Constructing identities in online communities of practice

A case study of online learning

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Introduction:
A context for online communities of practice

An area of research

I observe as my students enter the computer laboratory for the first time, some excited at the prospect, others more apprehensive. Why are these students excited, yet afraid of switching on their computers, which many worldwide take for granted? Such ambivalence might be explained through the anxieties surrounding broader areas such as politics, the economy, and education in developing countries. In the educational sphere, for instance, policies are vigorously debated and planned, but sometimes only sporadically implemented and evaluated. Such is the case with information and communication technologies (ICTs) in educational environments in a newly democratic South Africa.[1] Current South African higher education policy documents[2] recommend the implementation of ICTs[3] and resource-based education. However, there is often a mismatch between what is articulated in policy and in its implementation, and the emergence of ICTs in social, political, and educational spheres has been met with some ambivalence in South Africa. On one hand, the use of ICTs is perceived as enabling developing countries to acquire the status of global players, while on the other hand, the lack of infrastructure and resources has a detrimental effect on global participation and devel-

1 South Africa attained its democracy in 1994.

2 Such as the *Green Paper on Higher Education* (1996), the *White Paper on Education and Training* (1994) and the *Higher Education Act* (1997). At primary and secondary school level, the *Draft White Paper on e-Education* (2004) is relevant.

3 Definitions of ICTs are varied, although it is generally understood by most to encompass electronics and computers. In this book I adopt Gunton's (1993) view of ICTs to include electronic technologies that are used to collect, store, process, and communicate information.

opment. However, South African researchers and stakeholders in education[4] imply that to withhold new technologies is to marginalise developing countries even further.

Shifts in language teaching and learning pedagogies to incorporate multimedia ICT modes of delivery have introduced change to the South African educational landscape (Kajee, 2005a, 2005b). It is inevitable that teachers, to accommodate such shifts and changes, seek new strategies to manage and understand the new modes of delivery. It is also inevitable that teachers sometimes resist change and consider themselves inadequate and under-prepared to use the new modes in their teaching. This gives rise to questions around how ICT modes of delivery are used in the classroom, as well as how students, particularly those with minimal previous access to technology, position themselves in relation to its use, and make meaning in new online spaces. To address such concerns I provide in this introductory chapter the aim of this book on online communities of practice, the key questions that framed my methodological approach, as well as the underlying rationale for the study. I situate this work within perspectives of the digital divide, and the English language debates in South Africa. I further locate the work within the African and South African contexts, by focusing on ICT policy, practice and initiatives, with emphasis on higher education.

This book is an exploration of online learning, as mediated by ICTs, in an undergraduate English classroom at a university in Johannesburg, South Africa. Although the work is located in South Africa, it has implications for other developing countries[5] as well. The main aim of this work is to explore the extent to which communities of practice are enabled in an online environment, among English non-mother tongue speakers, who have had minimal previous access to ICTs. I use the case study which I find appropriate because of its ability to provide an intensive view of the participants as they unravel the complexities of their technological and digital engagement. In this case study I make reference to asynchronous ICT practices such as the use of the Internet

4 For example, Czerniewicz (2004), Czerniewicz and Carr (2005), Czerniewicz and Brown (2005), and Lelliot, Pendlebury and Enslin (2000).

5 I use the term ‘developing’, acknowledging the debates surrounding its use.

(Net), e-mail, and discussion forums on online Web course management systems. From a sociocultural perspective, and recognising that learning does not occur in isolation, this text draws on the work of Lave and Wenger (1991, 2002) who, rather than merely define learning as the acquisition of knowledge, situate it as forms of interaction and co-participation. Wenger (1998), for instance, considers learning to be interactive relationships among people and their environments. Lave and Wenger (1991, 1996, 2002) and Wenger (1998) therefore advocate learning in a specific context, and focus on how individuals become members of 'communities of practice' (COPs). COPs are viewed as sets of relations among people, activities and the world, over time, and in relation to other overlapping COPs (Lave and Wenger, 1991, 1996, 2002; Rogoff, 2003). The emphasis, therefore, is the interconnectedness of people, learning, practice, participation, and the social world. Development occurs as a process where a person gradually increases his/her participation and belonging to society's various communities of practice.

