource capacity building for developing countries, which negatively impacted on their economic development (Bloom *et al*, 2006; World Bank, 2008a). Countries that had attained high participation rates in higher education seemed to have also made significant economic advancement, while those with low participation rates seemed to find it hard to gain economic independence (World Bank, 2008a). Enhanced participation in higher education was therefore seen as an important investment option that could contribute to enhanced economic development for Sub-Saharan Africa (World Bank, 2008a).

1.2.4 A Sense of Urgency

Since the full-time face-to-face provision alone could not cope with escalating demands for higher education, and the ODL provision within dual mode institutions also made fewer additional opportunities, participation at this level appeared to have remained very low in the SADC region compared to other regions of the world as evidenced in SADC (2006), Daniel *et al* (2007) and UNESCO (2007). This situation seemed to continue to adversely affect the capability of the region to pull itself out of continued economic hardships compared with other regions (Bloom *et al*, 2006; World Bank, 2008a). The universities in the region had the responsibility to expand opportunities for participation in higher education. Therefore, one would expect that they would eagerly want to explore any mode, or a combination of modes, of higher education provision that could allow increased participation at this level, particularly if there was support in the political environment which put the importance of educational expansion in the forefront, acknowledging the contribution of education to economic development as seemed to be the case in Botswana (Republic of Botswana, 1977, 1994, 1997 and 1998; Mogae, 2005; Business and Economic Advisory Council, 2006;

Khama, 2008). As such, it appeared necessary for dual mode institutions to urgently expand and strengthen ODL to further improve participation in their programmes.

However, the urgency of this fact was not readily evident in some of the dual mode universities in the region. It appeared as though some of these institutions concentrated more on improving the full-time face-to-face provision further, giving less attention to the growth, improvement and expansion of the ODL provision. There appeared to be a reluctance or hesitation on the expansion and strengthening of ODL, even though universities appeared to continue to struggle through their face-to-face provision to meet the high demands from youth and adults who wanted opportunities to participate in higher education (Dodds *et al*, 2008). It actually became very important to me to find out what could be contributing to delays when it comes to expansion and strengthening of the ODL initiatives in dual mode higher education institutions. Some of them appeared not to maximise on ODL's promise of flexibility, potential to reach the difficult to reach audiences and to achieve substantially increased enrolments through its potential for mass production and mass distribution (Peters, 1967; Bernath and Vidal, 2006). It appeared as though the slow development and expansion of ODL might be one of the contributing factors to the low participation ratios for higher education that continued to be recorded for Southern Africa (UNESCO, 2007). When viewed in terms of dual mode provision in Southern Africa, it appeared as if ODL was unable to deliver its promise (Dodds, 2002). It was not clear and became necessary to investigate whether dual mode universities, as well as the higher education sectors within which they existed, valued ODL as much as they did the face-to-face mode of provision. The investigation also had to find out whether ODL was given equivalent recognition and support, right from national to institutional policy making, planning, funding and resource allocation, down to monitoring of implementation at national and institutional level.

This study investigated the Botswana higher education sector, using the UB as a case study to understand why dual mode universities in Southern Africa continued to enrol low numbers of students despite their use of the ODL mode to improve access into more programmes.

1.3 Statement of the Problem

In addition to their usual on-campus face-to-face approaches, some higher education institutions in Southern Africa have adopted ODL to improve participation rates for higher education. However, as literature over the years seemed to indicate, enrolments at this level remained low in the region (South Africa, Department of Education, 1994 and 1996; SADC, 2006; Daniel, 2007; UNESCO, 2007; Dodds *et al*, 2008; Richardson, 2009). This situation continued to adversely affect the human resource development drive of the region (Bloom *et al*, 2006 and World Bank, 2008a). As such it would seem urgent for some of the higher education institutions in the region, which had embraced ODL to strengthen this mode to improve participation rates. However, many of them did not seem to demonstrate this urgency or to be doing much to improve the apparent low contribution of ODL towards expansion of higher education opportunities. It was therefore important for me to find out why enrolments through ODL remained lower than through the face-to-face mode of delivery in some of the dual mode higher education institutions in the region. The question which became important in the case of Botswana was whether ODL received adequate support within the higher education sector from policy makers, planners, funding agencies and providers. It was important to study the policies that guide its planned expansion and the resource-base supposed to enable it to increase access to higher education. It was necessary to firmly establish its planned status and role in the process of expansion of opportunities for higher education programmes in a Botswana dual mode setting and to understand how that status impacted on its expansion process. Very little investigation seemed to have been conducted in Botswana, to bring to surface challenges of ODL within dual mode settings, with regard to its expected role of opening up access to higher education.

1.4 Purpose & Rationale for the Study

Even though there seemed to be evidence that ODL could substantially increase higher education enrolments (Peters, 1967; Perraton, 1991; Guri-Rosenblit, 2005; McIntosh and Varoglu, 2005; Daniel *et al*, 2007; Pityana, 2008), in Southern Africa this appeared to be true mainly for dedicated ODL institutions (Lephalala and Pienaar, 2007; SARUA, 2009).

Despite embracing ODL as a strategy to improve access to higher education, ODL in dual mode universities appeared to face some challenges such that these universities seemed unable to enrol large numbers of students through their ODL initiatives, compared to their face-to-face mode (Siaciwena, 2006; Mbwesa, 2009). The area of finding out why ODL could not increase enrolments significantly in dual mode higher education institutions compared to the face-to-face mode did not appear to have been extensively researched within Southern Africa and specifically in Botswana. Using the UB as a case study, this study sought to make a contribution in that area.

Since the SADC region seemed to be one of the hardest hit by the acute problem of low enrolments into higher education **(**UNESCO, 2004; SADC, 2006), there appeared to be an urgent need to expand higher education ODL and take full advantage of its potential to improve access. Despite this situation, expansion of ODL in many dual-mode institutions continued to lag behind (Hope, 2006; Koul and Kanwar, 2006), judging by the numbers enrolled through the mode compared to the face-to-face mode. Due to this slow expansion, the ODL initiatives within some of the dual mode institutions did not make the expected contribution towards increasing access to higher education. This study aimed to find out why the growth of ODL mode in dual mode universities seemed to remain slow and the mode to continue attracting low enrolment figures compared to the face-to-face mode.

1.5 Focus of the Study

The main focus of this study was to find out why dual mode higher education institutions in Southern Africa continued to enrol low numbers of students through their ODL mode. Special focus was on the Botswana higher education sector, with special reference to the UB which is a public higher education institution that employed both on-campus face-to-face and ODL strategies to deliver its programmes. The study sought to find out what opportunities prevailed that could enable UB to reach out to more and diversified clientele, as well as challenges and constraints that the ODL mode could have faced in the higher education sector and within the UB dual mode set up. Through contact with the Ministry of Education & Skills Development (MOESD) and the Tertiary Education Council (TEC), I needed to

investigate how ODL fitted within the context of the higher education system of the country, in order to understand its planned status within the system and its planned role towards opening up access to higher education in Botswana. I needed to trace the planned expansion direction of ODL within the overall higher education sector in Botswana and the environment which supported that growth since the inception of the 1994 Revised National Policy on Education (RNPE) (Republic of Botswana, 1994). I wanted to understand how this environment could have influenced the University's policies, plans, and resource allocation towards expansion of its ODL strategy. The study further sought to establish the kind of relationship that existed between the Department of Distance Education (DDE) and other organs of the University and the impact that the University's distance education mainstreaming policy had on access to its programmes. The study also endeavoured to establish the stated or perceived status of each of the two modes of delivery in terms of their perceived value and assess if such perceptions affected the expansion of the ODL mode and consequently the opening up of access to UB programmes.

By 2008, the Tertiary Education Council (TEC) was a body that regulated and provided support and guidance in the provision of higher education in Botswana. TEC also accredited higher education providers, planned the financing of higher education in the country and was responsible for monitoring the quality of provision. At the Ministry of Education & Skills Development (MOESD), the Planning Statistics & Research Unit was the main point of focus for this study. This study planned to assess how these regulatory bodies and higher education planners perceived the role of ODL at higher education level in the country and how they included it in educational planning at national policy level. The study also examined national policy documents to establish where they placed ODL in the process of expansion of higher education.

1.6 Research Questions

The problem highlighted above and stated in the problem statement lead me to the following questions, which were meant to assist me to understand the situation better.

1.6.1 Main Research Question

Why do some dual mode higher education institutions in Southern Africa continue to enrol lower figures through their ODL than their face-to-face mode of delivery, though ODL is purported to have the potential to increase access more substantially than face-to-face?

1.6.2 Other Critical Research Questions

1. What are the opinions of the UB community, as a dual mode institution concerning the quality and value of education provided through ODL compared to face-to-face?
2. What challenges does ODL face within the UB's programme delivery system?

1.7 Significance of the Study

This study gives insights as to why ODL may not increase enrolments better than the face-to-face mode of delivery when in dual mode higher education institutions in Southern Africa. It should, as such, influence and inform policy and practice at regional, country and institutional level. The study builds on and contributes to research in ODL within Botswana and the region. It also initiates further discussions of issues in the field of ODL and contributes to a wider knowledge-base in this field.

1.8 Plan of Enquiry

This part of the research is mainly the plan for conducting the study. The various sub-sections form the different parts of the plan, to ensure that the study takes the required direction and addresses the necessary steps and concerns for a study research project.

1.8.1 Research Approach

Research in the social and human sciences uses qualitative, quantitative or mixed-mode research approaches, depending on the issues that the researcher intends to address (Creswell,

2003). Each approach has its strategies and methods. Patton (1990), Creswell (2003) and Punch (2005) advised that researchers should focus on appropriately choosing methods that match the empirical questions, or on establishing a 'good fit' between questions of an empirical research and its methods. Qualitative research can be exploratory (Creswell, 2003), explanatory and/or descriptive (Yin, 2003b). If a concept or phenomenon needs to be understood and needs further research exploration, then it merits qualitative approaches (Creswell, 2003). Qualitative research has been seen to be much more relevant when a researcher is seeking meaning and understanding (Law *et al* 1998). My intention was to understand why, contrary to literature, ODL appeared not to increase enrolments significantly in dual mode higher education institutions. Qualitative approaches seemed to be the most appropriate for this study because they can enable the researcher to derive a deep understanding of a situation. They are also the most appropriate approaches where the researcher intends to deal with human subject (Gough and Madill, 2007), as is the case in this study.

1.8.2 Epistemology

My knowledge claim is that reality is socially constructed and the truth is subjective, relative and multifaceted. There is no singular and absolute truth, which has absolutely no alternative way of looking at in a given social situation. Individuals construct reality on the basis of their environment, age, sex, religion, background and experience, the belief system of their community, and just their complete value system (Robson, 2002; Creswell, 2003; Neuman, 2006). Social research in the interpretive/constructivist paradigm recognises this multifaceted nature of the truth, which is mainly due to multiple social realities (Creswell, 2003; Neuman, 2006). My study assumed the interpretive/constructivist perspective because it was dealing mainly with people and their perceptions regarding the development of ODL at higher education level in Botswana and in Southern Africa and why the strategy seemed not to improve higher education enrolments significantly in dual mode institutions. The study sought to probe how the participants perceived the performance of ODL and its challenges in achieving the intended contribution of expanding opportunities for access to higher education. The intention was for me to assess and interpret as closely as possible how the

different participants and stakeholders understood the issues at play, in order to understand the problem better from their perspective.

For this study I was interested in deriving an understanding of the problem of continued limited access to higher education, even after introducing ODL to expand access in dual mode universities. I wanted to understand the continued lack of growth of ODL in dual mode universities side by side continued inability of the face-to-face mode of delivery to adequately address the escalating demands for access to higher education. This better understanding was to be derived through an analysis of documented research and other official documents, as well as what the participants perceived as the reality, according to their experiences concerning the problem. However, I also had my own perceptions about the phenomenon I was researching. As somebody who had worked in distance education for many years, I had experienced its situation with regard to its perceived low status when compared to face-to-face education. I had a perception that ODL's growth process was slow and that its performance in expanding access in dual mode institutions was poor compared to dedicated ODL institutions. Naturally my own perceptions and experiences would play a part as I went about analyzing the data collected from the participants and from the literature reviewed. Therefore it would not be surprising if my interpretation of the participants' opinions and perceptions was to be also influenced by my own experiences with regard to the phenomenon.

