



Learn Conference, Barcelona (July 2009)
**Negotiating challenges and constructing digital identities: suggestions for
pedagogy and practice**

Dr Leila Kajee
University of Johannesburg
Johannesburg, South Africa
lkajee@uj.ac.za

ABSTRACT

This article reports on a technology-based English course that incorporates face-to-face and online modes of delivery at a South African university. The aim of the paper is to examine how the only blind participant among a group of sighted participants positions herself and engages with the technological practices of the university, as well as the course, given the recommendations of the policies. Included is a discussion of how she constructs her identity and negotiates meaning in the course. The construction of identity is explored from a post-modern view that old identities, which stabilised the social world are in decline, giving rise to new identities and fragmenting the modern individual as a unified subject (Hall, 1992). I explore Norton (Pierce's)¹ (1995, 1997, 2000) views of identity as how people understand their relationship in the world, how that relationship is constructed across time and space, and how people understand their possibilities for the future. I also draw on Davies and Harré's (1990) discussion of positioning and self. Finally, I suggest implications such a study might have for pedagogy, practice, and policy in higher education institutions in South Africa.

1. Introduction

The use of technological multi-media modes of delivery in the university English classroom is an emerging practice in developing countries such as South Africa. In this article I discuss a second-year English Language Studies module, Internet Literacies, facilitated at a university in Johannesburg, South Africa. I examine issues of social inclusion, the digital divide, disability, the construction of identity, and positioning through the lens of a blind student. The focus of this paper is on one subject, and as such does not intend to make broad generalisations about disability or social inclusion.

¹ Earlier works (1995) are attributed to Norton Pierce, while later works are attributed to Norton.

2. Theoretical framework

2.1 Negotiating the digital divide for social inclusion

Developing country contexts are stratified with their own internal divides between a small elite class with access, and a majority, poorer, working class. It is inevitable that limited access to, and lack of proficiency with ICTs hampers the use of technology. Thus, the digital divide, or division 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, 2002). Warschauer therefore considers the notion of the divide "simplistic" (2003a: 297), and feels that 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 (2003a: 44). Thus he sees the divide, or inequality as social, rather than digital. The notion concurs with Feenberg's (1991) view that the shaping of technology is strongly related to issues of class and power, and not just issues of access. Thus, the view that the presence of technology necessarily influences social change is technologically deterministic (Feenberg, 1991; Warschauer, 2002; 2003a; 2003b)².

The use of ICTs can pose both a threat and an opportunity to higher education. The threat appears in the form of widening the digital divide if not implemented. Its opportunities take on the form of its implications for material and commercial power, where the higher-paid jobs will demand its use. Kennard (2001), for instance, says "It is clear that in the next century, those who are literate in computer languages and familiar with new technologies will succeed, and those who are not, will not" (Kennard, 2001:196).

The divide is exacerbated in contexts such as universities, which are attended by able and disabled students in inclusive classroom settings. Thus I consider if disabled students (in

² Warschauer illustrates this with his case study in Egypt where expensive hardware and software was purchased at a university for educational purposes, but remained unused because of the failure to take into consideration the social environments necessary for computer laboratories to be utilised effectively (Warschauer, 2003).

this study, a blind student) face exclusion and marginalisation in relation to ICTs, because of their disability?

2.2 *ICTs, disability, and inclusion*

Limited studies in the area of ICTs, disability and inclusion in South Africa, prompt me to draw on international studies. Warschauer (2003b) points out that access to technology goes beyond quantifying those with and without access, far more significant is the use of technology for social transformation. He presents three illustrative studies: India's 'Hole in the Wall' project, Egypt's Model Lab, and Ireland's Information Age Town. In all three cases, technology was introduced to under-resourced environments, however, they cumulatively demonstrate that introducing technology to such environments does not routinely ensure a socially transformed society if participants are not sufficiently equipped for its use. Thus he emphasises the need for a four-pronged approach to incorporate social, human, physical and digital resources.

