

**ANALYSIS OF CULTURAL AND IDEOLOGICAL VALUES
TRANSMITTED BY UNIVERSITY WEBSITES**

BY: 'MAMOSHA GRACE RAMAKATANE

SUPERVISED BY: Ms. PATSY CLARKE

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**A thesis submitted in partial fulfilment of the requirements of the
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Durban.**

DECLARATION

I hereby declare that this study represents original work by the author and has not been submitted to another university. Where use has been made of the work of others, this has been duly acknowledged.

Signed by:

A handwritten signature in black ink, appearing to read 'Mamosa Grace Ramakatane', is written over a horizontal line.

'Mamosa Grace Ramakatane

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TABLE OF CONTENTS

DECLARATION.....	I
ACKNOWLEDGEMENTS.....	II
TABLE OF CONTENTS	III
LIST OF TABLES.....	VII
LIST OF FIGURES.....	VIII
ACRONYMS	IX
ABSTRACT	1
Keywords	1
CHAPTER 1	2
BACKGROUND TO THE STUDY.....	2
1.0 INTRODUCTION	2
1.1 STATEMENT OF PURPOSE.....	3
1.2 AIMS OF THE STUDY.....	3
1.3 CRITICAL QUESTIONS	4
1.4 THESIS OUTLINE	5
CHAPTER 2	6
LITERATURE REVIEW	6
2.0 INTRODUCTION	6
2.1 DIVERSITY IN SOUTH AFRICAN HIGHER EDUCATION.....	7
2.1.1 The legacy of apartheid	7
2.1.2 Higher education in the post-apartheid South Africa.....	7
2.1.3 Commodification of tertiary institutions	10
2.2 THE WEB	13
2.2.1 Cyberspace: a new public sphere?.....	14

2.2.2	Credibility of the Web content.....	16
2.2.3	Overview of the Internet in South Africa	18
2.3	THEORETICAL BACKGROUND	21
2.3.1	Culture, Ideology and Values	21
2.3.2	Semiotics.....	24
2.3.3	Hofstede's Cultural Dimensions.....	28
2.4	SUMMARY OF THE REVIEW.....	31
CHAPTER 3		32
METHODOLOGY		32
3.0	INTRODUCTION.....	32
3.1	SAMPLING	33
3.1.1	Sampling of the websites.....	33
3.1.2	Sampling of participants	34
3.2	DATA COLLECTION TOOLS	36
3.2.1	Interviews	37
3.2.2	Questionnaires	38
3.3	DATA ANALYSIS.....	39
3.4	DEMOGRAPHICS OF PARTICIPANTS	39
3.5	SUMMARY	40
CHAPTER 4		41
FINDINGS.....		41
4.0	INTRODUCTION.....	42
4.1	OVERVIEW OF THE WEBSITES	43
4.1.1	The University of Durban-Westville (UDW) website.....	43
4.1.2	The University of Natal (NU) website.....	45

4.2	ACCOMMODATION OF VARIOUS USERS	46
4.3	MESSAGES CONVEYED BY THE WEBSITES.....	48
4.3.1	Messages conveyed by design features.....	50
4.3.2	Messages conveyed by content	52
4.4	HOW WEBSITES TRANSMIT IDEOLOGY.....	54
4.4.1	Perceived target group.....	55
4.4.2	Achievements.....	60
4.5	WEBSITE CREDIBILITY AND ITS IMPACT ON VALUES.....	61
4.5.1	Website credibility	61
4.5.2	How websites impact on values.....	63
4.6	SUMMARY OF FINDINGS.....	65
CHAPTER 5		67
CONCLUSIONS AND RECOMMENDATIONS.....		67
5.0	INTRODUCTION.....	67
5.1	VALUES IN THE WEBSITES.....	68
5.1.1	Features that convey the ethos of a site.....	68
5.1.2	How producers accommodate users from diverse backgrounds in their design of websites.....	69
5.1.3	What agendas are conveyed by university websites?.....	71
5.1.4	How websites transmit ideology	71
5.1.5	The extent to which people accommodate possible contradiction between the values they hold and those they perceive to be conveyed by the websites	73
5.2	WEB DESIGN SUGGESTIONS.....	74
5.3	LIMITATIONS OF THIS STUDY	74
5.4	RECOMMENDATIONS FOR FURTHER STUDIES	75

5.5 CONCLUDING REMARKS	76
BIBLIOGRAPHY	77
APPENDICES	84
APPENDIX A – THE FIRST HOMEPAGE OF THE UNIVERSITY OF DURBAN-WESTVILLE	84
APPENDIX B – THE SECOND HOMEPAGE OF THE UNIVERSITY OF DURBAN-WESTVILLE	85
APPENDIX C – THE UNIVERSITY OF NATAL HOMEPAGE	86
APPENDIX D – QUESTIONS FOR CONSUMERS	87
APPENDIX E – QUESTIONS FOR PRODUCERS OF NON-UNIVERSITY SITES	88
APPENDIX F – QUESTIONS FOR BOTH CONSUMERS AND PRODUCERS (OF NON-UNIVERSITY SITES)	89
APPENDIX G – OUTLINE OF INTERVIEW QUESTIONS FOR PRODUCERS OF THE SAMPLE SITES	91

LIST OF TABLES

<i>Table 2.1</i>	Classification of higher education institutions in South Africa.....	7
<i>Table 2.2</i>	African and White student head count enrolments by institutional type, 1993 & 1999	8
<i>Table 2.3</i>	Student demographics at the University of Natal in 2000.....	9
<i>Table 2.4</i>	Student demographics at the University of Durban-Westville in 2000.....	9
<i>Table 3.1</i>	Summary of the sampling of participants.....	35
<i>Table 3.2</i>	Summary of interviewees	37
<i>Table 3.3</i>	Distribution of participants' demographics.....	39
<i>Table 3.4</i>	Web surfing experience of the participants.....	40
<i>Table 4.1</i>	Examples from participants' perception of the selected websites.....	49
<i>Table 4.2</i>	Perceptions of age group of the site's intended target group.....	56
<i>Table 4.3</i>	Perceptions of gender of intended target group.....	56
<i>Table 4.4</i>	Perceptions of race group(s) of the intended target group.....	57
<i>Table 4.5</i>	Perceptions of education level of intended target group.....	59
<i>Table 4.6</i>	How a participant perceived religion of the target group.....	59
<i>Table 4.7</i>	Features that contributed to Web credibility of the selected sites.....	62
<i>Table 5.1</i>	Suggestions for Web design.....	74

LIST OF FIGURES

<i>Figure 1.1</i>	Outline of Chapter 1.....	2
<i>Figure 2.1</i>	Outline of Chapter 2	6
<i>Figure 3.1</i>	Outline of Chapter 3	32
<i>Figure 4.1</i>	Outline of Chapter 4	41
<i>Figure 5.1</i>	Outline of Chapter 5.....	67

ACRONYMS

- CERN -- European Particle Physics Laboratory
- CMC -- Computer-Mediated Communication
- HBI -- Historically Black Institutions
- HBT -- Historically Black Technikons
- HBU -- Historically Black Universities
- HCI -- Human Computer Interface
- HWI -- Historically White Institutions
- HWT -- Historically White Technikons
- HWU -- Historically White Universities
- IBA -- Independent Broadcasting Authority
- ICASA -- Independent Communications Authority of South Africa
- ISP -- Internet Service Provider
- NU -- University of Natal
- POP -- Point of Presence
- SATRA -- South African Telecommunications Regulatory Authority
- UDW -- University of Durban-Westville

Abstract

With the advent of globalisation and new communication technologies, it was inevitable that educational institutions would follow the advertising trend of establishing websites to market their services. This paper analyses the cultural and ideological values transmitted by such university websites. Particular focus is on issues around gender, sexual orientation, race, religion and socio-economic status. The aim is to analyse consumer reaction to Internet messages conveyed in websites from different cultures, compare them with the intentions of producers and to relate all these back to ideological factors.

This study deconstructs content and messages conveyed by University websites to assess the extent to which they might subscribe to particular ideologies (whether overt or covert). The argument that there are hidden ideologies in Web design does not imply that designers or producers intended any conspiracy or deception. Rather, the study compares the organisation's intended image/ethos with that which consumers perceive through their exposure to the website.

The methodology was purposive sampling of participants consulted through personal (face-to-face) and interviews conducted online, as well as email-distributed questionnaires. This study uses websites of two universities in the KwaZulu-Natal region of South Africa.

Keywords

Ideology, culture, values, web design, identity, hidden texts/meaning, marginalization, perception, university website.

Chapter 1

BACKGROUND TO THE STUDY

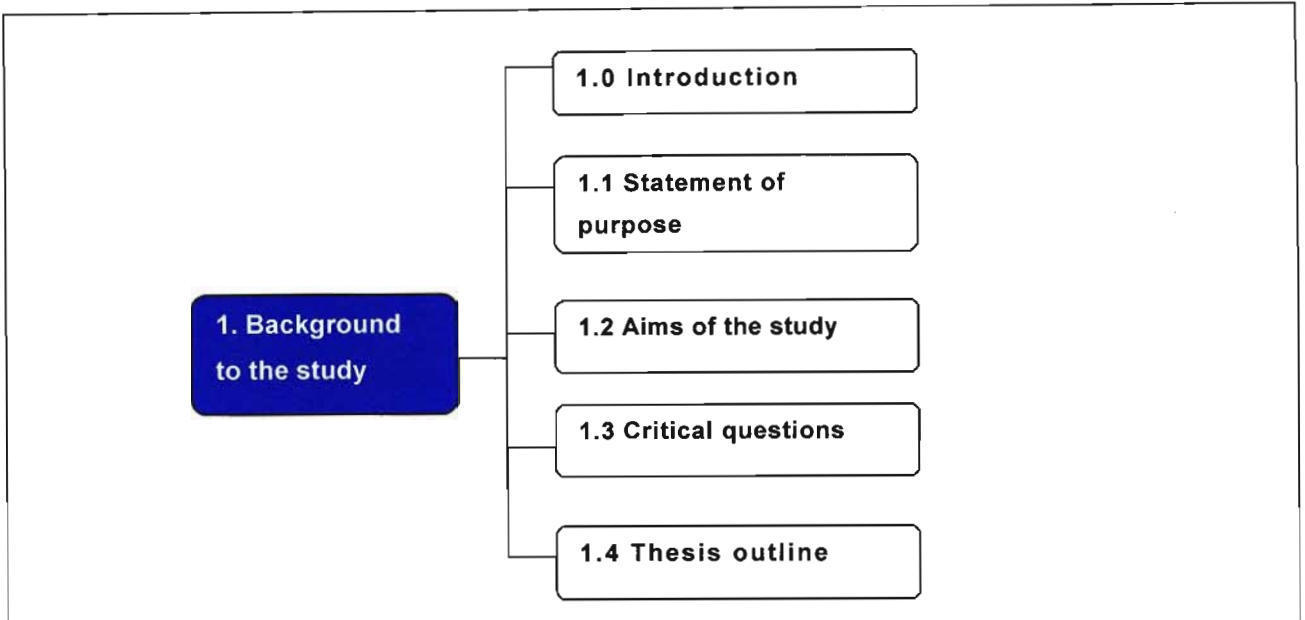


Figure 1.1 *Outline of Chapter 1*

1.0 Introduction

Organisations, companies, universities and individuals use websites to convey their own, distinctive ethos. This has implications for South Africa, a heterogeneous society in a post-apartheid era, where Web content could be open to various interpretations. Such interpretations may either be consistent with or adverse to those of the website designer. Prejudice and suspicion against all that is perceived of as 'different' are aspects that may affect the cultural diversity of the Internet slogan of the 'Global Village' by helping us to form stereotypes¹ of groups perceived as different from us.

¹ A stereotype is an exaggerated belief, image or distorted truth about a person or group — a generalization that allows for little or no individual differences or social variation. Stereotypes are based on images in mass media, or reputations passed on by parents, peers and many other members of society (Lippmann, 1992). Stereotypes can be positive or negative.

Existing studies have analysed the design of websites from various perspectives including web design (Dix, 1998; Lynch, 1999), credibility (Hagedon, 2000; Fogg et al, 2001) and usability (Nielsen, 1993, 2000; Trenner, 1998; Jordan, 1998). Recent studies include those focusing on how consumers judge the credibility of websites. The current study takes a different approach of analysis: looking at the cultural and ideological values transmitted (whether openly or hidden) by university websites. A particular focus is on issues around gender, sexual orientation, race, religion and socio-economic status. The rest of this chapter expands on the introduction and sets the scene for this study.

1.1 Statement Of Purpose

The purpose of this study is to assess the transmission of overt or covert agendas/ alternative discourse by educational web sites in South Africa. A qualitative study was undertaken on the Internet (specifically the Web) in relation to how websites transmit ideology focusing particularly on issues around gender, sexual orientation, race, religion and socio-economic status. The study deconstructs content and messages conveyed by websites to assess the extent to which they subscribe to particular ideologies. The argument that there are hidden ideologies in web design does not imply that there is a conspiracy (deliberate or not) by designers to deceive the general public. Instead, the study looks into the image/ethos an organisation (such as a university) intends to convey in comparison to what consumers perceive through their exposure to the website.

1.2 Aims Of The Study

The main aims of the study were as follows:

- To find out the values transmitted (whether open or hidden) by educational websites
- To identify ways in which educational websites, in addition to providing information about an institution also (intentionally or not) take part in the formation of ideology.

- To determine the extent to which websites accommodate especially previously marginalized and the advantaged groups.
- To analyse reaction of consumers from different cultures to Internet messages conveyed in websites, and to relate them back to ideological and cultural factors.
- To find out to what extent perceptions /stereotypes consumers make about an institution may influence their decisions to study there.
- To establish a basis for understanding how web designers can avoid transmitting unintended ideologies in the design of websites.
- To provide results to inform the development of websites to represent merged tertiary institutions.

1.3 Critical questions

The study makes use of publicly available websites of two universities in the KwaZulu-Natal province of South Africa being:

- I. The University of Durban-Westville (UDW) (see *Appendix A and B*)
- II. The University of Natal (NU) (see *Appendix C*)

Their selection is later described under Methodology (Chapter 3). With reference specifically to these selected websites, critical questions were:

- How was each site developed? What was the intended ethos to be conveyed via each site?
- To what extent do web producers (designers or proprietors) accommodate users from diverse backgrounds in their design of websites?
- What agendas are conveyed by educational websites?
- How do these websites transmit ideology? What kinds of foci are presented to convey the values of the institution?

- To what extent do people accommodate possible contradiction between the values they hold and those they perceive to be conveyed by the websites?

These questions are further broken down and posed as questionnaires in *Appendices D to F*.

The findings of the research are targeted at:

- a) Web designers – how not to unintentionally alienate/marginalize the target they intend to attract.
- b) Educational institutions/ Companies/ Organisations that might intend to communicate a particular ethos and this study might help inform them how to effectively communicate this ethos.
- c) Users (both experienced and novice) to become better-informed and more critical users able to assess the ideological and cultural messages of educational websites.

1.4 Thesis outline

An outline of the remaining chapters of this thesis is as follows:

Chapter 2 reviews related literature that has informed this study. It starts by examining the historical diversity of student populations in tertiary education institutions in South Africa. The chapter also gives a brief overview of the Internet use in South Africa. Then follows a review of literature that informed the theoretical framework upon which the study was developed.

Chapter 3 deals with the data collection methods used. Chapter 4 presents an analysis of data collected from the interviews and questionnaires. Chapter 5 provides conclusions and recommendations for the way forward.