1.8.3 Research Strategy

Basic case study entails detailed and intensive analysis of a single case, which could be an organisation, a school, a community, a family, or even a person (Bryman 2004a). This study utilised a case study design because it was intended to undertake an intensive examination of the setting or the phenomenon. Although case study design is in many instances associated with qualitative research because it usually uses observation and unstructured interviews, which are qualitative research instruments, it has been established that the method can also be used with other social research approaches (Bryman, 2004b; Yin, 2003b). For instance,

one can use the case study method in conjunction with questionnaires in a primarily quantitative research project.

I was attracted to the case study design strategy because I expected it to give me the opportunity to study aspects of the problem at hand in depth within the limited time of this study. The case study strategy entails a detailed and intensive analysis of single cases and stresses social interaction and the social construction of meaning (Bryman, 2004a). As such, it had the potential to allow me greater insight into what the participants perceived to be the reasons for ODL not performing better than face-to-face in terms of opening up access to higher education in dual mode settings. A case study is seen as a research design that has the potential to focus inquiry and be more manageable and time bound, yet still allowing the researcher to identify the various interactive processes at play and unique features of the case (Somekh and Lewin, 2005).

1.8.4 Data Collection Sites

To participate in this study, I included mainly the UB and two other institutions, each responsible for higher education in Botswana in different ways. UB was one of the main public providers of higher education in the country and the only one that employed both on-campus face-to-face and ODL strategies. The University was therefore the main institution of focus. TEC was a regulatory and advisory body in matters related to higher education, as well as responsible for planning the direction, expansion and financing of higher education in Botswana. The Planning, Statistics & Research Unit of the Ministry of Education & Skills Development was responsible for planning the whole education system of the country, including higher education, and providing policy direction and support for growth and development of the sector. Therefore interviewing participants from each of these institutions was crucial, the main focus being on the UB, while the other two were to provide background about the policy environment within which higher education was provided in Botswana.

Other data was collected through document analysis, as part of the literature review. The UB policy documents including development plans and enrolment plans were crucial for the

study. Policy documents of the Ministry of Education & Skills Development and TEC were also invaluable for this study. Among these documents were the 1994 Revised National Policy on Education (RNPE), policy on sponsorship, the 2008 Tertiary Education Policy, National Development Plans and the Human Resource Development Strategy. Through this document analysis, the study aimed to compare the trend and level of support for ODL at higher education level within the past twenty years, and its impact on access to higher education. Other documents from sources like SADC Secretariat and some universities in the SADC region, UNESCO, World Bank, and the Commonwealth of Learning proved to be invaluable for the study, as they gave an international perspective on the performance of the Botswana's higher education sector and hence provided a balanced view. The literature search for international environments was mainly internet-based and for purposes of comparison, particularly with regard to the level of participation in higher education in Southern Africa and other regions.

1.8.5 Study Population and Sample

The study population comprised people in Botswana who were involved in ODL, including those who were working in ODL environments as well as those planning and initiating policies, procedures, rules and regulations that might have implications for ODL development and delivery in Botswana generally, and at the UB specifically. However, this population was larger than the scope of this study. Therefore a sample of participants drawn from the above three institutions, UB, TEC and MOESD was seen to be sufficient. At UB the study examined the level of growth of ODL in the University's dual-mode delivery system in terms of its contribution to the student body and the support that ODL provision was getting from the system. The original plan was to interview a total of twenty-one participants from the University alone. However, only thirteen were able to participate from UB, three of them from policy makers. One of three policy makers from UB came from a wing of the central governing body of the University, which guides academic and scholarship development. One came from the Centre for Continuing Education (CCE), which housed the UB's Department of Distance Education, while the third policy maker came from one of the centres responsible for utilising different strategies to develop capacity and competency levels of academic staff

members of the University. Initially participants from UB were planned to come from the central governing body of the University and from three Centres, the CCE, Centre for Academic Development (CAD) and Centre for Graduate Studies. However, one of the Centres dropped out as will be explained in a later chapter. The work of the two centres not directly coordinating ODL was expected to have a bearing on the implementation of UB's distance education mainstreaming policy, as well as the teaching and learning policy. The idea was to find out how at policy level, top management regarded the role of ODL and guided its growth and utilisation by the various components of the University. The other UB participants came from lecturers and administrators from the two centres. Under the section on delimitations (see § 1.15), I explained why I did not include students in this study though they were considered to be crucial stakeholders.

This sample, which afforded me to interview policy makers and practitioners, in addition to documentation, provided more insight into reality on the ground in terms of the application of the ODL strategy within the UB dual mode system, compared to what policy said its role should be within the system. Practitioners in the two centres expressed their views on how the University had or had not embraced the concept of equivalency of the two modes to expand access to its programmes. They also expressed their perceived advantages and disadvantages of employing ODL at this level, as well as their challenges with regard to the implementation of the distance education mainstreaming policy and the teaching and learning policy, within the University's dual mode system. Interviewing top management and practitioners was intended to create a balance in the data collected, as some form of triangulation. Three participants came from TEC and one from MOESD. Only policy-makers and people responsible for developing plans for ODL in the country were interviewed in these two institutions.

1.8.6 Plan of the Data Collection Process

The study deployed two methods of data collection:

(i) interviews

(ii) document review/analysis – to review and analyse research documents, journal articles,

national and institutional plans, reviews and records, policy documents, as well as instruments of government where applicable

There was only one phase of the data collection process with three stages. The preparatory stage entailed the development of questions used for the semi-structured interviews, and the processing of ethical clearance with the University of Pretoria Ethics Committee, as well as the Botswana Ministry of Education & Skills Development. This was also the stage at which request letters were written to the selected institutions for their participation in the study. The purpose of the study and how it would be conducted were explained and permission requested for some staff members to be interviewed. Upon positive response from UB, I further made a selection of participants from the administrative and academic staff members to be interviewed. This was also the stage during which interview appointments were secured with the selected participants. This preparatory stage was planned to take up to three months, since it included certain processes that were anticipated to take long to complete, like the ethical clearance process.

The first data collection stage was the start of the document review and analysis process, which ran concurrently with all the other processes throughout the data collection phase. Therefore it was not given a time limit. The second stage entailed collection of data through interviews and continued document review. After the data collection process the process of transcribing interviews followed, before data analysis and interpretation was done. Since data analysis is a process that could necessitate further clarifications, I had anticipated that follow ups might be made with relevant or affected participants and documents re-visited as necessary and this actually was the case.

1.9 Theoretical Framework

ODL seemed to have generally experienced some stigmatisation. Literature indicated that there were perceptions within many contact university environments worldwide that ODL was not good enough to deliver higher education effectively, or not as good as the face-to-face delivery mode. The effectiveness debate discussed in Chapter 2 illustrates this.

However, perceptions about ODL being less effective than face-to-face seemed not to have convincing backing from research (Bernard *et al*, 2004a). Nonetheless, it was crucial that as I undertake this study, I should be very alert of such perceptions and to explore those prevalent within the UB community with regard to equivalency issues concerning the University's face-to-face and ODL modes of programme delivery. Perceptions might be very important, particularly since the growth and performance of ODL in dual mode settings appeared to be very slow and yet not very clear what could be constraining its fast growth.

The widespread acceptance of ODL at the UB would clearly be affected by how the University community perceived the issue of equivalency of these two modes, right from the University's Management, to administrators, faculty and students. Under normal circumstances, people do not want to invest their time, energy and resources on initiatives that they perceive to be destined to fail. Simonson, Schlosser and Hanson (1999) submit that experiences of the on-campus student and the ODL student should have equivalent value even though these experiences might be very different. I concur with their argument that the more equivalent the learning experiences of ODL students to those of on-campus students, the more equivalent the outcomes of the learning experiences would be for all. I further agree with their conclusion that if teachers, learners or the public in general identify learning at a distance as equivalent to learning on campus, then distance learning would become mainstreamed. However, should ODL be perceived inferior by the UB community and face-to-face perceived to have more status and more value, then face-to-face would be a natural mode of choice for all stakeholders, while ODL would continue to make an insignificant impact on expansion of opportunities for higher education participation, since it would remain peripheral within the UB system (Simonson *et al*, 1999). Perry and Rumble as cited in Abrioux (2006), observed that some of the challenges of ODL within dual mode universities included disinterested faculty members and provision of a form of teaching that was perceived less valued and less effective than the face-to-face provision.

Otto Peters (1967) saw distance education as a form of education with characteristics very closely linked to industrialisation (machination, mass production, division of labour resulting in specialisation). ODL is therefore capable of massification of education, while promising

that the quality of teaching and learning in such massive delivery state was not compromised. A few good lecturers could reach larger numbers of students (Perraton, 1991), making the quality of delivery equitably distributed. Peters (1967) further linked the development of this education model since 130 years ago, with technological developments upon which its strengths and successes depend. Notably, the first University study at a distance in its earliest form of correspondence, started around the same time as the appearance of the first railway line. A necessary condition for the success of correspondence study then was a relatively fast and regular postal and transport service. Likewise, one of the necessary conditions for the success of ODL in its current form is reliable multimedia services and infrastructure. To date, ODL seems to be a dynamic form of study which, depending on technical and technological support, has the potential to expand access to education extensively and to cater for large groups of students effectively (Sewart *et al*, 1983; Dhanarajan, 1996 and Peters, 1967) without compromising quality as some people appeared to hold it suspect.

Shale (1988) submitted that what constitutes the process of education when a teacher and a student are able to meet face-to-face, also constitutes the process of education when the teacher and the student are physically separated. What is necessary as Peters (1967) observed, is to make available the necessary environments for quality teaching and learning to take place. Whether it occurs on-campus or at a distance, Shale (1988) reiterated the presence of four common elements of every teaching and learning experience being a teacher, a learner, a communications medium and something to be taught or something to be learned (Simonson *et al*, 1999). So basically, effective and quality teaching and learning should take place in any mode of education delivery, as long as these four conditions have been satisfied. The concept of equivalency when it comes to dual mode settings therefore, is concerned with whether or not these conditions are satisfied in both on-campus face-to-face and distance learning, such that students and teachers who utilise either of the modes believe that effective teaching and learning has been achieved at the end of the day. The concept of equivalency of ODL with on-campus face-to-face is concerned with the quality of the teaching and learning experience for ODL teachers and students, compared to their counterparts on the face-to-face mode. Simonson *et al* (1999) see equivalency as central to the widespread acceptance of ODL. The common elements of teaching and learning as seen

by Shale (1988) should be provided in a way that allows the right rigour for a given mode in order to afford teachers and students in each mode to experience quality teaching and learning. None of them should feel that the services provided in the mode they are following yields an inferior quality of education.

Following on this argument, Carlson and Karp (2000) emphasised that experiences of the on-campus learner and the distant learner should have equivalent value even if these experiences might be different. They explained that equivalent does not mean identical and that ODL does not have to use the exact same methods as traditional or face-to-face education in order for them to be equivalent. What the equivalency theory stresses is the importance of equivalent value of the learning experience and the quality of the education that learners studying through either ODL or face-to-face receive. Therefore once a higher education institution decides to embrace both ODL and on-campus face-to-face learning modes and become dual mode, it should ensure that the outcomes of the learning experiences through the two modes have equivalent value, if each of the two modes has to make a significant contribution to the expansion of higher education. Otherwise, the one perceived to have more status and more value will be the one preferred by learners, faculty and all other stakeholders.

Teachers and students in any of the two modes should feel proud to be following that mode. Students should feel that they end up with the same quality of education and with credentials that are of the same value or the same worth with those from the other mode. The more equivalent the teaching and learning experiences of ODL teachers and students are to those of on-campus teachers and students, the more equivalent will the outcomes of the teaching and learning experiences for all. People do not want to be associated with inferiority such that those who find themselves in inferior situations would not continue to be there by choice. Teachers would want to feel that they are spending their valuable time and energy providing a valuable service and students should also feel that they are spending their resources on something that is adding value to their life. Otherwise, none of them would choose to be in or associated with a teaching and learning environment that wastes time and

other resources and which ultimately yields inferior results or tarnishes their image by being associated with it.