I argue in this work that practice and participation are underpinned, and to some extent determined, by the identities constructed by participants in the online communities. I examine participants' ICT-practices through the lens of literacy, in this case electronic literacy, as a social practice and New Literacy Studies, where I draw on the work of Gee (1996, 1997, 2000), Street (1984, 1993, 1998, 2003) and Barton, Hamilton and Ivanic (2000). I also refer to Lankshear and Knobel (1997, 2004) and Knobel and Lankshear (2002) to examine technological, or electronic literacies.

Finally, I explore constructions of identity from Hall's (1992) post-structural view that old identities, which stabilised the social world as we knew it, are in decline, giving rise to new identities and fragmenting the modern individual as a unified subject. With new technologies networking the world, computer-mediated communication (CMC) produces a vast array of virtual communities, which give rise to the construction of virtual identities (Castells, 1996). Thus, technological change should be located in the social context in which it is taking place, and by which it is being shaped.

My main aim then, is to establish the extent to which COPs are enabled in an online environment, among participants from under-

resourced backgrounds, to whom the use of ICTs in the teaching-learning context is still a novel practice.

For the purpose of this book, I refer to Kearsley's (1998) interpretation of online learning, which he views as any form of learning and teaching that takes place *via* a computer network, bulletin board, the Net, World Wide Web (WWW), local area network (LAN), or intranet. I examine this definition, and others more critically later in Chapter 1. In particular, I examine issues relating to how participants interact, develop relationships, and construct identities in online spaces.

In order to conceptualise, design and initiate a project that explores online communities of practice in the English classroom, questions need to be posed about the use of online technology, as well as the emerging communities of practice, and it is these questions that I attempt to address in the study and present in the section to follow.

Questions for research on online communities of practice

Although ICT-based applications in English language teaching are currently being used sporadically at South African higher education institutions, international studies, such as those by Warschauer (1996a, 1997a, 2000c, 2001, 2004), Mak (1995a, 1995b), Peyton (1990), Marcos (1994), Langston and Batson (1990), and others indicate that the use of ICTs and WWW technology, including the Internet, in English teaching opens doors to enhanced teaching and learning experiences. Knobel and Lankshear (2002) for instance suggest that personal computing, the Net, and digital communications media have changed what it means to learn, know and do things. My work focuses more specifically on the extent to which the use of online practices such as the Net, e-mail, and discussion forums on web course management systems facilitate online communities of practice. In order to address the main aim of my research, I ask: to what extent do English non-mother tongue speakers in a university English classroom engage in communities of practice in online spaces?

Recognising that communities of practice encompass negotiation of meaning, participation and the establishment of relationships, all of which are facilitated by the construction of participant-identities, I find it necessary to pose further related questions in this work:

- What are the electronic (ICT)-literacy practices of higher education English non-mother tongue speakers, and how do these practices shape their perceptions of ICT-use in an English language classroom?
- What relationships do the participants develop and sustain in online environments?
- How do the participants construct identities in online environments?

In order to address the first question, I examine participants' 'in- and out-of-school' electronic literacy practices, with specific focus on ICTs, by looking at issues of ICT access, proficiency and their perceptions of the use of technology for the teaching and learning of English. I use the notion 'literacy as social practice' as a lens through which to focus on their home, high school, and university ICT-literacy practices. I draw on the work of Gee (1996, 1997, 2000), Street (1984, 1993, 1998, 2003), Barton et al. (2000), and Lankshear and Knobel (1997, 2004) who suggest that the conventional meaning of 'literacy' is narrow, and that literacy is a social practice. I expand their views on literacy to include electronic literacy, with specific focus on ICTs. To answer the second question, I adopt Rogoff's (2003) and Lave and Wenger's (1991, 2002) concepts of relationships and legitimate peripheral participation, which relate to collaboration and interaction. I employ Hall's (1992) and Norton (Pierce's) (1995, 1997, 2000)[6] interpretation of identity, self and subjectivity from a post-structural position to examine how participants' construct online identities. I then examine in Chapter 5 how participants construct their identities by critically analysing their discussion forum messages. Finally, I apply a

6 Earlier work is attributed to Norton-Pierce (1995), while later works are attributed to Norton (1997, 2000). In her work on language and identity, Norton (1995, 1997, 2000) uses 'identity' to refer to how people understand their relationship to the world, how that relationship is constructed across time and space, and how people understand their possibilities for the future. I found such constructions relevant to participants' online textual presence. Lam's (2000) work on the construction of textual identity on the Net is also referred to.

critical sociocultural framework to examine how their postings position them in relation to themes found in key course readings.

