Faculty of Arts 2nd Annual Conference Proceedings

Theme
“Diversity and knowledge in Humanities and social Sciences”

Editors
Dennis N. Ocholla, Themba C. Moyo, Thandi A. Nzama
On behalf of the Faculty of Arts Research Committee I would like to take this opportunity to thank all academic staff members within the Faculty of Arts for their cooperation and support that has resulted in the production of this document – the *Faculty of Arts Conference Proceedings*. It is gratifying to present the Faculty of Arts Conference Proceedings which is a culmination of the combined effort of all colleagues within the Faculty of Arts who presented papers at the 2008 Faculty Conference. In its attempt to increase research productivity and to motivate new researchers to engage in research, present papers at local and international conferences and publish in peer refereed and accredited journals (SAPSE), the Faculty of Arts Research Committee has organized a series of research activities which include lunch seminars, capacity building workshops, and conferences. The first Faculty Conference was held in 2007 which laid a foundation for the subsequent conferences. The success of the first conference encouraged the Research Committee to commit itself in making a conference an annual event. The themes and objectives of these conferences are broad thus providing an interdisciplinary platform for sharing knowledge on research activities and related scholarly and academic work by staff and students in the Humanities and Social Sciences.

The aim of the conference is to provide an interdisciplinary platform for sharing knowledge on research activities and related scholarly and academic work by staff and students in the humanities and social sciences.

**The conference objectives were to:**

- Share scholarly knowledge among staff in the humanities and social sciences
- Popularize research and dissemination of research results
- Provide a platform for networking among staff and students
- Promote and encourage constructive scholarly debate
- Enable free interaction and exchange of ideas
- Provide a forum where staff and students can showcase their research output and academic work
- Provide an interface and interactive environment for disseminating and filtering research outcome before publication in scholarly journals
- Enable the creation of a faculty research open access repository for interdisciplinary research output in humanities and social sciences
- Promote knowledge sharing and transfer through open discussions

**Sub-themes**

- Knowledge Management and Indigenous Knowledge Systems
- Information, Communication and Technology
- Information and Knowledge Society
The *Faculty of Arts Conference Proceedings* covers a wide scope of research interests across the Faculty of Arts. May I mention that not all papers that were presented at the 2008 Faculty Conference are covered in this volume. It is anticipated that the Faculty Conferences and the resultant Conference Proceedings will encourage more academic staff members within the Faculty of Arts to participate in research activities organized by the Research Committee.

Thank you.

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Dr. Nsibande - Theology
Dr. Thandi Nzama - Recreation and Tourism
Prof. DN Ocholla - Library and Information Science
Prof. JM Ras - Criminal Justice
Dr. H Rugbeer - Communication Science
Prof. E. Wait – Philosophy
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The Indigenous Knowledge Systems (IKS) Centre of the University of Zululand: A Pilot Documentation Project

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1. Introduction

The National IKS policy which was adopted in 2004 mandated the Department of Science and Technology (DST) to establish a National Indigenous Knowledge Systems Office (NIKSO) whose strategic objective was to coordinate the South African Research Agenda on IKS within the DST and throughout the country. As a result of discussions held between the University of Zululand (uniZulu) and the Department of Science and Technology (DST), the first pilot IKS Centre was established at UniZulu. According to policy, UniZulu IKS Centre was to be a vehicle “through which indigenous knowledge (IK) wealth located in various communities could be captured and stored”.

2. UniZulu IKS staff

The IKS Centre is served by the following members of staff:

3. Background information

After an IKS inauguration workshop held by senior management and staff of UniZulu and DST from the 23-24 August 2007, the following declarations were adopted:

- to establish an IKS Centre after signing an agreement with the Department of Science and Technology (DST),
- to appoint a Manager to run the IKS Centre,
- to mobilise resources in order to realise the goals and objectives of IKS,
- to integrate IKS in the research agenda,
- to design and include a module or IKS qualification programme both at undergraduate and postgraduate levels of study at Unizulu,
- to enhance the partnership between the university and the community with regard to IKS,
- to explore collaborative activities particularly within the continent of Africa, and
- to maintain partnerships with relevant government departments and state owned enterprises.
3. Corporate Strategy

3.1. Vision
The IKS Documentation Centre is dedicated to upholding an Afrocentric world view that affirms the importance of African Science, Culture and traditions of knowledge production and will be dedicated to the preservation, protection and dissemination of science and technology through reports and documents.

3.2. Mission
The mission of the IKS Documentation Centre is:
   a) To mount IKS exhibits of research outputs on posters, digital doorway, portal and mounted visuals at the Science Centre, Richards Bay.
   b) To create a functional database Information System for the preservation, protection and dissemination of IK.
   c) to serve as a resource base for indigenous knowledge from various communities in the country; and
   d) To support the use of Indigenous Knowledge Systems (IKS) in the socio-economic development process in the community.

4. Core Business of Centre

According to the Business Plan, the core functions of the IKS Centre are as presented in the following tables:

**TABLE 1**

<table>
<thead>
<tr>
<th>ACTIVITIES</th>
<th>INDICATORS</th>
<th>OUTPUT</th>
<th>TARGET DATES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify office space</td>
<td>Office space allocation and occupation</td>
<td>To set up a pilot IKS Documentation Centre</td>
<td>April-May 2008</td>
</tr>
<tr>
<td>Appoint staff</td>
<td>Staff appointed on contract and transfer or secondment</td>
<td>-do-</td>
<td>April-May 2008</td>
</tr>
<tr>
<td>Purchase office equipment</td>
<td>Acquired furniture</td>
<td>-do-</td>
<td>April-June 2008</td>
</tr>
<tr>
<td></td>
<td>Laptop, desktop computer, fax, printer, digital camera, video recorder (camcorder), data projector, Astra Lab projector stationary, telephone, tea maker, refrigerator etc</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Budget allocation</td>
<td>Expenditure report, accounts and allocations</td>
<td>-do-</td>
<td>December 2008</td>
</tr>
</tbody>
</table>

Table 2
<table>
<thead>
<tr>
<th>ACTIVITIES</th>
<th>INDICATORS</th>
<th>OUTPUT</th>
<th>TARGET DATES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research, identify and mount exhibition at the Science Centre, Richards Bay</td>
<td>Exhibits at the Science Centre, Richards Bay</td>
<td>To document S&amp;T, IKS related reports and documents</td>
<td>May 08 - Sept 08</td>
</tr>
<tr>
<td>Desktop research from the library and transfer document to the Centre</td>
<td>Transfer of existing documents to the IKS documentation centre</td>
<td>-do-</td>
<td>Feb 08 - June 2008</td>
</tr>
<tr>
<td>Applied &amp; action research with local communities to populate IKS reports</td>
<td>Set up research teams</td>
<td>-do-</td>
<td>April-Aug 08</td>
</tr>
<tr>
<td>with the Documentation Centre and digital Doorway (IKS Portal)</td>
<td>Mobilising local communities</td>
<td>-do-</td>
<td>Aug-Feb 2008</td>
</tr>
<tr>
<td></td>
<td>Collate research result into a publication and populate research results</td>
<td>-do-</td>
<td>Aug 07 - Sept 08</td>
</tr>
<tr>
<td></td>
<td>into the Digital Doorway (IKS Portal)</td>
<td></td>
<td></td>
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</tbody>
</table>

Table 3

<table>
<thead>
<tr>
<th>ACTIVITIES</th>
<th>INDICATORS</th>
<th>OUTPUT</th>
<th>TARGET DATES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Set up a Steering Committee</td>
<td>Steering Committee meetings four times a year</td>
<td>To provide strategic leadership and managerial roles for the IKS Documentation Centre</td>
<td>April-08 March 09</td>
</tr>
<tr>
<td>Mobilize and incorporate three local communities to the IKS Centre</td>
<td>Communities of Nkandla, Mhlabuyalingana, and Mkhwanazi, are actioned in the IKS Centre</td>
<td>-do-</td>
<td>April-July08</td>
</tr>
<tr>
<td>Draft Operation Policy</td>
<td>Approved Operation Policy</td>
<td>-do-</td>
<td>July-08 Feb 09</td>
</tr>
<tr>
<td>Set up the Vision and Mission of the IKS Centre</td>
<td>Approved Vision and Mission</td>
<td>-do-</td>
<td>July-08 Feb 09</td>
</tr>
<tr>
<td>Represent the IKS Centre at various attended meetings</td>
<td>Table report on attended meeting</td>
<td>-do-</td>
<td>June – Sept 09</td>
</tr>
</tbody>
</table>
5. Progress of the IKS Centre
Since the establishment of the IKS Centre on the 1st April, 2008 (up to the present date, that is the 16th September 2008), the IKS Centre has progressed significantly.

5.1. Implemented or accomplished
a) The Service Level Agreement and the Business Plan were formalised;

b) An approved budget was allocated by both the DST and Unizulu.

c) Staff members of the IKS Centre (Prof TAP Gumbi, Miss PP Ngema and Mr NS Mkhwanazi) were appointed/seconded and offices (411, 413 and 409) were provided for the IKS Centre, with the last office to be fitted with lockable shelves for the purpose of storage and preservation of harvested Indigenous Knowledge (IK) and valuable documents of the IKS Centre.

d) The duty sheets of the three IKS Centre Staff, clearly outlining the KPA's of IKS Staff, were finalised.

e) IKS Centre staff and Steering Committee Members attended two capacity development workshops: one on the “World intellectual Property Organisation toolkit” held in Pretoria for harvesting Indigenous Knowledge the other on “IKS Content, Research and Technology held in Richards bay”.

f) An IKS Research Support Group (RSG) of 14 academic staff members was formed as a precursor for the establishment of one of the IKS Research Teams (IRT).

g) The Steering Committee (SC) was established: Five (5) Community partners from Mkhwanazi, Nkandla and Mhlabuyalingana; Three (3) nominated from the four faculties of UniZulu (Arts, Commerce administration and Law, Science and Agriculture); Three (3) from the IKS Centre staff; and Management as Ex Officio members.

h) Two IKS Centre staff (Prof TAP Gumbi and Mr NS Mkhwanazi), undertook familiarisation visits to three (3) partnership communities:

1) Mkhwanazi Community

On 5 July 2008 Prof TAP Gumbi together with his student intern, Mr N.S. Mkhwanazi, visited the Mkhwanazi Traditional Leadership, to strengthen the existing partnership with the Mkhwanazi community. Inkosi J Mkhwanazi reported that development in his area was overlooked for decades. The University which was built within the Mkhwanazi area did not contribute much towards the upliftment of his people.

The university has been an ivory tower in the area and members of the community were cut-off from the developments taking place within the university. He appreciated the linkages maintained between the university and the Mkhwanazi community.
Concerning the area of involvement in the harvest of IK material, three areas in the chieftainship were identified, namely: Port Dunford, Ongoye Mountains and eMatholonjeni. Indigenous Knowledge (IK) will be identified and collected in collaboration with Council and Traditional leaders of the respective areas.

On 29/07/08 Prof TAP Gumbi together with Mr NS Mkhwanazi visited Port Dunford as arranged and agreed with the Traditional Leadership. Mr B Mjadu, the Traditional Councillor, accompanied the IKS staff to the homesteads of IK holders in order to introduce the staff in order to facilitate the responsibility of identifying and harvesting of IK in the area.

2) Nkandla Community

A visit to Nkandla community was scheduled and undertaken on the 15th August, 2008. A meeting which lasted for about two hours was held with the Municipal Manager of Nkandla, Mr Ngonyama and his assistant Mr Ndela. A powerpoint presentation was made and questions about the IKS project were answered.

The two officials commended the IKS Centre staff (Prof TAP Gumbi and Mr NS Mkhwanazi). They were happy to establish contacts with the IKS Staff and mentioned their wish to link-up with the Unizulu’s Department of Agriculture.

Since there was only one community partner they promised to nominate the second one as soon as possible. It was agreed that the Nkandla Municipality will set a date for them to visit Unizulu. The IKS Centre was to make arrangements for them to meet other departments as well.

As there were a number of Inkosi’s at Nkandla, the political head of the municipality, the Mayor, was to be requested to convene a meeting with Amakhosi and the Traditional Council (Izinduna’s and Councillors) of Nkandla in preparation of the second round of the IKS Centre staff visit to the area.

3) Mhlabuyalingana Community

On the 17th August 2008 the IKS Centre staff (Prof TAP Gumbi and Mr NS Mkhwanazi) visited Mhlabuyalingana community.