Social inclusion refers to "the extent that individuals, families, and communities are able to fully participate in society and control their own destinies, taking into account a variety of factors related to economic resources, employment, health, education, housing, recreation, culture, and civic engagement" (Warschauer, 2003b:8). Even those who are more privileged, may face exclusion on the basis of age, disability, sexual preference or gender. Inclusion is therefore not just about material or economic resources, but also about control over life circumstances. In this pedagogical study, "inclusion" or "inclusive education" refers to students with disabilities receiving their education within the regular educational environment. The issue is whether this position offers inclusion for the disabled, particularly the blind, or marginalizes them further in a world that is dominated by the visual mode. In their study based in China, Guo *et al* (2005) for instance found that there is a digital divide in Internet use among the disabled³ communities. They argue that the use of the Internet can improve the frequency and quality of social interaction, and that it reduces barriers in the physical and social environments for disabled people.

³ Their study is not restricted to the blind.

In relation to disability and socialisation, Wiazowski (2002) argues that visual impairment hinders social communication, and points out that limited use and perception of body language become hurdles. He regards the use of computers as a means of mutually comprehensible communication among the blind, visually impaired and sighted.

On the other hand, others such as Hatlen (2004) argue that blind students in inclusive settings are socially isolated. He argues that environmental information, spatial knowledge and non-verbal communication are different for both groups, and that the educational modifications for blind students, such as Braillewriters and notetakers actually act as social barriers. Thus he concludes that the time spent by blind students, with blind students, are their best social experiences. Hatlen (2004) argues that this kind of socialisation gives blind students confidence and self-determination. At school level, visually impaired students have the choice of attending schools for the blind and visually impaired, or inclusive schools. This is not the case at university level in South Africa, where settings are inclusive. Thus there are contrasting views about disability, socialisation and inclusive education. I argue that by examining how the student, Carmen⁴, constructs her identity in relation to technology and her social world demonstrates how she positions herself in the world, and the extent to which she is empowered or disempowered in a world dominated by the visual.

2.3 *Constructing identities*

I adopt the views of Hall (1992) and Norton (Pierce) (1995, 1997, 2000) of identity from a non-essentialist, post-modern perspective. Stuart Hall (1992) says that old identities, which stabilised the social world are in decline, giving rise to new identities and fragmenting the modern individual as a unified subject. This crisis of identity is seen as part of a wider process of change, which is dislocating the central structures and processes of modern societies, and undermining the frameworks which gave individuals stable anchorage in the world (Hall, 1992). Thus, people increasingly make meaning, not

⁴ Not her real name.

on the basis of what they do, but on the basis of what they are, or believe they are⁵. The post-modern subject is conceptualised as having no fixed, permanent identity. Identity becomes a “moveable feast” (Hall, 1992: 277). Thus, Hall says, the post-modern subject is decentred, or dislocated. This is characteristic of late modernity, and with post-modern societies in constant change, it illustrates a theme of discontinuities (Hall, 1992: 277).

In her work on language learning and identity among immigrant women, Bonny Norton (Pierce) (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. In her longitudinal case study of immigrant women in Canada, she shows how the relationship between second language acquisition is dependant on issues of power between the women and their target audience, thus foregrounding issues of identity. She refers to West’s (1992) view of identity as it relates to the desire for recognition and affiliation (in Norton, 1997). This desire is inseparable from material and economic resources in society, where those with access to such resources are positioned as powerful and privileged. Thus identity shifts as social and economic relations change. Human agency and subjectivity are also foregrounded in her argument. Weedon’s (1987) theory of subjectivity, which Norton (1995, 1997, 2000) draws on, defines the multiple nature of the subject, subjectivity as a site of struggle, and subjectivity as changing over time.

In this article I explore Carmen’s identity construction, not only from the view of her online engagement, but also in relation to how she positions herself in the world, as well as in the technology-dominated English course, to present a more composite picture of her lived experiences. Details of the study follow.

⁵ To illustrate the shift in the construction of identity, Hall (1992: 275 - 277) identifies three concepts of identity: enlightenment, sociological, and post-modern. The enlightenment subject is based on the concept of the human as a unified, centred individual, which emerged at birth and continued throughout the individual’s existence. The sociological subject saw the subject as significant only in relation to others who mediated to the subject values, meanings and symbols. Here identity is formed in the interaction between self and society, and bridges the gap between the inside and outside. The subject was thus not composed of a single, but several identities.

3. *The study*

Discrepancies surrounding the use of ICTs with sighted students and a blind student in an inclusive setting are inevitable, more so because Carmen was the first blind student to take the course, which I describe later in this article. This gave rise to questions surrounding Carmen’s use of technology. Of particular interest was how she perceived the course, as well as how she positioned herself and constructed her identity in the world, which gave rise to the following questions:

- How does Carmen negotiate meaning and construct identity as a blind student in a sighted context?
- What are Carmen’s perceptions of a technology-based English course?
- What are the implications for pedagogy and policy in technology-based courses in an inclusive higher education setting?