Providing the rationale for this work

Current trends in South Africa demonstrate a sporadic, though increasing interest in the use of ICTs in teaching and learning. This phenomenon has to do with the lack of resources and insufficient teacher-development in the area of ICT education. This is compounded by the entry of students into the higher education sector who have neither had previous access to ICTs, nor share the medium of instruction of the institution, English. Thus I provide the underlying rationale for my study as being juxtaposed with power struggles around issues of ICT access and access to English.

ICT inconsistencies in higher education: Demystifying the digital divide

Concerns relating to the use of ICTs have been examined primarily against the backdrop of the binary view of developing and developed nations. It is usually assumed that what is appropriate in first world countries cannot be adopted in its present condition in developing countries such as South Africa. Warschauer (2002a, 2002b, 2003a, 2003b, 2004b), for instance, cautions against replicating common weaknesses in introducing ICTs to developing countries, from an instrumentalist perspective, such using overly-sophisticated technology, and not training teachers and key participants sufficiently in its use. Lelliott, Pendlebury and Enslin (2000) further caution against locating Africa with developed nations when they say 'In Africa and the rest of the developing world, patterns of inclusion and exclusion, empowerment and disempowerment have differed from those of Europe and North America' (2000: 42).

It is inevitable that limited access to, and lack of proficiency in ICTs hampers the use of technology. Thus, the digital divide, or distinction between 'haves' and 'have nots' is particularly evident in developing countries. However, the notion is somewhat inaccurate because the stratification that exists in relation to access to online information has little to do with ICTs, but rather more to do with political, economic, institutional, cultural, and linguistic contexts that shape meaning in people's lives (Warschauer, 2002a, 2002b, 2004b, 2005, in press). Warschauer therefore considers the notion of the divide 'oversimplified' (2003b: Foreword). He emphasises 'A consideration of how people can use computers and the Internet to further the process of *social inclusion* is paramount in any effort to install new technology into an environment lacking in it' (my italics, 2003a: 44). Thus he perceives the divide, or inequality, as social rather than digital. His approach concurs with Feenberg's (1991) more critical stance that the shaping of technology is related strongly to issues of class and power, and not just to issues of access.

The use of ICTs is both a threat and an opportunity to higher education. The threat appears in the form of widening the digital divide to those who lack power and access to the dominant technological requirements. Its opportunities take on the form of its implications for material and commercial empowerment, where higher-paid jobs and skilled employment will demand its use. Kennard (2001) for instance argues that the issue of access to new technology will also determine workers' progress up the socio-economic ladder, and adds that those who are literate in computer languages and familiar with new technologies will succeed, while those who are not, will not (2001:196).

The issue of power and access to technology mirrors Bourdieu's (1991) views on the English language debate, where those with access to the English language are in a position of power: they attain material and commercial power because of the access it creates to jobs and eventual economic gain. This results in an access paradox in that the more the English language is used, the greater its symbolic power, while those who do not acquire the language are denied such power (Janks, 2004). The consequence is a twofold divide.

I suggest that the ICTs debate follows similar reasoning to Bourdieu's (1991) argument around the role of English as a gate-

keeping language. In the ICT access debate, those with access to, and proficiency in the use of ICTs, attain material and commercial power, as we are reminded by Kennard (2001). The use of ICTs perpetuates the power of technology, and those who do not have access and proficiency find themselves marginalised, especially in the higher education sector. Thus, South Africa, like other developing countries, has to position itself in the debate by making conscious choices regarding the use of technology, given that resources and availability are not widespread, nor can be taken for granted.