Inkosi uTembe presided over the meeting of the Traditional Council. An NGO named Maputaland Development and Information Centre (MDC) escorted the IKS Centre staff to the Traditional Council.

A presentation was made by Prof TAP Gumbi and Mr NS Mkhwanazi which was followed by questions posed by the Traditional Council members. The presentation placed
emphasis on Science Innovation and Technologies without putting too much emphasis on the cultural element of IK as stated in the Service Level Agreement signed between Unizulu and DST.

After the meeting, it was agreed that the Traditional Council of Mhlabuyalingana was to convene a meeting with all relevant stakeholders in order to discuss IKS matters for the purpose of facilitating the harvest of Indigenous Knowledge material at Mhlabuyalingana. Some of the stakeholders mentioned were: the Department of Agriculture, Traditional Affairs, Health, Nature Conservation, Water Affairs and Forestry etc.

Inkosi uTembe commended the University for visiting his chieftainship. In order to operationalise the recommendation of Inkosi uTembe for the convening of a stakeholders meeting at Mhlabuyalingana, the Unizulu IKS staff and the Maputaland Development and Information Centre staff met to chart the way forward. Mr Sihle Tembe, the Mhlabuyalingana IKS community partner, was delegated to arrange and schedule the proposed meeting.

The community leaders of the three areas embraced the UniZulu IKS project. They also commended UniZulu for maintaining the linkage with remote rural communities. The second round of visits was to be with relevant stakeholders and Indigenous Knowledge holders to decide on the process of Indigenous Knowledge harvesting.

5.2. Ongoing activity

a) Procurement of equipment for the IKS Centre: two (2) digital cameras, one (1) data projector, one (1) laptop computer, one (1) Compujector, stationery etc.

b) Preparation of a paper entitled “The IKS Centre of the University of Zululand: A pilot documentation project”. This paper was presented at the Faculty of Arts Conference which was scheduled for the 16 September 2008.

c) In partnership with Mr John Phipson the Agri Business Consultant from the National Innovation Centre for Plant Biotechnology two research proposals mainly on the potential for IK commercialisation by entrepreneurs (supply, packaging, prising, sale and marketing, as exemplified in Table 1) of indigenous products were being developed. These were mainly:

- “To Determine the Commercial Viability of Establishing Indigenous Medicinal Plant Nurseries as a Significant Factor in the Maintenance of the Practice of Traditional Medicines”.
- “An Investigation into the Feasibility of Establishing Commercial Scale Decorative Indigenous Plant Nurseries as a Significant Contributor to Sustainable Rural Livelihoods”.

Table 4: Packaging indigenous herbs to tablets, capsules and syrup products
The Indigenous Knowledge Systems IKS centre of the University of Zululand

d) The IKS office has already collected some published research articles produced by academic staff members of UniZulu, from UniZulu Research Office, for digitisation and storage in the Digital Doorway.

e) The IKS Centre in consultation with the UniZulu Librarian is negotiating the assistance of a Librarian to assist with an electronic access of a selected collection of masters and doctoral theses for digitisation in the Digital Doorway.

6. Conclusion

The pilot IKS documentation Centre has now been established at UniZulu. According to plan, the IKS Centre will be launched early next year (February 2009) by the Honorable Dr Masibudi Mangena, the Honorable Minister of Science and Technology. Both the DST and Unizulu have collaborated well in ensuring a successful establishment of the IKS pilot project at the University of Zululand.

7. References


Service Level Agreement between the Department of Science and technology and the University of Zululand. July 2008.
Challenges of Higher Education in South Africa: Knowledge Management Amelioration Strategies

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Abstract  
The South African higher education sector faces challenges in their core areas of teaching, research and community service. Some of these challenges include internal and external pressures for accountability and transparency in the management of the institutions. There is also a clear demand for quality services, declining state subsidies, stiff competition from global counterparts, low graduate throughput, declining enrolments, inadequately prepared students from high school levels for university education, inadequate facilities (e.g. space, ICTs and equipment), ill-prepared graduates for the job market, disconnect of university from the community, limited partnership between industry and government, low visibility in the global research frontiers, brain drain, low bandwidth, bureaucracy and general poor service delivery. These challenges are partly the result of globalisation, separatist practices of the former apartheid government, rationalisation of higher education sector, and the multiracial nature of the South African society.

Knowledge Management (KM) has successfully been applied in corporate sectors to improve productivity, profitability, customer relations, efficiency, transparency, accountability innovation, and overall quality of service delivery. This paper submits that South African universities have, by and large, not embraced knowledge management practices and argues that KM integration within the universities' strategic processes and operations can help address the challenges facing them. But for this to happen, universities must, among other things, undergo some paradigm shift that include knowledge audit, infrastructure enhancement, content development, building a culture of sharing and creating awareness through enabling strategic frameworks.

Keywords: South Africa, higher education, knowledge management, corporate competitiveness, universities, knowledge economy

Introduction  
The university environment the world over is undergoing tremendous transformation due to a range of external and internal forces such as globalisation and increased competition. Universities now than before compete against each other due to a great number of people who wish to access higher education enabled through information and communication technologies. Universities are also experiencing pressure from decreasing financial support, increasing costs of education, virtualisation and internationalisation of education, pressure to reduce expenditure but at the same time demonstrate accountability and improve quality of service delivery.
As centres of knowledge, universities have long been under public scrutiny because of the special status they enjoy in society and their dependence on public funding. The World Bank (1999) observes that there is always a push for higher education to become relevant to the changing needs of society out of various drivers and trends including the transition towards a knowledge-based economy, massification and democratisation of higher education, and the integration and assimilation of information technology into the academic environment. Internationalisation of higher education and proliferation of research collaboration coupled with the growing student mobility and increased competition for funding have, recently occasioned effort to rank universities in terms of their academic quality and productivity at the national, regional and global levels putting more pressures on them. Marion and Martin (2005) citing (Carlin, 1999) observe that higher education executives especially in universities are struggling to deal with exorbitant tuition, numerous existing programmes and heavy teaching loads. Oosterlinck (n.d.) observes that most universities have a structure which is relatively hostile to interdisciplinary developments, yet most of society’s major problems require an interdisciplinary approach.

Oosterlinck (n.d) notes that universities of today unlike those of early days (established around 1200 BC) are expected to meet more complex society expectations. However, Rangwasamy (2000) citing Clark Kerr’s (1968) article on ‘the uses of the university ‘ observes that of the 75 institutions founded before 1520 AD, which are still doing much the same things in much the same places, about 60 are universities. The early universities were not necessarily centres of scientific discovery as they merely collected knowledge, preserved it and passed it on without the need to create or apply such knowledge (The Higher Education Working Group, 2005). The role of a modern university as espoused by the founder Wilhelm von Humboldt, who in 1809 established the Berlin University, includes knowledge creation; knowledge dissemination; and academic service to society. Oosterlinck (n.d) states that the role of the university in society is to guarantee the most efficient contact between university research results and possible applications in economic life. Universities are also expected to communicate more openly and more actively about the many specialisations and specialists within its walls. Universities also promote lifelong learning because what students learn today, will be obsolete tomorrow and in order to prevent this, universities must offer a wide-range of courses and seminars to make sure that graduates can keep up with scientific developments.

Petrides and Nodine (2003) note that there is increased external and internal pressure on universities with regard to information needs of faculty and administrative staff; keeping abreast of changing standards, curricula, pedagogical methods; expanding universe of knowledge; limited budgets for conference and research; demands for accountability and improvement in education. These demands necessitate knowledge management in these organisations. Moreover, though some universities have information systems in place, a number of barriers limit their use. Such barriers include the lack of staff to provide analyses of raw data, variant standard of data collection within departments, lack of leadership due to high staff turnover, lack of integration of technology in the curricula, lack of integration of information management systems in the missions and visions of universities, and distrust about sharing of data among staff due to risk of misrepresentation.

Challenges in South African Higher Education
South Africa consists of 23 public universities (Ministry of Education, 2006) following the completion of the restructuring process which started six years ago and resulted in mergers of some of the original 36 state universities and technikons (now universities of technology). The challenges engendered by this restructuring process included de-racialising education, forging new institutional identities and cultures through development of new institutional missions, social educational roles, and academic programmes mixes. Moreover, the restructuring process obligated the universities to achieve equity, standardise language of instruction, undertake curriculum reform, expand access, etc, (Badat, 2008). The other challenge is that South African formal education is largely modelled on Anglo-Saxon tradition which is proletarian in nature, and the curricula is shaped to a high degree that primary and secondary education were not meant to be preparatory processes to university (The Higher Education Working Group, 2005) instead, the path to a university is perceived as being a progression from primary through secondary to
tertiary level. In addition, the Working Higher Education Working Group (2005) points out that a lot of resources have been allocated to education without necessarily getting the desired outcomes. Traditionally, there has long been a misplaced notion within South African higher education that theory comes out of the academic universities and is then converted into applied technology in the technical colleges and university of technologies.

The industrial and knowledge economy now expects all universities to be part of knowledge generation, innovation and production processes but South African higher education is faced with the challenges of meeting more urgent training needs, of the economy especially in technical fields such as architecture, engineering, IT, law, health, accounting, auditing and communications. As the global and national economy evolves, universities will need to become more responsive to meet the demand of the knowledge economy in terms of skills needs as well as technology innovation and transfer. Additionally, the dynamism within the trajectories of knowledge and technology is such that specific skills for specific needs are changing so fast that they increasingly have to be generated on the job. This in turn means that knowledge origination, technology advancement and economic activity need persons with very high levels of generic knowledge. Moreover, necessary generic knowledge in any discipline or multidisciplinary fields is becoming highly specialised. People have to be exposed to the education process for longer period to acquire such levels of specialised knowledge (The Higher Education Working Group, 2005). Kok (2007) citing Asmal (2000) asserts that participation in the knowledge economy requires the ability to renew economic and social systems constantly: to extend knowledge and specialist skills: to engage effectively in knowledge production in higher education: to be socially responsive: to be in close contact with industry: and to produce top quality graduates.

The South African education system is less able to teach specific skills that would produce students who are able to fit immediately into the job market. This is exacerbated by the fact that the workplace environment is increasingly subject to constant change. The real challenge for the education system is to determine the skill sets and disciplines that are being drawn on most heavily by the society and economy at any point in time. The education system would then have to ensure that it imparts the highest possible level of knowledge and basic skills. This requires a very close understanding of the surrounding society and the economy by faculty within the university (The Higher Education Working Group, 2005).

South African universities are faced with the challenges of declining state funding thus, impelling some of them to embark on a range of innovative and entrepreneurial activities as a way of new sources of income for financial sustainability (Badat, 2008). Moreover, universities especially the former technikons (now university of technologies) face a serious shortage of quality research skills. Lamprecht (2008) the chief of Venture Solutions of South Africa points out that South African government while it has increased spending on skills development, innovations from universities have dried up because learning is not put to practical use. This, he explains, is exemplified by incubators or innovation hubs in the country which are hard-pressed such that one can hardly find any start-ups or small businesses that stem from university research. In addition, declining students’ enrolments, low graduation rates, students’ dropouts, student repletion and retention problems (Badat, 2008) are causes of concern. The government and the public service are dissatisfied with the quality of graduates from universities with regard to the nature and appropriateness of their qualifications, training and competitiveness in some fields. This is exacerbated by shortage of high level skills arising out of small intake of students in some programmes or low graduate throughput.

Dr Harold Wesso the Acting CEO of Meraka e-Skills Institute observed that South Africa lacks labour market intelligence gathering mechanism that would assist government to determine skills needs in the market. He pointed out that by 2009, demand for ICT skills will exceed supply by 24% because the output from universities is inadequate to meet market demand and there is currently a shortfall of 37,000 ICT related skills needed in the market. Moreover, a large % of university graduates who enter the labour market are not job ready and often require another two years of retraining to become competent on the job. More shockingly, 80% of students who enter ICT related programmes drop out for various reasons that range from maths-intensive nature of the programmes to lack of hands-on experiences. The Minister of Education, Naledi
Pandor (Ministry of Education, 2006) noted that the drop-out and through-put rates in the universities are bad not only because of poor school education but also due to poor teaching at the universities (Ministry of Education, 2006). Besides, the Higher Education Working Group (2005) points out that the links between the primary and secondary levels of education and the content of curricula at these levels and changes in tertiary education need to be carefully assessed and modified due to the concerns around mathematical and scientific skills and the weakening of language diversity. The Southern Africa Regional Universities Association (2008) notes that there is 60% university dropout rate in South Africa. The students affected are mainly from poor families who drop out before completing their studies on account of pregnancy, finding campus life too boring and structured; social and personal problems; having to care for sick relatives, and peer pressure. Moreover, 43% of learners do not complete high school level of education.