3.1 *Research approach*

A qualitative case study of Carmen’s experiences was undertaken because of its ability to “portray, analyse and interpret the uniqueness of real individuals and situations through accessible accounts”; “to catch the complexity and situatedness of behaviour”; “to contribute to action and intervention” and “to present and represent reality – to give a sense of ‘being there’” (Cohen, Manion and Morrison, 2000: 79).

I wanted a composite picture to emerge, where the events in the case study would be allowed to unfold, rather than to judge and overly interpret as the events occurred. In Geertz’s (in Cohen, *et al.*, 2000) view, the case study should therefore strive to portray what the experience is like in a particular situation and to catch the close-up reality of participants’ lived experiences of, thoughts about and feelings for a situation. Of course, what emerges is my understanding of events, which ultimately mediates Carmen’s experiences to the reader.

3.2 *Course participants*

The Internet Literacies (IL) course was conducted over a semester of fourteen weeks, and was attended by eighteen students of diverse socio-cultural backgrounds. There were four male and fourteen female students, ranging in age from 19 – 22. Ten were mother tongue (L1) speakers of English, and eight were second or additional language speakers of

English (L2). The mother tongue languages of the latter group included isiZulu, Sesotho, Tswana, isiXhosa, siSwati and siPedi. The L1 speakers had previously attended government suburban or private schools, while the L2 speakers had attended government township schools. Typically, in South Africa, in relation to ICTs, private schools are very well-resourced, while the rural and urban township schools have limited, or no access to ICTs. Extensive ICT proficiency was not a requirement for the course, however, basic skills such as the ability to use e-mail and conduct Internet searches was a recommendation. Thus, students had varying abilities of computer proficiency, ranging from beginners with very basic ability in word processing and the use of Internet, to students who had worked far more substantially with ICTs previously. It must also be pointed out that most students had used computers to some extent during their first year, although skills were sometimes acquired by trial and error (refer also to Kajee, 2003). This meant inevitably that the digital divide made its presence felt in relation to access and proficiency in class. This was highlighted further by the attendance of a blind student in class. Carmen is a 20-year old blind student who was in her second year of study at the time the research was conducted. Her background is provided in the section 'Carmen's story' later in this article.

3.3 Data collection techniques

I spent fourteen weeks as a participant observer in the class, which I also facilitated. I recorded journalistic notes after each class. In addition, Carmen wrote an electronic literacy history, which is a narrative in which she presents an autobiographical account of her introduction to the world of electronic and digital technology. She also kept a two-week diary of her ICT use. In addition, we had several conversations, after which I made note of relevant points. Finally, she was interviewed more formally at the end of the course. The one and a half hour interview was recorded and transcribed. The interview consisted of open-ended questions designed to elicit data on Carmen's experiences.

4. Findings and discussion

Carmen's story

Carmen is a 20-year old English first language speaker from a white South African middle-class background. She was born sighted but developed glaucoma at an early age, which eventually resulted in her blindness. She attended a kindergarten for sighted learners, but by high school she was totally blind, and attended a school for the blind. She registered at the university to study towards a Bachelor of Arts Degree. At the time of this study she was still unsure of what she would like to do at the end of her degree. Her major courses were Applied English Language Studies and Media Studies, and she started studying Music at the time this research was conducted. She also plays the piano.

Initially, Carmen felt nervous about attending the university, which is a large institution, and unlike the school she went to. She was orientated physically and verbally around the campus by another blind student, and was eventually able to negotiate her way around campus quite well. I got to know Carmen when she was in my first year English Language Studies class, and then in the second year class. We met at the beginning of the semester to discuss the use of technology in the course. By that time she had used the Internet to a limited extent, but not e-mail. She was a little nervous about the technological focus of the course, but was determined to attempt it. In order not to exclude Carmen from tutorials, I decided to have a voice synthesizer (JAWS) installed at a computer in the same computer laboratory used by the other IL students, rather than have her work in the laboratory at the Disability Support Programme (DSP)⁶, where JAWS was already installed on all the computers. Learning about technology for the blind was a challenge for me, as I did not have previous knowledge of the technology involved. Following discussions with Carmen and DSP co-ordinators, I decided to replace a Powerpoint digital story assignment with a task that was not visually based⁷. The rest of the course remained the same.