The equivalency theory (Simonson *et al,* 1999) had a significant bearing on this study since my interest was to find out why ODL appeared not to grow significantly in dual mode higher education institutions in Southern Africa to allow it to increase access to higher education significantly in the region. Using the UB, the study was to assess how ODL and face-to-face modes compared in a dual mode university in terms of planning and resources provision for each and generally how the equivalency of the value adding of the two together was perceived. The UB had embraced both models and further approved two very important policies (the Distance Education Mainstreaming Policy and the Teaching and Learning Policy) to be implemented within its Strategic Plan that ended in 2009 (University of Botswana, 2003). The Teaching and Learning policy emphasized quality of delivery of all UB programmes, while the Distance Education Mainstreaming policy intended to have ODL applied in all University faculties and Departments, to further the University's priority of expanding access. Both of these policies had the capability to influence widespread delivery of programmes, leading to expansion of enrolments in various programmes through ODL. These were well intentioned policies. However, their achievement of the intended goals (i.e. to increase enrolments and to provide widespread quality and effective teaching and learning) depended very much on their implementation in relation to the concept of equivalency. In this study I intended to probe the perceptions of the academics, both inside and outside the Department of Distance Education, concerning the importance of each of the two modes with regard to their teaching experience at UB, how they perceived the two policies to impact on delivery of programmes through both modes, and how the two policies contributed towards the growth of ODL at UB. Since the University had chosen to be a dual mode institution, I assumed that it was alert to the concept of equivalency to ensure that both modes were promoted such that they could both attract students and teachers who would ultimately produce graduates perceived to be of the same quality, in line with both the distance education mainstreaming policy and the teaching and learning policy. The study would further probe how the higher education planners, policy makers and practitioners perceived the concept of equivalency of the two modes (Simonson *et al,* 1999; Sewart *et al*, 1983), and

how their perceptions at the different levels would affect the expansion of ODL and its uptake at the UB and in the higher education sector as a whole.

Table 1.2 gives indicative areas or issues through which equivalency between the ODL and the face-face mode of delivery could be checked. However, an analysis of how these and any emerging ones facilitate equivalency, or lack of it, is dealt with in detail in Chapter Five, Six and Seven.

Table 1.2: Issues of Equivalency between ODL and Face-to-face Modes at UB

Policy Issues	**Strategic Planning Concerns**	**Quality Issues**	**Staff & Student Support**	**Faculty Incentives**
Is the motivation for the introduction of ODL based on research results? Any specified objectives for ODL at UB?	Any enrolment targets per mode? How do the set targets compare? What influences the distribution of such targets?	Is the curriculum the same for ODL and face-to-face?	Where does curriculum come from, who develops content, what are their competencies	Research and publication - are ODL modules recognised as publications? Do they have any promotional prospects for faculty? How is research in ODL rewarded?
Is there a specified and defined target audience for ODL programmes?	What structures are necessary for ODL mode – which ones are possible within what time frame?	Are the necessary structures in place?	How is the workload for faculty in either of the modes?	What incentives recognise over-stretched structures if any?
Has the volume of demand for	What are the necessary	Are the necessary resources	How close and accessible to clients	Any and what compensation for

ODL programmes been established? Any enrolment targets to address the demand?	resources? How will the two modes share the resources?	available for both modes (type/quality and amount)? If not enough, how are they shared between the two modes?	(students, tutors) for enhancement of ODL teaching and learning are human and other resources (library, internet, email etc)? What is the level of UB presence in various parts of the country?	staff (part-time or full-time), undertaking work beyond working hours and weekends, as well as for travelling to provide services at centres?
Any specific programmes and levels for either mode – what informs this decision?	How many programmes at what levels to be available through ODL? How do programmes offered through ODL relate to the human resource needs of the economy? Are ODL programmes cost-effective for the University?	How many study hrs are necessary for the content to be taught effectively under each mode? What assessment instruments and strategies are available for each mode?	How many study hrs are actually available for the content to be taught effectively under each mode? Who pays for programmes? How do they pay? Any University bursary or assistance for ODL students?	Any free or subsidised education for staff members and/or their families into UB programmes? What mode does UB prefer for staff training?
Has the University established the necessary staff competencies for ODL development, management &	How often are the staff competencies reviewed and upgraded?	Staff training – what interventions are available for enhancement of staff competencies for both modes?	How has the implementation of the Learning and Teaching Policy improved competencies for ODL development and delivery at UB?	How is best practice and good performance in ODL assessed and rewarded at UB?

delivery?				
How often will the performance of the ODL initiative be evaluated against its intended purpose?	What resources, competencies (i.e. by whom) need to be availed for the evaluation of the ODL initiative and when?	How many times has the ODL initiative at UB been evaluated? What was the focus of the evaluation in each case?	How have the results of evaluation exercises been used to enhance ODL provision and growth at UB?	What feedback has been given to faculty as a result of evaluation and how has this feedback improved staff performance? How has such improvement been recognised?
What is the UB ODL Mainstreaming Policy intended to achieve? What resources, structures and competencies does its implementation require?	How is the ODL Mainstreaming Policy to be communicated to the rest of the UB community?	Is there an ODL Mainstreaming Policy implementation strategy? What level of authority does its driver have for its implementation in other UB structures (faculties, departments)?	Who monitors the implementation and assesses the level of achievement of the ODL Mainstreaming Policy, in relation to its intended purpose?	How has the implementation of the ODL Mainstreaming Policy benefited faculty and students?

The analysis in Chapter 7 of issues raised in Table 1.2, which emerged from the responses of the participants, as well as the documents analysed appeared to give indications of the extent of the acceptance of ODL as a mode of provision equivalent in value and worth to the University community, as the face-to-face mode.

1.10 Data Analysis and Interpretation

This qualitative study is based on interpretive methodologies and principles, where, as observed by researchers across decades (Bell, 1987; Sarantakos, 1997; Seidel, 1998; Neuman, 2006; Taylor and Gibbs, 2010), data identified leads automatically to its analysis, evaluation and interpretation, which may lead to further probing and identification of more data. Seidel (1998) observed that the basic process of data analysis consists of three parts, which are noticing things to be collected, then collecting them, followed by thinking about them, which might result in noticing more things in the data collected and as the researcher thinks about them and having to go back and collect more. Even though the data collection process in this study has been divided into different phases, in practice the phases do overlap and their execution intertwine, as is the nature of qualitative data collection, analysis and interpretation. This typically presents challenges, which continue to be addressed as they arise.

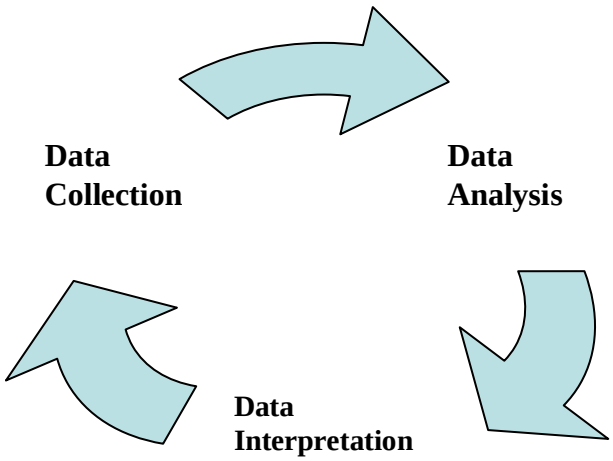

Figure 1.1 The Data Collection, Analysis & Interpretation Cycle

In qualitative interpretive research, the process of data collection is a continuous process. As collected data is analysed and interpreted, more issues tend to arise, which necessitate further investigation (collection of further data, its analysis and interpretation) to clarify other

aspects of the research, until all relevant emerging issues have been studied and the research question addressed fully.

During data analysis, the researcher searches for patterns of data and interprets them, moving from a description of empirical data to interpretation of meanings. Sarantakos (1997) asserts that the first steps of qualitative analysis are made during the data collection stage, during which time, data are collected, conceptually organised, interrelated, evaluated and used as a springboard for further data collection. Therefore data collection in this manner continues to take place concurrently with data analysis. Data analysis in this study follows the Qualitative Content Analysis methodology (Mayring, 2000; Taylor-Powell and Renner, 2003) where the researcher starts sorting out data by carefully reading them, identifying main themes, categorising the material for purposes of analysis, summarising, integrating, transforming and highlighting. This process, which is called data reduction, helps to identify important aspects of the research issue and assists in arriving at conclusions.

Data organisation can also be achieved by being assembled around themes and points and the information categorised in more specific terms. The third and last stage of data analysis is interpretation, in which the researcher has to identify patterns and regularities, discover trends, explanations, and on the basis of which, make decisions and draw conclusions related to the research question (Sarantakos, 1997; Mayring, 2000; Taylor-Powell and Renner, 2003).

1.11 Ethical Considerations

This study adheres to the Ethical Code and Guidelines of the Faculty of Education of the University of Pretoria and seeks permission to undertake research in the identified institutions from their management, as well as for permission and assistance to identify the staff members who will participate in the study.

The following ethical considerations were adhered to:

(i) **Informed consent:** Participants were informed of the objective of the study (to establish contributing factors to the perceived slow development and expansion of ODL, which was perceived to result in continued acute shortages of access opportunities for higher education in Botswana. They were further informed about their voluntary participation and right to withdraw from the activities of the study, if and when they no longer wished to participate (see **Addendum A**).

(ii) **Anonymity and confidentiality:** The institutions were not to be anonymous. It was important for the study to end up with empirical evidence of the situation with regard to the development of ODL and it was important to disclose participating institutions for the information to be credible. Individual respondents have been referred to as Participant 1, 2 etc. to maintain anonymity.

An agreement on anonymity was reached with individual staff agreeing to participate. Through the informed consent letter (**Addendum A**) and verbal explanation, the institutions and individual participants were also made aware that the findings might have wider readership within Southern Africa and beyond, since the study was intended to have regional relevance and benefit.

1.12 Credibility and Dependability of the Study

One of the most significant steps of the research process as observed by Neuman (2006) is interpreting data and drawing relevant conclusions that will answer the research question satisfactorily. Since in qualitative interpretive/constructivist research, truth can be multi facetted, some may wonder if meanings arrived at in a given study are valid and dependable. Research has already indicated that truth and reality in social research can be contextual, based on individual perceptions, experience and social interpretation. While quantitative researchers depended on measurable variables and hard figures or numbers, qualitative researchers depended more on social processes and cases in their social context as observed by Neuman (2006). Accuracy and completeness of research are very important as determinants of credibility in qualitative research. Robson (2002) advised the use of audio or

video recording during data collection, to ensure that accurate data is collected. According to Robson (2002), in qualitative research, trustworthiness and accuracy are key determinants of credibility and dependability of the research. Credibility and dependability of the sources of data therefore become crucial, as well as the methods of data collection. This guided my choice of institutions to participate in the study, as well as the selection of the two methods of interviews and document analysis. The semi-structured interviews were audio recorded to ensure accurate data capturing and these were later transcribed. Interviews and document analysis have an important role to play in ensuring trustworthiness of the data collected. Each of the institutions selected had a role in the expansion strategies for access to higher education in Botswana. They also each had a role in the development, implementation and support of ODL at higher education level.

Here I was mainly looking at the characteristics of the sample i.e. the relevance of institutions and individuals sampled, their credibility, dependability and the accuracy of the information they could provide. In this study

- One of the sampled institutions was a dual mode provider of higher education in Botswana and within the region. It had experience in utilising both ODL and on-campus face-to-face models of delivery and the assumption I made was that it would understand the strengths, weaknesses and challenges of each model in addressing access issues at higher education level. Presumably it had also experienced how the existence of the two models under one system enhanced or inhibited the performance of each in terms of improving access
- The last two sampled institutions were those responsible for planning and advising on resource allocation for higher education and training in Botswana and concerned with human resource development, as well as issues of access and equity. These two were expected to know the place and role of ODL at higher education level in the country's education system and how its development and expansion was supposed to be resourced and supported.

From this perspective the sample is fairly representative in terms of relevance, trustworthiness and credibility. From this sample, the study can produce reliable, dependable

and usable results. In terms of individual participants, I targeted decision-makers and practitioners. Planners in all selected institutions were fully aware of the extent of the higher education access problem regionally and at local level, as well as the planned interventions to deal with the problem. Practitioners represented implementers who were expected to know the reality of what was happening on the ground as compared to what had been planned. Looking at the issues from the sides of decision-makers and practitioners was expected to provide some form of triangulation and therefore enhance reliability and credibility of the data and conclusions drawn from them.