Conflict surrounding the digital divide in South Africa and Africa at large is evident when one considers the possibilities of *not* implementing technology in educational contexts. Included among the opportunities promised by ICTs is that they transcend discrepancies in location, distance and time. ICTs also offer the possibility of lower costs and wider choices, thus providing a lucrative opportunity for empowering stakeholders and making teaching and learning more equitable. With appropriate use emerging ICTs can therefore help developing countries by enabling educational reform.

However, current inconsistencies in the use of ICTs in higher education in South Africa can conflict with the goals of attaining quality education. There are the two key gaps or 'silences' in current ICT endeavours in South African higher education institutions at undergraduate level. First, many students enter higher education institutions from schools that may not have access to ICTs, therefore the students cannot cope with the demands of the technological requirements of higher education, where basic computer literacy is taken for granted. Thus students might feel excluded, or denied membership to the broader university community that privileges those with ICT proficiency. The second gap is that current research in the field of ICTs in South Africa is relatively new and its impact on learning still has to be explored.

The first 'gap': limited access and proficiency in ICTs, is particularly relevant to students from under-resourced schools in rural or township areas in South Africa, despite recommendations of ICT access for all teachers and learners in government policy documents. Most higher education institutions provide students with access to computer laboratories, however, many of these institutions do not assume responsibility for students' computer literacy. The students therefore ac-

quire computer literacy skills in an *ad hoc* manner, where they may learn by observing others, by 'trial and error' (Kajee, 2002, 2003), or by attending computer literacy courses at their own expense.

The second gap, relevant to students and teachers, is whether the use of technology in education necessarily equates with learning. Many researchers (such as Clark, 1994 and Cummins, 2000) are adamant that it is not the technology, but the pedagogy that impacts on learning, and that there is no justifiable evidence that the investment in ICTs has improved student achievement levels. Technology might increase the time spent on tasks such as reading, but it is the increased time expended, not the technology, that might improve achievement, they argue.

Against the backdrop of the digital divide in South Africa this book explores the use of ICTs in the teaching and learning of English. My rationale for focusing on English in the university context is justifiable because first, it is an accredited course of study, and second, the language is dominant in the university environment because it is the medium of instruction, as well as the language in which most of the materials are available. The third reason is that the language is often perceived by non-mother tongue speakers as a route to success in their studies as well as their careers.

The English language and learning debates

Locating my research in a higher education English course is appropriate because of current debates concerning the language's flexibility and its status as a 'world language' (Graddol, 1997: 6).

It is not uncommon in South Africa that English non-mother tongue speakers enter university under-prepared for the academic and linguistic demands and discourses where English is the medium of instruction. Thus, this work examines not just how participants construct their identities in the online medium, but how participants construct their identities through the medium of *English*.

Historically too, English has played a controversial role in South Africa, and has been central to debates about English usage and hegemony (refer, for instance to Lemmer, 1996; Silva, 1997; Chick,

1998; du Pre, 2002; Kajee, 2000, 2001; Kamwangamalu, 2000; Kamwangamalu, 2003). Key concerns regarding the role played by, and the use of English, particularly in the higher education context, are therefore given attention in this book. My decision to focus on English is also justifiable because it is a subject of choice and current medium of instruction at the majority of higher education institutions in South Africa. My background of over twenty years in the teaching of English, attendance at, and implementation of training courses in the use of ICTs to teach English, and the changing role played by the language in South Africa's history has motivated me further to explore more fully the teaching and learning of the language in online environments. Although policy documents[7] in South Africa describe the need for technology and resource-based learning, they do not elaborate on the implications for the teaching and learning of English. However, I am of the view that local and international studies[8] on the use of ICT practices in the English classroom unlock a world of pedagogical possibilities.

There have been many changes in the political, cultural and educational spheres in South Africa since the first democratic elections held in 1994. In particular, the issue of increased access to education has become a primary concern. With the formation of a single educational body, the National Department of Education, higher education became the responsibility of one Department. The primary task of the Department was to provide access to all South Africans to all institutions of education. Thus access, or what has commonly come to be perceived as massification, ensued.