Chapter 2

LITERATURE REVIEW

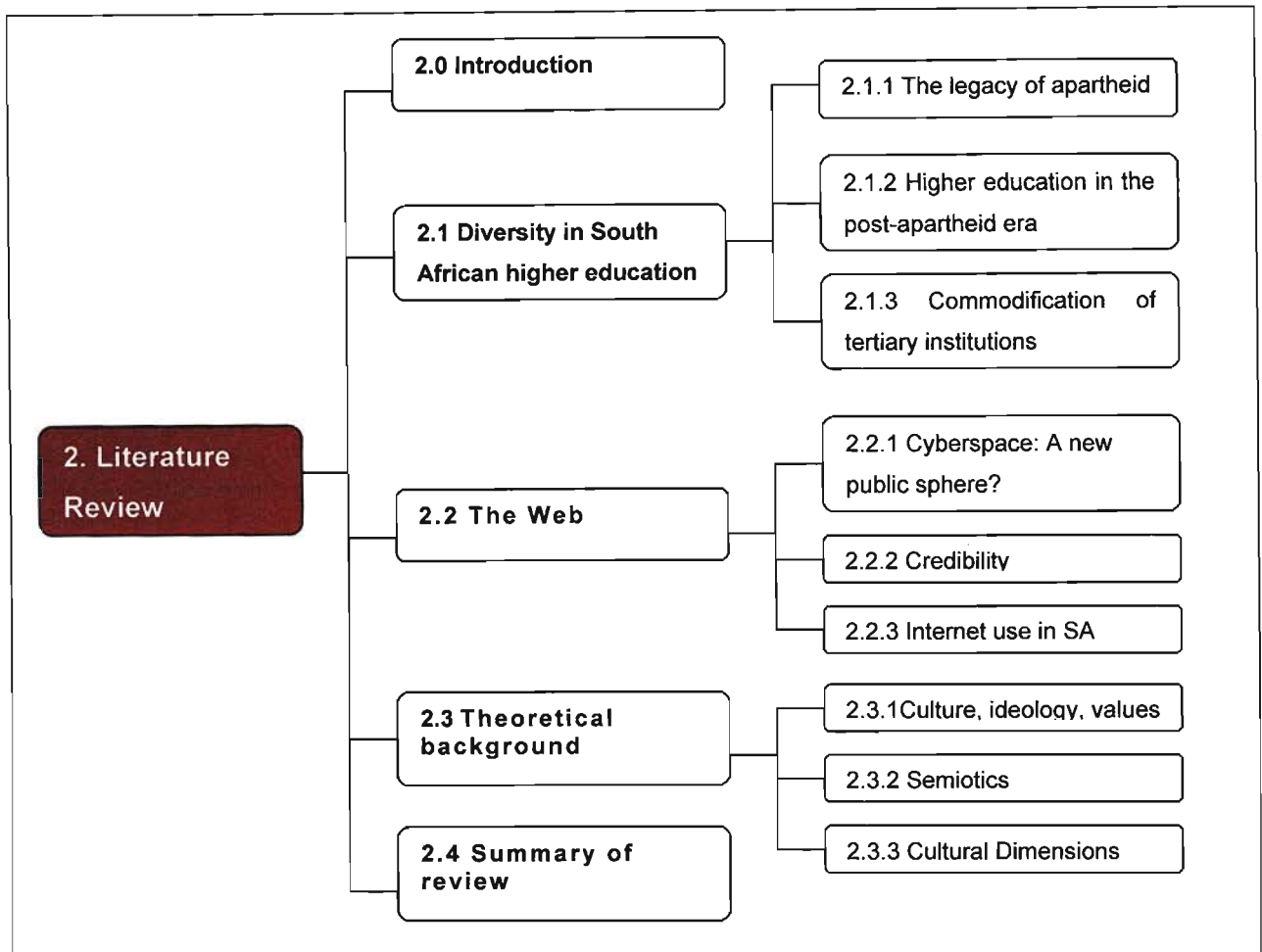


Figure 2.1 Outline of Chapter 2

2.0 Introduction

This chapter reviews the literature related to this study. It starts by examining the historical diversity of student populations in tertiary education institutions in South Africa. The chapter also gives a brief overview of Internet use in South Africa. Then follows a theoretical framework upon which the study is developed. In order to understand how people interpret and make meaning out of cultural texts, this study draws from the theories of Semiotics as well as Hofstede's Cultural Dimensions.

2.1 Diversity In South African Higher Education

2.1.1 The legacy of apartheid

Up until the current changes brought about as a result of the legislation to transform higher education, the South African higher education system can broadly be classified as having three types of institutions. They are universities, technikons, and professional colleges. Technikons provide vocational higher education and training. Professional colleges are specialized colleges that train professionals in one professional programme such as, nursing or agriculture.

Universities operate as residential contact institutions or non-residential distance institutions or a combination of both modes. Because of the past race-based segregationist policies, residential universities were classified according to race and ethnicity of the student population who were educated at that university (Dyasi, 2001). The legacy of apartheid is reflected in the thirty-six higher educational institutions that may be classified into the (1) historically white institutions (HWI) for white students and; (2) historically black institutions (HBI) which were for Africans, Indians, and Coloureds. These can further be classified as shown in Table 2.1 below.

Table 2.1 Classification of higher education institutions in South Africa

Category	Type of institution
Historically White Institutions (HWI)	a) Historically White Universities (HWU) b) Historically White Technikons (HWT)
Historically Black Institutions (HBI)	a) Historically Black Universities (HBU) b) Historically Black Technikons (HBT)

2.1.2 Higher education in the post-apartheid South Africa

The African and White student head count enrolments at higher educational institutions indicate that during the period 1993-1999, enrolments of black students in HWI increased remarkably.

Table 2.2 below indicates a remarkable increase of black student enrolment at the predominantly HWUs that were Afrikaans (from 3 to 18 percent) where black enrolment increased tenfold and outnumbered white student enrolments. However, the predominantly

English universities still had less than 10 percent of black student enrolment although this represented a doubling of black enrolments. According to the figures, during the same period fewer white students enrolled with the HBUs in 1999 than they did in 1993. This is interesting since in 1999, South Africa was five years into the political system of democracy. One would have expected more students enrolled with the HBUs.

Table 2.2 African and White student head count enrolments by institutional type, 1993 & 1999

	African		White	
	1993	1999	1993	1999
HBU	78,000 (41%)	70,000 (21%)	790 (<1%)	640 (<1%)
HWU Afrikaans	6,000 (3%)	60,000 (18%)	64,000 (29%)	59,000 (36%)
HWU English	10,000 (5%)	20,000 (6%)	33,000 (15%)	23,000 (14%)
Distance (UNISA)	53,000 (28%)	46,000 (14%)	53,000 (24%)	43,000 (26%)
Universities Total	147,000 (77%)	196,000 (59%)	151,000 (68%)	126,000 (76%)
HBT	15,000 (8%)	40,000 (12%)	720 (<1%)	425 (<1%)
HWT	10,000 (5%)	50,000 (15%)	44,000 (20%)	24,000 (15%)
Distance (TSA)	19,000 (10%)	46,000 (14%)	27,000 (12%)	13,000 (9%)
Technikons Total	44,000 (23%)	136,000 (41%)	72,000 (32%)	37,000 (24%)
Grand Total	191,000 (100%)	332,000 (100%)	223,000 (100%)	163,000 (100%)

Source: [Department of Education \(1999\), Table 39.1](#). Numbers below 1000 have been rounded up

For the purposes of this study, the two universities whose websites were reviewed were that of the University of Natal (NU) and the University of Durban-Westville (UDW). Their student demographics for 2000 are presented in Tables 2.3 and 2.4 overleaf. NU is historically white and English while UDW is historically black (Indian). Their website homepages are presented in *Appendices A, B, and C*.

Table 2.3 Student demographics at the University of Natal in 2000.

	Whites	Blacks			Other	Total
		Coloureds	Indians	Africans		
Undergraduate	2487	272	4646	3799	6	11 210
Postgraduate	1400	140	1091	1393	12	4 036
Total	3887 (25%)	412 (3%)	5737 (38%)	5192 (34%)	18 (<1%)	15 246 (100%)

Table 2.4 Student demographics at the University of Durban-Westville in 2000.

	Whites	Blacks			Other	Total
		Coloureds	Indians	Blacks		
Undergraduate	61	68	1877	4143	0	6 149
Postgraduate	72	32	887	1004	0	1 995
Total	133 (2%)	100 (1%)	2764 (34%)	5147 (63%)	0	8 144 (100%)

Source: [South African University Vice-Chancellors Association \(SAUVCA\)](#)

Table 2.3 shows a fairly even distribution of enrolments at NU from Indian, African and white students with the highest percentage made of Indian students. However, NU, an historically white university, had only a 25% enrolment of white students with African and Indian student enrolments higher at 34% and 38%, respectively. Table 2.4 shows that enrolments at UDW, historically a university for Indian students, were now predominantly African students who constituted more than 60% of that institution's total student enrolment. Overall, these tables indicate the diversity of student populations at these institutions, which are also undergoing transformation away from attracting only the racial group for which they originally catered.

Nine years into the post-apartheid era, the South African tertiary education system shows a significant level of diversity in terms of student racial backgrounds. In October 2000, legislation was passed by the National Assembly to amend the Higher Education Act (Act 101 of 1997). In 2002, Professor Kader Asmal, the education minister, disclosed the government restructuring

measures² to reduce the number of institutions from 36 to 21 through institutional mergers. The minister noted some broader goals including “promoting equity of access and outcomes and to redress past inequalities through ensuring that students and staff profiles reflect the demographic composition of South African society”.³

Other key goals of the restructuring process include increasing the number of students overall in the tertiary system over the next 10 to 15 years, increasing the number of black (Africans, Indians and Coloureds) students, female students, as well as the disabled students who are under-represented in tertiary institutions. This correlates with the South African *Employment Equity Act* No. 55 of 1998 has designated the following groups as previously disadvantaged: Blacks, women, children and the disabled.

The implications of these enrolment trends for how information is presented on university websites are that website content and pictures should accurately mirror the student populations in a university so that designers do not unintentionally alienate groups they intend to attract.

2.1.3 Commodification of tertiary institutions

Following the global ‘capitalisation’ of public institutions, academic institutions have embarked continuously on a drive towards ‘marketisation’ and the ultimate *commodification* of their services. In his study of the University of Natal’s corporate advertising, Oyedemi (2001) noted that, “Tertiary institutions are utilising aggressive marketing strategies and media campaigns to attract students”. Commodification involves “the process of turning use values into exchange values, of transforming products whose value is determined by their ability to meet individual

² The imperative for the transformation and restructuring of the higher education system is informed by the need to realise three fundamental objectives which are necessary to achieve the vision of a transformed, non-racial, non-sexist and democratic higher education system, as outlined in the Education White Paper 3: A Framework for the Transformation of Higher Education (July 1997).

³ Press Statement by the Minister of Education, Professor Kader Asmal, MP, on the Transformation and Reconstruction of the Higher Education System. Thursday, 30 May 2002.

and social needs into products whose value is set by what they can bring in the marketplace” (Mosco 1998: 143-144).

With regard to educational websites, it is often difficult to determine whether a particular website has commercial intention or a purely informational purpose since the line of demarcation between commercial and purely informational sites is blurred. Gorski (1999) advocates, “it may be the case that no site fits the latter extreme. Again, since many websites are produced by unfamiliar sources, we, the users, must look deeper to uncover the bias of online educational products”.

There are various academic products on offer to potential students and tertiary institutions have to advertise aggressively to recruit their market share. Education is then presented primarily in terms of exchange value: a degree is seen as a commodity that can be exchanged for lucrative employment, rather than its traditional use-value as an opportunity for personal and academic growth (Oyedemi, 2001:2). Oyedemi further analyses the critical issues that have led to commodification and advertising trends in South African tertiary institutions, especially universities, to include:

- I. Income generation;
- II. The information technology revolution;
- III. On-line education;
- IV. Increasing growth of private tertiary institutions;
- V. Redefining image in a post-apartheid ambience and;
- VI. The competition between the technikons and universities for recruitment of students.

(Adapted from Oyedemi, 2001:3)

The fifth issue referred to above – redefining image in a post-apartheid ambience – is of particular significance to this study. In the post-apartheid South Africa, institutions are redefining

their former image towards a more liberal one to attract more students. During the apartheid years, the public policy on education enforced racial segregation and thus, discouraged any movement towards racial and cultural diversity on campuses. In his paper on "Diversity in Higher Education – in South Africa", Dyasi (2001) points out that in the late 1970's and 1980's there was great political pressure on the South African Government to improve access to tertiary education by the South African black population. However, the government responded to this pressure by creating more ethnic universities as opposed to opening the existing universities to all race groups. The net effect of this order was the ironically *enviable* system of higher education, consisting of twenty-one universities, eighteen vocationally orientated higher education institutions (including fifteen technikons) and a large number of Colleges of Education, Agriculture, and Nursing (*ibid*). This being the case, the competition for students increases, hence, the need for more *aggressive* marketing strategies to attract students.

According to Nkopodi (2002), globalisation has increased competition and higher education institutions must improve and sustain their competitiveness in order to survive in a competitive market. Today, as new forms of knowledge production gain ground, universities no longer hold the monopoly on scientific research and knowledge. Technikons are also competing for academic excellence. The decline in student numbers and cut in government subsidy necessitate that these institutions examine the private sector for strategies aimed at protecting their survival and profits.

Mampuru (1997) presents negative aspects when tertiary institutions take every opportunity to turn education into a business enterprise. The result is they focus mainly on student intake without allocating the required resources to teaching and learning. Such institutions view students as a means to the financial rewards associated with students. This discussion indicates a commercialistic impact since universities are using websites to achieve this. The argument here is that when academic institutions (known to be non-profit making) revert to

commercial means for survival and profits, their cultural and ideological values are affected positively or otherwise. In the process, these values are transmitted whether overtly or covertly.

Having looked into the way universities use websites, the next section examines the background of the Web (especially in South Africa).

2.2 The Web

The World Wide Web (the Web) is essentially a document delivery system running over an international network of connected computers (Internet). The Internet came into existence slightly more than 20 years ago as an experimental network funded by American military research and named ARPAnet. The Internet relies on telecommunications technology that includes telephone lines, satellite links as well as the use of network protocols to route and transport all the elements of a multimedia service such as text, image, motion video and sound. The two terms – the Web and the Internet – will be used interchangeably in this paper.

The Web was initially conceived and created by Tim Berners-Lee, a computer specialist from the European Particle Physics Laboratory (CERN) in 1989 to share hypertext documents (Berners-Lee, 1995). The term “hypertext” was coined by Ted Nelson (around 1965) referring to text that is organised into units called nodes/chunks that are linked in a “non-sequential” way, which requires non-linear retrieval for its access with the use of a browser utility. The World Wide Web Consortium note that hypertext is made of blocks of text - in the form of written text, pictures, video and sound, chained together by electronic links (Berners-Lee, 1992). The aim of these systems to enable readers to browse through linked, cross-referenced, annotated texts in a non- or multi-sequential manner without becoming lost in the universe of texts, in hyperspace (Shneiderman, 1980; Landow, 1992).

The first users of the Internet were the Military and educational institutions. Almost twenty-five years on, we have reached a stage where no advertisement, feature film or television programme seems complete without its associated web site. Many schools have also begun to investigate the potential of the Web, more often to access information or market themselves than have done so as an instruction medium.

2.2.1 Cyberspace: a new public sphere?

Ordinary citizens find a variety of ways and a variety of media through which to enter into public discourse on human shared life with communal well-being. German scholar Jürgen Habermas (1989) introduced the concept of a “public sphere” in which he argued that in democracies, power differentials such as class and private commercial interests are put aside and power is replaced with discursive rationality. The public sphere⁴ is also a place where criticism of the state and existing society could circulate. The media, in particular, function as a public sphere by providing a forum for the enlightened, rational, critical and unbiased public discussion of what the common interests are in matters of culture and politics (Chomsky and Herman, 1998).

The principles upon which Habermas’ public sphere was based were “general accessibility (to information), the elimination of privilege, and the search for general norms and their rational legitimation” (Garnham, 1992:109). The Internet or cyberspace,⁵ as it is sometimes referred to, provides a platform where people from different walks of life may come together to discuss matters of interest on an equal footing.

⁴ A public sphere is a term coined by Jürgen Habermas, referring to places where individuals could discuss and debate issues of common concern. These included newspapers, journals, independent press as well as coffee houses and salons where people read newspapers and engaged in political discussion. Public spheres emerged during the enlightenment era and 18th century revolutions.

⁵ Refers to the conceptual space occupied by people using computer-mediated communication (CMC) technology.

Critics of Habermas' notion of public sphere have applied Gramsci's concept of *hegemony*⁶ to demystify the bourgeois American public sphere as a neutral arena for rational political discourse based on a general common good. In the public sphere, as Lippmann (1992) observes, "public life is organised to serve dominant groups under a mantle of universal inclusion while engaging in exclusionary practices vis-à-vis opposition groups that question the legitimacy of the established order". Bourgeois societies are split across class lines – in terms of socio-economic status, colour, ethnicity, gender, sexual preference, education, and so on – and different class factions produce different political parties, organisations, public spaces and ideologies with each class attracting specialists in words and writing known as intellectuals⁷ (Kellner, 1998:167).

In the wake of the new Internet technologies, studies have noted an increase in the politics of inequality on the Internet. The level and scope of access in cyberspace turns into a measure of status, class, power and wealth – similar to physical space where not all offices, stores, territories or neighbourhoods are open to everyone (Luke, 1998:136). The hope for cyberspace was that everybody would be afforded the same level of respect and the socio-economic indicators would be meaningless. The reality is that this has not occurred to the extent that people hoped. For instance, some websites and e-mail addresses have more status than others (Kellner 1998:170). In terms of gender, the result has been that men and women online often choose to manipulate their identities. In addition, Clarke (2000) observed that, "in mixed gender listservs, messages from women are undervalued [while those from men are] afforded more status".

⁶ Antonio Gramsci (1971) coined the term "hegemony" to refer to the struggle between coercion and consent as the dominant class makes their ideology seem natural, like common sense to the subordinate class. The latter ends up seeing reality from the former's point of view.

⁷ Kellner makes a distinction between *functional intellectuals*, who serve to reproduce and legitimate the values of existing societies (mainly functional to the State) and *critical-oppositional intellectuals* who oppose the existing order.