Credibility of a study can also depend on the extent to which its findings can be widely relevant and applicable. Even though the findings of this case study are not generalisable, I am of the opinion that its conclusions may derive lessons applicable and relevant to other environments in the region.

1.13 Contributions and Strengths of the Study

This study was intended to contribute to the existing body of knowledge about ODL at higher education level in the region. The study assessed the extent of the access problem for higher education within Botswana and within Southern Africa. It further established the low contribution that ODL had made towards increasing participation at this level locally and in the SADC region. The investigation revealed some likely issues that might be contributing to the slow development and strengthening of ODL in the Botswana higher education sector generally and within the UB specifically, which could be similar in other countries within Southern Africa. In some cases it confirmed fears and assumptions with regard to the stigma that appeared to affect its growth and widespread use in dual mode universities.

The knowledge gathered from the study appears relevant and can be applicable in certain contexts within the region. It will therefore inform higher education level ODL policy directions, practice, curriculum as well as staff development for some planners and providers in Southern Africa.

1.14 Limitations of the Study

The study was aimed at establishing why ODL does not seem to develop fast enough in dual mode institutions in Southern Africa to significantly expand opportunities for participation in higher education. Southern Africa is a very large region with varying contexts. Therefore the sample identified is not representative enough of the region. Its findings are not generalisable. The study could not take a larger sample and include participation from other SADC countries because that kind of scope would have been too large for its purposes and would have rendered the study undoable.

1.15 Delimitations of the Study

This study was not trying to investigate the status of the access problem in each of the countries in Southern Africa, or to assess the impact of ODL in each of those countries. It would not be possible for this kind of study to address such an enormous problem. The study was therefore limited to the identified institutions within the Botswana context. The results were not intended to be generalisable but were hoped to have relevance and an element of applicability in some of the SADC countries.

The sample population could have also included both face-to-face and ODL students, as well as parents and potential employers as their perceptions and preferences are also significant in a study of this nature. Other ODL institutions like Botswana College of Distance and Open Learning (BOCODOL) and Baisago could have been included in the study too. However, I decided not to include the two institutions mainly because the focus of the study was ODL in dual mode universities and these two did not fall within this criterion. The size and scope of the research would have also been unmanageable and too big for its purposes. With regard to inclusion of UB students, the timing of the data collection stage was a limiting factor since it was carried out around the time when students were preparing for end of semester examinations. Most of the lecturers and administrators seemed to prefer this period and it also gave me time to process the findings and write the report in time to submit my work for evaluation. Approached potential student participants from the face-to-face mode actually

expressed reluctance to participate, indicating that they had nothing to comment regarding ODL and claiming that they didn't know anything about it. ODL students on different UB programmes were scattered in different parts of the country and difficult to reach for this kind of research. Some of those who would be coming to Gaborone specifically to prepare for exams, I assumed would be reluctant to participate since they would not find time to do so without compromising their limited study time. Over and above the difficulty to access the students and potential students for interview, I also considered that the focus of the study was really on finding out primarily from planners and providers, why ODL seemed to perform lower in terms of increasing access, compared to the face-to-face mode when operated within dual mode universities. Based on these preliminary considerations, I decided to exclude these potential participants though they would have provided a valuable contribution to the study.

However, the participants who ended up being interviewed, who were the policy makers, administrators and lecturers, provided insight to the challenges that ODL may be facing in dual mode universities and those which might impact on its growth and consequently on its ability to contribute significantly to access to higher education. The institutions from where these participants were drawn were the most relevant institutions for the concerns of the investigation. The lecturers also provided the experiences they had encountered concerning the dissatisfaction of some students with regard to the perceived poor quality of the services they received as ODL students. Some of the documents reviewed also echoed this student concern (Sikwibele and Mungoo, 2009).

1.16 Conclusion

The conclusion for this chapter summarises what the chapter has covered and ends with a brief outline of the whole thesis.

1.16.1 Chapter Summary

Chapter One has indicated that although there continued to be a challenge of increasing numbers of youth and adults who wanted opportunities to undertake studies at higher education level in Botswana (Dodds *et al*, 2008), and other SADC countries generally, the region continued to record very low participation rates for higher education compared to other regions (Donat, 2001; UNESCO, 2007; Daniel, 2007). In addition to the secondary school leaving clientele, there seemed to be an increasing number of adults, mainly in employment, who also required opportunities to enrol for higher education programmes (Dodds *et al*, 2008). Some full-time face-to-face institutions in the region, including UB, had introduced ODL as one of their education delivery strategies, in a bid to increase access and participation in their programmes (University of Botswana, 2006). Despite this development, the numbers accessing higher education programmes through ODL in dual mode institutions appeared to remain very low compared to those accessing them through their full-time face-to-face provision. The Chapter also indicated that low participation in higher education had been seen to adversely affect country and regional economic development (World Bank, 2008a; Bloom *et al*, 2006). While ODL was seen as having the potential to substantially increase participation at this level if its improvement and strengthening could be urgently attended to, this chapter showed that many of the dual mode higher education institutions in the region appeared not to be in any hurry to do so and that as a result, their ODL initiatives seemed to be failing to make any significant contribution towards increased participation. The next two chapters reviewed literature to further determine the level of participation in higher education.

1.16.2 Arrangement of the Thesis

This thesis has eight chapters. Chapter One is an introductory chapter that provides orientation and context of the study, as well as acts as a road map for the study. The literature is reviewed in Chapter Two and Chapter Three. Chapter Two reviews the literature regarding low participation in higher education in Southern Africa in general terms, while Chapter Three examines the situation of low participation in higher education specifically

with regard to Botswana's experience. Chapter Four is the methodology chapter, while Chapters Five, Six and Seven deal with the analysis and interpretation of the data collected through the interviews as well as the documents reviewed. Chapter Eight discusses the findings and draws conclusions on the basis of the data analysis and interpretation. Each of the eight chapters starts with a brief overview that captures what it covers and ends with a concluding statement.

Chapter Two

Participation in Higher Education – The Broader Picture

2.1 Introduction and Overview

The previous chapter established a challenge for higher education institutions in Southern Africa with regard to high demands for this level of education. It also elicited the inability of existing institutions to cope with such demands. Chapter One also established a pattern in Southern Africa which appeared to indicate that in some of the universities that employed both ODL and face-to-face strategies for delivery of their programmes, enrolments through ODL for most of them seemed to remain low compared to their full-time face-to-face enrolments. The chapter indicated that although in theory dual mode universities had embraced ODL and declared their commitment to increase participation in their programmes through it (University of Botswana, 2006), in practice, a pattern seemed to emerge that might be suggesting that ODL was not developed fast enough in these universities, to adequately address the challenge of high and diversified demands for higher education. Not withstanding this general pattern, in some universities the faculties that adopted ODL seemed to do much better in terms of enrolment compared to face-to-face in the same faculty. The Faculty of Education at the University of Pretoria (UP) for instance, where the enrolment through ODL was so high that they had to cap enrolment within that faculty, seemed to be an example of how ODL could actually increase enrolments substantially even in dual mode settings (University of Pretoria, 2009). However, looking at enrolment beyond one faculty and at the entire university, access still seemed to remain a problem in the other faculties and hence the university as a whole, even in such rare instances. The overall picture seemed to indicate low enrolments through ODL compared to the face-to-face mode of delivery in dual mode universities.

When looking at many of the dual mode universities, it would appear that their ODL initiatives performed much lower than their face-to-face mode of delivery in terms of increasing opportunities for participation in higher education across faculties. Consequently

demands seemed to continue to outstrip provision even with the employment of ODL. Performance of the dedicated ODL institutions in terms of increasing enrolments on the other hand, seemed to indicate that ODL provision might have the potential to address the challenges of high demands for higher education, with their incumbent diversified clientele needs more adequately than the full-time face-to-face provision. However, the situation in some dual mode universities seemed to be telling a different story about ODL. Therefore to allow me to probe this situation, the main research question for this study was intended to probe why some dual mode higher education institutions in Southern Africa continued to enrol lower figures through their ODL than their face-to-face mode of delivery, though ODL was supposed to have the potential to increase access more substantially than face-to-face.

Whereas the first chapter related high participation and achievement in higher education in general terms, with enhancement of economic development, Chapter Two looked closely at this relationship with regard to Sub-Saharan Africa, particularly Southern Africa. It also compared the region's participation ratios with those of other regions, pointing out some of the challenges faced by the higher education sector in most of the Southern African countries. The focus then moved to the concept of ODL and its characteristics, and how these were supposed to give it advantage over face-to-face provision, in addressing high and diversified demands. It became important for me to review the debate surrounding the effectiveness of ODL, which seemed to continue across stages of its development, seemingly contributing to the slowness in its development and expansion. The concepts of the equivalency theory seemed to come out significantly in this debate. The literature review was alive to the likelihood of the impact of the ensuing perceptions on the development of ODL in dual mode universities.

2.2 Higher Education and Economic Development

Increased participation and high achievement in higher education are taken to be some of the main strategic directions that African countries could take to enhance the development of their economies (World Bank, 2008a).

2.2.1 A Shift of Emphasis

Whereas during the seventies and eighties, emphasis appeared to be more on expansion of education at primary and secondary school level, with the understanding that this was the level most important for economic development in the developing countries (Hallak, 1990; Bloom *et al*, 2006), recent research seemed to indicate that developing countries actually needed to expand their participation in higher education, as this had become the level that was regarded as holding more potential to enhance economic development in the global economy (Young, 2006). As Yaw Ansu, cited in the World Bank (2008a), observed with regard to Sub-Saharan Africa, the revival and sustainability of economic growth across Southern Africa also seemed to require urgent and substantial investment in the development of both its human resources and physical infrastructure. Ansu believed that maximising productivity and achieving competitiveness would depend on the success of the region to raise the quality of its human resources. The same observation was made by Carnevale and Porro (1994) that the competitive advantage of nations had been redefined in terms of the quality of national education and training systems, which according to Halsey *et al* (1997), was "judged according to international standards". Since the Jomtien forum and later the Dakar world summit, efforts seemed to have concentrated on developments towards achieving universal primary education, even though only a few of the developing countries, particularly in Africa had been able to achieve it, as reflected in the Africa Competitiveness Report 2009 (Global Competitiveness Network, 2009). Following primary education, efforts were then focused towards enhancement of transition from primary to secondary education in some countries. A firm foundation could therefore be said to have been laid at primary and secondary education level in some developing countries. However, this turned out not to be the level of education expected to facilitate effective and scientific generation of knowledge, innovation and creation of employment or even that could be considered as giving a country competitive advantage in the global market and global economy (Bloom *et al*, 2006). It is, however, an important level that laid the foundation for the attainment of more advanced levels of education and training.