The years of disadvantage that characterised the apartheid era (1948–1994) were especially apparent in black students' under-preparedness for higher education, and many of these inequities were attributed directly to language injustices associated with the marginalisation of African languages (du Pre, 2002). For instance, non-mother tongue English speakers were expected to compete with English mother tongue speakers in an English medium of instruction environment. The lack of suitable preparation also emanated from the remnants of the

7 Refer, for instance, to the *Green Paper on Higher Education* (1996) and the *Higher Education Act* (1997).

8 These studies are discussed in Chapter 1.

Bantu education system of the apartheid era, in which black schools were deliberately under-resourced and teachers were inadequately trained and prepared for their roles (Hartshorne, 1987). This became apparent when students from such environments entered their first year at higher education institutions in South Africa (see for example, Hartshorne, 1987; Dreyer, 1995).

In relation to language rights, use, and development, the *Constitution of South Africa* specifies eleven official languages,[9] however, the distribution of speakers of these languages is diverse. Mother tongue speakers of English were reported to number about 39.5% (Statistics South Africa, 2001 Census), however, English still assumes a dominant role in primary domains: education, commerce, science and technology, and as the language of internal and international communication. Among the reasons provided for its dominance, as alluded to in the previous section, is that English has linguistic capital (Bourdieu, 1991). Aligned with Graddol's (1997) argument that the language is a world language, Bourdieu (1991) says it has symbolic power. That is, it has commercial, cultural and material value: it ensures career success, opens doors to trade and it uplifts the economy (Lazenby, 1996; Mesthrie in Chick, 1998). Consequently, mother-tongue education was perceived to play an exclusionary role in apartheid South Africa, and black parents began to see English as a route to upward mobility and empowerment (Kamwangamalu, 2000; Kamwangamalu, 2003; Setati et al., 2002; Kajee, 2000, 2001; Titlestad, 1998; Silva, 1997). The view of parents, learners, and teachers was that English has an almost mystical power: 'If you know English well, desired things will follow' (Lemmer, 1996: 84).

English therefore appears to be a pragmatic choice at the level of higher education. However, the arguments do not articulate the need for the use of ICTs in the English classroom context. Cummins' comment is apt:

9 Act No 108 of 1996. The languages are IsiZulu, IsiXhosa, English, Afrikaans, SeSotho, Northern Sotho, Setswana, Xitsonga, Siswati, Tshivenda and IsiNdebele, as well as Sign Language as an unofficial twelfth language.

> Our task as educators in general, and as language educators in particular, should be to access the potential of IT to improve the human condition. As educators we are committed to drawing out the potential of students we teach; as language educators, we strive to increase students' capacity to use language to fulfil their personal goals and contribute to their societies (2000: 539).

This void prompted me to query how ICTs are being used in the English language classroom. In particular, I am interested in answering questions from a sociocultural perspective, around the extent to which participants collaborate and negotiate meaning, as well as construct identities in online spaces where these exist.

Contextualising the work

In contextualising this work, I first provide an overview of the use of ICTs on the African continent, primarily as a means of social inclusion. I then narrow the field by presenting an overview of the South African context, where I examine key policy documents and initiatives relevant to the use of ICTs in schools, industry, and the higher education context.

Describing the African context

Much of the argument cautioning against the use of ICTs in Africa, as explained by Lelliott et al. (2000), is made around the continent's more pressing concerns: war, famine, poverty and lack of basic education. Particularly apt are views such as the following:

> How can a woman be interested in Information and Communication Technologies (ICTs) on a hungry stomach with a child crying on her back for food and another she is carrying in her arms dying because of lack of medical care? (Ochieng and Radloff, 1996).[10]

10 Cited in Lelliott et al. (2000: 43).

Although the writers are vocal about such critical issues, which are relevant to any developing nation, they do support the use of ICTs in promoting new opportunities for democracy in Africa, such as extending its use to women, providing education to geographically distant areas, and in disseminating health information. The view is supported by Chapman (1996), who argues that society should exploit technology to provide education for democratic, socially inclusive, economically advanced communities. Warschauer's (2002a, 2002b, 2003a, 2003b, 2004, 2005, in press) studies in Egypt support this stance, while simultaneously demonstrating the difficulties encountered with bureaucracy in developing countries.