The point here is that the perceived equality and freedom of expression that was expected to be afforded people on the Internet does not virtually exist. Rather, those who go online end up competing for recognition so that the information they want to convey may be read or even regarded as credible. Therefore, it was inevitable that educational institutions would also compete for their voices to be heard, that is, their services be recognised and appreciated. This calls for adopting private sector strategies of attracting the target population.

2.2.2 Credibility of the Web content

The Information Revolution is now part of our everyday lives, rapidly transforming both our society and our expectations for the future. Activities people do on the Internet range from sending e-mails, getting news and information, banking, shopping, and playing games to playing lottery and taking lessons online. In a study carried out by the Markle Foundation⁸ in 2001, it was found that people view the Internet as a great information resource that makes their lives easier. However, the President of the foundation, Baird (2001), adds that, 70% of the interviewees “said that most of the information on the Internet is not trustworthy though they love the Internet as an information source”.

As it is so easy to publish on the Web, there are millions of websites offering diverse information on diverse topics. However, it is a challenge for the consumer to know if a site and its information are credible (trustworthy or believable). Studies have been conducted to investigate what factors lead people to believe what they find on the Web. Stanford University's Persuasive Technology Lab (Fogg et al, 2002) study was carried out over 3 years and included more than 2 600 consumers. It evaluated the credibility of two live websites randomly assigned from one of

⁸ The Markle Foundation is a private philanthropic organization that works to ensure that the Internet and other media are available to the public. This information was captured from an online interview published by the CNN.com on July 10, 2001.

10 content categories. The study observed that factors that determine website credibility included (in order of importance): design, information focus, company motive, information accuracy, advertising, writing tone, site functionality, usability and affiliations.

Almost half (46.1%) of the participants surveyed selected site design – professional appearance, layout, navigation, colours, graphics and consistency – to be more crucial to the site’s credibility than issues such as content, site author, information bias, accuracy or the site functionality. It is also noteworthy that industry recognised factors such as the inclusion of privacy policies and third party endorsements did not feature in the factors indicating credibility selected by those surveyed. The study attributed the prominence of design to the fact that “*looking good is often interpreted as being credible*” (Fogg et al, 2002).

Parallel to the Stanford University study and in collaboration with it, the *Sliced Bread Design* organisation conducted a separate study that focused on the opinion of 15 experts to evaluate the same 10 websites. In contrast to responses from the inaugural study, the financial and health experts were less concerned about the visual appeal of sites but assigned more credibility to “the quality of the site’s information” (Stanford et al, 2002). Experts assigned more credibility to sites if they:

- ❑ Provided information from reputable sources,
- ❑ Disclosed names and credentials of each author,
- ❑ Provided unbiased information.

Individual differences may also influence people’s perception of Website credibility. In a study by Stanford University in 2001, it was concluded that men assigned less credibility to websites than women did – suggesting that men are slightly more critical of Websites than women (Fogg et al, 2001). This gender difference was consistent across two cultures as the respondents came from both Finland and the United States. Fogg and others added:

- Compared to the U.S. participants, Finns reported lower credibility perceptions for Web sites that conveyed commercial implications and for those that showed marks of amateurism.
- Compared to Finns, respondents from the U.S. assigned more credibility to sites that used some type of tailoring technology and sites that conveyed expertise and trustworthiness, as described in the questionnaire.

The implications for the current study are that it should find out if the design and content of websites are crucial to the credibility of the selected websites. In addition, findings from the above studies imply that web designers should be careful with both the appearance and content of their sites.

2.2.3 Overview of the Internet in South Africa

The politics of digital inequality – with regard to internet connectivity – contribute to the politics of economy and technology as embedded in the classification of countries into developed, developing and, less developed. Hall (1998) is of the opinion that

Being one of the Connected is more than receiving and sending digital signals. It involves marks of status and conspicuous consumption, government policy and private enterprise, bureaucratic regulation and commercial interest. It is, in short, a matter of participating in a Digital Culture.

By 1997, the costs of Internet access were generally affordable in about 25-30 cities of South Africa due to the establishment of local points of presence (POPs) though there was still no low cost method of access outside of these areas (Jensen, 1997). Studies in 1998 revealed that the Internet market in South Africa was very much larger than any other on the continent, being in the top 20 (ranking seventeenth) of Internet usage countries worldwide. At that time, South Africa was leading with 95% of the continent's hosts, followed by Egypt with 2% while Namibia, Botswana and Zimbabwe shared 1% of hosts, and the remaining 2% was shared between nineteen countries. There were an estimated 1.8 million users. These factors ranked South

Africa in a category with Spain, Denmark, Austria and New Zealand (Hall, *ibid*) and outside that of 'developing' countries.

Within a few years, according to studies by the World Wide Worx (as presented in *The Goldstuck Report*, 2002), South Africa had dropped to 27th in terms of connectivity, with a slowing down of growth in numbers, which were estimated to reach just more than 3 million by the end of that year. The report revealed that only 1 in 15 South Africans had access to the Internet at the end of 2001 as compared to the developed countries that boast 1 in 2 people being connected. The Geographics Population Explosion site (the CyberAtlas 2003) further confirms the estimates that South Africa has 3.068 million Internet users out of a population of more than 43 million people (as at May 9, 2003). Clarke (2002) argues, "The slow Internet connectivity growth in South Africa and other African countries continues to reflect lack of economic and telecommunications infrastructure and the failure to deregulate telecommunications and end de facto monopolies". It is worth noting that the numerical parity does not necessarily mirror the social parity.

Theoretically, the Internet is supposedly available to anyone with a modem, access and ability to use it, but the reality gives a different picture of lack of universality of access. Foko (2000) highlights Mowlana's (1997) argument that "the profile of users is skewed by race, gender, income, and age and access is restricted by the cost of technology and the steep learning curve for computer neophytes". Earlier studies by the then Independent Broadcasting Authority (IBA) of South Africa noted that, "Despite the rapid growth of the medium in South Africa, the disparities of access to the Internet cannot be ignored. Although there are more Internet users in South Africa than in the rest of Africa, teledensity (lines per 100 people) [was] approximately 10%" (Langa, 1999).

According to The Broadcasting White Paper, June 1998, the Internet situation in South Africa is such that universities and technikons are large users of the Internet. "It is hoped that they may find ways to extend services to members of the community... The Internet should help in the democratisation process by allowing the largest number of individuals and communities to have access to a variety of information and educational material". The priority (in South Africa and worldwide, it seems) is to start off by closing the information gap between the *information rich* and the *information poor*. Langa (1999) points out that "rural and poor communities, women and other disadvantaged groups face a new form of poverty and exclusion – information poverty".

Having established the inequities of the Internet access as well as the state of higher education in South Africa, this chapter now turns to the theories that inform this study.

2.3 THEORETICAL BACKGROUND

The major obstacle for analysing the implications of people's cultural uses of the networked information and communication technologies of the Internet comes with the fact that there are no established theoretical and methodological models for analysing the Internet (Lillie, 1998:2). This, despite the ever-growing cultural, social, economic and political significance of the Internet. This research is informed by the principles of Information and Communication theories as they relate to how people make meaning about information on the Internet. These are

- I. Semiotics (Peirce's triad of a sign), and
- II. Hofstede's Cultural Dimensions.

To set a stage for the theoretical framework, methods and results of this study, we first need to define *culture* and *ideology* and tie them with *values*.

2.3.1 Culture, Ideology and Values

2.3.1.1 Culture

There exist numerous definitions of culture depending on the person defining culture since their ideology and discipline will influence their definition. The Oxford Advanced Learner's Dictionary (1995) defines culture as the customs; art; social institutions; literature; music and other "intellectual expressions of a particular society or time". Culture is defined as a historically transmitted system of symbols and meanings; identifiable through norms and beliefs shared by a people (Collier and Thomas, 1988:99). Thus, culture is shared meaning, shared understanding and shared sense making.

From an anthropological approach, Gokool (1994) argues that the human learned experience derives from that which is passed down through generations, and this contributes to the formulation of norms that define the parameters of a society. In defining the parameters of a society, these norms become the definition of the culture of a society. Gokool highlights Schneider's (1974) claim that

Culture is a system of symbols and meaning. Symbols in this context, refer to the basic premises that a culture posits for life. It also refers to what the units of the culture consist of, how these units are defined and differentiated, and how they form an integrated order or classification.

2.3.1.2 Ideology

An ideology can be understood as a set of ideas that structure a group's notions of reality, a system of representations or a code of meanings governing how individual groups see the world and the role of the individual in a society (Littlejohn, 1992; Victor, 2002b). A group of people who share a common set of ideas about the world share an ideology and, an ideology that is shared by the majority of people in a society is the *dominant ideology*⁹. Tomaselli and others (1987:115) argue, "Ideology can be thought of as a coherent set of ideas which have a limited ability to

⁹ Roland Barthes refers to the dominant ideologies of our time as myths. Myths are usually associated with classical fables about the exploits of gods and heroes.

transform the ways in which men live out their 'common sense'". The three authors highlight Gramsci's concept of 'common sense' as referring to "the uncritical and largely unconscious way of perceiving and understanding the world that has become 'common' on any given epoch" (Gramsci, 1971; cited in Tomaselli et al, 1987). This means that what might apply to one as common sense may highly be shaped or influenced by the prevailing hegemonic ideology.

In every society, there are dominant and non-dominant groups. According to Barthes (1985), both the denotative (obvious/literal) and the connotative (hidden) meanings of a text are ideological constructs. Studies have been done that explain the differences of non-dominant and oppressed groups; many of these studies focus on women as a "muted group". According to Cheri Kramarae (1998, cited in Griffin, 2000), the theory of Muted Groups "considers a variety of groups including women, African Americans, homosexuals and the homeless as having to see reality from the perspective of the dominant white male".

Media critics see media content as signs/representations/reflections of values and beliefs of a particular time and place or social group. The meaning embedded in media content is viewed as a social construct and messages are also decoded according to the social situation of those in the receiving audience. McQuail (2000:50) argues, "The notion of ideology in media content...has allowed researchers to 'decode' the ideological messages (whether implied or overt) of mass-mediated entertainment and news". This is because media personnel interpret and write about events from their frame of reference as to what meaning the event conveys to them. These ideological messages tend to promote/legitimise the status quo since the ruling class makes the experience seem natural (Turkle, 1998).

In their study of how South African journalists interpreted and wrote about events during the apartheid era, Tomaselli and others (1987) noted that both the black and the white journalists

interpreted events in a way that was largely (and subconsciously) influenced by their cultural and, more especially, their ideological backgrounds. Thus, in a struggle to portray/give meaning, a struggle for ideology also comes to the fore.

2.3.1.3 Values

Griffin (2000:12) describes values as “the traffic lights of our lives, priorities that guide what we think, feel, and do”. He therefore concludes, “When we talk about *values*, we are discussing things of relative worth”. The things we value are to a great extent influenced by our culture and the dominant ideology of our society and time.

2.3.2 Semiotics

The issue of media content as representations or signs takes us to *semiotics*, that is, “the study of how meaning occurs in language, pictures, performance, and other forms of expression” (Tomaselli, 1996:29). Tomaselli explains that the semiotic method incorporates “how prevailing meanings are the outcomes of encounters between individuals, groups and classes and their respective cosmologies and existence”. Other factors that further influence creation of meaning include gender, psychology, religion, language, ethnic and nationalist forms of domination and/or resistance (Tomaselli, *ibid*).

The basic unit of semiotics is a ‘sign’ and a sign “stands for something else”. Semiotics can be applied to anything that is seen as signifying something – that is, to everything that has a meaning within a culture. Thus, semiotics provides tools for the descriptive and textual analysis of meanings carried by web content. From a semiotic approach, websites can be classified as popular culture. As media texts, websites cut across national, state and cultural boundaries in that even though they may be produced in a certain setting, they are consumed cross-culturally. Websites can be seen as signs of the current post-industrial society.

This study adopts Peirce's Triad of signs as explained in Tomaselli (*ibid*) that shows the different levels at which meaning is derived. Pierce's model of a sign is in a form of a triad comprising the *iconic*, *indexical* and *symbolic*. For the iconic sign, the relationship between the signifier and signified is one of likeness/resemblance. Here, the surface or overt meaning of a sign is considered since the sign possesses some qualities similar to those of the object/concept it signifies/represents. Tomaselli adds, the drawing, picture, film or television image of a dog literally looks like a dog. Sound effects of a waterfall, on a radio drama, resemble/imitate the real waterfall. Similarly, an image of a university on a web page looks like a university. Lister and Wells (2001) point out that in this notion of a sign, the signifier (the physical mark or material thing/object/quality) bears the same kind of resemblance to what it signifies (what it means or stands for).

The interpretation of iconic signs may vary across cultures, individuals and groups. A study conducted by Amory and Mars (1994) established that most South Africans would represent the word "picture" with an icon of a drawing in a picture frame, whilst Americans would do so with the image of a camera. The implication for websites is that information designers need to select metaphors with care in the design of their sites since interpretations may differ depending on the reader characteristics such as the socio-political or national background.

Grayson (1998; cited in Chandler, 2001) observes, we are often left with a sense that the icon has brought us closer to the truth because we can see the object in the sign. A study by Singh and Sook (2002) indicated that one of the things people like to see in a university website is a photograph of university building(s). This gives viewers/users the feeling of being there since the photograph is perceived to resemble the real university. As a result, this adds to the credibility of the university website.

The indexical is a sign in which there is a sequential or causal relation between signifier and signified, in this case, the relationship is inferred as the signifier is caused by what it means (Dyer, 1982 as quoted in Kress and van Leeuwen, 1996; Tomaselli, 1996.). This sign engages the reader's first level of deep interpretation since it draws attention to the object/concept to which it refers. For instance, a footprint is caused by a foot, smoke by fire, and a miserable facial expression by distress. This is less arbitrary and less close to reality (*modality*) than a picture of a dog is for the animal it signifies. What the sign refers to might not be physically seen. Drawing upon this, the picture of a university may signify tertiary learning institution or education. Incidentally, the *indexicality* is based on an act of judgment or inference whereas iconicity is closer to 'direct perception' making iconic signs closer to reality (Kress and van Leeuwen, 1996).

The symbolic sign has no obvious connection to the idea it represents except through convention, what we take for granted (Tomaselli, 1996:31) or what we have learnt. Here, the sign calls for metaphorical interpretation of the idea represented or what is viewed as common sense. For instance, the picture of a university symbolizes attainment of knowledge, a step towards success and achievement in life (Oyedemi, 2001). This category of a sign requires the deeper level of interpretation connecting the *iconic* and *indexical* meanings. Tomaselli (1996:58) argues the *symbolic* sign "is a system of relations – a method of combining various elements and making them intelligible". Meaning is therefore constructed on the account of a comprehensive cultural view of the world, a coherent and structured perception of reality within which a society or group or class makes sense of social relations and the way the world is organized (Tomaselli, 1996; Chandler, 1995). As such, symbolic meanings of cultural products are not always overtly embedded but the co-operation of the viewer/audience is necessary for decoding meaning (Oyedemi, 2001).

According to Victor (2002b), social groups and communities create specific signs, which they attach to a specific signifier. Drawing from the works of Saussure, Victor argues, “communities also create ideology in the form of discourse, myths, stories and religion and this ideology is necessarily grounded in language”. Victor’s study noted that school websites usually reflect the demographics of the school population as well as the learning environment in the respective school. For instance, an image showing more people of a certain gender or race group in a school homepage might be read as an indication that there are fewer people of the less represented gender or race in the school. Victor suggests this might arouse the subsequent feeling that the learning environment in this school is not conducive to the less represented group.

Victor adds that the mood of the people in the pictures and the surrounding environment are important. For instance, smiling faces or those looking at something with great admiration, composure, and people’s posture. Most of all, he noted that the inclusion of pictures of the school gives the feeling of being there and can attract potential students. A study by Singh and Sook (2002) confirm this idea that pictures of the campus and campus life “stimulate thoughts of an excellent learning environment”.

Another observation Victor made is about the tone or style argumentation of the site. He argues this could be read for the kind of products the school produces. For instance, a graphic in one of the schools under review had the words “Brentwood Rules” repeated over and over. One of the overt meanings would be that “Brentwood’s sports teams win more games than other schools’ teams” or “Brentwood is better than other schools” (noting a sense of superiority to other schools). The deeper meanings Victor makes out of these include: “it is good for our school to be better than other schools” and “it is good to exult in one’s superiority”. Victor, however, notes that the designer/producer seemed to be demonstrating “a stereotypically male aggressiveness

toward rivals in other school (most likely in the area of sports or other competitive events)".

These might be oppositional readings to the designer's intentions and might be adversely read by readers who do not like aggression. Victor's point is that there may be alternative meanings inbuilt in seemingly inoffensive websites hence; website producers should "create sites that accurately represent school populations" (Victor, 2002b).