Bloom, Canning and Chan (2006) submitted that "previously tertiary education was viewed as an expensive and inefficient public service that largely benefited the wealthy and

privileged" (Bloom *et al*, 2006). For several decades therefore, development agencies seemed to have placed great emphasis on primary education and to neglect higher education as a means to improve economic growth and mitigate poverty. Bloom *et al*, (2006) observed that from 1985 to 1989, the World Bank's worldwide education-sector spending on higher education was 17% from 1995 to 1999, the proportion allocated to higher education declined to just 7%. This observation was also made by Kanwar and Daniel (2008) who reiterated that in the eighties and nineties the World Bank privileged basic education over higher education. Young (2006) challenged the initial belief of some of the African countries and the donor institutions they worked with, that higher education had little role in promoting poverty alleviation and submitted that this level of education and training could have an enormous and sustained impact on economic development and poverty alleviation. Several scholars seemed to be convinced that the availability of good quality higher education and training could result in increased potential for high productivity levels, further resulting in accelerated economic growth (Williams, 1997; Young, 2006; Bloom *et al*, 2006; Pityana, 2008). Pillay, Maassen and Cloete (2003) noted with appreciation a change with regard to negotiations in the General Agreement on Trade in Services (GATS) that in 2000, the global multilateral trade talks for the first time, included higher education and that this inclusion had actually affected policy debates on higher education, for both the developed and developing countries. Young (2006) argued that investing in higher education in Africa may accelerate technological readiness, which would reduce knowledge gaps between Africa and other regions and in turn contribute to innovation and accelerated economic development. The World Bank too, according to Kanwar and Daniel (2008), was now of the view that for countries to achieve sustainable economic development, the Age Participation Rates (APRs) in higher education should be in the region of 40 to 50%. Ansu (World Bank, 2008a), submitted that high quality human capital was central to the growth strategy of Africa. He argued that human capital affects growth through multiple channels, including increasing efficiency of asset utilisation and management, entrepreneurship and innovation, which raise productivity levels, unlock new investment opportunities and promote diversification of products and services and export opportunities. He observed that African countries had gone far in achieving high levels of literacy and increasing enrolments at primary and secondary school level. He urged that the continent needed to urgently move into acquiring higher order

skills and expertise and to intensify knowledge growth, which would allow them to have value add to existing economic activities and enter new industries and services. Literature seemed to indicate that it was the post secondary level education and training that was now being recognised to hold the potential to make more meaningful contribution to sustainable economic development in the globalised world (Williams, 1997; Young, 2006; Bloom *et al*, 2006 and Pityana, 2008), even though good quality basic education was still an important foundation ingredient (World, 2002). The 1998/99 World Development Report cited in World Bank (2002), seemed to be of the opinion that among the most influential changes of the 21st Century were, the increasing importance of knowledge and up-take of information and communication technologies as drivers of growth in the context of the global economy. The report noted that today's most technologically advanced economies were those that were truly knowledge-based and capable of creating millions of knowledge related jobs in an array of disciplines, thereby out-pacing overall growth rates in less technologically inclined economies (World Bank, 2002). A more knowledge-intensive approach capable of sustained development was encouraged for African countries (Williams, 1997; World Bank, 2002; Young, 2006).

2.2.2 Expansion of Higher Education Competing for Resources

Despite the realisation of the importance of higher education for economic development and the urgent need for its expansion, Southern Africa seemed to be facing huge challenges of profound threats such as diseases and poverty, as well as diminishing resources and slowing economic development, while at the same time trying to meet its ever-increasing higher education requirements (Ekhaguere, 2000; Pityana, 2008). While Southern African countries were grappling with these domestic issues, another disquieting reality was that at the centre of social, political, and economic transformation, as Brown and Lauder in Halsey *et al*, (1997) observed, there was the creation of a global economy that had led to an intensification of economic competition between regions and states. Global competition therefore seemed to have created serious challenges for Sub-Saharan African countries, because as they grappled with their local obligations, they also had to consider their state of global competitiveness and its implications on their present and future positions on the international development arena. Urgent expansion of higher education participation, reduction of life threatening

diseases, infrastructure development and intensified technology up-take therefore was observed to be a strategic way-forward for Southern Africa.

2.2.3 Challenges for the Higher Education Sector

Concerns were raised that in developing countries generally, and in Sub-Saharan Africa particularly, the demand for higher education continued to grow much higher than face-to-face institutions could handle (Dhanarajan, 2001; UNESCO, 2005; Boulard, 2005; SADC, 2006; Daniel, 2007). As the 2007 EFA Monitoring Report indicated, although a significant growth had been recorded between 1999 and 2005 in gross enrolment ratios (GER) at higher education level for all regions, Sub-Saharan Africa was still way too low, with an average of 5.1%, compared to Northern America and Western Europe at 70.1% GER. One look at the disparity in these GERs between Sub-Saharan Africa and America and Europe showed a desperate position for Sub-Saharan Africa in terms of competitiveness between the two worlds, as higher order skills, technological advancement, expertise and intensified knowledge growth, which are necessary conditions for sustained economic growth and effective competition in the globalised world, were still in very short supply in Sub-Saharan Africa and in Southern Africa.

Therefore it seemed urgent that Southern African countries needed to do something differently in order to address their chicken and egg adverse conditions, where higher education expansion was a necessary condition for accelerated economic growth, just as economic soundness or a good resource base was a necessary condition for expansion of good quality higher education. Ekhaguere (2000) had foreseen aggravated pressure for higher education in Africa in the new millennium, as post secondary education and lifelong learning became more and more important. Daniel (2007) also detected this pressure and observed that tens of millions of aspiring third-world young adults would be seeking postsecondary education in the coming years.

According to the above discussion, it seemed necessary, at individual as well as society level for these youth and adults to aspire to participate in higher education. The question was how

Southern African higher education institutions planned to deal with this expanded and diverse demand, where in addition to soaring numbers of secondary school graduates, a growing number of prospective adult learners, including workers, the unemployed and people under special circumstances or with special needs also needed opportunities for higher education (Daniel, 2007). Human resource needs of the region also called for innovative human resource development strategies to address the gap between demand and supply for qualified and innovative personnel (UNDP, 2005; Bloom, *et al* 2006). Meanwhile, regional resources and capacity to handle the escalating demands continued to diminish (World Bank, 2009). Doubts have been expressed whether African higher education institutions utilising the traditional on-campus face-to-face mode only, for delivering higher education could develop further and adequately expand access, while maintaining quality (World Bank, 1999). Ebersole (2003) and Browne (2005) drew a conclusion that the question was no longer whether, but how to innovate for institutions seeking to reach more and diverse audiences and to build new forms of support. A major challenge was to find a strategy that could expand enrolment rates for higher education, while maintaining quality.

2.3 The Identified Strategy

ODL has been identified in Southern Africa and other parts of the world as one of the strategies through which universities and colleges could manage to adequately expand participation in higher education and maintain quality (Sherry, 1996; SADC, 1997; Browne, 2005; Daniel, 2007 and Pityana, 2008). Pityana (2008) observed the advancement of information and communication technologies as having enhanced opportunities for expanded quality ODL provision for African higher education institutions. Sherry (1996) also observed that political and public interest in ODL had become high, especially in areas where the diverse student population was widely distributed. Realisation of the potential of ODL to increase participation rates in higher education in Southern Africa had resulted in three dedicated ODL universities in the region; UNISA in South Africa, the Open University of Tanzania (OUT) and the Zimbabwe Open University (ZOU). Several ODL units had also been established within many contact universities and colleges, making them dual mode institutions (Bates, 2000a; Romiszowski, 2004; Daniel, 2002; Dence and Armellini, 2009;

Hope, 2006). However, while ODL seemed to have attracted large numbers in dedicated ODL higher education institutions in Southern Africa, for dual mode institutions, numbers enrolled through this mode seemed to have remained comparatively low, as reflected through the student profiles of some of the universities in Southern Africa as Table 1.1 indicates. These comparatively low enrolment figures through ODL could be indicative of a number of challenges that some dual mode institutions in Southern Africa might be facing. There appeared to be no doubt that the universities were aware that their face-to-face strategies were not coping with the high and diverse demands. This was one of the reasons why they had introduced ODL in the first place (University of Botswana, 2006). However, there appeared to be constraints regarding the expansion of the ODL mode within some dual mode institutions in Southern Africa, to facilitate the intended expanded participation.

2.4 The Problem of Low Enrolments

Southern Africa, like most developing regions, seemed to have been concentrating its education development efforts more at primary and secondary level and less at higher education level. This appeared to have created a wide gap for participation in higher education between Southern Africa and other regions (Pityana, 2008), especially the highly knowledge-based economies, as pointed out by Daniel (2007), World Bank (2008a) and UNESCO (2007).

2.4.1 Outside sub-Saharan Africa and Southern Africa

Literature from outside Sub-Saharan Africa painted a despondent picture with regard to the region's participation in higher education compared to other regions. Donat (2001) and Daniel (2007) observed the lowest APR participation rates in Sub-Saharan Africa and Southern Africa, which was also generally recording the lowest GER in the world (MacGregor, 2008). While the developed countries had an APR of 50% or more, South Asia and Sub-Saharan Africa recorded an average of below 10% (Daniel, 2007). It would appear that although improvements had been made over the years, the situation during 2007/8 was still of comparably very low enrolment rates for Sub-Saharan Africa, as was the case in 2005.

The EFA Global Monitoring Report of 2005 and that of 2007 showed a huge gap between gross enrolment ratios of developed and developing countries, with even more worrying records for Sub-Saharan Africa. Woodley (2004) noted that during the 1960s, Britain had a participation rate of about 6% of the school leavers getting places in full-time higher education. Even though Woodley (2004) was worried about the low (6%) participation rate for Britain during the 1960s, this was quite high compared to the reported 1% by 1965 and 5% by 2006 for Sub-Saharan Africa according to the World Bank (2000) and UNESCO (2007), as well as the average of 3.5% for the rest of the Commonwealth by 1995 (Dhanarajan 2001). More than four decades later, the EFA Global Monitoring Report 2008 comparison drew an even more depressing picture, considering the leaps that developing countries, including Sub-Saharan Africa and Southern Africa, had made in terms of improving access to higher education since the 1960s. A median GER of 55% among developed countries and 11% among developing countries by 2001 was reported by Daniel (2007). Many countries in Western Europe, North America, some in Central and Eastern Europe and a handful in East Asia and the Pacific had achieved a gross enrolment ratio of about 40% in higher education by 2001, while China and India were substantially below 15%. In the majority of Southern African countries for which 1998 data was available, gross enrolment ratios for higher education were still far below 5%, as indicated in the example below extracted and modified from UNESCO (2004).

Table 2.1: Estimated Enrolments in Higher Education - 1998 and 2001 & 1998 GER for Sub-Sahara Africa

Country	**Total No of Students Enrolled in 1998**	**Higher Education GER 1998**	**Total No of Students Enrolled in 2001**
Angola	8 000	0.8%	8 000 *(1999/2000 data)*
Botswana	6 000	3.1%	8 000
Democratic Republic of Congo	60 000	1.4%	-
Lesotho	4 000	2.2%	5 000
Madagascar	31 000	2.3%	33 000
Malawi	3 000	0.3%	-
Mauritius	8 000	7.1%	13 000
Mozambique	-	-	9 000 *(1999/2000 data)*
Namibia	11 000	6.6%	13 000
South Africa	634 000	15.3%	639 000
Swaziland	5 000	4.9%	5 000
United Republic of Tanzania	19 000	0.6%	22 000 *(2000/2001 data)*
Zambia	23 000	2.3%	25 000 *(2000/2001 data)*
Zimbabwe	-	-	60 000

Adapted from UNESCO 2004: 318 – 325

Table 2.1 reflects a grave concern with regard to low participation in studies at higher education level in Southern Africa. Only about three countries in the region seemed to have achieved a gross enrolment ratio of above 5% by 1998. South Africa appeared to be the only one that compared positively with enrolment ratios of developed countries then, and performed better than China and India, both of which recorded less than 15% GER during 1998 - 2001.

2.4.2 Sub-Saharan Africa and Southern Africa

A focus on literature from and about the region seemed to confirm generally low participation rates for higher education for the region beyond 1998 (Watson, Motala and Kotecha, 2009). By 2008, Botswana's participation rate of the 18 – 24 age group was estimated at about 11.4% according to Tertiary Education Council (2008a) up from 5.12% by 2005 (UNESCO, 2007). South Africa was recording about 17% participation rate according to Pityana (2008). This was also an improvement from the previous just above 15% up until

2006 as reflected in UNESCO (2007). Namibia and Mauritius recorded 5.83% and 17.15% for 2006 respectively, according to UNESCO (2007).

During 2006 and 2007, South Africa seemed to have accounted for about 71% of the total higher education provision in the SADC region (SADC, 2006). Though there seemed to be a notable increase in enrolment rates for most of the Southern African higher education institutions as reflected in the SARUA (2009) report, a large number of students from Southern Africa seemed to be still enrolled in South African higher education institutions. By 2007, about 34 600 students from the other SADC countries were enrolled between the 22 South African state funded universities covered in the SARUA Handbook 2009 (Robbins *et al*, 2009). This seemed to indicate a high level of South Africa's contribution and support for the development and delivery of higher education in the region to that point in time. The SARUA Handbook 2009 (Robbins *et al, 2009)* indicated this continued trend, even though many other state funded universities in SADC also enrolled students from other SADC countries. This indicated student mobility generally prevalent in the region. In 2007 there were more than 2500 international students on campus at the University of Pretoria, representing 60 countries. More than 1 500 of these students came from the SADC countries (University of Pretoria, 2008; SARUA, 2009). In the same year the University of South Africa (UNISA) reported to have on the roll, more than 200 000 students, including those from Southern Africa, other African countries and abroad. Table 2.2 indicates the enrolment pattern of students from Southern Africa in UNISA programmes.