Most ICT degree programmes do not have inbuilt provisions for attainment of human-related skills, but instead recommend add-ons from other departments which students sometimes do not take seriously. Information society ICT skills needed include competencies to develop and maintain ICTs, e-literacy, networking expertise, wireless technologies know-how, etc (Wesso, 2008). Jordaan and Biermann (2008) in a study on research skills found that ICT research students on a graduate level in South Africa experience a large array of problems such as writing, searching and presenting original work. In particular, students from first year are exposed to a culture of copying especially within programming fields. They also point out that the status of research at the universities of technology is poor because of the scarcity of research expertise, inexperienced supervisors, and supervisors working in fields that differ from their specialisations. This situation results in low research outputs, and generally discourages students who would wish to continue with their postgraduate studies.

Botha and Simelane (2007) observe that in most South African universities, research is either not published or is not digitised, making it largely inaccessible. Lor (1998) points out that the “filtering out” of articles submitted by authors from less developed countries to journals in the developed world is common. Moreover, authors from least developed countries tend to publish in more prestigious foreign journals which are less accessed by scholars from such developing countries because of high subscription costs. Yet in South Africa, government insists that academic authors should publish their work in high-ranking journals for their affiliate institutions to obtain state subsidies.

Global ranking of universities that has been carried out in the last three years reveals that though South African universities are far ahead of their counterparts in Africa, they are not among the top ranked 100 universities worldwide. The 2006 ranking by Internet Lab, shows that South Africa leads in Africa continent with 22 out of the best 50 universities. However, none of the African universities are among the best 300 in the world. The top institution, the University of Cape Town, was in position 546 globally in 2006, but improved remarkably in 2007 to become among the top 200. The University of Stellenbosch was second in Africa followed by the University of Pretoria and University of Witwatersrand. Others that were favourably ranked were the University of Western Cape, University of South Africa and the University of KwaZulu-Natal (The Standard, 2006).

South Africa has suffered in recent years from brain drain of up to 25% of its graduates to the US alone. Moreover, 9.7% of all international medical personnel in Canada are South Africans (International Monetary Fund, 2006). It is estimated that up to 1.6 million people in skilled, professional and managerial occupations have left the country since 1994 (Ndulu, 2004). The brain drain has been attributed to, among other factors, perceptions of deteriorating quality of life, dissatisfaction with the cost of living, level of taxation, low remuneration, unrealistic workloads, poor infrastructure and sub-optimal conditions of work, high levels of crime, and demand for skilled workers in the UK, US, Canada, and New Zealand (Ndulu, 2004). The Minister of Education, Naledi Pandor (Ministry of Education, 2006) pointed out that the key challenge facing South African universities is how to ensure that higher education simultaneously develops the skills and innovation necessary for addressing the national development agenda, as well as for participation in the global economy. She observed that creativity is concentrated in a small number of highly talented individuals which need to be nurtured and retained in a country’s national system of innovation. In addition, there is need to provide the conditions in universities in which they are both nurtured and encouraged to remain in order for them to promote the aims of the developmental state. She acknowledged that the
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South African higher education is not performing well with regard to training new researchers and this was hampering the nation’s ability to enter new and important global areas of innovation. She lamented the shortage of researchers with PhDs in the universities saying only 11 of our 23 higher-education institutions account for 90% of the research output. She pledged to renew research infrastructure especially equipment at the Universities (Ministry of Education, 2006).

Wesso (2008) notes that most ICT graduates from the South African Universities are lacking in ICT hybrid skills needed to fit them in the information society labour market (Wesso, 2008). Besides, a study by Brown and Czerniewicz (2008) on trends in student use of ICTs in higher education in South Africa revealed that there is low use of ICTs for communication both in general and for academic purposes. 25% of students hardly ever communicate with fellow students by e-mail in general and 50% hardly ever participate in discussion lists. Another half does not communicate with lecturers and tutors by email, and more than half does not use or engage in synchronous activities online. Moreover, despite the rise of Web 2.0 tools for sharing information, 25% does not share resources using these tools, about half does not upload resources using these tools and 67% does not use these resources to publish content. 75% does not use blogs as part of their studies, 67% does not exploit the option of working collaboratively with other students online. Students also reported limited use of ICTs by lecturers, and those lecturers who use them exploit only presentation software and images. The authors raise concern from these findings in the light of the opportunities presented by Web 2.0 for knowledge sharing and the investment made by institutions in ICT infrastructure.

The Southern Africa Regional Universities Association (2008) February report states that South African universities are bandwidth starved, as a result students and lecturers complain that the slow speeds make internet-based research and work virtually impossible and may even create a negative sentiment towards it as a research tool. This is exacerbated by the fact that though Telkom’s broadband footprint of ADSL and WiMAX now covers about 90% of the country (Telkom, 2007) prices have only come marginally down (fast ADSL -348 kbps rental is ZAR 152 per month, less by 66% than in January 2005: Faster ADSL -512 kbps, ZAR 326, 52-59% less than in January 2005: Fastest ADSL-4mbps rents at ZAR 426 per month) making access still beyond the reach of many institutions and worse for individuals. A study by the Business Leadership Group on 15 countries world wide said ADSL (broadband) costs in South Africa were 139% higher than the average rate in the nations surveyed (Naidoo, 2007).

The University of Stellenbosch 2007 Annual Report points out that the university faces challenges related to globalisation and the expanding knowledge economy, changes in the subsidy formula and transformation in the higher education sector, student access and success, people management and diversity, expanding footprint to the rest of Africa, broadening participation in higher education, low through flow rates, backlog with regard to facilities, equipment and other capital, decreasing government subsidies impelling universities towards far reaching structural changes, and undergraduate teaching having come under the spotlight of senate. The report expresses concern that the university suffers from lack of credibility and therefore needs to improve its relevance to society. The report notes that recent rationalisation of institutions of higher education had a definite effect to the extent that the availability of funds for normal operations despite the fast expansion of the university was constrained. Kok (2007) points out that in view of the realities of the present funding system in higher education and there is need to exploit alternative forms of income, specifically the "third money stream" (where funds are earned from other sources than students and government).

Knowledge Management Paradigm

White (2004) perceives knowledge management as a process of creating, storing, sharing and reusing know-how to enable an organisation to achieve its goals and objectives. The Organisation of Economic Cooperation and Development (2003) defines KM as a broad collection of organisational practices related to generating, capturing and disseminating know-how; and promoting knowledge sharing within an organisation with the outside world. Similarly, Skyrme (1997) perceives KM as a process or practice of creating, acquiring, capturing, sharing, and using knowledge, wherever it resides, to enhance learning performance in organisations. Though knowledge management is said to have evolved in corporate environments as a result of the revolution in information and communication technologies, knowledge management ideas and
concepts have been available to managers for millennia. For example, Alexander the Great, Caesar, Napoleon and Henry Ford are referred to as pioneers of knowledge practice. However, knowledge as strategic resource started gaining momentum in organisations in the mid 1980s.

Knowledge management focuses according to White (2004) on the following:

i) Intellectual capital or intelligence
ii) Personal experience
iii) People’s beliefs, perspectives, judgments, expectations, intentions, relationships, etc
iv) Know-how, skills and competencies
v) Learning, critical thinking, and innovation
vi) Knowledge application
vii) Explicit and tacit representations.

Wagner (2008) identifies three major components of KM to include: people who create, share and use knowledge; processes that acquire, create, capture, organise, share, transfer and apply knowledge; and technology that stores and provides access to knowledge. Processes in KM may include scanning, document imaging, forms processing, classification, indexing, categorisation or taxonomy, backup and recovery, search and retrieval, publications, archiving, storage, migration, records management, e-mail management, etc. Within an organisation, knowledge is embodied in wisdom of people, expertise and talents, databases, records, portals, formal and informal meetings, memos, best practices, competitive intelligence, infrastructure, staff, teaching sources, course outlines, academic programmes, visions, missions, strategic and, budgets, accounting and financial systems, human resource systems, etc.

Technology is at the centre of knowledge management and helps to retrieve the various information and knowledge embodied in systems, institutional repositories, books, theses and dissertations, processes, strategies, methodologies, e-mails, patents, products, services, etc within and outside organisations. Knowledge can be explicit (documented information express-able in formal shared language) or tacit (embodied in peoples minds). Kidwell et al (2000) point out that explicit knowledge is packaged, easily codified, communicable, and transferable.

The increasing adoption of knowledge management in organisations has been fuelled by a number of factors. For instance, as the foundation of industrialised economies has shifted from natural resources to intellectual assets, executives have been compelled to examine the knowledge underlying their business and how the knowledge is used. Besides, the rise of networked computers has made it possible to codify, store, and share certain kinds of knowledge more easily and cheaply than ever before (Hansen et al, 1999). The motivations for integrating knowledge management in organisation processes cannot be over emphasised. The pressure of competitiveness and the incentives to lower costs are increasing with time in public sector organisations. Additionally, there is increased pressure for the public sector to demonstrate accountability and transparency in the use of public resources (International Record Management Trust, 2004).

Knowledge Management Strategies

Hansen et al (1999) in a study of knowledge management strategies of companies in several industries especially the consulting firms found two major practices of knowledge management which they respectively called codification and personalisation. The codification approach involves information being carefully codified and stored in databases, where it can be accessed and used easily by anyone in the company. Codification involves using people-to-documents approach where, knowledge is extracted from the person who developed it, made independent of that person and reused for various purposes. For example, after removing knowledge from the person, knowledge objects are developed by pulling key pieces of knowledge such as interview guides, work schedules, benchmark data, and market segmentation analyses out of documents and storing them in the electronic repository for people to use. This allows many people to search for and retrieve codified knowledge without having to contact the person who originally developed it. This approach makes it easy to reuse knowledge especially in developing projects proposals thus saving great amount of time.
The personalisation knowledge management practice according to Hansen et al (1999) involves knowledge being closely tied to someone who developed it and shared mainly through person to person contacts. This strategy focuses on dialogue between individuals not knowledge objects in a database. In this case, knowledge that has not been codified is transferred in brainstorming sessions and one-on-one conversations. To make this knowledge management strategy work, heavy investment is made in building networks to experts. Knowledge is shared not only face-to-face but also over telephone, by e-mail, via videoconferences, etc. Networks are developed by transferring people between offices, by supporting a culture in which consultants are expected to return phone calls from colleagues promptly, by creating directories of experts and by using consulting directors within the firm to assist project teams.

Firms have been found to focus on one of the strategies and using the other in supporting roles. Hansen et al (1999) state that codification provides high quality reliable and fast information systems implementation by reusing codified knowledge. It invests once in knowledge asset and reuses it several times. However, codification invests heavily in IT systems while personalisation invests only moderately in IT resources. The codification is useful where organisation is dealing with similar problems all the time. Personalisation is important for rapidly changing environment. Most solutions in codification have been proven and are reliable. The codification approach is cost-effective especially in reusing software programmes. Personalisation on the other hand can be very expensive because of high consultant fees that may be involved. Codification enhances sharing of knowledge while, personalisation strategy relies on tacit knowledge which is difficult to share and is time consuming, expensive and slow to transfer. If a company offers a standardised product or a mature product, it may benefit from a reuse model. On the other hand, if a company relies on tacit knowledge to solve its problems, then personalisation model may be appropriate.

Kidwell et al (2000) cite Nokia as one company that uses knowledge management practices to make sense of market trends and customer requirements to quickly put that knowledge into action in the product development pipeline. Nokia Company’s management system provides relevant information rapidly to whoever needs it in the organisation. It has a stronger customer focus, service ethic and is innovative in a highly competitive market.

**KM Integration in Universities**

Though medieval universities were expected to collect, preserve and transmit knowledge, they were not involved in its creation and application. This is a great departure from the modern universities whose core role is not only the creation of knowledge, but its dynamic storage, transmission and application. This role is well captured in most universities’ mission statements, aims and objectives which are consistent with knowledge management tenets of discovery, acquisition or creation of knowledge (through research), the transmission or dissemination of knowledge (through teaching); the application of knowledge to human problems in the interests of public service; and the preservation of knowledge in libraries, museums and archives (Allen, 1988:66).