If a media text is considered in terms of the semantic relationships between visual and verbal utterances, the meaning derived from a visual image would depend on the visual context in which it is used, the attitude or expectations of the viewers/readers and meaning as determined by cultural conventions (Norman, 1986:32-65; Du Plooy, 1989:10-33). For instance, a clenched fist (in a boxing web page) may symbolise victory (Morgan and Welton, 1986), whereas in an anti-apartheid movement web page it may symbolise freedom (Du Plooy, 1989:11). This meaning is derived from extrinsic associations people make based on their past experience.

Another qualitative researcher, Maboudian (quoted in Victor, 2002b), examined the visual representations of gender differences presented in the Web pages of an urban public school. Victor emphasizes that while Maboudian findings did indicate possible gender bias in the area of female use of technology, she cautions that the analytic methodology she employed suggests only possible meanings, not definitive ones. Both researchers recommend that further studies not only analyze the possible meanings but also get the actual meanings derived by the website users.

2.3.3 Hofstede's Cultural Dimensions

Theories of Intercultural Communication indicate that variables measured in intercultural research include attitudes, perceived similarity, uncertainty and attributions (Gudykunst, 1988) as well as group vitality, ethnic boundaries and status. In the light of this, Marcus and Gould (2000) observed "companies or organisations that want to do international business on the Web should consider the impact of culture on the understanding and use of Web-based communication, content and tools".

The theory of *Cultural Dimensions* as developed by Geert Hofstede (1991), advocates the idea that cultural differences manifest themselves in a culture's choice of symbols, heroes/heroines, rituals and values. Hofstede's study was focused on employees in multinational corporations worldwide. He noted that the cultural diversity of employees in a company had some effect on the company culture. Marcus and Gould (2000) explain these five differences by putting them in the context of websites:

a) Power Distance (PD) – refers to the extent to which less powerful members expect and accept unequal power distribution within a culture. In high PD societies, for instance, access to information is highly structured; prominence is given to leaders as opposed to citizens/customers /students/employees; and more focus is on the group's expertise/authority/experts. In low PD school websites, Marcus and Gould (*ibid*) explain, the emphasis is put on the power of students as consumers and equals. They are given almost the same prominence as the school leaders.

b) Individualism vs. Collectivism (IC) – individualism implies importance is given to the individual and everybody is expected to look after oneself or immediate family. For instance, images of success are demonstrated through consumerism versus achievement of socio-political agendas. Thus, importance is given to individuals and products shown by themselves or with groups. Success is not seen as a result of group effort but of individual effort. In the workplace,

collectivist cultures value harmony more than honesty/truth (Marcus and Gould, *ibid*). With regard to school websites, it is the case of whose interests are represented. The two authors claim that in a collectivist school website, student achievements are also given prominence instead of showing only the staff achievements.

c) Masculinity vs. Femininity (MF) – refers to the gender-role differences especially the different roles/professions that are dominated by different genders. For instance, Hofstede observed that women in the Soviet Union dominate the medical profession while in USA it is men. Masculine societies advocate assertiveness, competition and toughness while feminine ones advocate tenderness, consideration and concern. In 1991 Hofstede's study showed South Africa to be a highly masculinist society with an index of 63 (Hofstede 1991). Marcus and Gould (*ibid*) suggest that website navigation in a high masculinity society is oriented to explorations and control; the site makes no appeal to unifying values and; above all, there is a great alignment towards specific gender or age.

d) Uncertainty Avoidance (UA) – cultures vary in their avoidance of uncertainty, creating different rituals and having different values regarding formality, punctuality, legal-religious-social requirements, and tolerance for ambiguity. For instance, the structure in organisations, institutions and relationships with a high UA, helps make events interpretable and predictable; formality is stressed; any form of difference is deemed to be threat or danger; and businesses require longer career commitments. Marcus and Gould (*ibid*) claim that websites expressing a high index of UA usually have limited choices and clear navigations to prevent users from being lost (as if trying to hide certain information or not giving it all) and such websites employ redundant cues (colours, typography, sound) to reduce ambiguity. Moreover, the information given is as limited as possible and scrolling must not hide the content. According to the two authors, in school websites in a website from a high UA society, teachers are expected to be and are seen as experts.

e) Long-term Time Orientation (LTO) – the longer one has been around, the more credibility and authority one has (for instance, older versus younger; and in some societies men are deemed to have existed longer than women – with regard to the biblical story of Adam and Eve); emphasis is on unequal relations whereby such relationships are also seen as a source of information and credibility. Marcus and Gould (*ibid*), argue LTO societies exercise status over practice and search – for instance, things said by professors are given more credibility over those said by ordinary people regardless of how much research or practice the latter might have done with regard to what they say. The LTO web content focuses on practice and practical value and relationships (associations and links –navigation – to other known sites) form the basis of credibility. On the contrary, websites of Short-term Time Orientation (STO) focus their content on truth and certainty of beliefs and, obeisance to the rules is seen as the source of credibility.

In all, Marcus and Gould advocate that this theory that studies organisational cultures implies that user-interface designers must be considerate of how their web designs could be interpreted by users from diverse cultural backgrounds.

2.4 Summary of the review

This chapter has reviewed the literature related to this study. Examination of the enrolments figures of students of different race groups at the two institutions used in this study confirm the ongoing transformation and the diversity of student populations. This poses particular challenges for university website developers/designers if their sites are to keep abreast of these changes as well as attract and accommodate the different groups'.

This chapter also discussed theories applied in the construction of meaning while, at the same time, putting them in the context of this study. What emerges from the literature review is the

idea that culture and ideology do inform our value systems, which ultimately influence how we make meanings out of cultural texts – web content in this case.

The theories support the argument that there might be potential messages – overt and covert – transmitted by university websites. The argument further claims such meanings might bear some cultural and/or ideological connotations within them and these might indicate the nature of learning, demographics, as well as the character of the university. These, in turn, impact on the credibility of the institution.

The following chapter presents the methods used to collect data for the study.

Chapter 3

METHODOLOGY

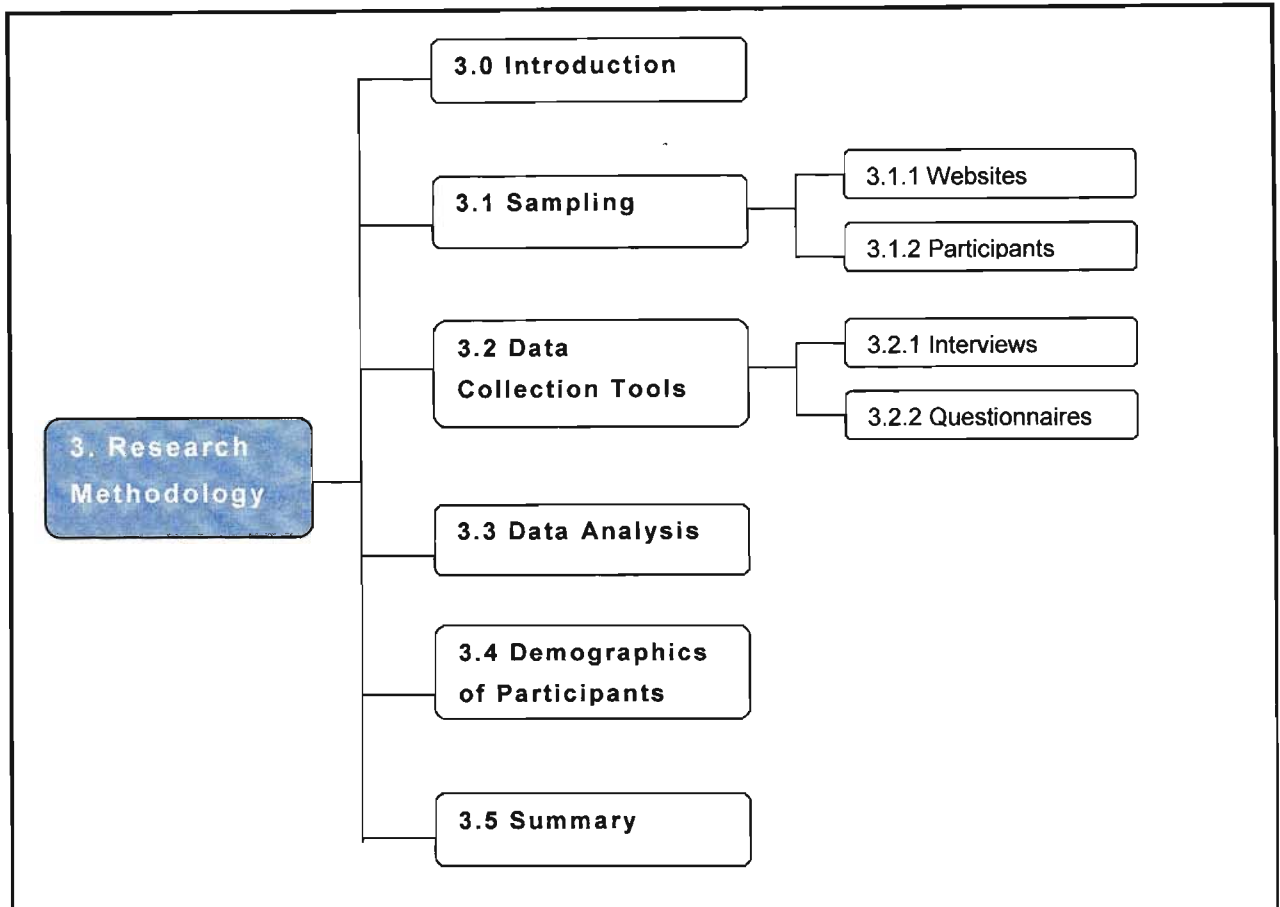


Figure 3.1 Outline of Chapter 3

3.0 Introduction

The previous chapter was focused mainly on the theories that inform this study with regard to the Internet and construction of meaning. These helped in the formation of questions as well as the selection of data collection tools. The literature also explored the possibility of deriving overt and covert meanings from educational websites. This chapter will concentrate on the research methods of the project.

3.1 Sampling

3.1.1 Sampling of the websites

The study used purposive sampling on the choice of the universities; the reason was that the two chosen are local universities that offer comparable courses and are in close proximity to each other. There is a great possibility that each targets its own target population that might be diverse. These two institutions were selected as it would be useful to investigate any similarities or differences in the values transmitted by their respective websites. This was considered particularly important given that from the beginning of 2004 the two institutions would be merged into one institution, which would have a new website to represent a new merged institution.

Publicly available websites (not the intranet) of two universities in KwaZulu-Natal province of South Africa were chosen as the subjects of study. These were

1. The University of Durban Westville (UDW) website available at <http://www.udw.ac.za> (see *Appendices A and B* for graphics of the original and subsequent homepage). This study focused more on the latter (*appendix B*) being the latest and more responses were made with reference to it.
2. The University of Natal (NU) website available at <http://www.nu.ac.za> (see *Appendix C* for a graphic of the homepage).

Many websites are dynamic in nature: their layout and content may change hourly, daily, weekly or yearly depending on the respective producer (owner/designer). During the process of data collection, the UDW site changed completely as the site was given a whole new design (including layout and content). This had an impact on the findings in that two sets of responses were received: those who responded referring to the original design (*Appendix A*) and those referring to the re-designed site (*Appendix B*). As a result, there was a need to go back to the

respondents, check which design they had commented on, and then recode their responses accordingly to enhance the analysis. Sections of the content of the NU homepage also change regularly since the page incorporates a front-page newsletter. The news feed and photographs change and thus participants in the research responded to and evaluated different news stories and pictures.

3.1.2 Sampling of participants

The study used purposive sampling on the part of participants to interview in order to obtain the perspectives of a diverse range of stakeholders. The researcher's intention was not to survey a more collective response but to get individual responses and explore them more fully with the respondents and get richer material. Thus, when the researcher felt enough data had been collected that reflects people's experiences, recruitment of participants and the actual data collection stopped.

Participants (on the part of consumers/users) included representatives of all stakeholders in tertiary education including local and international students (both UDW and NU), parents, UDW and NU staff, and community members and members of human rights groups. Also participating were respective producers who designed the two sample sites as well as producers of non-university websites.

In order to get the volunteers on board, the researcher encouraged students and staff members from the local tertiary institutions and each of the two universities through a snowball sampling process. To ensure there were participants from the two universities, contact was made with people who were interested in taking part in the study to recruit others. The names and contact details of all the volunteers were sent to the researcher who checked and found that there were

people from both universities in the sample. All volunteers were then consulted through e-mail for their informed consent. They were also asked to indicate their preferred method of questioning between face-to-face interviews and self-administered questionnaires sent via e-mail. When they had chosen which type of participation they wanted in the study they were then interviewed or sent questionnaires during the three-month period from April 2003.

It is important to note that the timing and the announcement of the merger between the two universities had some effect in influencing people (especially the staff and students of the respective universities) to participate. It also made people sensitive about any comparisons they made. For instance, some participants did not want to give opinions that favoured one site over another. What the researcher did, to get such information was to re-assure the confidentiality of their responses as well as probe more in the interviews. Besides, in the questionnaires, the questions were set in a way that some responses for the last questions would help verify the consistency with those given in the preceding questions.

The study is based on responses of 30 participants collected through 14 interviews (10 face-to-face, 4 online) and 16 questionnaires. Participants were asked to browse the two websites (they were not told what to look for) and then answer the questions that followed. They (participants) could choose to provide answers for only one site or both sites per question. The sampling of participants summarised in Table 3.1 overleaf, depicts the stakeholders consulted.

Table 3.1 Summary of the sampling of participants

Participants	Frequency
Producers of the sample websites:	
1. UDW: independent designer and site manager	1
2. NU: staff member and co-designer	1
Other Website Producers:	2
Designers	1
Owner/proprietor	1
Maintainer	
Totals for the producers (out of 30)	6
Consumers /Stakeholders in tertiary education websites	
Students	11
Parents	4
Staff members	5
Community members	2
Human Rights Group members	2
Totals for the consumers (out of 30)	24

3.2 Data collection tools

The study aimed to obtain different perspectives of the opinions and experiences of people in relation to the university websites. For this reason two methods of data collection were used namely questionnaires with questions concerning demographics, browsing experience, and behaviour as well as more in-depth interviews. The demographic questions were asked to see if there were any differences between different genders/age groups, race groups and educational levels in the participants' viewpoints. Like for any qualitative study, the aim was to get participants' experiences in their own words. Thus, the questions were open-ended.

The theories outlined in the previous chapter helped in the development of the critical questions underpinning the study as well informing the specific questions included in the questionnaires and the framework of questions that guided the interviews. An initial pilot study was conducted with eight participants (two producers and six consumers) to check on the feasibility of the study

as well as to pilot the questions and questionnaires. During the actual data collection, after each interview, the questions and interview schedules were refined to help inform the study. The questions were obtained as part of the data collection process. In other words, they grew and were developed as the data was collected. The open-ended approach of the data collection tools helped bring out some themes/ideas that were not expected.

3.2.1 Interviews

Semi-structured interviews were conducted face-to-face with participants who had opted for interviewing. The questions, similar to those included in the questionnaires (see Appendices D to F), helped facilitate and guide the interviews but the researcher also followed where the interviewee led the interview. Appendix G presents an outline of questions for the producers of the sample sites.

As the study progressed, there was a problem of finding time and venues convenient for both the researcher and interviewees to meet in person. For this purpose, the researcher set up web-space for online interviews using synchronous online/Internet chat. The online management tool used for this was WebCT¹⁰. This proved successful and four online interviews were conducted through this medium. In all, 14 interviews were conducted including interviews with the respective producers of the two university sites in the sample. A summary of the interviewees is presented in Table 3.2 overleaf.

¹⁰ WebCT is a proprietary software system that provides communication tools such as email, online discussion boards, synchronous chat, the whiteboard and pin board. It is commonly used in online learning for content delivery.

Table 3.2 Summary of interviewees

Participants	Type of interview	Frequency
1. Respective producers of the sample sites		
a) UDW – independent consultant designer	Face-to-face	1
b) NU – co-designer and staff member	Face-to-face	1
2. Other Website producers	Face-to-face	4
3. Consumers	Face to face	4
	Online	4

On the part of the web producers, there were no Africans and there was only one female.

Producers' roles varied between layout design, content management and/or site maintenance.

Two producers had the dual roles of layout design and content management.

3.2.2 Questionnaires

30 self-administered questionnaires with open-ended questions were sent via email to the

University of Natal and University of Durban-Westville students in May 2003. 16 of them were

returned. The data collection time coincided with examinations preparation and the actual

examinations time hence the low response rate from those who had expressed interest in participating.

Participants were asked to browse the two websites and then answer the questions that

followed. They (participants) could choose to apply the questions to one or both sites. The

questions, posed in the open-ended questionnaire, are presented in Appendices D to F.

Appendix D presents the questions on demographics and browsing behaviour of university

website consumers. Appendix E presents similar questions specific to website producers and

Appendix F presents the common questions asked to both the website producers and the

consumers on their perceptions of the university websites and their views on values transmitted

by the websites. Asking similar questions to both the producer and consumer groups helped

with comparative analysis and conclusion since the researcher would check the uniformity of the responses from producers and consumers.