The need for inclusion across the African continent is further articulated by current South African President Mbeki, who speaks about the need to improve connectivity among people in Africa. He also draws links between connectivity as a strategy for poverty reduction in NEPAD[11] (Chisholm, 2003). This view is important in identifying not only the possibility of ICT skills being taught, but in providing a time frame for *when* they are taught.

In relation to connectivity, issues of infrastructure cannot be ignored. The SADC[12] e-readiness study (SADC, 2002), aligned with NEPAD, considers regional cooperation, the development of infrastructure and education essential for ICT development. In order to maximise benefits to communities the study recommends the following, in no particular order, across the African continent: basic infrastructure, electrification, education, integration of ICT by government, increased telegeography, growth of teledensity and mobile penetration, increased PC penetration, increased Internet population, growth of banking infrastructure, policy and regulation, liberalisation of communications infrastructure, affordability, and multipurpose community centres (SADC 2002; Chisholm et al., 2004).

In relation to practice, initiatives such as SchoolNet Africa are underway, connecting schools across Africa. The aim of the initiative is to provide improved education access, quality and efficiency through

11 NEPAD – New Partnership for Africa's Development.
12 SADC – Southern African Development Community.

the use of ICTs in African schools.[13] The organisation supports the right of all African youth to education and lifelong learning, by providing affordable and sustainable access to information, African education content on the Net, and online content in local languages. Currently, thirty-one African countries form part of the SchoolNet network, including South Africa.[14]

Describing the South African context

In locating my study in the South African context, I examine government's call for ICT-based initiatives in the country, ICT initiatives introduced at the level of school and industry, and then examine policy issues that underpin learning principles and the use of ICTs.

Over the past four years (2002–2005) current South African President Mbeki has reminded South Africans (in his State of the Nation Addresses) of the vital role played by ICTs in creating global economic networks for South Africa.[15] Bearing in mind the words of its current president, South Africa is considered the most technologically

13 www.schoolnetafrica.net Last accessed 5 October 2005.

14 The countries are: Angola, Benin, Botswana, Cameroon, Cape Verde, Cote D'Ivoire, Egypt, Ethiopia, The Gambia, Ghana, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mauritius, Morocco, Mozambique, Namibia, Nigeria, Rwanda, Senegal, Malawi, Mauritius, Morocco, Mozambique, Namibia, Nigeria, Rwanda, Senegal, Sierra Leone, South Africa, Swaziland, Tanzania, Tunisia, Uganda, Zambia, Zimbabwe.

15 For example, in his Address in 2002, he said 'a critical and pervasive element in economic development in the current age is the optimum utilisation of information and communication technology' (Mbeki, 2002, online). In 2003 he promised that greater attention would be paid to the development of ICT capabilities among the youth (Mbeki, 2003, online). In 2004 he urged South Africans to ensure that the country and people are properly positioned within the global community of nations, fully understanding and responding to the diverse political, economic, social and technological challenges of the process of globalisation (Mbeki, 2004, online). And in 2005 he said that government would focus more on ICT and telecommunications systems. President Mbeki's State of the Nation Addresses (2002, 2003, 2004, 2005) www.info.gov.za/ speeches/ Accessed on 5 October 2005.

advanced country in Africa. At the end of 2003, 3.23 million South Africans, or one in thirteen of a population of 47.5 million were reported to have access to the Internet (Internet World Statistics), this of course considering that not all circumstances are equitable. South Africa was also rated as having the highest number of domains and websites of the SADC countries: 187 649 domains and 3002 websites, compared with Angola, for instance, with eight domains and 136 websites (in Chisholm et al., 2004).

The country has also made several initiatives into the field of ICTs at school level, largely as a result of documents such as the *Draft White Paper on e-Education* (2004), which is aimed at promoting the use of ICTs in schools. The document calls for all teachers and learners to have access to ICTs in order to promote socio-economic growth in the country, and to narrow the digital divide by 2013. Discussion around the document led to initiatives such as the Thutong Project,[16] which is the Department of Education's Web portal designed to support teaching and learning in South Africa. The portal aims to help teachers technologically by providing high quality materials, and enabling them to communicate and work together. However, the project is still in its introductory phase.