Bhatt (2001) identifies five phases of knowledge management to include knowledge creation, knowledge validation, knowledge presentation, knowledge distribution, and knowledge application. Knowledge creation is the first phase and refers to the ability of an organisation to develop novel and useful ideas and solutions. The knowledge management chain was incomplete in medieval universities discounting the notion that universities have always been involved fully in KM (Goddard 1998; Oosterlinck, n.d). Besides, information and communication technology is a critical tool and key driver of knowledge management which the medieval universities did not enjoy. Despite the fact that KM is of critical importance in modern universities, it has not seamlessly been integrated within the cultural milieu of most universities. This perhaps explains why Maponya (2004) citing Ratcliffe-Martin, Coakes and Sugden (2000) observes that universities do not generally manage information well instead, they tend to lose it, fail to exploit it, duplicate it, do not share it, do not always know what they know and do not recognise knowledge as an asset.
Agarawal (n.d) points out that higher education in today’s environment is subject to the same pressures of the marketplace and increased competition is pushing universities to think like business. Moreover, the educational markets are becoming global as universities and higher education institutions attempt to internationalise their curricula and offer high-quality programme to students regardless of location. They also face higher competition for a share of student market, both local and international. Moreover, they have to adjust themselves and develop strategies to respond rapidly to the changes in technologies and increasing demands of stakeholders.

Knowledge Management Practices in Some South African Universities
A conducive environment exists for KM adoption within universities in South Africa. Singh (2000) points out that an enormous amount of policy support (especially research and training) is taking place in many of the south Africa’s public higher education institutions, science councils, national research facilities and research institutes linked to universities, non-governmental organisations and labour movement. Research and development is supported by private sector, foundations and foreign aid to a large extent. Government is spending closer to 1% of GDP on research. All government regulatory frameworks for higher education seek to create a new trajectory for knowledge development, knowledge sharing, knowledge management and knowledge utilisation away from the preservation for racially defined minority. Moreover, higher education and science and technology systems have seen the publication of White papers which require greater responsiveness to development priorities on the part of knowledge systems, institutions and organisations as well as great efficiency and accountability with regard to the expenditure of public funds. Moreover, the connection between knowledge resources, knowledge capabilities and national social and economic development is made strongly and often in government’s position.

The government has through deeds challenged higher education and science systems to ensure South Africa’s successful entry into the globalised knowledge economy by increasing capacity to produce, access and apply knowledge which is both technical and social. The government has further demonstrated its commitment to harnessing knowledge to participate effectively in the knowledge economy by establishing government funded research support organisations such as the Human Sciences Research Council (HSRC) and National Research Foundation to enhance knowledge generation and build research teams, facilitate multidisciplinary and problem-solving research which cut across disciplinary and institutional boundaries, promote knowledge diffusion and dissemination and link academics and researchers with industry, government and civil society. The government has also taken steps to regulate intellectual property issues especially with regard to indigenous knowledge systems and biodiversity resources.

A number of local factors are reportedly placing knowledge management issues at the forefront of an increasing number of South African executives though universities are not largely in this league. The motivations for KM by the executives according to McLean (1999) include: isolation from global economy resulting in a huge knowledge disconnect from world class business practices which has come to the fore through entry of multinationals in the South African economy. The other factor relates to brain drain which results in the massive net outflow of intellectual capital and the consequent need to explore technologies application and methodologies that would facilitate retention of those knowledge assets within organisations beyond the person’s physical departure. Finally, transformation initiatives needed to redress the historical imbalances within the economy require rapid knowledge transfer to ensure that the full intellectual support infrastructure is in place to improve the success of the transformation process.

Stellenbosch University seems to recognise the importance of knowledge management in its operations. The 2007 Annual Report says, the university places great emphasis on sharing acquired knowledge through publication of research results in national and international journals as well as in books and chapters in books, and strong postgraduate programmes. For example, in 2005 the university contributed 11.2% and 10.6% of masters and doctoral degrees awarded at South African universities respectively. The university had in 2007, 224 National Research Foundation (NRF)-rated researchers. The report states that 2007 was characterised by spirit of sharing. Besides, the university had specialised expertise and resources at its disposal that could not remain in the exclusion of traditional target groups. Consequently, Council had
given approval for faculties to institute parallel medium tuition particularly at undergraduate level to enhance access.

The Vice-Chancellor's Report 2007 of the University of Cape Town (University of Cape Town, 2007a) reveals that UCT was among the top 200 universities in 2007, according to Times Higher Education Supplement World University Ranking. UCT was the only African University among the four in the developing world to be named in the rankings. UCT also experienced student enrolment growth by 3% in 2007. UCT has currently 26 of the 70 research chairs of the 70 chairs in the South African Research Chairs Initiative and Signature Theme. In 2007 UCT had 28 new NRF ratings bringing the total to 279. UCT is enhancing its research through the emerging researcher programme (ERP) as well participation in the Thuthuka programme that is aimed at human and institutional capacity development. The Programme provides support for women, black and young researchers, within the research, innovation and knowledge generation arena in the country, as part of research capacity development. The core objectives of the programme are: improvement of the qualifications of the designated research group to doctoral and postdoctoral levels; accelerate the progression of the designated research group into the mainstream of competitive national and other research support opportunities; contribute to the sustainable research capacity development of the designated research group and; increase the number of NRF rated researchers from the designated research group in research nationally and internationally.

These initiatives have increased the research output of participants at UCT and helped improve on academic exclusions and at the same time diminished dropouts. Moreover, this effort has resulted in increased completion rates, among first-time entering undergraduate cohorts with success rate ranging between 86-90%. Focus is overly on teaching and learning in terms of expertise, resources and constructive engagement with problem areas. Innovations in teaching and learning are encouraged and examples of good practice identified in the academic reviews are disseminated widely.

UCT has also shown significant progress in integrating strategies to improve teaching and learning into mainstream faculty plans. The University has increased its interventions within high schools systems notably through maths and science education project. Other initiatives include marketing campaign that seeks to widen undergraduate applicant pool so that there will be broader range of students to consider for places at UCT. UCT recognises challenges facing it to include transforming the profiles of staff more rapidly, improving customs and behaviour that structure personal interactions with university community, and HIV/AIDS prevalence of 10% but projected to increase to 12% by 2010. The University carried out a research to trace registered students who achieved 50% of credits necessary for qualification, but who dropped out of courses in targeted scarce skills areas. Other outreach projects include building long term strategy for enrolment planning in higher education in targeted areas, discussion with business schools about provision of opportunities for continuing professional development, etc. UCT is also involved in networking with communities through colloquiums on interconnectedness of research, teaching, social responsiveness and curriculum responsiveness.

UCT enhances its research visibility by, among other things, making it locally responsive and engaging with various stakeholders. The University research strategy emphasises global competitiveness of its research outcomes. The research capacity in the University is enhanced through support for postgraduate studies, start up grants for new appointees, strategically selected research focus areas, support for departmental accredited journals, and the continuous review of its research strategy (Research Office, 2007). On the other hand, the University of Pretoria emphasises multi-disciplinary research to minimise duplication as well as identify niche areas (University of Pretoria, 2007).

**KM Infrastructure**

Organisations that are knowledge management-intensive have some or more of the following knowledge-based resources (Corall, 1999):

i) Knowledge databases and repositories (explicit knowledge)

ii) Knowledge route-maps and directories (tacit and explicit knowledge)

iii) Knowledge networks and discussions (tacit knowledge).
Knowledge databases and repositories consist of stored information and documents that can be shared and re-used, such as client presentations, competitor intelligence, customer data, marketing materials, meeting minutes, policy documents, price lists, product specifications, project proposals, research reports, training packs, etc. Knowledge route-maps and directories on the other hand, are tools that point to people, document collections and datasets that can be consulted such as yellow pages, ‘expert locators’ containing CVs, competency profiles, and research interests. Knowledge networks and discussions refer to networks which provide opportunities for face-to-face contacts and electronic interaction such as chat facilities for, fostering learning groups and holding best practice sessions.

Increasingly, the concept of digital dashboard has emerged as a KM tool customised for knowledge workers and consolidates personal, team, corporate and external information and provides single click access to analytical collaborative resources. It brings an integrated view of a company’s knowledge sources to an individual’s desktop enabling better decision making by providing immediate access to key business information (Microsoft, 2000).

**KM Benefits to Universities**

Kidwell et al (2000) identify some areas that may benefit from knowledge management in universities to include research process, curriculum development, student and alumni services, administrative services and strategic planning. With regard to research process KM application would be applied in developing a repository or portal of research interests within the institutions and affiliates containing for example, research results; funding organisations; commercial opportunities for research results; pre-populated proposals; budgets and protocols; proposal routing policies; award notifications; account set up procedures; negotiation policies; procedures for technical and financial support; internal services and resources. The benefit from these KM applications with regard to research would include: increased competitiveness and responsiveness for research grants, contracts and commercial opportunities; reduced turnaround time for research, facilitation of inter-disciplinary research, leveraging of previous research and proposal efforts; improved internal and external services, reduced administrative costs; and outsourcing to meet internal skills shortfall (Luan, 2002). Moreover, KM can be deployed in higher education to facilitate determining the most profitable customers, clients likely to defect to competitors, etc.

With regard to curriculum development, KM may be applied to develop a repository of curriculum revision effort including research conducted, effectiveness measures, best practices, lessons learned, portal of information related to teaching and learning with technology. Such portal would also contain hubs of information in each discipline, including updated materials, recent publications, repository of analysed students’ evaluations, guides on developing curriculum, etc. The KM benefits from this application would include: enhanced quality of curriculum, improved speed of curriculum revision; improved administrative services, interdisciplinary curriculum design, etc (Kidwell et al, 2000).

The students’ alumni KM application would relate to portal for student services to enable faculty and students to be well informed in their respective roles. Information on the portal would include policies and procedures related to admissions, financial aid, registration, degree audit, billing, payment, housing, dining, career placement services; alumni contacts, research interests, etc. KM benefits from this application would include: improved services for students, improved service capability for faculty, improved services for alumni, improved effectiveness and efficiency, etc. The administrative services application of KM on the other hand could include: portal for financial services i.e. budgeting and accounting, best practices, procedures, templates, communities, procurement (e.g. purchasing, accounts payable, receiving, warehousing); human resources (e.g. vacancies, payroll, affirmative action, best practices, templates), etc. With regard to strategic planning, KM application would relate to portal for internal information that catalogues the strategic plans, reports developed from external environmental scans, competitor data, and links to research groups. Benefits here would include improved ability to support the trend towards decentralised strategic planning and decision-making; and improved sharing of internal and external information (Kidwell et al, 2000).

Dyer and McDonough (2001), state that the primary business uses or domains of KM include: capturing and sharing best practices, providing training and corporate training, managing customer relationships, delivering competitive intelligence, providing project workspace,
managing legal and intellectual property, enhancing web publishing, supply chain management, etc. E-learning is one of the most important KM practices that can enable students and staff to leverage their intellectual asset. Milam (2001) observes that colleges will be better able to increase student retention and graduation rates, retain a technology workforce, expand new web-based offerings, analyse the cost effective use of technology to meet more enrolment, etc. Through KM, distributed learning will become the norm where information and knowledge that is not necessarily located on campus can be accessed by professors as well as students. The goal would be to help improve teaching effectiveness by encouraging self-guided exploration, and collaborative learning. KM would also enable distance learning where students not necessarily on campus can gain access to knowledge using electronic means (e.g., synchronous and asynchronous technologies). The goal is to increase the productivity of faculty by expanding geographical reach (Rangwasamy, 2000). In general, companies that adopt KM have the following benefits: improve profits, grow revenues, support e-business initiatives, shorten product development cycles, and provide project workspace. Microsoft (2001) points out that organisations that reward collaboration and information sharing are outperforming companies that discourage these practices.

**Challenges of Knowledge Management**

As universities contemplate adopting KM practices, they will have to content with a number of challenges. Milam (2001) citing Dyer and McDonough (2001) identifies several knowledge management challenges including: employees having no time for KM; current culture that fails to encourage sharing; lack of understanding of KM benefits; lack of skill in KM techniques; lack of funding for KM; lack of incentives or rewards to share; lack of appropriate technology; and lack of commitment from senior management. Kidwell et al (2000) explain that relying on institutional knowledge of some staff with specific expertise and knowledge may hamper the flexibility and responsiveness of any organisations. The challenge to convert the information and those individuals knowledge and make it widely and easily available to any faculty member, staff person or constituent is critical.