⁶ The DSP at the university is a unit which caters specifically for the needs of disabled students. For instance, computers are installed with voice synthesizers for their use. Notes, tests and assignments are also scanned or brailled at the unit.

⁷ For her presentation, Carmen kept a digital diary over two weeks where she reflected on the daily challenges and benefits of ICTs in her life.

Carmen recorded lectures using a Pacmate notetaker, which she synchronised with her computer at home, or at the DSP. She used a voice synthesizer and screen reader to access information off the computer, or to word process. Voice synthesizers translate text on screen to synthesized voice. She also used a scanner in order to scan notes and texts that might not be available on computer. Much of this was done at home and at the DSP at the University. Carmen had some of the technology installed at home, as a result of sponsorship on which she relied. The DSP also brailled tests, assignments and additional notes that I would e-mail to them weekly. She said a ninety-minute class could take her two to three hours to transcribe, which she did daily. However, she maintained a positive attitude, despite the cumbersome daily process.

4.2 *Carmen's world: constructing identity and negotiating challenges*

Carmen carefully constructed her identity around her blindness, and how she positioned herself in her social world. On the whole, she felt that she had learnt to cope with her blindness quite well. Although she could see as a child, she says she did not experience great difficulty on turning blind:

When it (my sight) went...it deteriorated gradually, so it wasn't one day good, then the next I couldn't see...gradual, not sudden...it didn't bug me so much (Interview).

When describing herself, she says she thought of herself as friendly and funny, but that she did not always know how other students and staff perceived her as she usually only associated with people at the DSP. She interacted to a lesser extent with sighted students in her classes. The difference though, was in her Music class, of which she made special mention, because it was a small class, and she felt that the students were more sociable and approachable.

I observed that Carmen always sat in front in class, so she could record classes, while students in IL tended to sit in the middle or back of the large tutorial room. When asked how she believed other sighted students responded to her, she said that hardly anyone sat near her, so she could not really tell, which is an indication of the divide between the sighted and the blind in the class. Thus she positioned herself as an outsider (Davies and

Harré, 1990), as a member of the out-group (Thornborrow, 1999), or as a marginalized other (Luke, 2004). Davies and Harré (1999: 47) refer also to "multiplicities of self" where the acquisition or development of our own sense of how the world is, or how we believe it to be, is interpreted from the perspective of who we take ourselves to be. This might involve learning the categories and sub-categories to which we belong, or do not belong, such as male-female. In this case, Carmen constructed the categories as blind-sighted.

Further, the IL class was primarily designed around small group discussion, and some lecture style classes. The group discussions were unproblematic for her because these entailed other students joining her to form a group. What was problematic was that she did not feel like part of a particular group, as other students tended to sit next to their friends. A similar situation occurred in another class as well. When asked if other students engaged her in discussion, she said:

Not specifically, no. I think I sit alone in class. Hardly anyone comes to sit near me, I don't know why. Even in ...(course name removed), it's quite a big class, and there's still one seat empty, but no one comes to sit there. I don't know why people sometimes...how they think...maybe they think because I'm blind...I can't do stuff...I don't understand...I really don't (Interview).

She articulated the frustration she felt here when she positioned herself as 'othered': a blind person among sighted students. She tried to justify their behaviour, but hesitated, and tailed off with the view that perhaps her blindness made people feel she was less capable. It must be noted that in relation to class assessment tasks, Carmen was an above average student who maintained a strong second (in the region of 60%) throughout the course.

Carmen's construction of herself as blind in a sighted social world was clear in the language she used. She consciously described the situation as "us" (blind) and "them" (sighted). Thornborrow (1999) refers to how our social identities cannot be constructed on our own, and that they are bound by how others perceive us. Thornborrow (1999) uses the concepts 'in groups' and 'out groups' to show how linguistically, individuals may be

associated with particular groups. Clearly, Carmen felt positioned as an 'other' or outsider among sighted peers.

These insights were not limited to classroom relationships. Carmen found this evident in the broader social and university world as well, where she felt that sighted people could be insensitive (sometimes unintentionally) towards blind people. An incident occurred when she was on her way to my office once and found obstacles in the passage. She commented:

It's really funny...like this week there was a table in this passage that had never been there before. I think it's still there, so I don't know where these things come from. It can be frustrating. A blind person can tell you where to be careful, not sighted (Conversation, April, 2005).