Another initiative, located in the Gauteng region to promote ICT access and use among the youth is the GautengOnline Project.[17] The Project hopes to bridge the digital divide in Gauteng by positioning the province at the centre of technological change and innovation. The Project was launched with the South African information technology (IT) industry designing IT solutions for Gauteng schools, and computers were introduced to selected classrooms. Other technological initiatives are being made in industry with the newly drafted ICT Empowerment Charter (2005).[18] The Charter arose as a result of apartheid policies that denied black people and women access to economic resources in South Africa on the basis of race and gender. The document aims to bridge the digital divide by promoting access to ICTs, in particular to black South Africans and women, as an equity initiative. It is viewed as a route to

16 Please refer to www.thutong.org.za for more detail. Accessed 20 August 2005.
17 Please refer to www.gautengonline.com Accessed 5 October 2005.
18 Please refer to www.ictcharter.org.za/ Accessed 29 August 2005.

reducing unemployment and poverty in the country. Further initiatives in commerce and industry include the development of organisations such as the Meraka Institute,[19] which is designed to facilitate socio-economic development through technology, once again, in an attempt to narrow the digital divide.

Thus, South Africa is making inroads into technological redress at the levels of policy, school and industry. At the level of policy, key recommendations are being made in relation to ICTs and a resource-based approach. While endeavours such as the *Draft White Paper on e-Education* (2004) are currently not emulated in higher education, policies such as the *Higher Education National Plan* and the *Green Paper on Higher Education*, highlight the need for an ICT approach.[20]

Like at school and industry levels, the overarching recommendation for the use of ICTs is joining the competitive global economic market, and the borderless world of ICTs is proposed as a route to global participation. Thus higher education is seen as playing a pivotal role in preparing the youth for the knowledge and information society. The *Green Paper* suggests further that one of the measures that can be introduced to improve the efficiency of the higher education system, reduce unit costs and increase productivity, is by introducing new teaching and learning strategies such as open and resource-based learning which are less labour-intensive. The document proposes that this would lead to significant changes in traditional modes of programme delivery and staff-student ratios.[21]

Despite the call for an ICT-based approach to global participation, the role played by ICTs in higher education teaching and learning spheres is fairly uncharted territory in South Africa. Recommendations made in discussion documents have yet to filter extensively into

19 Please refer to www.meraka.org.za for further details. Accessed 29 August 2005.

20 'As South Africa locates itself in this network of global exchanges and interactions, higher education will have to produce the skills and technological innovations necessary for successful economic participation in the global market. It must also socialise a new generation with the requisite cultural values and communication competencies to become citizens of an international global community' (Section 3.1, Chapter 2, *Green Paper on Higher Education*, 1996).

21 Section 5.3, Chapter 2, *Green Paper on Higher Education* (1996).

teaching-learning paradigms. However, studies such as those conducted by van der Merwe (2004); SAIDE[22] (2000a, 2000b, 2003); Czerniewicz (2004), Czerniewicz and Brown (2005); Czerniewicz and Carr (2005); Spurrett (2005); Hodgkinson-Williams and Mostert (2005); Turkington and Frank (2005); Carr, Cox, Eden and Hanslo (2004); and Lundall and Howell (2000), indicate a growing awareness of the value of the use of ICTs. Although the studies focus on the higher education, as well as school sectors, I have included them because they demonstrate similar concerns.

Van der Merwe (2004) evaluates the use of *WebCT* at the university of Stellenbosch, and the SAIDE (2000a, 2000b, 2003) projects examine ICT-use in schools and higher education. Czerniewicz (2004) frames a discussion of the articulation of computers in teaching and learning in higher education, with a focus on the University of Cape Town, while Czerniewicz and Carr (2005) call for a community of practice of researchers in the field of ICTs. Spurrett (2005) conducts research into an online critical thinking component of a Philosophy course at the University of KwaZulu-Natal, and Hodgkinson-Williams and Mostert (2005) examine staff and student perceptions of the use online debate in encouraging online learning communities among B.Ed students. Turkington and Frank (2005) narrate their Journalism students' experiences with the creation of an online newspaper, while Carr et al. (2004) examine online student participation from a community of practice perspective in an Economics course at the University of Cape Town. Finally, Lundall and Howell (2000) survey the use of computers in schools. The studies cumulatively indicate that ICTs is a growing area of research in South Africa though many of the studies also demonstrate that teachers and learners are not yet sufficiently prepared for, or trained in its use. Although studies are being undertaken in the field of ICTs within an educational context, applied research into ICT teaching-learning paradigms and pedagogies, particularly in higher education, is still in need of further consolidation.