Hansen et al (1999) observe that since knowledge management is so young, executives have lacked successful models that they could use as guides. Most knowledge management systems relate to inadequate or outright lack of human resources, infrastructure, finance, illiteracy, relevant content, and technologies. Leonard (1999) notes that challenges with KM relate to the difficulty of handling knowledge in different formats, issues relating to protection of intellectual property, patent processing, confidentiality protection, dealing with intangible products and auditing intellectual capital that involves establishing its existence, its ownership and its value. Other challenges of knowledge management according to Storey and Quintas (2001) relate to the difficulties of:

i) Winning trust, motivation and commitment of stakeholders  
ii) Managing workers who are not conventional employees such as contract workers and consultants  
iii) Reliance on knowledge workers who may leave the organisation without their knowledge having been captured  
iv) Vulnerability of Web-based systems and other technology infrastructure  
v) Replication and piracy.

**Way forward for KM in South African Universities**

Kidwell et al (2000) point out that as organisations contemplate adopting knowledge management approaches, the following steps are recommended:

i) Start with strategy and determine what you wish to accomplish with KM  
ii) Avail human resources, financial resources and information technology to support KM  
iii) Seek a high-level champion who can advocate for KM as needed  
iv) Select pilot project for KM with high impact and low risk on the organisation  
v) Develop a detailed action plan for the pilot that defines the process, the IT infrastructure, roles and incentives of the project team  
v) After the pilot, assess results and refine the action plan.
The South African universities need also to undertake business process reengineering, nurture a KM culture in the organisation, (re)develop content in the form of portals, websites, intelligent agents, etc. Building a culture of sharing would involve buy-in by customers to the tenets of knowledge management. Moreover, KM must be integrated with the firm’s existing strategic direction so that the core competencies, and employee capabilities can be transformed and the performance of the organisation improved. Additionally, a knowledge audit is needed before implementing KM approaches. Such a KM audit would facilitate finding, analysis, interpretation, and reporting of a company’s information and knowledge policies, its knowledge structure and knowledge flow (Hylton, 2002). The purpose of KM audit is to determine existing knowledge, gaps in the existing knowledge or knowledge flow in the organisation and in order to develop a knowledge map.

Knowledge management can also be enhanced in organisations by motivating staff so as to keep their skills and avoid depletion of the talent pool. Organisations can offer security of long term employment, in order to minimise high staff turnover and costs of knowledge maintenance (Leonard, 1999). Besides, effort should be made to develop a recruitment policy that emphasises research skills, postgraduate programmes with student funding schemes, mentorship systems, creating a research culture, improving research infrastructure (such as access to well equipped libraries, offices, classrooms, access to the Internet and electronic journals) (University of Botswana, 2006). Oosterlinck (n.d.) makes proposals on how universities can improve KM practices including drafting a mission statement that incorporates KM: creating awareness concerning the responsibility and accountability of the university members towards the university’s stakeholders; increasing international openness; preparing students for the knowledge society; professors and students working together, in order to strengthen the total research quality and the overall level of academic performance.

Conclusion

The importance of KM as a natural process in education cannot be over emphasised. KM management holds great potential for higher education in South Africa but for this to be realised it is important to understand how to align, within a specific environment context three core resources namely: people, processes and technology. Organisations that invest in new technology without understanding their organisation and human patterns of information sharing are bound not to reach their investment potential. Besides, leveraging organisation’s know-how and best practices can make a dramatic difference to a university’s basic competence, its flexibility, its responsiveness, and its customer relationship. Finally, as universities the world over including those in South Africa contemplate adopting KM practices, Davenport and Prusak (1998) principles of knowledge management are worthy keeping in mind, namely that: KM is expensive, KM needs both people and technology, KM is highly political; KM needs knowledge managers; KM must be practical and simple: creation and sharing of knowledge is unnatural: knowledge work processes must be promoted and supported through KM: access to knowledge is only the beginning of KM: KM never stops: and KM needs a knowledge contract.

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The vexed “colour problem”: Doris Lessing and the “African Renaissance.”

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I am going to begin with a quotation from a recent article in the journal, Rethinking Marxism:

‘One of the major critical issues of debate in Africa is the question of revitalizing African cultures. In South Africa, this has been given the name of African renaissance, and it is perceived as a continental ideology. However, debates are mired in essentialisms that have obscured rather than clarified the potentially unifying effect of the notion in Africa.’ (Vambe, Taonezvi Zegeye, Abebe, 2008: abstract). This quotation emphasizes the importance of the aspirations of African people in the quest for African unity and the revitalization of African cultures. Their argument emphasizes looking towards the future rather than the past. However, it is difficult to escape references to the past and in particular to precolonial Africa when speaking of renaissance. In fact in order to revitalize a culture, one must surely look back to see what vitalized it in the first place. So while not disputing the importance of aspirations, I argue that looking back to Africa’s past is an important part of the notion of African renaissance.

The central reason for the need for an African renaissance is the damage done to African culture by colonialism. Indigenous African culture is suppressed and degraded while westernized culture is imposed. Part of this process involves the construction of meaning. In particular, the meaning of history and culture is constructed by colonial discourse during the colonial period. Edward Said explains in Orientalism that it is possible “for many objects or places or times to be assigned roles and given meanings that acquire objective validity only after the assignments are made.” (Said, Orientalism (1978) 202). It is therefore important for Africans to resist the meanings assigned to their culture by colonial discourse and to re-establish the meanings that they had before the advent of colonialism.

Antony Chennells explains that “an obvious form of anti-colonial resistance to these constructions of a colony’s meaning is to deny their truth: the periphery insists on its rights to draw meanings from itself not as periphery but as centre. Resistance to colonialism is possible, this argument implies, only because the indigenous culture remains intact and therefore possesses its own incontrovertible authority.” (1999:113) diversity. Indigenous culture is by definition connected to the past, and the system of knowledge that describes that culture is what we now call IKS or Indigenous Knowledge Systems. Thus IKS is an important tool in the restructuring and revitalizing of African culture in the African Renaissance.

How then is Doris Lessing connected to Indigenous Knowledge Systems or the African Renaissance? Indeed, one may on the surface think that she represents the colonial ‘other’ as the stories that she writes about Africa are set during the colonial period in Zimbabwe – then Rhodesia, and reflect the settler community. The crucial question is, what meaning does she assign to African culture? Does it support colonial discourse, or does it subvert and undermine it?

When I was teaching Lessing’s African Stories to a class of black students at the University of Zululand during the time of the old, Apartheid South Africa, I found that students were initially resistant to these stories. They reacted against what they perceived to be racism in her use of terms, such as “kaffir”, even though this term was used in a non-derogatory way, to describe objects such as the ‘kaffir orange’ tree and the kaffir path. They also objected to her representation of black people in menial relationships to the whites, in master-servant roles. I took these criticisms seriously, and as we were studying protest literature, I suggested that we look more carefully at her representation of black people in the stories to see whether she was in fact making a protest against the colonial discourse, and if so, what kind of protest it was.
We studied interviews with Lessing herself and various critical articles and one of the main points that came up was that Lessing puts the “colour problem” in a wider context than its colonial African context. She says in an interview with Eve Bertelsen in 1986,

About this colour bar thing: the point I was making was that it’s not just the white man’s attitude towards the black, but people’s attitudes to each other in general – all over the world you’ll have a dominant group despising the rest. This is the pattern. This is what interests me more and more. I’ve found it very limiting when people say ‘you are a writer about colour bar problems’. I wasn’t writing only about colour bar problems. Not even my first volume was only about colour bar problems, there were a lot of other themes in it (1986: 138).

This broader cognitive framework enabled the students to distance themselves slightly from the emotive force of the terms and to accept their use as being a reflection of the way people spoke at that time. However, the danger of a broader framework is that it can lead to over-generalisation. Eve Bertelsen is concerned that making it a universal problem “lets the colonialist off the hook” as it were. She asks Lessing, ‘I wonder whether when you ask the reader to take a general meaning out of the stories you are downplaying the historical particulars – the fact that there were specific policies that caused the suffering and problems in Rhodesia at that historical time?’ Lessing’s reply to this, apart from the above quotation was, “what you want me to do is to write didactic novels.” (1986:139) Bertelsen of course denies this but it is exactly what the students would probably have responded to. They wanted the criticism against racism to be clearly defined and unequivocal. When Lessing depicts characters in her stories making racist remarks or behaving in a condescending or paternalistic way towards blacks, she is showing what the settlers were like. Her views are different. The distinction between Lessing’s own viewpoint and that of the characters in the stories was not immediately evident to the students, however, and it took some close examination of individual stories for the students to be able to see that Lessing’s criticism of racism was more subtle and nuanced than what the students had come to expect from other more simplistic and indeed caricatured representations of racist attitudes, and also novels with a high level of didactic content.

The students’ objection to seeing blacks being portrayed as servants is reinforced by Eileen Manion who acknowledges that Lessing’s representation of black people in her African fiction is restricted. She says, ‘within her African novels and stories, there are few educated Africans, and the predominating relationship between whites and blacks is that of master and servant…..Seldom do we see in her fiction Africans and Europeans forming friendships, having (non-exploitative) love affairs, or uniting in political action.’ (1982, 435).

However, what we discovered was that even within this restricted framework, Lessing portrays black people as being in some way superior to the whites. Their power is limited within the colonial system but it nevertheless has an impact on the whites and it points to the value of their indigenous culture while simultaneously showing up the arrogance, paternalism or rude behaviour of the whites. Stories which illustrate this point are “The Old Chief Mshlanga”, “A Home for Highland Cattle” and “No Witchcraft for Sale.”

“The Old Chief Mshlanga” is a well known story which has received considerable critical attention. The story has autobiographical elements in it and the focus of criticism has mostly been on the young white girl and her slowly evolving consciousness about the way colonialism affects the lives of the black inhabitants of the land. This is prompted by an unexpected meeting between her and Chief Mshlanga on her father’s farm. What needs to be highlighted here in terms of the African Renaissance is that the reader is given a glimpse of the precolonial order in the person of the Chief. Significantly, he behaves with grace and dignity in the face of the arrogant young girl, heir to the land he has lost. The narrator (as retrospective “I”), acknowledges this as she describes the meeting:

A Chief! I thought, understanding the pride that made the old man stand before me like an equal – more than an equal, for he showed courtesy, and I showed none.
The old man spoke again, wearing dignity like an inherited garment, still standing ten paces off, flanked by his entourage, not looking at me (that would have been rude) but directing his eyes somewhere over my head at the trees. (1994:16).

The girl violates the code of politeness which forbids that a young girl address a chief by his name and asks him directly what his name is. One young man of his entourage answers for him, thus rescuing him from further humiliation. Later in the story she again breaks the social codes by going to his homestead to see him there. Again we as readers are allowed an opportunity to see the style and beauty of the traditional African architecture. This makes the outcome of the story more shocking as the homestead falls to ruin after the Old Chief is forced to leave his land, thus underlining the displacement of the indigenous people during colonialism. However the traditional African culture is held up as something to be admired and tragically mourned for as it is destroyed and humiliated in this story. It is captured iconically in the picture of the Old Chief when he comes to see the farmer (the narrator’s father) at the end of the story to discuss the damage his goats have done to the land.

He arrived at our house at the time of sunset one evening, looking very old and bent now, walking stiffly under his regally-draped blanket, leaning on a big stick. My father sat himself down in his big chair below the steps of the house: the old man squatted carefully on the ground before him, flanked by his two young men. (1994: 23)

The Old Chief has no power in this situation – colonialism has robbed him of his power but the sad picture of his “regally-draped blanket” is a poignant reminder of his once powerful position in society. The father sitting in his big chair, comfortable and superior while the chief squats in a menial position is surely one of the lasting and memorable pictures the Lessing has created in these stories of colonial power, while the narrator looks on, helpless to prevent it but describing the ‘pathetic, ugly scene, doing no one any good.’ In situations like this, where the white settler is wielding power over the black inhabitant, Lessing often shows that the power relations damage both sides. There is a sense of impotence and hopelessness in the narrator’s reaction. She deplores the harm that is being done to the Chief and his people but must also accept that harm has been done to her father as well, since his fields have been damaged by the Chief’s goats. It’s a situation where no one wins and the Chief’s last statement rings out ironically today when we know what the consequences of the settler appropriation of land has been in Zimbabwe.