Table 2.2: UNISA Students Head Count by Country (Africa – SADC), 2005 and 2006

Country	**Total, 2005**	**% 2005**	**Total, 2006**	**% 2006**
Angola	120	< 1	132	< 1
Botswana	1,415	< 1	1,309	< 1
Congo	8	< 1	10	< 1
Lesotho	200	< 1	137	< 1
Malawi	114	< 1	118	< 1
Mauritius	1,308	< 1	1,116	< 1
Mozambique	243	< 1	210	< 1
Namibia	2,574	1	2,335	1
Seychelles	7	< 1	23	< 1
Swaziland	992	< 1	1,125	< 1
Tanzania	77	< 1	83	< 1
Zambia	316	< 1	406	< 1
Zimbabwe	4,585	2		2
Total	**11,959**		**10,652**	

Source: Adapted from Lephalala & Pienaar 2007

From the table above, it appears most of the SADC countries were still very dependent on South Africa for their higher education needs by 2008. People from most of these countries were still taking ODL programmes from South Africa, as the UNISA example demonstrated, even from countries which had introduced ODL at higher education level, either in dedicated or dual mode institutions. This seemed to point out to the slow expansion of the various ODL initiatives in their countries.

2.4.3 A Shortfall in Planned Expansion

Even though an improvement was noticed in the higher education enrolment rate in Southern Africa (Daniel, 2007; Pityana, 2008; Tertiary Education Council, 2008b; UNESCO, 2007 and World Bank, 2008a), many of the countries were still far below the targets they had set

for themselves. The National Human Resource Strategy of Botswana prioritised access to higher education as a major strategic goal to enable transition from a resource driven economy with unskilled low wage labour to a high skilled knowledge intensive service economy by 2026 (Tertiary Education Council, 2008b). By 2007/8 figures, the country had an estimated participation rate of 11.4% (Tertiary Education Council, 2008b). Its projected participation targets were a minimum of 17% by 2016 and a further minimum of 25% by the year 2026 according to the Tertiary Education Policy – White Paper No. 37 of 2008 (Ministry of Education & Skills Development, 2008). Looking at the past record of trying to improve access and participation in higher education and achieving only 11.4% after 42 years of independence, even with the UB embracing ODL since the establishment of the CCE in 1991, it was apparent that something needed to be done differently to realise such a projected participation rate for Botswana. One noticed that the target that Botswana was setting for itself in 2008 for the eighteen years to 2026 was way below the achievement of the knowledge-based economies at the time, which were at more than 70% GER, particularly considering the "ambition to brand Botswana in terms of international competitiveness with the corollary being that its people must be world class performers" (Molutsi, 2006). Even South Africa, one of the countries with the highest participation ratios of about 17% (Pityana, 2008) in Southern Africa, had also fallen short of its projected target of 30% participation of the relevant age group, which was set for 2005, according to the White Paper No. 3 of 1997 (Cloete and Bunting, 2000).

2.5 The Need for a Catching Up Strategy for Southern Africa

The discussion so far has indicated that contrary to earlier assumptions that for alleviation of poverty and improvement of live conditions of the people, Africa needed to concentrate more on the development of basic education (World Bank, 2008a) and less on higher education, recent findings indicated that it was actually higher education and higher order skills training, as well as harnessing information and communication technologies that could bring about more sustained economic development in the highly competitive, knowledge-based globalised economy (Kotecha, 2004; World Bank, 1994, 2002 and 2008b; Watson *et al*, 2009). With the urgency for Southern Africa to work towards catching up (World Bank,

2008b) and closing the gap between it and other regions, as well as challenges related to mitigation of diseases and other disasters, it seemed the region had to urgently devise means of putting infrastructure in place and improving availability and up-take of ICTs, while also accelerating participation in higher education.

Looking at the performance of the first world countries in terms of their high GERs, it would appear not very far fetched to presume that ODL could have had a significant contribution to this healthy looking situation. Davies and Pigott (2004) reported that 87% of institutions with more than 10 000 students in Canada and USA had ODL programmes by 2004. In Canada 57% of the 134 Colleges and Universities were offering online programmes, while in the USA online programmes were offered by 44% of higher education institutions by 1998, which was an increase of 72% since 1994. Several successes were noted by Davies and Pigott (2004) through their assessment of the level of growth of ODL in Northern America and Canada. Europe, Australia and New Zealand were also noted to have had comparable investment drive on ODL initiatives (Perraton, 1991). It appeared that the advancement of information and communication technologies provided a welcome advantage for the successful implementation of ODL (Perraton, 1991; Sherry, 1996; Davies and Pigott, 2004; Pityana, 2008). Guri-Rosenblit (2005) and Browne (2005) saw ICTs and e-learning offering a great potential for ODL and lifelong learning by reducing barriers for continued open access to learning. It is worth noting that within Southern Africa, South Africa and Mauritius, which were noted to have the highest gross enrolment ratios at higher education level in the region, also appeared to have had a long history of ODL. They also seemed to be having comparatively the most advanced technology development in the region.

Interestingly, Davies and Pigott (2004) noted that the economic downturn of the 1990s period inevitably stimulated the growth of ODL in Canada and North America, with a strong e-learning component, presumably implying that ODL, and e-learning, was comparatively less expensive than full-time face-to-face. This line of discussion was quite interesting, considering that inadequate expansion of higher education opportunities in the SADC region could very easily be traced to continued slow economic development, coupled with other hardships of the region. The higher education sector had experienced competition with other

urgent demands on scarce resources, which could have been a contributing factor to its slow expansion. Southern Africa could learn from the developed countries which expanded the use of higher education ODL, particularly during the years of an economic slowdown (Davies and Pigott, 2004).

Looking at the magnitude of the access problems for higher education for Southern Africa and considering resource constraints of the region, it seemed that expansion of campus-based face-to-face education on its own would never be enough to cope with the ever increasing demands at this level. SADC countries through the SADC Protocol on Education (SADC, 1997) had identified ODL as a strategy that would improve access to education and training at all levels of the education system and facilitate the much needed catch up at higher education level. However, despite this regional political commitment to ODL, as well as commitment at country and institutional level, and with examples learnt from other regions that ODL does make a significant contribution in terms of opening up access, its expansion at higher education level still appeared to remain very slow in dual mode institutions in Southern Africa.

People above 18 – 24 suddenly started increasing pressure on the already stretched face-to-face higher education institutions, demanding access into higher education programmes (Dodds *et al*, 2008). This no doubt further compounded the problem of high demands for higher education. However, this trend also seemed like a healthy development that needed to be nurtured, and which could lead to improved productivity and increased competitiveness for the various SADC countries. Pityana (2008) and Molutsi cited in Tertiary Education Council, (2008a) observed this as a healthy and dynamic work environment that could be an opportunity through which to achieve lifelong learning. Since family, work, community and personal commitments might prevent potential students from accessing education and training through face-to-face attendance, the education system should build mechanisms and flexible modes of accommodating this welcome developing culture of learning. Sewart *et al* (1983) called for ways and means of changing teaching methods that could enable universities to utilise resources to the best effect, both quantitatively and qualitatively.

The discussion so far has indicated that ODL was generally introduced to respond to challenges of increased and diverse demands made on the higher education sector, as one of the strategies that had the potential to substantially increase participation in the much needed quality higher education (University of Botswana, 2006; Pityana, 2008; Molutsi, 2008). Many traditionally face-to-face universities in Southern Africa had made commitment to increase access to their programmes, to cater for the growing diverse needs for higher education, both within their countries and at regional level. They had at least in theory and on paper, acknowledged the potential of ODL and their commitment to develop and continue to improve it. The UB, University of Namibia and the University of Zambia were some of the universities in Southern Africa which had embraced ODL in addition to their on-campus face-to-face provisions. However, it appeared that expansion of ODL in some dual mode universities, like UB, continued to lag behind and ODL continued to make very limited impact in terms of increasing access. Data drawn from the universities of Botswana, Namibia and Zambia, indicated very low numbers of students accessing programmes through ODL, compared to those enrolling on their face-to-face programmes (University of Botswana, 2006; University of Namibia, 2007; SARUA, 2009). Comparatively, as the SADC Appraisal Report of 2006 and recently the SARUA (2009) report indicated, higher enrolment figures were achieved through ODL in dedicated ODL institutions, as reflected in Table 1.1. Therefore it became difficult to assume that maybe students in the region did not want to access higher education programmes through ODL. Hope (2006) saw dual mode institutions competing favourably with dedicated institutions because they stand to benefit from advantages of each mode in addressing the dynamic student needs of the current environment. However, the examples from both dual mode and dedicated ODL institutions seemed to indicate that ODL in dual mode universities in Southern Africa tended to perform less than expected in terms of expanding access, contrary to the observation by Hope (2006).

Low enrolment figures on ODL programmes in many dual mode institutions in Southern Africa caused concern since there continued to be a low gross enrolment ratio for the region. Even though ODL was supposed to be capable of expanding access opportunities significantly, as it turned out, access through ODL in dual mode institutions appeared to be just marginal. Similar concerns of low contribution of ODL to the priorities of education and

economic development had been expressed before in South Africa and Botswana (DoE, 1994; DoE, 1996a; Botswana Ministry of Education, 1994). Despite these documented concerns and recommended actions, many dual mode higher education institutions seemed not to maximise their resources for the expansion of ODL in order to benefit from increased enrolments and possibly realise economies of scale, which usually results from large enrolments.

2.6 The Distance Education Strategy

Even though ODL as a strategy for education delivery had been around for many years, research in it as a field of study seemed to be still very limited (Castañeda 2005).

2.6.1 Theory of Distance Education

Simonson *et al* (1999) submitted that theory is important because it directly affects the practice of the field. According to Holmberg cited in Bernath and Vidal (2007), "Scholarly theories imply a systematic ordering of ideas" about a phenomena or the field of inquiry. He explained that theories were of two kinds. One was concerned with understanding, while the other kind was concerned with explanation and prediction. Peters (1967) saw the general goal of theory being to accomplish an understanding of reality. He further explained the centrality of theory to the validity and development of a field of practice, and for the field's recognition and credibility from those not yet initiated into the field. He reiterated that the theoretical foundations of a field described and informed practice by providing primary means to guide future developments and influence practice and research. Theory reveals new knowledge and suggests alternatives (Bernath and Vidal, 2007). Moore (2007) compared theory to a map that summarises what is known and shows what is not known. He saw the principal value of theory being the knowing what is known, for people who aspire to research, in so far as it indicated the areas for further exploration, or further inquiry (Moore, 2007). It appeared from these submissions by some of the major theorists in the field (Bernath and Vidal, 2007), that without theory there had not been any satisfactory research in

distance education for quite a long time, as observed by other researchers like McIsaac and Gunawardena (1996), Castañeda (2005) and Shale (1988).

Simonson *et al* (1999) observed that although various forms of distance education had existed since the 1840s and attempts at theoretical explanations of distance education had been undertaken for decades, the need for a theory of distance education had largely been unfulfilled for a very long time. McIsaac and Gunawardena (1996) also observed that though there had been a variety of efforts to identify theoretical foundations for the study of distance education, there had been little agreement about which theoretical principles were common to the field. It was observed that without a strong base in research and theory, distance education had struggled for recognition by the traditional academic community (McIsaac and Gunawardena, 1996). The lack of an agreed theory for distance education seemed to have contributed to its limited research and a general lack of recognition, as postulated by McIsaac and Gunawardena (1996) and Castañeda (2005).