3.3 Data Analysis

The data analysis approach was qualitative and focused on the common as well as the unexpected themes and concepts evident in the data. In addition, the demographics of the participants were collected from both the interviews and questionnaires (see Table 3.3 overleaf). This was to enhance analytic coding of data with regard to who said what, to show how the concepts/themes (discussed in Chapter 4) were developed as well as to make comparisons between the data obtained through interviews and questionnaires. To facilitate the process of data management and coding of themes, a specialist software package for qualitative data analysis was used, namely, QSR Nvivo Version 2.0 (QSR 2002).

3.4 Demographics of participants

Table 3.3 *Distribution of participants' demographics*

Attribute	Value	Frequency	Percentage
Age group	<24	8	27%
	25-34	14	46%
	35-44	5	17%
	45-54	3	10%
Gender	Male	17	57%
	Female	13	43%
Race	White	11	37%
	African	10	33%
	Asian	6	20%
	Coloured	3	10%
Education level	Completed High school	3	10%
	College or technical school diploma	8	27%
	University undergraduate or equivalent	13	43%
	Completed postgraduate studies	6	20%

The modal age group was 25-34 years. The sample comprised 57% male. The racial distribution of the sample conforms to the South African Internet use whereby the highest user numbers are from the white group (Hall 1998). This happened by chance since the participants were not recruited on the basis of their racial groups but more volunteers happened to be white people. Participants' demographics are presented in Table 3.3 above.

Participants were also asked about their Internet surfing experience in order to compare responses given by experienced surfers and novices (see Table 3.4 below). Most participants accessed the Internet from school and work, and used it mainly for communication, information search and entertainment. The largest percentage of participants had been using the Internet for between of 1-5 years and spend 2-5 hours in a day online.

Table 3.4: Web surfing experience of the participants

Attribute	Value	Frequency	Percentage
For what do you mainly use the Internet?	Communication	13	30%
	Information search	10	23%
	Education	9	21%
	Entertainment	7	16%
	E-commerce	4	9%
From where do you access the Internet?	Work	16	42%
	School	13	34%
	Home	6	16%
	Internet café	3	8%
How long have you been using the Internet – to browse websites?	Less than one year	6	21%
	1-5 years	16	54%
	More than 5 years	8	25%
How long do you spend browsing websites?	Less than 2 hours a day	10	36%
	2-5 hours a day	14	46%
	More than 5 hours a day	6	18%

3.5 Summary

The range of data collection instruments including face-to-face and online interviews as well as self-administered questionnaires that were delivered by email provided multiple perspectives related to the design of the selected websites and participants' experiences with them. These are discussed in the next chapter.

Chapter 4

FINDINGS

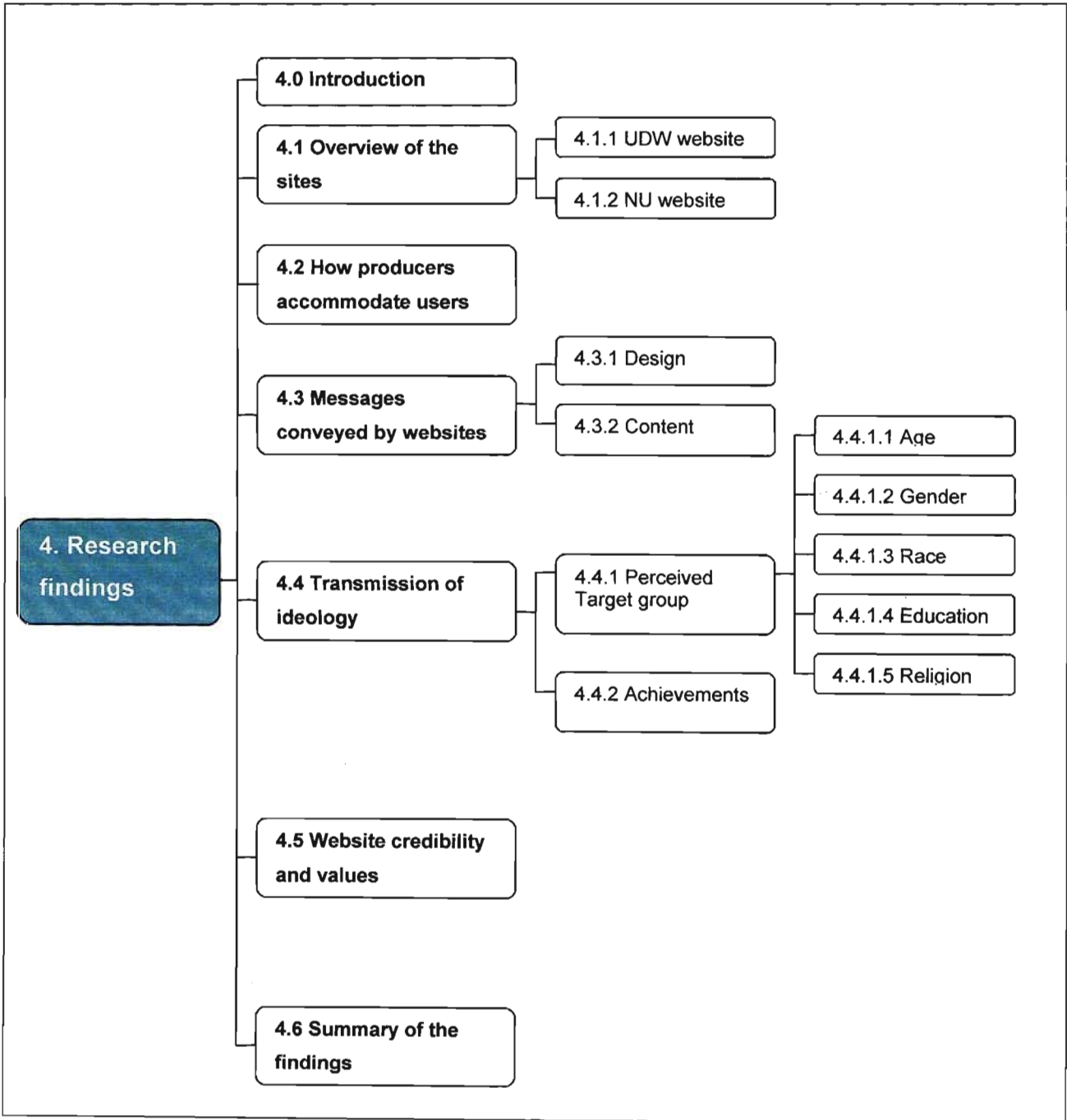


Figure 4.1 Outline of Chapter 4

4.0 Introduction

The major obstacle for analysing the implications of people's cultural uses of the networked information and communication technologies of the Internet comes with the fact that there are no established theoretical and methodological models for analysing the Internet (Lillie 1998). This, despite the ever-growing cultural, social, economic and political significance of the Internet. The analytical framework adopted for this study is the one for analysing mixed methods, advocated by Miles and Huberman (1994). The two authors suggest that two or more data collection methods can be used to complement one another adding that "qualitative data can supplement, validate, explain, illuminate or re-interpret quantitative data gathered from the same setting" (*ibid*). According to the two authors, the first level of data analysis – data reduction or coding data into tree node structure – involves summarising segments of data. The second level is grouping those summaries into a smaller number of sets, themes or constructs.

This chapter makes a qualitative analysis and interpretation of the data that were collected to analyse the possible open/hidden cultural and ideological values transmitted by the selected university websites. The chapter begins with a brief overview of the websites that includes the way each site was produced and the intended ethos as described by each site producer. Answers to the critical questions are obtained from the themes or patterns of thought from respondents. These included their perceptions of the sites, favourable features referred to, features they did or did not expect from the sites, what the participants perceived to be the site's target group as well as the reported values they perceived in the websites.

Responses from the producers of the sample sites are covered in Section 4.1 and 4.2. Other responses covered in the sections that follow come from producers of the non-university websites as well as consumers. In the discussions, issues raised by consumers are checked against those raised by other producers (including the producers of the selected sites). The

interviews helped provide more in-depth information as they allowed for probing. Illustrative quotations in this chapter that are taken verbatim from the responses to e-mail questionnaires and interviews appear italicised at the beginning of sections.

4.1 Overview of the websites

4.1.1 The University of Durban-Westville (UDW) website

The discussion of results is based on *Appendix B* but an indication will be made where results refer to *Appendix A*. The homepage (*Appendix B*) has white as the background colour with the other dominant colours as blue and red – resembling the colours of the crest. These colours are also used for the fonts in the navigation menu on the left of the page. The use of white space, according to the designer, was intended to create visual appeal. The banner bears the university name and to the left there is an advert that flashes “Your Education” Your career” “Your future”, which requires the use of *Flash* software for the browser to read. The main navigation tabs are repeated in the banner – just below the university name – as well as in the navigation menu on the left of the page. There is no sitemap¹¹ to provide the user with lists and text links to all of the pages in the website.

The main pane bears a photograph of four women of three different races (one African, one white and two Asians)¹² against the background of Indian artwork. The women are smiling as they look admirably at something out of view. According to the designer, this picture was only chosen because it was one of the available photos and not just to draw attention to the cultural

¹¹ A sitemap is a visual model/an overview of a website's content that allows the users to navigate through the site to find the information they are looking for. Typically, sitemaps are organized hierarchically, breaking down the Web site's information into increasingly specific subject areas (<http://www.ecommerce-dictionary.com/s/site-map.html>).

¹² During data collection, the term “Asian” was used to refer to Indians, Chinese, and all people from the Asian continent. This was to accommodate participants who were non-South Africans and who might not be familiar with the classification of Asians as “black”. Hence, the two terms “Asian” and “Indian” are used interchangeably, at times.

diversity of the university. To the right of the photograph is the University crest in the university's colours – red, white and blue. The right side of the main pane is a strip of blocks bearing photographs of the university buildings – intended to give the user a sense of being there.

The site is not database-driven¹³ hence it does not allow the user to make a query and get information based on that query. In addition, information is highly organized in hierarchical categories (chunking) – this was the designer's goal to guide the user through the site.

The UDW website was designed by a member of technical staff. According to him, the main aim was 'to keep abreast of times' and attract prospective students and staff by showing the degrees offered. In addition, the site had to reflect the cultural diversity of the institution's student population. The site was intended to be attractive and facilitate interaction between current students and staff by the inclusion of names and contact details of staff members as well as a discussion forum. Another aim was to present staff profiles and research projects carried out by staff.

To accommodate people from various cultural groups, the producer included pictures of the campus buildings as well as a picture of three women from the four South African race groups. Users of the site (staff and students) were consulted after the development phase and their responses helped modify the design. The producer mentioned a lack of more in-depth information pending supply from respective departments.

¹³ A database driven website is the one that uses a database to gather, display, or manipulate information. This makes it easy to maintain a site since the site design is kept separate from the content (Yank, 2001; Graves, undated). Database driven websites are very powerful tools because they allow a site to be dynamically generated or customized to display the information that is relevant to each visitor. They allow a website to quickly and efficiently display a subset of relevant information selected from a larger pool. They also allow a website to be interactive and store information the user enters, for use in the rest of their visit to the website, or for use in other activities (Amory, 2003, Personal communication).

4.1.2 The University of Natal (NU) website

The site uses the university's branding colours that were designed a few years back to market the institution. These are white, red and gold – also notable on the university crest situated to the left side of the banner. The main navigation tabs are visible in the banner – just below the university name. There is a sitemap that gives a list and links to all of the pages in the site. The left side navigation has links to various departments and a range of information including a search field for staff details and information within the site. Thus, to find information on a particular department, there are four options: the sitemap either in the banner or side navigation, the Faculties link or the Search link in the side navigation. A co-designer explained that this flexibility was intended to “move away from structured hierarchies and adopt flat democratic principles that give the user freedom to start browsing from anywhere”.

Incorporating other media, the link labelled 'Let's go to the movies' leads to two video clips that show university alumni who are now high-profile achievers either in government or the private sector. These were originally produced as television and cinema advertisements. The co-designer explained these were incorporated to show the university values the success of its products (students) and also to attract prospective students, staff and donors. The main pane gives the current date as well as all the contact details of the university. The main content of the home page incorporates a newsletter about what is happening at the university including achievements of both the staff and students. In this newsletter, there are snippets of stories with links that lead to a page where the stories are presented in full. In addition, the NU site is database-driven and the staff and department pages allow user-control.

The NU site was co-designed by a member of the academic staff and a member of the technical staff to update the university site. A co-designer who was interviewed indicated that the aim of creating the website was partly to keep abreast of the times by having a website and also to

project a clear identity to the outside world. According to him, this was part of a marketing strategy, the branding process that was intended to portray the university as an institution of quality and excellence.

The site was also designed with the intention to accommodate people from diverse backgrounds. The co-designer noted the main target group of the site comprised prospective students, staff as well as local and international donors. Provision was made to include information of current students, staff and alumni. The university's successes were presented through the display of both the staff and students' achievements because the university values them, according to the co-designer. During the development of the site, users were consulted in workshops on user-analysis, planning, design, and implementation. This was helpful since "users' perceptions change along the way" and adaptations could be made accordingly.

4.2 Accommodation of various users

To what extent do web producers accommodate users from diverse backgrounds in their design of websites? This question was mainly directed to both the producers of the sample sites as well as producers of non-university sites. Then, responses from consumers were used to check if users with diverse backgrounds felt accommodated.

Responses from all the producers stressed the need to consider the following when planning for a website:

- The purpose of a site (whether to inform or sell),
- Target group
- Content

□ The Human Computer Interface (HCI)¹⁴.

In addition, they agreed that it is imperative that users be involved in the production of the sites so that they address their needs. According to the respective designers, the development of the NU site involved users at every stage of the design and development process. The designer of the UDW site involved users after the initial design phase.

While producers of non-university sites concurred with the view that users be consulted at every stage during the design of a website, most admitted they hardly ever do so owing to time and money constraints. They indicated that most often users are only consulted during the planning phase in relation to users' needs analysis and then later again during implementation. This was seen as a way of accommodating users in the design of websites.

The extent to which users felt accommodated by the web designs emerged from the issues that participants referred to in what they liked or disliked in the selected websites (discussed in Section 4.4 below on transmission of ideology). It is worth noting that it appeared most people made conclusions about a site including its credibility, ethos and values after visiting only the homepage (and maybe a few more pages) rather than after visiting the whole site or a larger portion of the site. Most comments referred to the homepage since the participants believed this was the most important page because this is the first contact users make with a site.

¹⁴ HCI refers to the interaction between the human (end-user) and the computer through the hardware (e.g. screen, keyboard, mouse) and software (application programmes and metaphors) that allow the user to operate a computer programme (Apple Macintosh, 2000; Nielsen, 1990; Nielsen and Norman, 2000).

4.3 Messages conveyed by the websites

This one is more like a news page you know; I don't see pictures of Howard College or even aerial views from the harbour.

Consumer participant

The layout makes this university look like a West Street Fly-By-Night College, which is clearly not... they didn't respond to my mail when I asked about the courses they offered. I believe they don't take us seriously.

Producer participant

Messages conveyed by the sites were viewed through the eyes of the consumer participants and producers of the non-university websites. The way participants in this study judged a website was dependent on its content and overall design. Their judgement also took into account whether the style of presentation of content was consistent with the nature of the site. For instance, some participants felt that if an educational site used an excessively commercial style of writing (almost like advertising) the information was deemed less credible.

Responses from participants indicated that their perceptions are guided, to a great extent, by features they liked or disliked in the sites as well as the way information was presented. Examples of what people liked /disliked about the features of the selected websites are presented in Table 4.1 (overleaf). The research findings also indicated that, in some instances, opposite views were held about the same feature on the same website. It is interesting that some people perceived the same features positive that others regarded negative. From a semiotic point of view, a university website brings a visitor closer to the respective institution by provoking thoughts of seeing/imagining the real concept. Participants felt websites may transmit their hidden ideologies through their design features and/or content. They argued these reflect the extent to which the university accommodates people from various backgrounds as embedded in the cultures of the institution.

The absence of pictures of students or university buildings on the NU homepage made some participants feel less *belonging* to the university, as one of them said. From a semiotic

approach, the site did not engage the visitors in a deeper level of interpretation of the site as a symbol of education.

Table 4.1 Examples from participants' perception of the selected websites

Feature	What people liked	What people disliked
<u>Design</u> 1. Layout	a) Consistency across the site b) Information chunked in categories; making it easy to find information	a) Lack of consistency across the site b) It takes more than 'three clicks' to get to the desired information c) The user has to scroll down to view items on the homepage
2. Navigation	a) The navigation is hierarchical and guides the user to browse the site b) The layout is 'open-ended' and gives freedom of browsing	a) Categorisation only hierarchical thus, linear b) There are too many options that lose the user in the myriad of links c) The site does not allow easy reversal of actions
3. Graphics	a) Pictures included women b) The site requires the user to have an extra plug-in to view animations	a) Pictures reflected only women's achievements b) The flashing animations do not bring themselves to stop
<u>Content</u> 1. Depth/Amount	a) Comprehensive information invites one to study at the institution b) Sufficient detail in the homepage and other pages c) A wide range of subjects covered in brief	a) Clutter as too much information is provided b) Insufficient information to enlighten the user
2. Message tone	a) Content fits within the boundaries of an educational website b) The message is just informative and it invites one to come and study	a) Content is too academic and presents aspirations / achievements of academics only b) The message is too aggressive in marketing the institution.