Lessing shows us how traditional cultural values of African society are denigrated and degraded. It is partly due to colonialism and also due to urbanization and poverty (which one could say is a result of colonialism). Lobola, for example, is treated with grotesque tragi-comedy in “The Home for Highland Cattle.” The young, liberal-minded British couple, newly arrived from England, has a difficult time adjusting to the African experience. For Marina, it is the older British settlers who she has the most difficulty with as their conservative views clash directly with her liberal outlook. For Giles, it is the reality of working with black farmers in the bush. His intervention is that of an agricultural adviser as he is a soil scientist. Faced with the difficulties of the situation on the ground where there is over-grazing and soil erosion, he focuses on getting black farmers to reduce their herds. In a note to his wife he writes:

Spent this morning as planned, trying to persuade these blacks it is better to have one fat ox than ten all skin and bone, never seen such erosion in my life, gullies twenty feet deep, and the whole tribe will starve next dry season, but you can talk till you are blue, they won’t kill a beast till they’re forced.......Until all this mystical nonsense about cattle is driven out of their fat heads, we might as well save our breath. (Lessing, 1994: 271)

Significantly, he doesn’t mention the fact that the reason for overgrazing is that the land available to black farmers has been drastically reduced by the settler government. He chooses rather to belittle the custom as “mystical nonsense.” However this view reflects no doubt a commonly-held opinion in settler society. Lessing satirizes this young couple and is ironic about their liberal ideas which seem to get whittled away quite quickly.
Later in the narrative, Marina intervenes in her servant, Charlie's lobola problems by giving him a painting of Highland Cattle to use instead of real cattle. She and Philip then transport Charlie and the painting to his prospective father-in-law's shack in an informal settlement outside the city. The ludicrous inappropriateness of the gift illustrates the extent to which colonialism imposes its stamp on the culture and traditions of Africa.

The grotesque humour of the scene changes to a tone of deep sadness and loss as the narrator reports the man's reminiscences: He tells the young people about “the long courting, according to the old customs, how, with many gifts and courtesies between the clans, the marriage had been agreed on, how the cattle had been chosen, ten great cattle, heavy with good grazing” (Lessing, 1994: 293). The narrator writes, “he was asking them to contrast their graceless behaviour with the dignity of his own marriages, symbolized by the cattle, which were not to be thought of in terms of money, of simply buying a woman – not at all. They meant so much: a sign of good feeling, a token of union between the clans, an earnest that the woman would be looked after, an acknowledgement that she was someone very precious, whose departure would impoverish her family – the cattle were all these things, and many more.” (1994:293).

His words bring out the nostalgia for the pre-colonial times when the customs were respected and the land was available to graze enough cows. By satirizing the British couple, Lessing undermines their views whereas by lending beauty and poignancy to the words of the man talking about lobola, she counteracts the effect of Philip's dismissive tone and brings out the true value of the African traditions.

Another aspect of African tradition that Lessing demonstrates the value of is that of indigenous knowledge about medicinal plants. This is the central issue in the story “No Witchcraft for Sale”: one of the most ironical of her stories. Irony is encapsulated in the title: In what Chennells refers to as “the constituting gaze of the metropole” (113), the denigrated term, ‘witchcraft’ is used to denote the superstitious, primitive side of ‘savage’ life in Africa. It carries with it all the nuances of the superiority of western society, their rationality and scientific and technological superiority. It contains the way in which Africans were viewed by the white colonizers. But the irony is that it is this very “witchcraft” which saves little Teddy Farquar's eyes when he is spat at by a poisonous snake. Western medicine is powerless to help him. [A further irony is of course that the colonial’s superiority towards the practice of witchcraft has a very flimsy basis as it was something that was practiced in Britain until very recently and may still be practiced.]

In this story, Gideon saves the eyesight of a little white boy, Teddy, who is the only son of Gideon’s employer, Mrs Farquar. Gideon has a double identity. He works as a servant in her kitchen but is also one of the most famous medicine men of the district. His knowledge of indigenous plants enables him to quickly find a plant in the veld which is an anti-dote to the snake’s poison. This story demonstrates the superiority of indigenous knowledge as opposed to western scientific knowledge. However, Lessing does not leave the story there. She continues to demonstrate how imperialism reaches over the realms of indigenous knowledge.

The news of this healing spreads through the district and as a result, a scientist visits the farm in order to find out about the plant that was used. A conflict then ensues between Gideon and the whites as they try to persuade him to show them the plant. Eventually he seems to give in: “He lifted his head, gave a long, blank angry look at the circle of whites, who seemed to him like a circle of yelping dogs pressing around him, and said: ‘I will show you the root.’ “(1994: 41).

What he does, however, is to lead them through the bush in the hot afternoon sun for two hours, and then finally pick a random plant “that had been growing plentifully all down the paths they had come”(1994: 41). In this way Gideon manages to stave off intervention from western science and he protects the sacred knowledge which had been passed down to him by his forefathers. The whites are punished for trying to force the knowledge out of him, and the knowledge remains intact and secret, hence the title.

This story shows that Doris Lessing was aware of the problems related to the protection of intellectual capital and indigenous knowledge systems long before the topic became popular. What the colonial discourse denigrated as Africa’s weaknesses, “Negritude valorized as sites of power and as superior ways of being and knowing.”(Chennells, 1999: 113). What Lessing does is
to show that Africans such as Gideon possess such “superior ways of being and knowing” and that these are in fact under attack from the whites – or under from the colonial centres of power and knowledge. They wish to incorporate these into their own systems which have been shown to be lacking when it comes to experiences of Africa.

Through these stories we have seen that Lessing shows respect for certain African customs and traditions: for the traditional structures of African society such as the Chief, and the dignity that such a position can carry with it; for the traditional system of lobola and what that represents, and lastly for the knowledge and power of indigenous plants and their medicinal value. She gives them value through the narrative and in this way supports the notion of African Renaissance and Indigenous Knowledge Systems.

References
Drawings as a Method of Evaluation and Communication with Bereaved Children

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ABSTRACT
There has been a lot of concern as to whether children grieve or not when death strikes in their immediate environment. If the experience of bereavement can be reliably measured in children, insight into their painful experiences will be gained and appropriate treatment strategies will be established.

This study aims to explore whether projective drawings can provide a reliable method of exploring the world of a black bereaved child. The Human figure drawing (HFD), Self Portrait, Kinetic Family drawing (KFD) and Own Choice/spontaneous Drawing was administered on a group of 20 bereaved children and a control group of 20 non bereaved children. In general, more Emotional indicators were identified on HFDs and Self Portraits of the Bereaved Group. Result showed statistically significant differences between the two groups in four indicators on HFDs (big figure; teeth; monster/grotesque; hands cut off) and in two indicators on Self Portrait (slanting figure and hands cut off) KFDs and Own Choice Drawings could not statistically differentiate the two groups but were found to be of assistance in gaining insight into the family dynamics and for gaining respite from grief work respectively, in the bereaved group. Composite analysis of the four projective drawings provided more insight into the world of the bereaved child.

Literature Review
While (Bowiby. 1980; Worden, 1986; Case, 1987; Forrest & Thomas, 1991) suggest children present with grief reactions in the form of behaviour following attachments loss, there is much concern as to whether children complete the grief process when death in their immediate environment occurs. To many people, children do not really understand death (McMahon, 1992; Hemmings, 1995). A child is often ignored and it is assumed that she/he is unaware of the life! death process (Worden, 1986). Siegel. Mesagno and Christ (1990) have indicated that some parents feel children should not be involved in situations which concern death. Forrest and Thomas (1991) documented that the emotional pain experienced by bereaved children may at times unrecognized and therefore unresolved. Christ, Siegel, Mesagno and Langosch (1991) suggest that psychosocial development and mental health of children may be affected by the death in the child's family or immediate environment. Thus, helping children deal with the suggested emotional pain caused by bereavement will result in an immediate healthy childhood long term psychological well being in adulthood. Mental health professionals, psychologists in particular, can contribute and assist identified bereaved children through the implementation of effective intervention strategies.

Children often find it very difficult to articulate their feelings verbally (Worden, 1986; McMahon, 1992). Research (Siegel, 1980: Forrest & Thomas, 1991) has shown that many children express painful experiences effectively through drawings and as a medium they often feel this is easier than verbal articulation. Supporting the notion that drawing is a natural mode of expression, Koppitz (1983) stated the following: “During the elementary school years boys and girls can express their thoughts and feelings often better in visual images than in words” (p.2). Winnicott (1971) has also recognized the value of using drawings to help children express problems and worldly-views and this is in keeping with research which has used drawings to reflect their concerns (Koppitz, 1968: Klepsch & Logic, 1982; Bums, 1982; Golomb, 1992). Therapists introduce drawings to facilitate communication and expression, utilizing it as a means of assessment. Kelly (1984: 1985) suggeststhat human figure drawings can be used as “emotional assessment indicators” to identify trauma in young children, who are unable to verbalize their feelings. Cantlay (1996) states that both distress and trauma can be expressed and identified in drawings.
In addition to helping children express their feelings of grief, drawings assist the process of healing. The overall purpose of this study was to identify the bereaved feelings expressed in children’s drawings.

**Method**

**Aim**

The first aim of this study was to report findings concerning the grief which children experience when they lose an immediate family member. Secondly, to clarify the relationship between projective drawings and expressions of an affective meaning in life. Thirdly, the inner world, individual feelings and personality structures of bereaved children needed to be clearly assessed using an alternative medium such as drawings.

**Hypothesis**

It is expected that children’s drawings will provide sufficient information about emotional state to distinguish the bereaved children’s group from a matched control group.

**Participants**

Forty (40) children who attend primary school in the KwaZulu-Natal province participated in the study. All participants were Zulu speaking (one of the largest Southern African language groups). Group A (experimental) consisted of bereaved (20) children and a matched group B (control) consisted of non-bereaved (20) children.

The sample was chosen due to the following reason as noted by Siegel (1960) research done using projective drawings is usually conducted with small samples. None of the 40 subjects had any significant psychological disorder in the past. For the total sample, ages ranged from 8 to 12 years. Inclusion in the experimental group meant that the bereaved child had lost a parent or sibling in the past six months.

The present study used a non-probability convenience and purposive sample (Bailey, 1978; Reaves, 1992; Schweigert, 1988). As suggested by Bailey (1978), research projects, often use non-probability samples despite the drawbacks that arise from their non-representativeness. This is due to the fact that they are less expensive, easier to use and are adequate for non-generalizing purposes.

**Measuring instrument**

The data were collected using a series of qualitative individual interviews and psychological assessments. Using literature by Harris, (1963); Koppitz, (1968) and Mayekiso, (1982) has emphasized the importance of using individual assessment together with projective drawings, as individual assessments provide a more thorough observation and understanding of the individual during the drawing process and allows for the opportunity to clarify questions about the drawn figures. As suggested by Koppitz (1968) an attempt was made to provide an environment that was comfortable and uncluttered. No pictures were placed on the walls as this could have served as models which the children may have copied.

Well known psychological instruments which have been used extensively with children were utilized. They were easy to administer and were well tolerated by all participants. The interviews and assessments took place over a period of six months. Informed consent was obtained from each participant’s parent/guardian. Letters of informed consent were written in Zulu to accommodate the overwhelming majority of the parents who were Zulu speaking (most with a primary school education). All interviews and instructions with the participants were given in Zulu to prevent any misunderstanding. The research design incorporated the use of both descriptive and inferential analyses.

According to Lammand and Grantt (1998) art work (including projective drawings) produced by clients should be protected in the same confidential manner as with verbal communication. Protocols were therefore not identified by name and the parents were assured of confidentiality.
Questionnaires and informal interviews were conducted with teachers who provided a case history and information on the participants was very relevant to the study. The projective drawings used in this study were the human figure drawing (HFD), self-portrait (SP), kinetic figure drawing (KFD) and own choice drawing (OCD).

**Procedure**
The following sequence of drawings was conducted by each participant
1) Human figure drawing (HFD)
2) Self-portrait (SP)
3) Kinetic family drawing (KFD)
4) Own choice drawing (OCD)

**Data analysis and results**

Qualitative data collected was scored, coded, checked and responses were tabulated in the following frequency tables:

**Human figure drawings (HFD)**

Table 1 shows a breakdown of the emotional indicators on the HFD’s by the experimental group (A) and control group (B).