By 1972, 1986 up to around 1995, leading scholars in the field of distance education like Moore, Holmberg and Keegan respectively still reiterated the need for a theory for distance education (Simonson *et al*, 1999). However, even though there was no single agreed theory for the wide and dynamic field (as distance education was described by Saba in Moore, 1997), there had been traditional theoretical explanations of the field derived from classical models based on correspondence study (McIsaac and Gunawardena, 1996; Simonson *et al*, 1999). Three classifications of such traditional theories influencing the field of distance education included theories of independence and autonomy by Wedemeyer (1977) and Moore cited in McIsaac and Gunawardena (1996), theories of industrialization by Otto Peters (1967) and theories of interaction and communication championed by Holmberg (Simonson *et al*, 1999; Bernath and Vidal, 2007). Holmberg's description of his theory of "the empathetic teaching-learning conversation" in Bernath and Vidal (2007) captured the essence of the theory, which seemed to conclude that a friendly conversational style of developing distance education learning materials, as well as the interaction between students and tutors, should enhance success. Holmberg argued that the application of a methodological, empathy-creating conversational style, leads to increased motivation to learn and better results than the

conventional presentation of learning matter. He had observed in his experience working with adults and also through his studies that it was generally accepted that friendly atmosphere, helpful suggestions and encouragement supported study motivation and facilitated success (Bernath and Vidal, 2007). He therefore concluded that if distance educators could cater for this empathetic approach through friendly conversation, the outcomes of study by distance would improve.

Otto Peters (1967) submitted that during the 1960s he developed scholarly interest as a pedagogue, in finding out more about distance education, which appeared to him to be a peculiar form of education (Bernath and Vidal, 2007). After applying criteria developed for the face-to-face model of education, he discovered that such criteria could not apply for the distance education model. He then studied the teaching and learning at correspondence schools, colleges and universities at UNISA, European and U.S.A. universities as well as those of the former Soviet Union. He found that common among all of them was a characteristic feature of their teaching and learning approach, which was highly "industrialized" (Bernath and Vidal, 2007). He discovered that distance education was a form of teaching and learning that sprang up and developed only in the industrial age and which he realized was an expression of industrialization. He also discovered that the first owners of correspondence schools were entrepreneurs who found it adequate and profitable to apply methods of industrialization of goods to teaching and learning and that common between industrialization of goods and distance education were criteria like division of labour, rationalization, the use of technical media, mass production and mass distribution. Peters therefore came to the conclusion that such an entirely different structure of education required new and unique learning and teaching behaviours (Bernath and Vidal, 2007). That was how Peters' theory of 'the most industrialized form of education' was born and he believed that distance education, which was transitional in nature, was a product of the industrialized society, whereupon only the "industrial man" was willing and able to study at a "distance" in the same way as only the "post-industrial man" was able and willing to study through online learning, in another stage of its development (Moore, 2007; Bernath and Vidal, 2007). Peters found his theory of the most industrial form of education to have several

dimensions including historical, organizational, economic, cultural, sociological, anthropological and pedagogical (Moore, 2007).

Michael Moore (2007) offered two inter-related theories of ODL (Bernath and Vidal, 2007; Simonson *et al*, 1999). Both of these theories seemed to fall within the interaction and communication as well as the independence and autonomy classifications of distance education theories. One was the theory of transactional distance, whose origins Moore could trace to his first time experience as an adult educator in Kenya, in the 1960s, where he discovered correspondence education (Bernath and Vidal, 2007). According to Moore (2007) there existed a physical, emotional and cognitive distance, which he called transactional distance. Transactional distance created a communication gap, or interfered with understanding between the tutor and the learner (Bennett, 2007). In Keegan (1996) Moore described distance education as a transaction between the tutor and the learner which occurred in an environment that had a special characteristic of separation. This separation, he maintained, led to special patterns of learner and tutor behaviours that profoundly affected teaching and learning. With separation there was a psychological and communication space to be crossed (Moore, 1997). It was in this space where there was a potential for misunderstanding to occur between the inputs of the instructor and those of the learner. Moore explained that it was this psychological and communication space which he called the transactional distance. The more the tutor or learner felt this transactional distance, the further away they would feel from the other person (Bennett, 2007). Moore suggested that this transactional distance could be bridged through a well structured constructive interaction or dialogue between the tutor and the learner, as well as between learners, mediated by interactive learning materials and interactive technologies (Bernath and Vidal, 2007). He saw learner autonomy, which seemed to be the essence of his second theory of independent study, as an indication of the level at which the transactional distance was reduced, with the increase in dialogue (Bernath and Vidal, 2007; Bennett, 2007; Moore, 2007). In his theory of independent study (Simonson *et al*, 1999), Moore discussed the amount of learner autonomy, which increased with the reduction of transactional distance and afforded the learner more control or more independence over his/her learning. According to Moore, the structure of distance education programmes should be concerned with the provision of two-way

communication and the extent to which a programme is responsive to the needs of the individual learner. This way, the transactional distance would be reduced and learner autonomy or the learner's independence and control over his/her learning increased, leading to more successful learning.

There seemed to be a positive and negative answer to the question that sought to find out whether there was a theory yet, which guided the practice of ODL and its research. There seemed to be theoretical foundations for the field, based on the four theories that have been discussed so far and new theories that seemed to be emerging following those. For example, based on these theoretical foundations, most of which seemed to have been muted and actually first published in the 1960s and 1970s (Bernath and Vidal, 2007), Simonson *et al* (1999) came up with a new theory they called the "equivalency theory", which was intended to guide the development and application of ODL and seemed to fit very well as a theory that could go a long way guiding the research, development and implementation of ODL, particularly in dual mode institutions. This was the theory that guided this study.

Central to the equivalency theoretical approach is the concept of equivalency. Full-time face-to-face and ODL learners have fundamentally different learning environments (Simonson *et al*, 1999). It is therefore the responsibility of the distance educator, or the institution, to design learning events that provide experiences with equal value for all the students. The essence of the concept of equivalency in the equivalency theory is reflected in the perceptions of stakeholders with regard to the value of one mode of delivery compared to the other in a teaching/learning environment where the two co-exist. If stakeholders, whether they are faculty, administrators, students, parents or employers, perceive that the value of the teaching/learning experience in one mode is inferior to the other, then they will naturally choose to be associated with the mode that is perceived to be more superior (Simonson *et al*, 1999). A learning experience, according to Simonson *et al* (1999), is anything that happens to the student to promote learning, including what is observed, felt, heard, or performed. They submitted that different students in various locations, learning at different times, may require a different mix of learning experiences. The goal of instructional planning in a dual mode environment would therefore be to ensure that the quality of teaching and learning in

both modes, and the outcome of such teaching/learning experience is equivalent for all students regardless of the mode. Instructional design procedures should provide the collection of experiences that would be most suitable for each mode, to ensure equivalency in the quality of the teaching/learning experience and the quality of the outcome of that teaching and learning process. This seemed to talk to institutional arrangements that are put in place to ensure that each mode is appropriately catered for, through structures, policies, plans, procedures and resources. These arrangements ultimately guide the development and implementation of ODL in dual mode settings, such that the value of teaching and learning through both modes are perceived to be equivalent, even if the teaching strategies are different. Should the teaching or learning experience through ODL and the value of the outcome of that teaching or that learning be perceived as inferior, Simonson *et al* (1999) maintained that distance education would then remain in the periphery, since human beings, where they have a choice and circumstances allow them to exercise that choice, usually go for what they perceive to be giving them more value for their efforts and/or resources. Human beings also usually prefer to be associated with achievement and success rather than failure.

A discussion of the presence or absence of an ODL theory revealed that there were several theories, old and new. However, it appeared that there had not been any one agreed theory of the field, on which to base research and definition. Therefore, the answer to whether or not there was a theory for distance education would be that several attempts that had been made at developing a theory for distance education resulted in several theories, but there does not seem to have been one agreed comprehensive theory for the field. Simonson *et al* (1999) saw the dynamic nature of the environment in which distance education was evolving and practised as being the main contributing factor to this state of affairs.

2.6.2 The Definition of Distance Education

As observed by a number of researchers (Hubbard, 1995; McIsaac and Gunawardena, 1996; Egbert, 2000), there was no agreed definition of distance education or ODL, which occurred in a continuum. Egbert (2000) saw many obstacles to reaching a common understanding of

what distance education was and how it should be carried out. A lack of one comprehensive theory for ODL seemed to result in what Egbert (2000) saw as a lack of solid empirical research on the field, which further brought obstacles of inconsistencies in defining the field. As Shale (1988) observed, ODL seemed to have asserted its existence and become generally accepted as a mode that could bring extended opportunities for access to education, even though it appeared not to have defined itself.

2.6.2.1 Attempts at Offering a Definition for Distance Education

Notwithstanding the lack of one comprehensive theory for distance education, several attempts had been made at defining the concept, or at least its characteristics, based on theories that were developed so far. Keegan (1980) defined distance education as a generic term that included the range of teaching/learning strategies which, within the American education system was referred to as 'correspondence' at further education level, 'independent study' at higher education level, and 'external studies at all levels in Australia, 'distance teaching' or 'teaching at a distance' by the UK Open University. This definition immediately appeared to confirm Egbert's (2000) concern of inconsistencies. Keegan (1980) agreeing with this concern submitted that with such a proliferation of terminology particularly in the English speaking world, there was need for a clear definition of distance education. Moore and Kearsley (1996) looked at distance education as planned learning that normally occurred in a different place from teaching and as a result required special techniques of course design, special instructional techniques and methods of communication by electronic and other technology, as well as special organizational and administrative arrangements (Moore and Kearsley, 1996). Farrell (2003) observed that open learning had more to do with "policies and practices that permit entry to learning with no or minimum barriers with respect to age, gender, or time constraints and with recognition of prior learning.

Rumble (1989) defined distance education as "a process" in which there must be a teacher, a student, a course or curriculum that the teacher is capable of teaching and the student is trying to learn, and a contract, either implicit or explicit, between the student and the teacher

or between the student and the institution employing the teacher, which should acknowledge their respective teaching and learning roles. Rumble's definition of distance education did not seem to draw any difference between distance education and the full-time face-to-face education, usually referred to as conventional education. Simonson *et al* (1999) presented a difference of opinion where Holmberg (1986) and Keegan (1988) asserted that distance education was a distinct form of education, while Shale (1988) countered that all that constituted the process of education when teachers and students are able to meet face-to-face, should also constitute the process of education when teachers and students are physically separated, implying that distance education was just like conventional education. So the definitions may also present differences of opinions about whether or not this is a field of study separate from conventional education and complicate it even further.

Hubbard (1995) defined distance education as the application of telecommunications and electronic devices which enable tutors and learners to receive instruction that originates from some distant location." Egbert (2000) defined distance education as "institution-based, formal education where the learning group is separated geographically, and where interactive telecommunications systems are used to connect learners, resources, and instructors". Young (2006) described distance education as "the family of instructional methods in which the teaching behaviours are executed apart from the learning behaviours", so that communication between the teacher and the learner has to be facilitated through available media, including print, electronic, mechanical. Perraton (1991) defined distance education as "an educational process in which a significant proportion of the teaching is conducted by someone removed in space and/or time from the learner". He went further to indicate that distance education had used a combination of media, including print, broadcasts, face-to-face and other media. It therefore, appeared that there was not yet any single agreed definition of distance education.

2.6.2.2 Characteristics of ODL and its Impact on Access

Notwithstanding the observation that there seemed to be no single agreed definition of distance education, similarities emerged in some of the attempts offered at defining it, as well as describing how it should be carried out.

In addition to the above definitions, Perraton (1991), Miller and King (2003), Walts, Lewis and Greene (2003), COL (2003), Hope (2006) and Rice (2006) all appeared to emphasise certain characteristics, which seemed to distinguish distance education or ODL from the face-to-face delivery mode

(i) Most of the time teachers and learners are separated in time or place, or in both
(ii) Teaching behaviours are executed apart from the learning behaviours
(iii) Dependence on media and its availability rather than on the teacher
(iv) Use of mixed-media courseware
(v) Synchronous and/or asynchronous two-way communication systems for interaction
(vi) Limited face-to-face sessions for tutorial interaction, library, laboratory or practical work
(vii) Use of industrialised processes and division of labour
(viii) Potential for massification of education, resulting in economies of scale.