Higher education institutions are currently in a phase of transition and transformation, and face challenges such as open learning, lifelong

22 SAIDE – South African Institute of Distance Education.

learning, commercialisation and quality requirements.[23] Such challenges could be answered by an ICT-based approach. For instance, the concept 'open learning' encapsulates many of the features of learning in higher education, and may be defined as:

> a flexible, learner-centred approach to education, seeking to increase access to educational opportunities by removing all unnecessary barriers to learning. This involves using the full spectrum of available resources to ensure quality and cost-effectiveness in meeting diverse educational needs, including preparation of the widest possible range of learners for the process of lifelong learning (in SAIDE, 1997: 4).

The key features of open learning are relevant to this text because they concur with the theoretical concepts underpinning communities of practice. The features of open learning may be summarised thus (in SAIDE, 1997):

- *Learner-centeredness*: Key to learner-centeredness is that the learner should be the focus of the educational process and an active decision-maker. Education should build on learners' experiences and encourage independent and critical thinking.
- *Lifelong learning*: The concept entails that learners should continue their learning throughout their lives, and that learning should be relevant to learners' needs and life experiences.
- *Flexibility*: Learning should be flexible in order to cater for learners' needs regarding what they want to learn, how they want to learn, when they want to learn, and the pace they want to learn at.
- *Removal of access barriers*: Open learning allows for the removal of barriers such as geographical constraints, race, gender, age and physical disability.
- *Recognition of prior learning*: Learners should be able to accumulate credits for other learning experiences and contexts.
- *Learner support*: Learners should receive adequate support within the learning environment, such as counselling, tutoring, interaction and access to facilities and resources.
- *Expectations of success*: Learners should be afforded opportunities to complete learning programmes, and the qualifications they receive are marketable.

23 White Paper on Education and Training, 1994; Green Paper on Higher Education, 1996.

- *Quality learning*: Learning should be of the highest quality and should be evaluated and adapted regularly.
- *Cost-effectiveness*: Learning opportunities should be cost-effective, which does not mean cheap, rather, quality learning which utilises a range of resources for its success.

Thus in this book I suggest that it is precisely the basic tenets of documents such as the *Green* and *White Papers on Higher Education*, as shown above, that need to be implemented, or else they remain confined to policy.

However, my position is also that some caution in relation to the use of ICTs is necessary. As is spelt out in the documents, additional budgetary outlays are required in the form of investment in hardware, software, and the development of online materials. Further concerns are expressed about the utilisation of ICTs and their sustainability. Also, if such an approach were to be adopted extensively in South Africa and elsewhere, it would have serious implications for teacher-training and professional development, as improvement in the quality of teaching-learning pedagogies involving the use of ICTs is essential.

Therefore, although South Africa is considered a prominent player in the field of ICTs in the SADC region, the country is a relatively minor player globally, and research in the field of ICTs at macro- and micro-levels in the country is valuable within its context as a developing country. As was stated earlier, in the higher education context, researchers have begun to examine ICT-based issues. However, such studies are minimal, particularly in the area of English language education, and I hope that books such as this can help provide insight into ICT-implementation at the level of classroom pedagogy, as well as into learners and how they construct and position themselves in relation to its use.

Bearing in mind the challenges surrounding the implementation of ICT-based teaching and learning practices, the issue of ICT use is not restricted to issues of policy, access, training and budget. The use of ICTs also impinges on power struggles created by inconsistent access to technology, for its potential users. Broadly, this book contributes to the following ten key issues, and these in turn provide the scope and focus of the research.