4.3.1 Messages conveyed by design features

I didn't expect to find a site so interactive... a web page should be open ended to allow flexibility of the user...I think the designer values freedom.

Consumer participant

I seem to prefer information put in chunks as it guides me to important sections of the site. The other site has so many options to information that get me lost.

Consumer participant

Issues of design include the layout, navigation and graphics (these include images, colours and fonts). Both the consumers and producers shared the same sentiments about the importance of a good design especially for a corporate website. Two of the producers stated that they had no expectations about the layout of the sites because people have different intentions to publish and they also express themselves differently. What mattered to them was for the layout to fit the mission of the site and the content to be consistent with that of other sites in the same category. Meanwhile, consumers strongly commented negatively on the layout of the first homepage of UDW (Appendix A). Those who commented felt it was 'amateurish' argued the page only had the links and pictures that were "just thrown haphazardly", as one participant said. They wanted to see more content on the homepage such as the mission of the university or what goes on there.

One would have thought the design of a website is only important to designers but this study has observed that consumers are aware of the design. More than two-thirds of the consumer users made references to the bad/good design of a website in their assessment of the values transmitted by the site. One international participant (a student from Europe) said the "badly designed university websites" he observed while searching courses in African universities almost dissuaded him from coming to study in Africa. He argued, "How could I expect those people to teach me how to create websites if theirs are so badly designed"? He chose to study at the University of Natal because he thought its website was "better" and the contacts at NU had replied to his online queries and provided further information.

Participants commented on the level of *browsing freedom* they perceived in the designs of the sites. Some preferred a hierarchical structured layout with highly structured categorisation of information and limited browsing options. They argued this guided their browsing of a site without getting lost. Others found this layout as restricting their perceived 'freedom' to browse. They were more for an *open-ended* layout whereby categorization of information was there but not hierarchical and a number of options were provided to get to the desired information. They saw such layout as facilitating the perceived freedom to browse and explore. A male participant added that he felt that the designer was encouraging him to dig deeper into the site – a sign that the institution encourages a culture of discovery among learners rather than *spoon-feed* them. Another male participant associated a hierarchical structured site with a feminine approach. He argued that females have a tendency to guide while males would more advocate discovery and exploration by offering many options.

The majority of female respondents expressed views about the layout and navigation views as did people with a higher education level (postgraduates and those who have completed university undergraduate or equivalent). Unlike beginners, participants who had 1-5 years surfing experience also showed more concern about these factors. Every participant commented about the graphics in both sites. Notably, males had more to say about graphics than females. In comparison, users who spend more than one hour a day on the Internet were more analytic with reference to graphics maybe the amount of exposure they get surfing the Internet contributes their visual literacy¹⁵.

¹⁵ This refers to the ability to critically interpret visual messages and to communicate intentional messages to a specified destination (Du Plooy, 1989:8). Visually literate Internet users are regarded more able to critically analyse information on the websites and pick up any messages that are deemed prejudiced as opposed to purely artistic design techniques.

Participants confirmed that the inclusion of pictures of the campus buildings or students gave them a feeling of *being there* – a *sense of belonging* – contributing to a desire to study there. According to the theories of Semiotics (Peirce's Triad of a Sign), this could be explained as the interpretation of a *symbolic* sign (the picture of a university building) whereby the reader not only takes the surface meaning of the image (Tomaselli 1996:29) but also decodes the meaning and finally gets the feeling of being there.

Women are more likely to identify with pictures of women and men with pictures of men. Women's positive comments at times were conditional in that they were wary of the possible interpretations (hidden meanings) with regard to people's gender and sexual orientation. One female who responded favourably to having only women in the pictures – especially on the homepage – also cautioned that the message conveyed could be adversely interpreted and deemed to marginalize men. A larger percentage of male participants felt marginalized by pictures that showed only successful women on a university website.

4.3.2 Messages conveyed by content

The homepage is cluttered and it is easy for the user to get lost.

Consumer participant

Most pages lack information, you know it gives a negative impression that when you are studying there, you will come out knowing nothing or that some information is withheld from you.

Consumer participant

Producers of the sample sites and those of the non-university sites were clear that content is driven by reaching the goals of putting up a site and reaching the target group. Both the producers and consumers agreed that web pages should provide adequate information in order to save the user's time.

One aspect that participants assessed about content was in relation to the depth and the nature of information provided. Those that disliked a site that provided scanty information felt it left them less informed to make decisions to study at the institution. They saw no point in putting up a website "if information is going to be withheld". At the other extreme, the provision of too much information, especially in the homepage, was deemed to cause clutter.

Because of the open-ended approach of the methodology, there were themes/ideas that were not expected but came through participants' responses. Features that participants found favourable but did not expect to find in a university website ranged from:

1. Information that facilitates self-help
 - Online access to the library, links to donors, career development, search engines
2. Detailed information about degree programmes, fee structures and accommodation
3. Information that contradicted participants' prior negative perceptions about a university
 - The way the site accommodates different races as depicted in the pictures or content
 - The quality of degree programmes offered by an institution
4. Information on events happening at the university
5. Current activities, successes, community outreach, research

Participants were disappointed there were some missing features they would have liked on one or both of the selected sites. These included:

1. Sufficient information on programmes, fees structures, accommodation, etc
2. Information to make one identify with the university and feel a sense of belonging
 - Pictures of the campus buildings or students/staff
3. Features that make the site more interactive and engage the user
 - Online activities such as applications, registration, submission of exercises and projects, payment of fees, replying to users' online enquiries, page for user feedback
4. Services provided for differently-abled people.

Another issue about content related to the presentation style, which the participants had expected to be academic rather than entertaining or commercial. For instance, the use of video clips of an advertising campaign that presents high profiles alumni was perceived as an aggressive marketing strategy by some but attracted other participants. The inclusion of information on donors was perceived as an indication that the university cared about prospective students who needed financial help to attend university. In a way, this corresponded with the respective designer's intentions to attract donors (as explained in Section 4.1). This elaborates the argument that prioritising the commercial value of higher education institutions affects their perception by the target audience.

The fact that the same features were regarded negative by some participants while others deemed them positive in the same site could imply the websites were moderate in accommodating users from diverse backgrounds. This is a challenge to designers in meeting what people perceive in a site. These features are also discussed in the following sections as they form the basis of how participants perceived values transmitted by the selected sites.

4.4 How websites transmit ideology

In order to analyse how the selected websites transmit ideology, the study looked into the kinds of foci presented by the sites as these are deemed to convey the values of the institution. These included the site's target group as perceived by participants and the achievements/aspirations deemed to be presented in the sites. The study also investigated whether the participants had to change the way they looked at what they needed because of the way the site is designed. For instance, a producer of one sample site argued he "designs from flat democratic principles" of allowing user-control. This is where several options are available to get to a certain service of information.

4.4.1 Perceived target group

The data revealed that participants deemed the sites as targeting certain groups. Group factors including age, gender, race, education level and religion were observed in the responses as well as the extent to which they might contribute to marginalisation of members of such groups. Issues of content and the overall design were also referred to in determining how the participants perceived the website's target group.

4.4.1.1 Perceptions of targeted age group

It seems like these websites or even the universities are intended only for the young people. It makes no mention of services for elderly people.

Consumer participant

I think the newsletter is rarely read by the youth maybe it is intended for the old people and donors.

Consumer participant

In this era where there is a trend of life-long learning (people go on studying at all life stages), if universities want to tap into this, they need be sensitive to how people perceive what the website portrays about the age group that is targeted. Designers need to accommodate the needs and expectations of various age groups (presented in Table 4.2 below). In this study, more than half of the respondents (19 people) had concerns about the way a website portrayed the targeted age group. Participants felt all age groups were catered for but nobody said older people were catered for. One parent said she nevertheless felt accommodated as part of the target group because of her role in choosing a university for her child.

Table 4.2 overleaf shows participants focused on pictures, services offered and the way content was presented in newsletters not just the design of a site. While some participants indicated aspects of marginalisation, others perceived no marginalisation because pictures portrayed people of diverse ages. The reason why no mention is made of services for older people could be associated with the dominant ideology that learning/education is for young people.

Table 4.2 Perceptions of age group of the site's intended target group

Factor perceived by participants	Examples provided from websites
Age: a) Youth culture b) All ages culture c) Exclusion of elderly people d) Exclusion of young people	a) Pictures portray young people b) Pictures portray people of diverse ages c) Site does not mention services for older people d) Newsletters do not appeal to young people.

4.4.1.2 Perceptions of targeted gender group

I dislike the picture of all women with no man. It makes the site look like is advancing only aspirations of women. What about us, men? One might mistake it to be a girls-only university.

Consumer participant

I like the picture of the four females in the homepage as this breaks away from the conventional perception that only men are achievers.

Consumer participant

Table 4.3 Perceptions of gender of intended target group

Factor perceived by participants	Examples provided from websites
Gender: a) Women are more important than men b) Men are equally as important as women	a) Pictures show women only b) Content (including pictures) show achievements of both men and women

From the data, more than half of the participants (88% of males, 56% of females) commented about the way gender was portrayed in the websites. Table 4.3 (above) indicates there was a feeling that sites displayed some gender bias towards females as some pictures showed women only. Some male participants saw this as an acceptable move towards women advancement while others felt alienated and excluded and they expressed doubt on the credibility of the institution.

Most females were positive about the inclusion of women in the picture as they felt this portrayed women as achievers. One female, however, expressed caution that this could be read adversely by some male visitors to the site(s). She warned, “You don’t want to scare off your visitors by placing pictures that appeal to only specific gender, sexual orientation or cultural underpinning”. All producers concurred that the inclusion of only one gender could be read adversely from the designer’s intentions and alienate sexist males. A challenge to designers is whether to compromise their own worldview or not to care about values held by sexist males.

4.4.1.3 Perceptions of targeted race group

I cannot say there is particular race that the web page portrays but from the pictures, I just had an idea of a rainbow nation.

Consumer participant

I used to think this university was for whites only but I can see some black people are recognised as achievers.

Consumer participant

Table 4.4 Perceptions of race group(s) of the intended target group

Factor perceived by participants	Examples provided from websites
<p>Race:</p> <p>a) Accommodation of all race groups</p> <p>b) Contradiction of participant’s original perception about the institution’s racial exclusivity</p>	<p>a) The content and pictures show people of diverse racial groups</p> <p>b) The site advances achievements of all racial groups</p>

The data revealed that the issue of race was important to participants – almost all participants (90%) had something to say with the way race was depicted. This can be understood in the context of South Africa as a heterogeneous society where the previous ideology of apartheid has made people sensitive to race issues (Dyasi 2001). Some participants who had thought the university accommodated only one race group changed because they thought the pictures showed people from different race groups. Although participants felt race was depicted

positively in the sample sites, a larger percentage of those who commented felt this opposed their prior knowledge about the respective institutions. They argued the websites “tried hard to portray an even racial distribution of the student populations at these institutions”, contrary to what they knew as the real situation. The issue of contradiction of prior knowledge held by participants is further discussed in Section 4.5.2 below.

Upon realization that race is still an issue when it comes to educational institutions, the researcher decided to look into the demographics of these people who commented about how race was depicted. These were females, black people and people aged 25-34 years. In addition, race was commented on more by people with a higher level of education – those who hold university undergraduate (or equivalent) degree and the postgraduates.

4.4.1.4 Perceptions of education of the targeted group

It is presenting achievements mainly for the most highly educated in the society i.e. the professors. This is a pre-eminent research university in South Africa.

Consumer participant

I think it targets mainly new students or students who have never been to tertiary level since it markets the institution and courses available.

Consumer participant

By their own nature, websites have selectivity in terms of the education level of those who view them. University websites target academics or people who are interested in education and these people should have some level of education/computer literacy and exposure to the service/products offered. With reference to the same features in the same site, 56% of participants in this study (especially those who held postgraduate qualifications) assumed the sites adequately targeted everyone. On the contrary, the less educated felt the sites were targeted at a level above them thus they felt left out as shown in Table 4.5 overleaf. This means the higher the level of education the likelihood that a participant would feel the site targeted all.

Table 4.5 Perceptions of education level of intended target group

Factor perceived by participants	Examples provided from websites
Education level:	
a) Bias towards the well educated	a) The site presents achievements/aspirations of the well educated (e.g. research work, awards)
b) Exclusion of the less educated	b) Only staff achievements are presented excluding those of students and the less educated The tone of writing is too academic and the site does not show students' achievements
c) Accommodation of the less educated	c) The site presents achievements/aspirations of all regardless of their education level The site also shows the institution's community outreach.

4.4.1.5 Perceptions of religion of the targeted group

The picture of four women and no man makes me feel excluded as a man because in my religion men are more holy than women... in fact; we should have more men than women in the picture.

Consumer participant

Table 4.6 How a participant perceived religion of the target group

Factor perceived by participants	Examples provided from websites
Religion:	
a) Disregard of participants' religion	Pictures presented women only

From the data, it seems the selected websites did not provoke comments about religion from the participants except for one male participant (as shown in Table 4.6). He focused on the pictures that showed all women and no male representative. He felt these pictures did not apply to the values held within his religion hence, felt marginalized as shown in the quote. As a result, one needs to think about how to put pictures together – maybe if there were something else (a

variety of pictures such as those of men and women) this participant would have felt better. The challenge is how do web designers promote women's rights, neutralise perceptions or perpetuate the ethos of an institution.

4.4.2 Achievements

I think they do not seem biased in the sense that from the newsletter the achievements that have been portrayed are those of both the staff as well as the students.

Consumer participant

This site shows only the achievements of staff and disregards those of students.

Consumer participant

According to the participants, the way an institution displays its achievements/aspirations is important since it shows where the institution's value lie. The main products of education institutions are students who graduate. Marcus and Gould (2000) claim that in a school website, the values held by a school could be illustrated by giving equal prominence to achievements or aspirations of the school authorities as well as those of students thus, minimizing the power-distance between the two. According to the two authors, websites of schools within a collectivist society value students' success as part of the school's success. In so doing, Marcus and Gould (2000) advise, "care should be taken to show achievements of students from diverse backgrounds".

Examples in the sites that participants referred to with regard to whose achievements should be foregrounded are given in Table 4.5 above. In the current study, both the producers and consumers concurred with the view of Marcus and Gould (*ibid*) that student achievements should be given enough prominence in a university site. One producer advocated that reporting of staff's success in research projects should not overshadow reporting of students' achievements. Staff members and students had more to say than producers and parents about whose achievements were given more prominence in a university website as they are two

groups reported on in the sites. The participants indicated that a university website needs to present achievements of both the staff and students if it takes pride in its staff and students. One participant said this shows “the university values the contribution these people make to the global research”.

4.5 Website credibility and its impact on values

The study also focused on contrasting how producers aim for credibility of their websites with how users judge their credibility. A key feature investigated was whether the information on the websites perpetuated or contradicted the participants’ prior positive and/or negative perceptions about an institution.

4.5.1 Website credibility

Try your level best to ensure that material is up to date, relevant and snappy enough to keep the user interested.

Producer participant

Most websites are not trustworthy so I usually select those I have heard about or those containing the information I have read somewhere else, maybe in a book.

Consumer participant

The features that producers and consumers used to evaluate credibility of the selected websites are summarised in Table 4.7 overleaf. The features arise from participants’ perceptions and they fit Fogg et al’s (2001) model. These are listed in order of the frequency at which consumers mentioned them. Unlike Fogg et al’s study, which found the “Real-World Feel” of a site as a feature that was most referred to, the current study found the “Expertise” was the feature most referred to in determining the credibility of a site. People who made more comments about the “Expertise” were those who had at least one-year web browsing experience and these were mainly white males.