Proponents of distance education asserted that ODL was quite capable of massification of education, without compromising the quality of teaching and learning (Peters, 1967; Perraton, 1991; Moore and Kearsley, 1996). Whereas in a face-to-face environment some classes could benefit from a good lecturer while others might end up with a not so good lecturer, the quality of delivery in an ODL environment could be easily equitably distributed. It was observed that a good lecturer, through materials and/or multimedia technologies, could reach larger numbers of students (Perraton, 1991) in various places, as long as the environment was conducive for such delivery. Otto Peters (1967) saw distance education as a form of education whose characteristics were very closely linked to industrialisation (machination, mass production, mass distribution, division of labour resulting in specialisation). He linked the development of this education mode since 130 years ago, with technological developments upon which its strengths and success depended. Notably, the first University study at a distance in its earliest form of correspondence, started around the same time as the appearance of the first railway lines. A necessary condition for the success of correspondence study then was a relatively fast and regular postal and transport service. Likewise, one of the necessary conditions for the success of ODL in its current form seemed

to be reliable multimedia services and infrastructure. ODL therefore seemed to be capable of massification of education, while promising that the quality of teaching and learning in such massive delivery is not compromised. One of the necessary conditions for the success of face-to-face teaching appeared to be the presence of a teacher or lecturer in the same place as the student. This is where space and student/teacher ratios may present limitations to access in face-to-face environments. In ODL however, space and student/teacher ratios appear to be less of a limiting factor when compared to face-to-face. One of the main conditions for success in ODL, once content had been generated and packaged accordingly, seemed to be technical and technological support through reliable multimedia services and infrastructure (Perraton, 1991; Davies and Pigott, 2004; Browne, 2005; Guri-Rosenblit, 2005). Through technical and technological support, ODL appeared to have the potential to expand access to education much more extensively than face-to-face, and cater for large groups of students effectively (Sewart *et al*, 1983; Dhanarajan, 1996 and Peters, 1967) without necessarily compromising quality.

Certain resources which would require a proportionate increase with any increase in enrolment in face-to-face delivery could be shared much wider in distance education than in face-to-face environments (Perraton, 1991). Since faculty and learners do not have to be in the same place, at the same time for teaching and learning to take place, distance education appeared to have the potential to reach more learners with comparatively less resources than for face-to-face. Bates (2000a) noted that increasing demand for higher education and its consequent large enrolments for face-to-face institutions was making it more difficult to assign professors to undergraduate classes. Therefore less experienced assistants were being engaged to teach at undergraduate level to allow more experienced faculty members to handle more post graduate students. This was perceived to affect the very quality that was apparently of concern with regard to distance education delivery. However, with the advent of technology (and ODL), this discrepancy could be alleviated as faculty would be able to provide high quality teaching, which large numbers of learners could access at any time and any place. A few excellent distance education lecturers would be able to provide education to a larger number of learners compared to face-to-face.

However, technology appeared to be bringing an increased blurring of the boundaries between face-to-face teaching and distance education (Wheeler, 2005; McIntosh and Varoglu 2005). As both modes use more mixed media and blended approaches to teaching and learning, universities were beginning to derive more opportunities for opening access. Even though this development appeared to avail dual-mode universities the opportunity to open up access to their programmes, many in Southern Africa still preferred to utilise media mainly for campus-based programmes and wait for potential clients to come to the university and access such programmes, instead of reaching out to potential students, become more inclusive and realise economies of scale.

2.6.2.3 Stages of Development of ODL

Guri-Rosenblit (2005), Rice (2006) and Taylor (2001) cited in Bernard *et al* (2004), as well as McIntosh and Varoglu (2005), observed that ODL existed in a continuum, graduating from traditional text-based correspondence to fully integrated, technology-mediated teaching and learning. This observation tallied with the observation by Farrell (2003) that ODL has moved from its original 'distance education' stage of being mainly a correspondence mode of delivery, which depended on infrastructure like the railway and postal services, to a stage where it is now concerned with opening up access by minimising barriers to learning through the utilisation of information and communication technologies. Pityana (2008) also referred to ODL as an innovative, technology driven 'education provision' that held promise and possibilities. In its 'distance education' or 'correspondence' stage, it appeared to have a lot of limitations in terms of the basic technology it utilised, while in its 'ODL' stage it seemed to provide more opportunities for institutions to open up access for participation, in this case in higher education and lifelong learning, to diverse populations who require higher education, whose numbers are observed to be growing and who may otherwise be unable to access face-to-face university programmes.

2.7 The ODL Effectiveness Debate and its likely Impact on ODL Expansion

Seen as a critical phenomenon in higher education, whether in campus-based or distance education mode is the construction of knowledge and the development of a critical mind. While individuals are able to construct their own meaning and understanding in accordance with the constructivist perspective, they do so within the influence and support of their environment and through social interaction and dialogue (Huang, 2002; Gorsky and Caspi, 2005a). Moore's (1997) transactional distance theory seems to have agreed with this line of argument. Dialogue or interaction seems to have a crucial bearing on the quality of the knowledge construction process and the development of a critical mind. Collaborative learning theories emphasised communities where members could support each other in building knowledge, exploring what they already know and considering other perspectives through discussions.

Some researchers (Wikeley and Muschamp) seemed to express concern about the quality and effectiveness of technology mediated dialogue inherent in distance education and ODL. They seemed to hold a view that interaction and dialogue facilitated through media could not achieve as good results as the traditional face-to-face interaction. According to Wikeley and Muschamp (2004), real and meaningful relationships and communities can function effectively only in face-to-face environments. Their view was that the face-to-face contact provided for communication through the unspoken language, since manner and style of the tutor and student are susceptible only to observation and codification. They believed that only an illusion of community could be created in cyberspace.

However, according to Romanoff (2003), Williams (2003), Kennedy and Duffy (2004), Browne (2005), Campbell and Swift (2006), collaborative learning and social interaction could take place in both on-campus and out of campus environments. They maintained that media, especially technology, can facilitate the necessary, and just as rewarding and effective, contact that would promote quality dialogue for effective teaching and learning. In order for learners in ODL environments to build knowledge, they were perceived to just need text-based computer communication tools such as asynchronous discussion systems, which

could support a variety of collaborative learning experiences (Kear, 2004; Huang, 2002). They affirmed that such collaborative and interactive learning activities including peer modelling, mentoring and the use of written language, can result in increased reflection and higher quality performance in problem solving and the development of critical thinking skills.

As Shale (1988) sharing similar opinions with Rumble (1989) and Simonson *et al* (1999) maintained, in every teaching and learning experience there has to be a teacher, a student, a communication medium and content to be taught. Effective and quality teaching and learning should therefore take place in either ODL or face-to-face environment, as long as these basic elements have been availed. Moore in Bennett (2007) suggested well structured technology mediated dialogue for distance education, to reduce the transactional distance. Simonson *et al* (1999) emphasised the centrality of equivalency for the acceptance of ODL, particularly in dual mode environments. Like Moore they suggested that the institution should avail whatever was necessary, including well structured technology mediated interactive communication between learners and instructors. They maintained that the more equivalent the learning experiences of ODL students were to those of on-campus students, the more equivalent the outcomes of the learning experiences would be for all students. They emphasised that experiences of the on-campus students and those of ODL students should have equivalent value, even though they might be following different teaching/learning strategies. They concluded that if all concerned could identify learning through ODL as equivalent to learning on campus, then ODL would become mainstreamed. But if equivalency is not what was perceived, then ODL would remain peripheral to the field of education (Simonson *et al*, 1999).

In agreement with Shale (1988), Bernard *et al* (2004a) submitted that distance education ought to be regarded as education carried out at a distance, while face-to-face instruction was education carried out on a face-to-face basis. Literature has indicated that education carried out at a distance is necessarily technology mediated (Keegan, 1980). That being the case, it would then follow that what constitutes education when the teacher is with students in a face-to-face environment should also constitute education when the teacher and the students are

separated (Shale, 1988). Therefore good distance education applications and good classroom instruction should in principle, be relatively equivalent with one another, regardless of the media used. Distance education can be non-interactive at one end of the continuum, when it is purely correspondence, or highly interactive at the other end, when it is ODL and utilising interactive media. At this end it is perceived to have the potential to achieve a range of instructional objectives and learning outcomes.

In-spite of debates on whether or not dialogue in distance education is effective, or whether scholarship through distance education is of comparable quality, several outcome comparison studies between students who studied through campus-based face-to-face systems and those through distance education have been conducted. Bernard *et al* (2004a) in their meta-analysis of empirical literature, assessed how distance education compared with classroom instruction. They focused on the literature taking a comparative evaluative perspective from 1985 until 2002 and analysed a total of 232 studies that met their selection criteria. Their analysis, as well as that of Burgon and Williams (2003) found no evidence of any 'significant difference' in terms of effectiveness between face-to-face and the media facilitated or ODL model. As such no research supports the perception that dialogue or interaction through face-to-face instruction is of superior quality compared to the one through ODL instruction (Campbell and Swift, 2006).

Concluding from these studies, it seems justifiable to assume that the ODL mode is as effective as the campus-based face-to-face mode. Therefore concerns of effectiveness should normally not interfere with decisions to develop and expand distance education. However, since there is limited research in distance education, the effectiveness debates appear to cast doubts in the minds of some planners and providers that quality, value and standards may be compromised through the use of the ODL mode. Such doubts may impact negatively on the development and/or expansion of ODL, as dual mode institutions make choices of spending their meagre resources to expand access to higher education. They may perceive ODL as a high risk model of education delivery in terms of allocation of resources if it continues to be clouded by uncertainty and mistrust. Therefore, as this study investigated what could affect expansion and strengthening of ODL within dual-mode universities, it was important to be

aware of the debates around effectiveness issues and to assess their likely impact on the level of commitment to ODL within such environments. This was one of my areas of interest as I traced the development and expansion of ODL within the Botswana higher education system, and at UB.

2.8 Conclusion

This chapter has indicated recent affirmations of the relationship between participation in higher education and economic development, contrary to earlier perceptions that emphasised this relationship to be more pronounced at basic education level. It has shown that following recent analysis of this relationship, Southern Africa was being encouraged to shift emphasis from a concentration on basic education only, towards also focusing on investing in the expansion of higher education, to enhance economic development, technological readiness and the region's competitiveness in the global economy (Young, 2006). The chapter pointed out the urgency for the region to expand the participation level of the APR, as well as the adult populations in higher education. It has shown increased demands for higher education in the region compared to the low enrolment reflected through several sources, both from within Southern Africa and from outside the region (Williams, 1997; Young, 2006; Bloom *et al*, 2006; Ekhaguere, 2000; Pityana, 2008; World Bank, 2009; UNESCO, 2004; SADC, 2006; University of Botswana, 2006; Dodds *et al*, 2008). Looking at the demands and the history of low participation ratios for the region at higher education level, compared to other regions, the chapter pointed out the unlikely situation where existing higher education institutions through their full-time face-to-face strategies alone would manage to satisfactorily absorb the large numbers with the inherent diversified needs.

The chapter also discussed the slow level of expansion of ODL in dual mode universities in the region, pointing out the need to find out why ODL seemed to be given low attention in such institutions, while they continued to struggle with large numbers demanding entry into their programmes. Having established the challenges of the higher education sector, pointing out that ODL had been identified as one of the catching up strategies to address these challenges, the chapter pointed out that in-spite of the urgency to expand ODL, dual mode

institutions seemed not to be in a hurry to improve their ODL initiatives. It then focused on discussing the concept of ODL. This part of the chapter discussed theories of distance education, which guided its development and practice. It established that research in the field was perceived to be low. This situation seemed to be blamed mainly on the lack of an agreed comprehensive theory to guide research, as well as the lack of an agreed definition. The chapter indicated that despite this identified gap, there were characteristics emerging from the attempts at theory and at definition that helped to distinguish ODL from full-time face-to-face provision, some of which seemed to give it advantage over face-to-face, when it comes to large enrolments. The equivalency theory was discussed where the chapter pointed out its importance as a theoretical basis for this study. The chapter emphasised the slow pace at which some of the dual mode institutions seemed to expand ODL, resulting in lost opportunities to benefit from its perceived advantages. Having pointed out that ODL exists in a continuum and relating this continuum with the stages of development of technology, the chapter concluded from the ODL effectiveness debate that, with the use of technology on which its success is perceived to depend, there was no significant difference between ODL and full-time face-to-face provision in terms of effectiveness. The discussion indicated a possibility of a negative impact of ongoing effectiveness debates on the growth and resourcing of ODL in the delivery of quality higher education and a need to explore issues of equivalency in the Botswana higher education environment and specifically within the UB dual mode system.

The next chapter reviews the literature to establish the experiences of Botswana with regard to ODL at higher education level and the environment within which it is growing.