TABLE 1: Emotional Indicators on HFDs of the experimental and control group
<table>
<thead>
<tr>
<th>Emotional Indicators</th>
<th>Group A</th>
<th>Group B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor integration</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Shading of face</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Shading of body, limbs</td>
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<td>0</td>
</tr>
<tr>
<td>Shading of hands, neck</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Asymmetry of limbs</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Slanting figure</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Tiny figure</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Big figure</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Transparencies</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Tiny head</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Crossed eyes</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Teeth</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Short arms</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Long arms</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Arms clinging to body</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Big hands</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Hands cut off</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Legs together</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Genitals</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Monster, grotesque</td>
<td>4</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Three figures</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Clouds</td>
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</tr>
<tr>
<td>No eyes</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>No nose</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Big mouth</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>No body</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>No arms</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>No legs</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>No feet</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>No neck</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>
Table 1 indicates six of the items (poor integration, tiny figure, monster, teeth, and no feet) were found exclusively in the protocols of the experimental group. Five items (asymmetry, slanting, short arms, hands cut off, and no neck) were found in both experimental and control groups' protocols but were more frequently validated by the experimental group participants.

The frequency of three items of shading of face, no nose, and no mouth was equally for both groups' protocols. Transparency indication was found more often on protocols of the control group rather than the experimental group. Fifteen HFD items were not present in any of the experimental nor control group protocols.

The four items of big figure, teeth, hands cut off, and monster/grotesque were found to be more common on protocols of the experimental group rather than the control group.

According to Koppitz (1968), Emotional indicators must be considered compositely for diagnostic significance. Thus the total number of emotional indicators for each subject's HFD was considered important. Table 2 shows the number of Emotional indicators on HFDs of the experimental group in comparison to the control group.

Table 2 shows that only one (5%) of the 20 participants in the experimental group had no emotional indicators compared to nine (45%) control group participants. In the experimental group, five participants had more than two emotional indicators compared to none (0%) in the control group.

Table 2: Number of Emotional indicators on HFDs of experimental group and control group. N=40

<table>
<thead>
<tr>
<th>Number Of Emotional Indicators</th>
<th>Group A</th>
<th>Group B</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>1</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
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<tr>
<td>20</td>
<td>20</td>
<td>20</td>
</tr>
</tbody>
</table>

Self-portrait
Table 3 shows emotional indicators of the experimental group and control group on self portraits. N=40

**TABLE 3: Emotional indicators on self portraits of the experimental group and control group.**

<table>
<thead>
<tr>
<th>Emotional Indicators</th>
<th>Group A</th>
<th>Group B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor integration</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Shading of face</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Shading of body, limbs</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Shading of hands, neck</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Asymmetry of limbs</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Slanting figure</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Tiny figure</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Big figure</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Transparencies</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Tiny head</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
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<td>3</td>
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<tr>
<td>Long arms</td>
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<td>0</td>
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<tr>
<td>Arms clinging to body</td>
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</tr>
<tr>
<td>Big hands</td>
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<td>0</td>
</tr>
<tr>
<td>Hands cut off</td>
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Table 3 shows that nine of the items (poor integration, shading of face, asymmetry, tiny figure, big figure, crossed eyes, arms clinging to body, monster/grotesque and no feet) were found exclusively in protocols of the experimental group. Four items (slanting figure, teeth, short arms and hands cut off) were present in both groups' protocols but more common on the experimental group protocols. Transparencies and shading of hands and neck were found exclusively on the control group protocols.

Table 4 shows the number of emotional indicators of self portraits of the experimental group compared to the control group.

Eleven of the 20 participants (55%) in the control group had no emotional indicators on their protocols compared to three (15%) in the experimental group. Twelve (60%) of the experimental group participants displayed two or more of the emotional indicators on their protocol as compared to only 4 (20%) in the control group.

**HFD and Self-portraits analysis**

In protocols for both HFDs and SPs the number of protocols with two or more emotional indicators was always higher in the experimental group than in the control group. The total number of protocols from the experimental group with no emotional indicators was 4 (10%) as compared to 20 (50%) protocols in the control group. The total number of protocols with one emotional indicator was found to be 13 (33%) in the experimental group with 12(30%) in the control group. As discussed by Koppitz (1968) the presence of only one emotional indicator implies absence of serious emotional problems. For two or more emotional indicators, a difference between the two groups was evident. The total number of protocols with two or more indicators was 23 (58%) for the experimental group and only 8 (20%) for the control group. As discussed by Koppitz (1968) two or more emotional indicators are suggestive of emotional problems including interpersonal problem.

**Kinetic family drawings**

Analysis showed that it was easier to differentiate between the two groups as they were found exclusively in protocols of the experimental group participants. These variables included compartmentalization, unexpected description of figure actions, no face and position of figure
with respect to safety. As revealed in this study, these variables could be regarded as an important screening measure when assessing for psychopathological family dynamics, which can occur in bereaved families.

**Own choice/spontaneous drawings**

The measured own choice/spontaneous drawings was not effective in differentiating the experimental from the control group participants.

In this study the spontaneous or own choice drawing served the purpose of relieving tension or relaying wishes rather than differentiating between the experimental and control groups. Davies's (1995) view is validated, in that drawings can serve as a mechanism of distraction from grief work.

**Discussion**

The findings of this study provided evidence that children indeed go through the process of grief. Grief symptoms reported by bereaved children were confirmed by parental reports. The emotional indicators on human figure drawings and other variables on kinetic family drawings, reflected symptoms that characterized bereaved individuals.

Findings also supported the concept that grief is a unique process (lemmings, 1995). While grief symptoms were similar in most of the bereaved children, the grief process was not identical in nature.

This study was able to support the assumption that children’s drawings provide sufficient information emotional state to distinguish a bereaved child from a child who is not suffering from grief. As noted by Maichiodi (2001) childrens drawings can reveal thoughts, feelings and psychological wellbeing reflecting the child’s persona.

As discussed by Cobia and Brazerton (1994) projective drawings are amongst the most commonly used assessment tools on socio-emotional assessment. As revealed in this research, the human figure drawings (HFDs) and self portraits (SP) were able to distinguish the bereaved group participants from the non-bereaved group participants. Big figure, teeth, monster/grotesque figure, hands cut off and slanting figure were the emotional indicators which indicated a large difference (when HFDs and self portraits were separately considered). Those emotional indicators found exclusively on the experimental group protocols were found to be diagnostically important and they could assist in the understanding of the inner world of a bereaved child.

The kinetic family drawings could not significantly differentiate the experimental from the control group but were found to be invaluable in providing insight into the family dynamics. Variables identified, such as omissions, were consistent with psychopathological interpersonal relationships within bereaved families.

Own choice/spontaneous drawings also. could not significantly distinguish experimental group from control group of participants.

**Conclusion**

The following conclusion can therefore be drawn from the research. Human figure, self portrait and kinetic family drawing provide a composite picture for gaining primary insight into the inner world of the bereaved child and the bereaved child’s family dynamics. Own choice drawings can be administered to assess a child’s feelings toward bereavement once this has been identified.

Projective questions following completion of any projective drawing was an invaluable assessment. When in doubt, check information out by asking the child directly. The current
research revealed that projective drawings have an important role in psychology. Projective drawing research is often criticized for selective reporting, where only significant results are found (Garb, Wood & Nezworski, 2000) and distortion in analysis, where indicators are not clearly defined (Abraham in Lev-Wiesel, 1999). In this study results are shown, guidelines for scoring used, and technique indicators were clearly defined. Since the sample for the present study was small and confined to a limited geographic area, future studies exploring similar concept with larger samples would allow for the generalization of results. Future studies should have independent raters for human figure drawings, self portraits and kinetic family drawings to increase reliability.

References


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Intoga: Stick Fighting Game – A Ndebele Perspective

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ABSTRACT
This article looks at the practice of stick fighting as was practised and engaged in by Ndebele young boys. It analyses the game by looking into the methods and rules used in the game and other cultural practices linked to this game. It further attempts to check how much value is still attached to this game by the modern Ndebele people.

Introduction:
The game of iintonga is perhaps as old as the Ndebele nation itself if not the Black nation itself. It has been found to be taking place in almost all the Black nationalities in one form or another. Consistent with the theme of this conference, the iintonga game can, in my view, in one way or another indicate to us how legitimate a claim for a land is. It is an indisputable fact that coming with the land restitution claims are a number of cunning twisted fakes with double agendas. Some of these become apparent when we find that more than one group of people present an application over the same piece of land. A machinery has to be put in place to check such irregularities. It is argued therefore, that cultural practices such as iintonga game can perhaps help us. If any individual were to claim to be a Ndebele, and was claiming a piece of land as the one that once belonged to his forefathers, it would perhaps be a good thing to test him and find out how much of the Ndebele culture he understands. The game of iintonga would be a good question.

The term “iintonga” as it stands is a plural form of “intonga” which means a stick. For a stick to be referred to as an intonga it has to be about a meter in length with a radius of about a centimeter and a knob not to be too conspicuous on the other side. The intonga is used primarily as a sort of a walking stick. But perhaps the main reason of carrying an iintonga is that traditionally a male is not expected to undertake any form of journey empty handed. The question normally put forward is “What if a snake is encountered on the road?” A snake in this sense will refer to anything which would prove to be a menace, human beings included. An intonga should not be confused with idondolo. An idondolo is primarily used for balancing by the elderly when they walk. The latter is never used for fighting but is often used for correctional punishment especially by one’s elderly. It is common to hear a grandmother shouting, “Ngizakufak’ idondolo!”

The term “iintonga” in the context of this paper refers collectively to fighting sticks, where more often than not, the shield is also included without giving it any special mentioning. This game is found to be taking place in almost all Black nationalities of our country and beyond our borders. Msimang (1985) says that this game is also popular among the Zulu people and is called “ukungcweka”. He further explains that, “Ukungcweka ngumdlalo omuhle wokufundisana nduku” (Ukungcweka is a lovely game where people teach each other the stick fighting game)

Msimang (ibid) explains further that, “Anilweli udelisani kuphela nifundisana induku nemiphoso, nawo onke amangwevu okulwa.” (This really should not be taken as a fight but as a method of teaching each other the technique of stick fighting.) (Msimang, 1985, 167)

Who engages in stick fighting?
It would appear it is in the nature of human beings to every now and again engage in some form of power testing where strength and technique is put to test. You only need to think of the present day boxing game, martial arts, wrestling, fencing and the rest of the other games.
The greatest difference between Western games of this type is perhaps in the name. In the
Western language they will always talk of a “fight” (sic) between Dingaan Thobela and Baby
Jake Matlala. The word “fight” is always there. Why call it a fight if it is a game? In Ndebele we
always say “ukudlala iintonga”. The term “dlala” is always there to indicate that we are engaged
in a game.

Among the Ndebele there is an age group which is expected to engage in the iintonga game. This
is a group of boys that has just graduated from herding cattle and is at the stage where they will
go for initiation. The boys are going through a stage called “ukugwaba” and they themselves are
called “abasegwabo” or affectionately as “abogwabani”. They are a group halfway between
boyhood and manhood. They are fond of moving in a group and would always make their
presence felt especially when there is an umnyanya, a traditional party. Their favourite
umnyanya is known as “ique”, which is a ceremony marking that a young girl is now a teenager.
This group of boys will always chant lovely songs and entertain the guests with melodious music
accompanied by the most current way of dancing.

Boys herding cattle also do engage in the iintonga game though to a lesser extent. These boys
play iintonga more as a foretaste of things to come. More often than not, instead of using sticks
they will use small tree shrubs. They use these on daily bases to perfect their skills in this game.

In some homes where there are girls only and no boys to herd the cattle, the job is done by girls.
Such girls end up taking part in all activities engaged in by herd boys. These girls also learn the
art of playing iintoga. Sometime they work this art to the pick of perfection. Many boys and
sometime future husbands to these girls are often embarrassed when during times of
misunderstandings an open challenge is advanced to them.

The iintoga game is never engaged in by grown up men. When men take up iintonga for each
other, it is viewed in a much more serious light because that will be a fight.