Table 4.7 Features that contributed to Web credibility of the selected sites

Factor	Producers' intentions	Consumers' perceptions
Expertise	<ul style="list-style-type: none"> <input type="checkbox"/> Provide a company's mission statement <input type="checkbox"/> Indicate names and credentials of authors 	<ul style="list-style-type: none"> <input type="checkbox"/> Company's mission statement <input type="checkbox"/> Author credentials <input type="checkbox"/> The site is by a reputable name, institution or accredited journal <input type="checkbox"/> Length of time in existence (of the site/institution/author)
Ease of Use	<ul style="list-style-type: none"> <input type="checkbox"/> The layout should fit the mission of the institution <input type="checkbox"/> Provide consistent navigation <input type="checkbox"/> Provide a sitemap <input type="checkbox"/> Ensure correct graphic file compression for easy download 	<ul style="list-style-type: none"> <input type="checkbox"/> The site looks professionally designed <input type="checkbox"/> The site is easy to navigate <input type="checkbox"/> Provision of a sitemap <input type="checkbox"/> The site downloads easily <input type="checkbox"/> Inclusion of search facilities
Trustworthiness	<ul style="list-style-type: none"> <input type="checkbox"/> Keep to the topic <input type="checkbox"/> Regular update with new content <input type="checkbox"/> Include links to other well known sites (of the same category) <input type="checkbox"/> Ensure accuracy of content 	<ul style="list-style-type: none"> <input type="checkbox"/> The site provides information consistent with others in the domain <input type="checkbox"/> Regular update with new content <input type="checkbox"/> The site gives links to other credible sites (in the same domain) <input type="checkbox"/> Accurate and well-researched information <input type="checkbox"/> Friendly presentation style <input type="checkbox"/> The information reinforces what the user knows or has read somewhere else <input type="checkbox"/> The site reflects the truth without manipulating the cultural diversity of the institution
Commercial Implications	<ul style="list-style-type: none"> <input type="checkbox"/> Avoid advertisements in an informational website 	<ul style="list-style-type: none"> <input type="checkbox"/> The site does not have adverts <input type="checkbox"/> The site does not reflect a commercial purpose <input type="checkbox"/> The site does not require a paid subscription to gain access
Amateurism	<ul style="list-style-type: none"> <input type="checkbox"/> Making a presentable and professional site 	<ul style="list-style-type: none"> <input type="checkbox"/> The site does not look professionally designed <input type="checkbox"/> The site does not provide sufficient information <input type="checkbox"/> Some links don't work <input type="checkbox"/> It takes more than 'three clicks' to get to the desired information

With regard to comments on credibility, men had more to say on the credibility of websites. In addition, men's comments tended to be more critical of website credibility than those of women. These findings correspond with those of the study by Fogg et al (2002) whereby men were found to assign less credibility to websites than women (see pages 17–18).

After men, groups that had more to say about the credibility of websites were those in the 35-54 year average. They were mainly white people and those who had gone through tertiary education. The latter group focused more on issues relating to "Expertise" and "Trustworthiness" than the other issues.

Older respondents attributed more credibility to websites from reputable institutions and avoided overly commercial elements in a site. They also checked the company's mission statement and the length of existence of a site. The younger respondents (below 34 years) assigned credibility to websites that had a professional look, gave the author's details, had no broken links, and showed accurate and well-researched information. These findings, with regard to age, are consistent with those of Fogg et al's (2001) study.

4.5.2 How websites impact on values

This website has changed my perception of this institution as generally lagging.

Consumer participant

I suppose it reinforced my preconceived belief that this institution is of a high quality and its degrees are also of a higher standard though it took time to get to the desired departments.

Producer participant

The study investigated to what extent people's evaluation of a website was influenced by their prior perceptions of the particular institution. The focus was on whether the information gathered from the websites reinforced or opposed what they already knew or felt about the institution. An assessment was also made of the extent to which people's preconceived ideas about an institution influenced their subsequent decision to study there.

More than half of those people whose preconceived beliefs were opposed after viewing the site nevertheless felt they were part of the target group. Thus, it appears that the websites were able to change their perceptions about the respective institutions in a positive direction to the extent that it could influence their decisions to study there or for their children.

The data revealed that people react more to information that reinforces/contradicts their prior negative perceptions about an institution than to features such as the layout or the depth of content. From participants' responses, such information included the way an institution accommodated different genders and races as depicted in the pictures and content as well as the quality of degree programmes offered by an institution. It was observed that a few people's opinions about an institution changed from positive to negative after visiting its site. For instance, some comments were that the perceived bad layout and scanty information on the site made the institution look "trashy", as one participant argued.

With regard to gender, women's attention was drawn to pictures that showed more women or women only. They commented that this broke away from the dominant cultural ideology of "seeing success only in the eyes of men". A site that showed this was deemed to value women as achievers. One female cautioned, "Men or homosexuals might adversely read such pictures because of the patriarchal society in which we live".

On the whole, it appeared the absence of some expected features on a site contributed to whether the site reinforced or opposed prior perceptions about the respective institution. For instance, the perceived 'amateurish' design of a site reinforced some participants' prior negative perceptions that the university was of a lower standard. They felt that the 'amateurish' layout of the site implied the institution produces degrees of a lower quality. Those who felt the site provided scanty information subsequently felt they would not study there for the fear of coming

out “half-cooked”, as one said. Therefore, these people distanced themselves from the target group and even strongly felt they would not study at the university.

In addition, a few participants' negative perceptions of the sites (see Table 4.1, page 48) were not strong enough to affect their decision to study at the institution. Even though they disliked the design and/or the depth of content presented in a site, these participants still felt they would study there. They cited reasons of their prior knowledge of the institution in producing quality degrees as influencing their decisions to study there. In the same manner, some participants who had positive perceptions of the sites still felt they would not study at the institution, as they believed the site had manipulated the “real picture” of what goes on there, as one of them said.

4.6 Summary of findings

This chapter has presented and analysed data that qualitatively examined the overt and covert meanings transmitted by educational websites. These meanings depict the cultural and ideological values transmitted by these websites. The theories discussed in Chapter 2 helped get responses from participants yet there were no established theories to do so. For the larger part, the findings of this study confirmed the theories.

Theories of *Semiotics* (Peirce's Triad of a Sign) helped explain the design features and pictures in the websites. For instance, the findings confirmed that people do not only interpret websites at the iconic level (the surface meaning) but their interpretation goes further into the symbolic meanings transmitted by the layout, navigation structure and pictures. It is quite clear people use the design features and content to make decisions about whether they feel marginalized by a website. Subsequent to this, they decide whether they want to study at the particular institution.

The findings also confirmed the theory of *Cultural Dimensions* as developed by Geert Hofstede (1991). With regard to power-distance, the findings indicated that some societies believe that inequalities among people should be minimised or that they are expected or desired. Most participants felt the Power-Distance between school authorities (staff) and students should be minimised. This also ties in with Individualism vs. Collectivism in that participants confirmed that the university's success should be measured in the achievements of both staff and students. Most participants emphasised that students' achievements should be given as much prominence as those of staff.

Chapter 5

CONCLUSIONS AND RECOMMENDATIONS

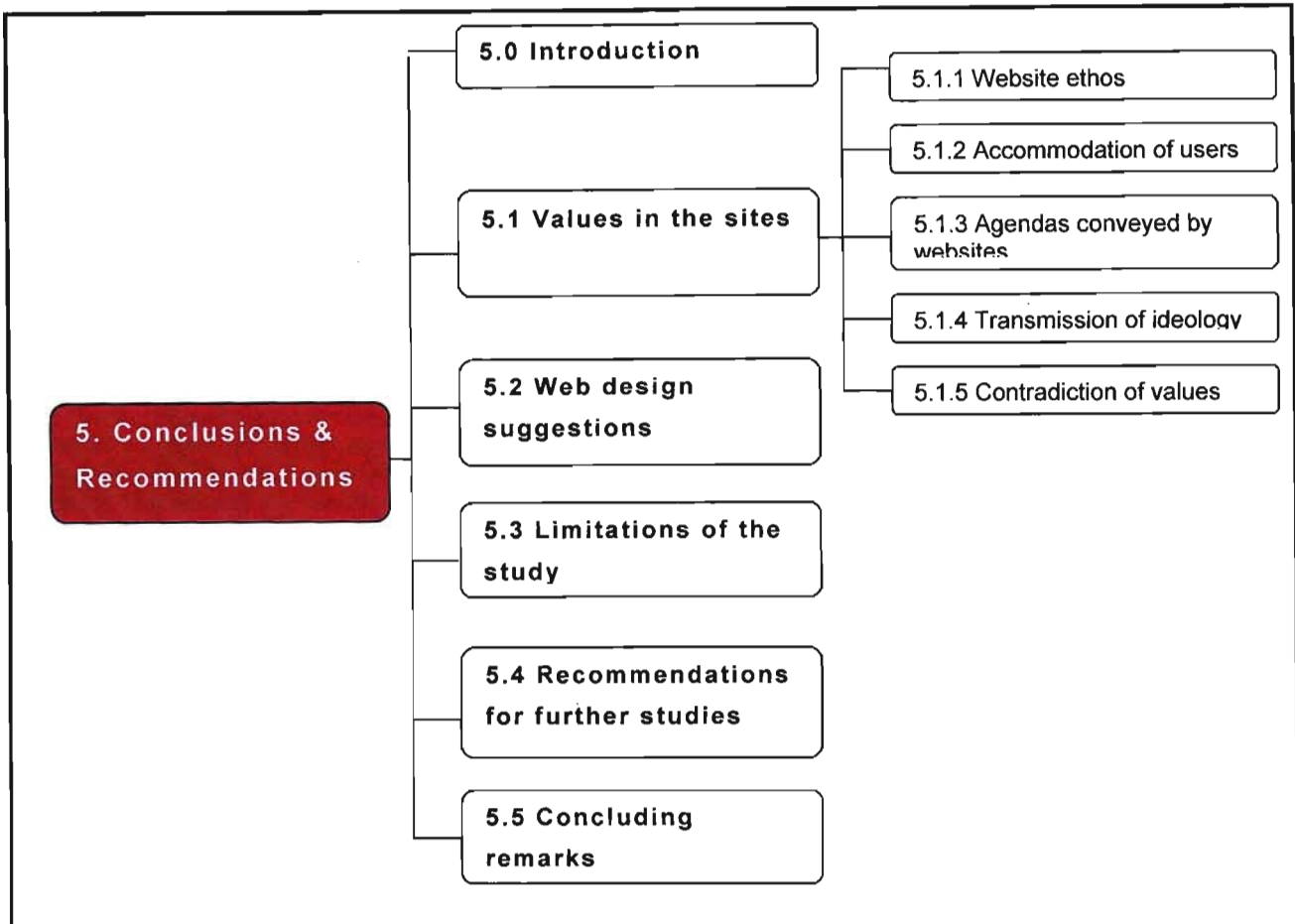


Figure 5.1 Outline of Chapter 5

5.0 Introduction

The Web is different from pre-existing media of communication. Its rise challenges the balance of power between the publishers of content and consumers since the Web is a *pull media* – consumers can decide for themselves whether they want to call up what the publishers or producers are offering (Toulouse 1998:4). In the commercial world, the dominant ideology is that of *survival of the cleverest* as goods and services that sell belong to those who are clever. In the struggle for survival, things that we believe in and value are often conveyed through our actions and the symbols we use.

The previous chapter analysed the data collected from participants through interviews and questionnaires. It has been the aim of this study to explore the cultural and ideological values transmitted by university websites. This was achieved by analysing consumer reaction to Internet messages conveyed in websites and, at times, comparing them with the intentions of producers. The overarching theme of the study was to investigate the different ways university websites transmit ideology. With this background in mind, the current chapter will draw conclusions about the perceived values transmitted by the selected university websites and to relate all these back to ideological and cultural factors. The chapter ends by recommending a way forward.

5.1 Values in the websites

The values transmitted by the websites will be presented in the order of the Critical research questions presented as presented in Chapter 1 (pages 4 - 5).

5.1.1 Features that convey the ethos of a site

The way a site is developed is the first indicator of an organisation's values. This takes into consideration which stakeholders are involved in the development of the site. With regard to university websites, these could be students, academic staff, administration members, or independent consultants. The time at which users (both staff and students) are consulted – whether during analysis, design or implementation of the site – shows the extent to which the university values their contribution.

The concern for the stakeholders goes beyond just the involvement in the design process to the issue of whose aspirations or achievements, the site should present. According to the participants, presenting the research done by both the staff and students shows the institution values high level of education and acknowledges the contribution its staff and students are

making in the global research. The conveyed ethos is that it is good for a university to take pride in its staff and students. This confirmed the theory of Cultural Dimensions, which posits that this minimizes the power-distance between the university leaders and the students (Hofstede, 1991; Marcus and Gould, 2000).

People interpreted pictures in a way that confirmed the theory of Semiotics. Participants felt that showing the alumni who are top achievers not only portrays the institution as a symbol of education but also a symbol of success. They concurred with the respective producers of the sample sites that this invites the user to come study there, with the hope that they will end up successful like those alumni. This study has confirmed Peirce's Triad of a Sign (a theory of Semiotics discussed in Chapter 2) which posits that signs do not only carry surface meanings but also the symbolic meanings whereby a sign has no obvious connection to the idea it represents but calls for a metaphorical interpretation of the idea represented. In addition, both websites in the sample were intended to portray their respective institutions as centres of academic excellence, by showing that the institutions produce degrees of good quality. Participants bought into designer's intentions as they felt the institution produced quality degrees that will make them succeed in life.

5.1.2 How producers accommodate users from diverse backgrounds in their design of websites

A website can be seen as a representation of a particular individual or corporate identity.

Therefore, it is imperative that institutions are considerate not to alienate certain groups with their Internet messages. The extent to which producer's intentions accommodate people or not was shown where people felt positive or negative about the same features on the same website. This is a challenge to designers since it is not easy to satisfy all people at one time.

The findings indicate that moving away from the dominant ideology of seeing only men as successful, designers find themselves using simplistic measures – such as pictures that show all age/race/gender groups – in a view to support the ethos of organisations. This implies yet another challenge of how designers can avoid simplicity yet attract people who hold different beliefs to the website(s).

Moreover, the research results indicated that designers should make deliberate, purposeful decisions about the pictures they use in their websites because these pictures are going to be interpreted as having certain values. For instance, the designer of the UDW website argued that the picture that shows only women was used only because it was one of the pictures available whereas some participants interpreted it as an implication/sign of part of the university's gender policy or how the university foregrounds women as part of their gender policy. This confirmed Peirce's Triad of signs in that websites (through their design and content) are signs of an institution/company's ethos. The fact that the same features were regarded positive by some people while others regarded them negative could mean the sites took a middle way between the two extremes and tried to accommodate users from diverse backgrounds.

The site design determines the extent to which the site will accommodate users from diverse backgrounds. With regard to the layout, participants confirmed that chunking of information and the consistency across the site enhances the user's learning time of the site. The inclusion of a sitemap was deemed to make it easier for the readers to find information they are looking for. The participants concurred with Hofstede's theory of Cultural Dimensions that giving too little information as well as too much categorisation of information might imply uncertainty avoidance – as if the site is trying to hide certain information.

5.1.3 What agendas are conveyed by university websites?

Tertiary institutions go to great lengths and expenses to create their image. This calls for even more effort if image is to be maintained on the Web. The need for educational institutions to attract students from all social groups has implications for the marketing strategies that do not marginalize people the institutions intend to attract.

The study found that consumers respond more readily to content than the design of a website in their assessment of the site's ethos. While producers are more concerned with the design than the content, the data showed that most consumers' comments centred on the style of presentation, the depth of content and the type of content presented in a website. One would have thought the design of a website is only important to designers/producers but this study has observed that consumers are also aware of the importance of a site design. This concurs with the idea that consumers need to be educated so they do not simply buy into the propaganda on the websites but to become critical consumers (as stipulated in the aims of this study on page 3).

5.1.4 How websites transmit ideology

The research findings show that the theory of Hofstede's Dimensions helps explain how websites transmit ideology. This is shown in the way a site chooses symbols and communicates certain information with regard to Power-Distance, Individualism vs. Collectivism as well as Long-term Time Orientation. The research findings correspond with Hofstede's (1991) contention that an institution's value system and ideologies manifest themselves in its choice of symbols, heroes/heroines, rituals and values. This is also shown in the way a site addresses its target group with regard to content, in most cases.

Findings indicate that consumers perceived the focus of the selected sites to be mainly on students and staff. This concurred with the producers' intentions, which subsequently, fed into Hofstede's theory that posits different societies measure success in terms of individuals or a

group. It is a matter of whose achievements/aspirations are given prominence on a university website. Participants concurred with producers' intentions that prioritising staff and/or students achievements on a university website shows where the institution's values lie. Those participants who commented on the absence of students' achievements such as research projects on a university site felt this might imply the institution was not proud of the students and did not value the contribution they made to the global research.

With regard to Long-term Time Orientation, participants did not support unequal relationships which, according to Hofstede (1991), "are a source of information and credibility" in some societies. Most of the participants strongly felt that less educated people (students in this case) could still provide information that is as credible as that given by professors.

Designing a university website aimed at targeting a heterogeneous community like South Africa is a challenging task. In an obvious attempt to be politically correct and transforming, designers sometimes find themselves imposing what Nirvana (1996) termed "the ideology of *rainbowism*" on the public. This is where they try to give the image that all social groups – with regard to people's age, gender, race and education level – are well represented at the educational institutions. According to Nirvana, "this ideology exists only in a hypothetical state and cannot be said to be true of South African universities". This may not be achievable by university sites but it is just what they aspire for.

What this means is that designers must think about ideology and values that might be conveyed by their sites because people/users are aware of them and interpret them.

5.1.5 The extent to which people accommodate possible contradiction between the values they hold and those they perceive to be conveyed by the websites

The findings indicate that some peoples' reaction was negative towards what they deem as a contradiction between the values they held and those they perceived to be conveyed by the websites. This condition was to an extent that people felt they could not identify with the site; hence do not regard themselves as part of the target group. On the contrary, even though some participants felt the site held different values from their own, they still felt they might study there. Web designers need to investigate a variety of ways of presenting information. Usability studies that also focus on how messages and values are communicated and perceived, as was done in this study, could prove useful to web-designers in these investigations.