Although Carmen positioned herself as independent and self-sufficient, there are times when she positioned herself as excluded, lost, powerless and marginalized, often through no fault of her own.

4.3 Being social

On a more social level, Carmen was the only one of a group of blind and partially sighted school friends who attended this particular university. Most of her friends who had been with her at school, now attended another university, however, she still counted them among her friends, concurring with Hatlen's (2004) observations that blind students in inclusive settings are socially isolated, and that the time spent by blind students with other blind students are their best social experiences.

Social occasions usually involved going out for coffee, spending time with family, visiting friends, and going to a movie if she had someone to explain what was happening during the movie. She generally found communities friendly, but said she felt a little awkward if she was not addressed directly, for instance, at restaurants, and sighted family members or friends were asked what she wanted to order at the restaurant. She expressed her dissatisfaction at not being directly addressed:

It irritates me...they think you're blind so you don't know what you want...you can't talk for yourself or something (Conversation, April, 2005).

To Carmen, being overlooked, and being indirectly addressed was a source of frustration, annoyance, and disempowerment. She related such responses to past experiences, a process to which Davies and Harré (1990: 51) refer as "extension", where meanings are extended and developed through past experiences. Carmen's sense of powerlessness therefore could be drawn on from experiences in the university and in other classes as well. Thus, she said she preferred spending time in the DSP catching up on work, which gave her more free time at home.

4.4 Insights and perceptions of the Internet Literacies Course

In relation to the IL course, one of my foremost concerns was that Carmen be able to work as part of a community of learners in the computer laboratory, rather than on her own in the DSP. This is consistent with Lave and Wenger's (1996) idea of a community of practice. Their theory advocates learning in a specific context, and focuses on how individuals become members of communities of practice (COP). They see COPs as sets of relations among people, activities and the world, over time, and in relation to other overlapping COPs. In communities of practice (COPs), the acquisition of knowledge is therefore seen as a social process, with novices, or 'new-comers' to the community participating in its practices peripherally until they are assisted by more able participants, or 'old-timers', in their journey to central participation (Lave and Wenger, 1996). Rogoff (2003) adds that people acquire their cultural values and practices from the communities in which they interact, thus, through guided participation, using tools such as words and gestures, learning occurs. Members of COPs therefore bond by mediating through the activities in which they participate to accomplish particular goals.

This was important to Carmen as well me, especially so that she would not be isolated, or miss out on work:

There's no point always being isolated because I can't see. Why shouldn't I go to the lab? The point is that we working as a class, so why shouldn't I have that opportunity too? Why should I be on my own? I must struggle with the same problems, do what they do (Interview, May, 2005).

Once again, Carmen positioned herself as wanting to be invited into a community or group. Her use of three rhetorical questions are foregrounded as though these are questions she has asked before. She perceived herself as sharing communal struggles with other sighted students, as they negotiated their way to the centre of the community.

Carmen found her greatest challenges to be visual material, and technological problems, during laboratory sessions. Note that all blind students attend technological training courses during the year, however, the practice can only be monitored in the classroom. For instance, initially a screen reader, was installed on one computer for her to work with. She was delayed for two weeks because the technician was late setting it up, and because the system was one she was not used to. When asked about the late installation, the technician said he did not realise how important it was, as blind students did not usually use the general computer laboratories. Even though policy documents recommend technology-based learning, in the case of blind students these issues are not a priority at the university because such cases are not the norm, being in the minority. It was also problematic for Carmen that the software was only installed on one computer, which limited her to that specific computer. This was necessary because the laboratory was open to all Humanities students, and had to be booked specifically for our tutorials. Carmen felt that this was inadequate and restrictive, and that it would be preferable to have options if her computer did not work well. She said:

It makes me feel really angry when this happens because I feel so powerless, I was restricted (Interview, June, 2005).

Carmen's work was often delayed because of human and administrative errors, which resulted in her playing catch-up. Such incidents saw me working one-on-one with Carmen in the laboratory, or at the DSP, so that she would not be too far behind in her work, but limited the idea of a community of practice to a certain extent. This served to emphasise the disjuncture between policy calling for resource-based teaching and learning, and the practice thereof.

Technologically, Carmen also experienced problems with combo boxes (lists of items), columns and tables, and PDF documents as these could not be read off a screen reader. She said further:

Computers are very useful and help me quite a lot with my work but if something goes wrong with the computer, and the computer freezes, then there is no way that I will be able to know what is happening...you are left wondering what happened...someone has to help you...this makes me more vulnerable (Interview, June 2005).

When searching and evaluating websites, Carmen experienced problems with certain websites if the links were not clearly labelled. For instance, she could not manoeuvre around the academic section of the website of another university in Johannesburg. It was easy to access what she called "unimportant links", such as student affairs, however details about courses were not available at the time. She found that this was restricting, and it would be so for other blind students who tried to access information about specific courses at the university⁸.

Despite the frustrations encountered during the course, Carmen felt empowered at the end:

One of the major changes that the computer has brought about in my life is that I do almost all of my work on the computer and no longer use Braille so often...It is wonderful that the technology for the blind is up to date with regular technology and that blind people are not being left behind or forgotten (Interview, June, 2005).

She also felt that by using the Internet she did not have to rely as much on scanning, or on the help of other people. In this way she had more control and agency, and could work at her own pace.

In the following section I consider the implications of the case study of Carmen's experiences for pedagogy and policy.

⁸ While most academic departments at South African universities have academic information available on their web sites, this might not be consistent of all departments.

5. *Implications for pedagogy, practice and policy*

Much of Carmen's learning experiences surround the impact of learning technologies with aspects of her identity formation, and while it must be emphasised that a small scale case study is not generalisable, it has considerable implications for practice because of the depth of the data elicited. This study has implications for pedagogy and practice from the following perspectives: first, from a critical perspective, and second, for teaching and learning within a community of practice framework. From a critical perspective, how Carmen constructs her identity and positions herself within the university, as well as within the technological context of the course are important considerations. Her feelings of powerlessness and isolation in an inclusive setting confirm Hatlen's (2004) argument for non-inclusive education for blind students. However, considering blind students attend university classes in South Africa with sighted students, an understanding of how they construct their identities and position themselves is relevant to teaching and technical staff, as it is to sighted students.

For teaching and learning, the implications are clear that lecturers and technical aides need to be aware of the implications of an inclusive educational setting, especially in the light of higher education policy recommendations. Currently the disability unit facilitates workshops and training courses for lecturers, and trains sighted students as assistants. This is a practice that needs to be extended across the university to include technical staff should technology-based teaching and learning become more standard practice. In addition, with an increase in the integration of ICTs in teaching and learning, hardware and software used by blind students should not be confined to the unit, should there be instances where blind students attend technological components of courses in general computer laboratories.

Also related to teaching and learning is that the suitability of course content and materials be considered, especially in relation to visual content. From a community of practice framework, it is important that classroom-student interaction include blind students more vigorously. For example, I often arranged peer-reading if brailled articles were not

available on time, or read to Carmen myself, as the unit recommends. The sense of isolation, othering and marginalisation experienced by Carmen should not persist.

Finally, in relation to policy, at the time of this study the university did not have a technological policy or plan stipulating the adoption of technology across the university (refer to Kajee, 2008). In order to standardise the integration of technology into teaching and learning, such a plan or policy is vital. Such a policy should also consider implications for technological access and use by blind students, as well as for lecturers and technical staff in inclusive settings.

This article considered the implications of a technologically-based English course for a blind student among a sighted lecturer and students, by narrating Carmen's experiences in her social and academic world. The article proposes a community of practice approach, as well as greater awareness among all staff involved in such inclusive settings. As a teacher, I feel more empowered in relation to the technological requirements for the blind, having worked closely with Carmen in an inclusive setting. More importantly, I glimpsed something of Carmen's social world, which helps in an understanding of the needs of a blind student. Studies such as this could therefore help sighted teachers of the blind realise the inner struggles of blind students, despite their already heavily-burdened work schedule. .

A case study such as that described in this article hopes to open doors to empowering the blind, as well as their sighted teachers, by enabling us to have a glimpse into the 'othered' social and pedagogical world of the blind. In the light of policy requirements, the need for practice at institutional level is inevitable, not just for able students, but for disabled students who constitute the academy as well.

References

Chisholm, L. (2003) Proposal submitted in terms of the SADC EPSI theme. "The use of information communication technologies in curricula" Available on <http://www.sadceducation.com/documents/ict.doc> Accessed 14 May 2004.