In addition, the way people respond to whose achievements/aspirations are advanced on a website is another factor that determines the extent to which people accommodate possible contradiction between the values they hold and those they perceive to be conveyed by the website. When people feel the achievements of the group they identify with are not well presented, they usually feel the site was not intended for them. At times their perception of this is strong enough that they report that they would decide not to study at the particular institution. Others feel strongly at the omission to the extent that they feel marginalized, but report that they would still choose to study at the institution despite this contradiction with their values.

5.2 Web design Suggestions

Suggestions that arose from participants' responses are summarised in Table 5.1 below.

Table 5.1 *Participants' suggestions for web design*

Feature	Suggestion
Design	
a) Layout	<ul style="list-style-type: none"> □ Strive for professionalism. Badly designed websites discourage users from visiting a site ever again.
b) Navigation	<ul style="list-style-type: none"> □ Websites should be navigable giving users a number of options for navigating a site
c) Graphics	<ul style="list-style-type: none"> □ If educational institutions want to ensure that they attract people with diverse worldviews, they need to investigate ways of presenting information that accommodate these views. □ Aesthetics/illustrations should be carefully chosen and used purposefully.
Content	
a) Depth/Amount	<ul style="list-style-type: none"> □ Provide adequate content to inform the user. Users interpret scanty information as being withheld from them. □ Be careful not to put too much information in one page as this might cause clutter.
b) Presentation style	<ul style="list-style-type: none"> □ Commercial content in an educational site is considered inappropriate because it contradicts the purpose of the site

5.3 Limitations of this study

- While the range of methods proved useful for obtaining the perception of website users, some online methods presented accompanying limitations. Online chat is relatively anonymous and seldom enables the extended time frame required to build up a mutual relations or confidence in credentials. The result is that it can become difficult to gauge the commitment and honesty of participants.
- The lack of incentives for participants led to a small turnout of volunteers for the study.
- This study targeted a small sample of participants thus there may be perspectives that were not represented or others that were over-represented.

5.4 Recommendations for further studies

Studies that incorporate online tools for communication with participants can facilitate convenient and quick access to a range of people. Use of these tools is particularly appropriate when the focus is on aspects of the Web or related Internet services.

The timing of studies that involve the university community need to take careful account of examination and vacation periods when staff and students are less likely to follow through on responding as happened at times in this study. In addition, online collection of information from participants needs to be followed up promptly as connection is easily lost in anonymous online contexts.

Further studies are recommended that focus more specifically or more in depth on the phenomenon of website features that elicit a mixture of positive responses from some users and negative responses from others. Such studies could provide valuable data for educational website designers who target a diverse range of users.

Studies that focus on perceptions of messages and values could be particularly useful when institutions change their website designs or, as will be the case with the two universities that were incorporated in the current study, institutions merge to form a new institution that requires a new website.

Future studies of this nature could benefit from a creative scheme of incentives – not necessarily material or monetary – to encourage more participants. Institutions that find value in the outcome of studies such as the current one should consider providing more resources to fund larger studies that are able to access more participants from target groups appropriate to the nature of their business.

5.5 Concluding remarks

This study has investigated the different ways university websites transmit ideology. The argument is that university sites are culturally and ideologically 'loaded'. In addition, the commodification of higher education impacts on how it is portrayed by producers as well as how it is perceived by the consumers and all stakeholders. The challenge to educational institutions that market their services through the Web is accommodating the kind of users they are targeting so that the latter do not reject the site(s).

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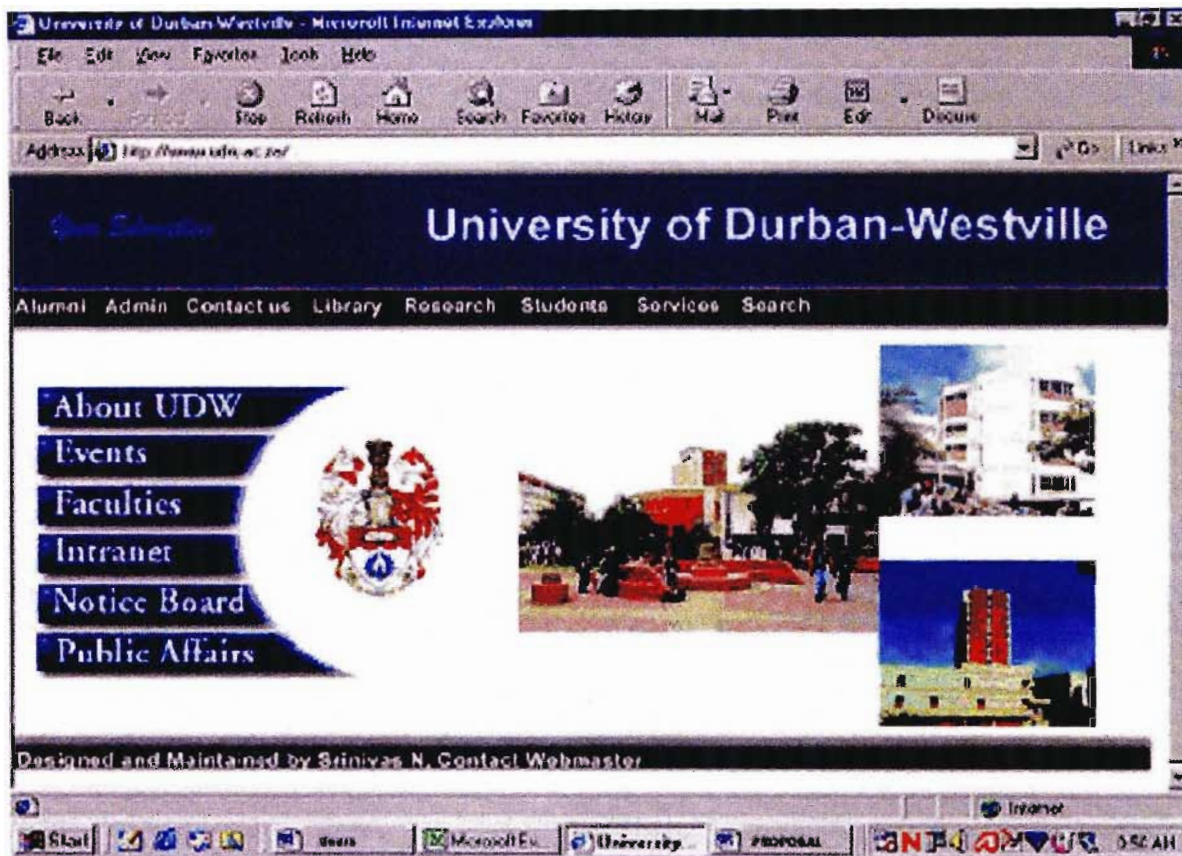
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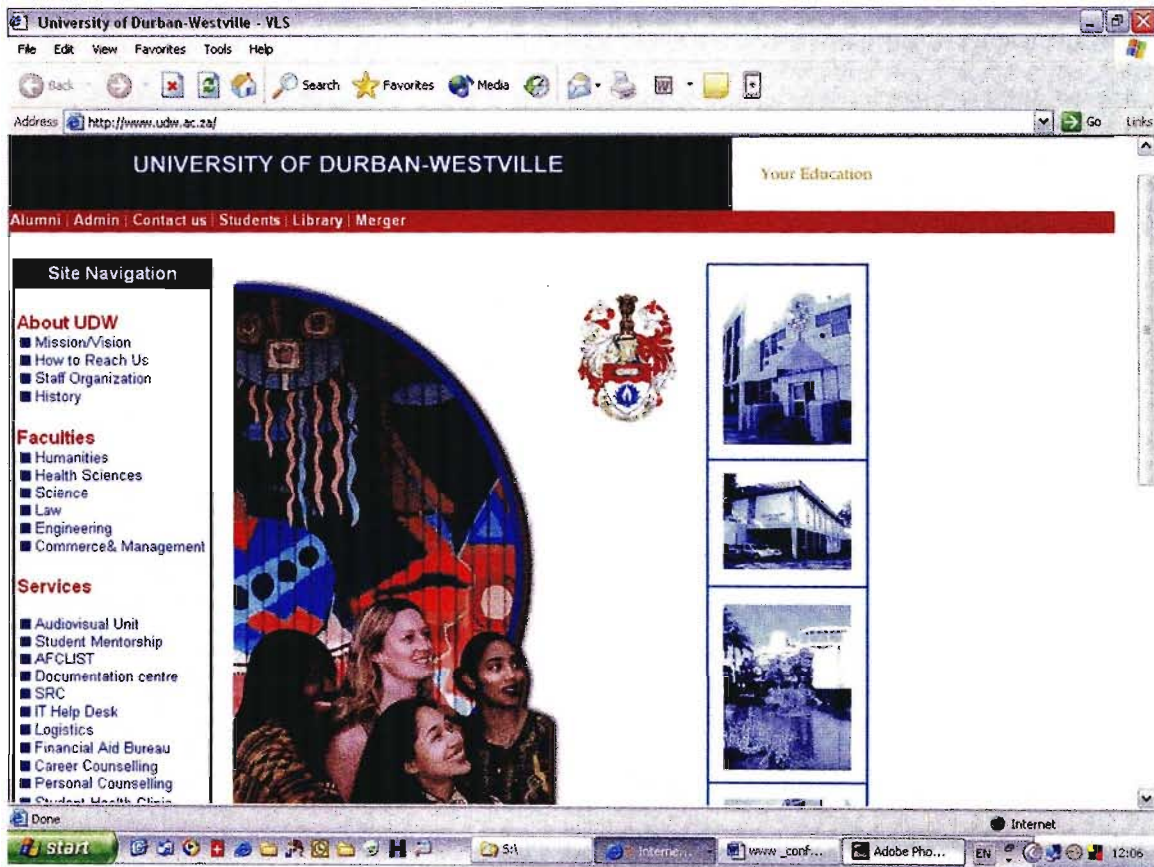
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APPENDICES

Appendix A – The first homepage of the University of Durban-Westville



Appendix B – The second homepage of the University of Durban-Westville



Appendix C – The University of Natal homepage

www.nu.ac.za : Natal University, South Africa - Web Site - VLS

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Media Print Mail

Address http://www.nu.ac.za/nuj

Home Students Site Index Campuses Research Alumni

UNIVERSITY OF NATAL
DURBAN, EDGLWOOD, MEDICAL SCHOOL AND PIETERMARITZBURG

Find Staff:

Find Information:

Date: 18 August 2003

The Registrar, University of Natal, Durban 4041, South Africa
Telephone: +27-31-260 1111, Facsimile: +27-31-260 2214

STUDENTS
[2nd Semester Lecture](#)
[Timetable UND](#)
[Exam Information](#)
[Exam Results](#)
[Finance your studies](#)
[International Students](#)
[Postgraduate](#)
[Student Central](#)
[Student Information](#)
[Undergraduate](#)

HUMAN RESOURCES
[HR website](#)
[Staff Vacancies](#)

ABOUT NU
[Academic Areas](#)
[Annual Report](#)
[Concurrence](#)
[Experts List](#)
[Financial Statements](#)
[History](#)
[Libraries & IT](#)
[Manager](#)
[Mission](#)
[Site Index \(A to Z\)](#)
[University Executive](#)

Natal University's International Director appointed to Home Affairs advisory body

The Minister of Home Affairs has appointed Dr Roshen Kishun, the Director of NU International at the University of Natal, to the newly established South African Immigration Advisory Board.

Other news items

New Natal University campus building reflects growth trend

Sustained growth at the University of Natal's Science Foundation Programme (SFP) in the Faculty of Science and Agriculture, and in the MBA classes at the School of Business, have resulted in the construction of the first

Jomba! Contemporary Dance Experience

22 - 31 August, 2003

One of the highlights on Durban's dance calendar is the Centre for Creative Arts' Jomba! Contemporary Dance Experience - a

Done Local Intranet

Appendix D – Questions for Consumers

SECTION A: Personal Information

Please mark/check the box, which applies to you

1. Age: <25
 25-35
 35-45
 45-55
 55>
2. Gender: Male Female
3. Race: African White Asian Coloured Other
4. What is the highest level of education you have completed?
Please click [HERE](#) to make your selection
5. What is your role in tertiary education?
 Student Parent Community member
 Teacher Member of staff member of human rights group

SECTION B: General Surfing Experience

6. For what do you use the Internet?
7. a) From where do you access the Internet?
- b) How long have you been using the Internet, esp. accessing websites? (Please check the correct box)
 Less than 1yr 1-5yrs more than 5yrs
- c) How long do you spend browsing websites? (Please check the correct box)
 Less than 2hrs a day 2-5hrs a day More than 5hrs a day
- d) How is this time spent?
 Continuously (stay on the site for the whole viewing session without closing)
 Continually (open-and-close the site, keep calling up again in sessions)
8. Which search method do you use to locate websites (i.e. **Domain Name System** – for instance **.com, .edu, .org, .ac, .gov, OR Search engines** – e.g. Google, Alta Vista, Ananzi, Hotbot, AskJeeves – where you use keywords/phrases)? Why?
9. Which sites do you usually visit (e.g. educational, entertainment, etc)?
10. How do you judge the credibility (trustworthiness or believability) of a website?

Appendix E – Questions for Producers of Non-university Sites

SECTION A: Personal Information

Please mark/check the box, which applies to you

1. Age: <25
 25-35
 35-45
 45-55
 55>
2. Gender: Male Female
3. Race: African White Asian Coloured Other
4. What is the highest level of education you have completed?
Please click [HERE](#) to make your selection

SECTION B: Web design experience

5. For what do you mainly use the Internet?
6. a) From where do you access the Internet?
b) How long do you spend on the Internet? (Please check the correct box)
 Less than 2hrs a day 2-5hrs a day More than 5hrs a day
c) How long have you been designing websites? (Please check the correct box)
 Less than 1yr 1-5yrs more than 5yrs
d) In which capacity?
 Student Proprietor of School/company Owner
 Administration member Independent consultant Altruistic
7. What things do you put in mind when designing / planning for a website?
8. At what stage do you involve users (analysis, design, implementation)?
How does this help?
9. Do you have any design guidelines you use? Are you deliberately employing them to distribute visual impact? How and why?
10. How do you ensure the credibility of your website?

Appendix F – Questions for both consumers and producers (of non-university sites)

For the following questions, please visit the tertiary education sites listed below, then come back to this questionnaire and share your experiences when browsing these sites. You may choose to provide answers for only one site or both sites per question. Please attempt all the questions.

A. University of Durban-Westville (UDW) <http://www.udw.ac.za>

B. University of Natal (NU) <http://www.nu.ac.za>

Section C: Overall perception of the websites

11. a) What is your perception of the website(s)?
(You may also think along the lines of layout (information presentation); content (e.g. the nature of learning; demographics, credibility of the university); what did you like/dislike about the site(s))?

b) What character does the site portray?

12. What things didn't you expect to see but were there **or** what did you expect to see but wasn't there? Why?

13. a) Who do you think the target group for the site is? Please explain.

b) Do you think you are part of this target group? Why?

14. Do you think the site is presenting achievements/aspirations of a particular group (e.g. students/staff, gender/race/age group) or do you think it is just artistic design? Please explain.

Section D: Values transmitted by the websites

15. a) Did you feel any part (design or content) of the site does not apply to the values/morals (i.e. standards of perfection, beauty, or excellence) held by you or your family with regard to your gender, race, religion, education level or social-economic class? Please explain.

b) What would you rather have had instead i.e. what would you like to see in a university website?

16. Given that the South African policy on higher education is that access to tertiary education institutions should be open to all and not exclude anyone, what can be done to ensure higher educational institution websites accommodate all?
17. Would you regard these tertiary institutions websites as a considerate (just informative) or aggressive (excessively persuasive) marketing strategy to attract students? Please explain.
18. With the forthcoming merger between these two institutions, what would you suggest so that the **new website** captures the identity of the merged institution without losing old identities of both?
19. How has any piece of information you gathered from the website(s) reinforced or opposed what you already knew or felt about the institution(s)?

Appendix G – Outline of interview questions for producers of the sample sites

SECTION A: Personal Information

1. Age: <25
 25-35
 35-45
 45-55
 55>
2. Gender: Male Female
3. Race: African White Asian Coloured Other
4. What is the highest level of education you have completed?

SECTION B: Web design experience

5. a) How long have you been designing websites? (Please check the correct box)
 Less than 1yr 1-5yrs more than 5yrs
- b) With regard to the site reviewed in this study, what were your terms?
 Student Proprietor of School/company Owner
 Administration member Independent consultant Altruistic
6. What was the aim for designing this site?
7. What things did you put in mind when designing / planning for a website?
8. At what stage did you involve users (analysis, design, implementation)?
How did this help?
9. Did you have any design guidelines you used? Did you deliberately employ them to distribute visual impact? How and why?