- Chisholm, L.; Dhunpath, R. and Paterson, A. (2004) "The use of ICTs in the curriculum in Botswana, Namibia and Seychelles" Report conducted for SACHES: Commissioned by Southern African Development Community Education Policy Support Initiative (SADC EPSI).
- Cohen, L.; Manion, L.; Morrison, K. (2000) *Research Methods in Education*. Fifth Edition, London: Routledge Falmer.
- Davies, B. and Harré, R. (1990) "Positioning: The Discursive Production of Selves" *Journal of the Theory of Social Behaviour*, vol. 20, no. 1, pp. 43-63.
- Feenberg, A. (1991) *Critical Theory of Technology*, New York: Oxford University Press.
- Guo, B.; Bricout, J.C.; Huang, J. (2005) "A common space or a digital divide? A social model perspective on the online disability community in China" *Disability and Society*, vol. 20, no. 1, pp. 49-66, London: Routledge.
- Hall, S. (1992) "The Question of Cultural Identity" In Hall, S., Held, D. and McGrew, T. *Modernity and its Futures*, Cambridge: OUP, Blackwell Publishers Ltd.
- Hatlen, P. (2004) "Is social isolation a predictable outcome of inclusive education?" *Journal of Visual Impairment and Blindness*, vol. 98, no. 11, pp. 676-724.
- Kajee, L. (2003) "A Case Study in South Africa: Going online in under-resourced ESL classes", *Academic Exchange Quarterly*, Spring Issue, pp. 102-107. <http://www.rapidintellect.com/AEQweb/spr03.htm> Last accessed 31 December 2005.
- Kajee, L. (2008) *Constructing identities in online communities of practice: A case study of online learning*, Oxford, Switzerland: Peter Lang.
- Kennard, W.E. (2001) "Equality in the Information Age" In Compaine, B. M. (Ed.) *The Digital Divide: facing a crisis or creating a myth?* Massachusetts: MIT Press.
- Lave, J. and Wenger, E (1996) "Practice, person, social world" In Daniels, H. (Ed.) *An introduction to Vygotsky*, London, NY: Routledge.
- Lelliott, A.; Pendlebury, S. and Enslin, P. (2000) "Promises of access and inclusion: online education in Africa", *Journal of Philosophy of Education*, vol. 34, no. 1, pp. 41-52.
- Luke, A. (2004) "Two takes on the critical" In Norton, B. and Toohey, K. (Eds.) *Critical Pedagogies and Language Learning*, Cambridge, England: Cambridge University Press.
- Norton, B. (1997) "Language, Identity, and the Ownership of English", *TESOL Quarterly*, vol. 31, no. 3, pp. 409 – 429.
- Norton, B. (2000) *Identity and Language Learning: Gender, ethnicity and educational change*, London, New York: Longman.
- Norton-Pierce, B. (1995) "Social Identity, Investment, and Language Learning", *TESOL Quarterly*, vol. 29, pp. 9-31.
- Rogoff, B. (2003) *The Cultural Nature of Human Development*, New York: Oxford University Press.
- South Africa (1997) *Higher Education Act 101 of 1997*, Pretoria.
- South Africa (1996) *Green Paper on Higher Education Transformation*, Pretoria.
- South Africa (1997) *White Paper on Higher Education*, Pretoria.
- Thornborrow, J. (1999) "Language and identity", In Thomas, L. and Wareing, S. (Eds.) *Language, Society and Power*, London and New York: Routledge.
- Warschauer, M. (2002) "Dissecting the 'digital divide': A case study in Egypt", *The Information Society* vol. 19, pp. 297-304.
- Warschauer, M. (2003a) "Demystifying the digital divide" *Scientific American, Inc.* pp 42-47.
- Warschauer, M. (2003b) *Technology and Social Inclusion: Rethinking the Digital Divide*, Cambridge, Massachusetts: MIT Press.
- Weedon, C. (1987) *Feminist Practice and Poststructuralist Theory*, Oxford, Cambridge: Blackwell.
- Wiazowski, J. (2002) "Computer-assisted language learning as a bridge to social inclusion of blind learners in mainstream schooling", Available online <http://www.icevi.org/publications/ICEVI-WC2002/papers/01-topic/01wiazowski.htm> Accessed 8 June 2005.