The basic necessities

Just like any other game, the iintonga game follows certain procedures. For you to can play you
need two very necessary items. One needs isibhuku, a knobkerrie and ikhande, a shield. A
Ndebele youngster and his knobkerrie are inseparable. He always keeps it with him whatever
the cost. When not under threat he will find a place around his waist and allow it to hang there.
Normally a young tree is uprooted and both the bottom part and the handle are nicely carved. It
is used specially for striking and never for shielding. The size of the knob depends on individual
taste. It may be anything from a golf size to a coffee mug. As long as it will not be too heavy for
the owner.

Knobkerries come in all shapes and sizes. The length of the handle also depends on individual
taste. A long handle normally indicates that the owner is a coward who is always ready to strike
standing far away and always be ready to run away. A short handle, known as “unokorwana”
indicates that the owner is very brave and is not afraid of a close contact encounter. With this
one you cannot stand far away from your opponent. You jump close to him using a method called
“ukukhwela”.

The shield is for self protection against blows from the opponent. Shields for this group are
different from those carried by Zulu warriors. This one is round-shaped with a radius of about
the size of a ruler. All in all it is about the size of a 51cm television set with a long stick
protruding both on the top and the bottom part.

It is made out of a cowhide with the hairy part facing the opponent. The inner part is well
 cushioned with soft sheep wool. The cushion is there to act as a shock absorber in case a blow
lands on the shield. A player who is a regular participant in the game of iintonga this becomes
evident from his shield as it will have areas without any hair. The shield is normally not carried
around. It is only carried around when there is a likelihood for it to be used. It has a small string whereby its owner can carry it on his back.

The nature of the iintonga game

Several ways can be used to set up a game. The two most favourite ones are those of “imbizo” where several bouts of stick fighting will take place. The name imbizo is from the verb “biza” which means to call. So this is a call wherein the message circulate by word of mouth stipulating the day and venue of the “coming together.”

Another popular way is that one of meeting at a traditional party called iqude. Here the normal proceedings of the day carry on undisturbed until late after lunch. These youngsters normally travel in schools depending on the area they come from. It is not common for them to mix. This is because more often than not, they despise one another or are bearing grudges for each other, girls being at the centre of the whole squabble. All the abasegwabo who are guests of this ceremony will remain in their respective groups.

Late in the afternoon, a whistle would be cheerfully blown. This whistle is normally a cue for them to go and meet at a secluded place for a few bouts of iintonga. They all leave silently without causing any scene. Sometimes they take different directions and make it appear as if they are now leaving for home. They will all disappear on the other side of the hill. There the different groups will converge still maintaining their groups.

Another occasion which normally takes place on the same day as iqude is called “umganga”. This ceremony takes place in a room where both the boys and girls of this age group are allowed to be alone together which is itself a rare occasion in Ndebele. As special gift the day the girls would give the boys meat called umganga. These are ribs cooked in a traditional way without being chopped and are normally the favourite dish of this group. For all boys to gain access into this room they must have taken part in the iintonga game earlier on. The izingwenya, the champs stand at the door as monitors and admit only those who took an active part during the game. All cowards are turned away. If they, (the cowards) hang around long enough they may be allowed to gain free admission late towards the end of the ceremony after they shall have missed all the fun. This spurs them to take an active part next time thus ensuring a bigger number of contestants next time.

The actual game

The name "evadleni" is a special name used to refer to a competition of this nature. The meeting place is normally a flat plain. They identify a spot known as itjhatjhalazi, meaning a plain piece of ground. By this time they will all have their fighting material with them. A knobkerrie and shield is put at the centre of the plain. Once these have been put, it is a declaration that the games may begin. Any individual who feels like challenging an opponent would take the knobkerrie and shield and wild it in the air moving up and down showing how he would attack his opponent. The Ndebele people use the term “ukutjhagala”. This performance is an open challenge normally interpreted to mean, “let anyone worthy of his salt dare come and get me!”

Once the challenger starts performing the ukutjhagala movements, a prospective opponent from the other group will jump up with his own knobkerrie and shield. According to the rules of the game it has to be somebody more or less one’s own size and more or less your age. If the challenger is satisfied with the opponent he would move towards him which is a sign that the game is starting. There is no referee or umpire, nor is there any timekeeper. The bout would go on and on up until one of them is defeated. There is no winning in points, nor is there any technical knock out. There is only one win and it is a knock out.

If the challenger starts performing the ukutjhagala movements, and a prospective opponent comes to him and he feels he cannot take this one or is afraid of him, the challenger has to throw down both his knobkerrie and shield and go and sit down in shame and embarrassment.
A game may last any length of time. For many it lasts for less than a minute. Normally it depends on who strikes first and strike at a place which would force the opponent to retire. If the blow is a good one the opponent will immediately give up by falling on his knees or buttocks.

Normally the head is targeted. There are two types of blows that one may receive on one's head. The first one is when you may receive a blow which is not so hard and you end up with a swollen spot but with no blood oozing out. That one is called ingongoma.

A blow may land and produce an open wound. It may be an open wound but small in size in which case it is referred to as, "iduma elisikazi" (literally meaning "a female wound"). A wound may be referred to as "iduma elidundu", a male wound. This happens when the blow is a hard one and leaves a bigger cut. Sometimes the Ndebele people refer to this cut as "igandelela". This type of a blow would always cause one to fall down. One will consider oneself lucky if one could still remember how one landed on the floor. Many do not. Although this game is meant for entertainment, sometime a killer blow may leave the opponent unconscious. More about this later.

Just like in any ordinary game, some players may attain a high standard of playing and they become champions. Such a player is known in Ndebele as "ingwenya" or "ikutani" which means "a champion".

Ikutani is someone who has mastered the art so well that no one dares to challenge him. Anyone who dares to challenge him find himself biting the dust before he even knows what is going on. Ikutani will, therefore, every now and then pick up his iintonga and perform ukuthagala just case there is someone who can dare challenge his status (ukudhlrunyelwa zingazi. If there is no one he returns with pride to his sit and watch the proceedings.

News soon filter down to the village that so-and-so is an ingwenya or ikutani of iintoga game. He gains the respect of the community and he becomes the pride of his family. He may carry that title until he dies. His kids would also learn of their father's title through his father's friends and peers. The honours of that title do trickle down to his children. One would hear people saying, "Lo ubelethwa nguSpereketjhana, ingwenya yangekuthikuthini, eyayibetha khulu leya". (This is so-and-so's child who used to be a champ and a good fighter).

Every ingwenya has jurisdiction over a particular area. Although it is not common but it does happen that at one particular meeting two or three champions of different regions meet, and then the champ of champ title is contested. Sometimes the scenario may become very, very ugly.

If the opponent has been struck on the head and blood is oozing over his face and it is apparent that he cannot continue with the game, in the true spirit of the game, it is the duty of the challenger to sympathetically help him to the river and wash his wound.

Rules of the game
The game is always well regulated. It has rules and regulations which participants must observe without failing. The rest of the members of the audience see to it that the rules pertaining to the game are observed. There is something different with the Ndebele people which makes them somewhat different from the other Nguni people. Fair play is strictly observed during the izintonga game even during actual fighting. For instance, during a fight a Ndebele person would defeat the opponent, the moment one runs away towards or enter one's home he would not pursue the opponent any further. According to the Ndebele culture a person may not be followed and be killed in his own home. Home is always respected as a place where a person may enter and say, "I am safe!"

During the iintonga game one waits until one's opponent is ready. He must have in his hands both isibhuku and ikhande. Your opponent is regarded as still challenging you for as long as he has his iintonga and is still on his legs. Once the opponent falls down, one may not continue to attack him. Once his knobkerrie slips out of his hand you have to wait for his fellow mates to give
him back his knobkerrie. If it is broken he has to be given another one, a practice known as “ukuhloma”.

You are not allowed to aim at the knees or knuckles especially for boys who use isiviko only and not ikhande.

**Part played by foul play and witchcraft**

Just like in most games, no matter how much precautions are taken, foul play always surfaces here and there. The commonest of them all is to strike the opponent when he is down or has lost grip of his knobkerrie. This practice normally has devastating consequences. It may change the game into a free-for-all fight. Often this is an opportunity used by some opportunistic opponents who are bearing grudges against each other. Often for reasons totally outside this game. A grudge against someone who took one’s girlfriend is one of the most common ones.

One other common foul play is the use of umuthi. Depending on whether you believe in muthi or not but the Ndebele people believe there is considerable of muthi involved in the iintonga game.

This is usually caused by an over zealous quest to be the winner. The iinyanga can dispense all sorts of muthi. Among the ingredients used for muthi, it is believed that the following animals play an extremely important role. I will give only three examples here but there are more.

**The swallow (ikonjani):**

A swallow has very good reflexes. It is next to impossible to strike it using a stone or any other object. It will always sway away from a blow as if nothing has happened. This is precisely what the opponent does when he uses a swallow. You never can get at him. Your blows would always go astray.

**The bat (umaphelephelana):**

The spell emitted by a bat plays a different set of monkey tricks with you. It is a known fact that bats always take to the skies after sunset when it is dark. A bat therefore, causes one to be momentarily in darkness and you could therefore not see a blow coming. You never can tell what happened. All one would feel is the hard surface of the ground followed by the smell of dust as you kiss the floor. Should you choose to strike first you suffer the same fate. Your opponent is in the dark and you can hardly see him well. If you release a strike the likelihood is that you will miss him because it is not easy to strike a bat.

**The mole (ifukwana):**

A mole has no eyes and is completely blind. If an opponent has used a mole on you it causes temporary blindness on you the moment he is in front of you. For the entire duration of that minute or two you become completely blind. He does with you as he pleases.

One of the most popular outfit are what through the lack of a better term I called fighting belts (amabhande). Fighting belts are worn by many Ndebele males. These belts are worn on each arm just above the biceps. They are thought to be providing their owner with power. Any prospective opponent is negatively affected or weakened by these belts because they are thought to be well “worked” with muthi. (asetjenziwe)

Even in the modern world a number of Ndebele males continue to wear these belts under their shirts. They rely heavily on them at work to be keeping the enemy in abeyance.

It is believed that the muthi used by some people on their knobkerries is so strong to such an extent that even if he may playfully throw a blow at you and miss you, you will feel dizzy and fall down. These and many other tricks are used as foul play in the iintonga game.

It is perhaps because of the above reasons that a knobkerrie is one’s personal and very private property. A Ndebele youth would never lend it out to someone else. These are restrictions he gets from his iinyanga.
Going together with these, his knobkerrie is never touched by females. It is believed that the *muthi* in it would be weakened (*ukuphupha*). If a female finds it lying down across her way she may for the above reason not jump over it. Young girls are taught from a young age to observe all these. They obey this up to their dying days even if they one day happen to get married they treat their husband’s knobkerries with the same reverence. Girls are tested time and again on this. If a knobkerrie is lying across the door way through which a young lady wishes to pass, that door is as good as closed, she would not be able to remove it nor can she jump over it.

**In cases of fatalities**

Although *iintoga* are a game, it cannot be denied that this game can be fatal some times. Cases are known where participants received fatal injuries in the game. There are cases of people who suffered permanent broken cerebral bones as a result a heavy blow on the head. Some become semi-lame and some have suffered complicated skull deformities and have remained in that state for the rest of their lives.

Foul play described earlier on sometime leaves an opponent unconscious. When and if such an unfortunate mishap takes place and the monitors suspect that this condition is caused by muthi, the user of such a knobkerrie is forced to produce an antidote. (*Umkhathisa isihlungu*) This stuff he usually gets from his *inyanga* and he carries this with him all the time. The effects of the *muthi* used only show its effect a day or two later. This is noticed when after a fight a few days later, a boy starts showing strange behaviours. Typical such behaviours are sleepless nights or when a boy would up jump and use his hands to shield himself as though he is taking part in a fight.

It then becomes the duty of the elderly to find out who his opponent was and where the opponent stays and the sick boy is taken there and a ceremony called *ukwelula* is performed. Among others, this involves referring to the *inyanga* which dispensed the deadly venomous *muthi*.

**Conclusion:**

With the advent of the new slogan “azibuye emasisweni” people tend to go back to their roots. They re-examine the type of lives which were led by their forefathers. All practices and activities which identified them as a nation must be revived. It is my belief that the *iintonga* game can be revived successfully with a big following. Modernisation and a few adjustments can be made. For instance I have in mind that the knobkerrie can be manufactured from a spongy material which will not be life threatening but which will be hard enough to knock someone down.

Perhaps among many lessons, the *iintoga* game teaches one to be disciplined especially in addressing people. In meetings like this one, by the manner in which a person speaks to you, or carries out an argument with you, you can tell that this one has never been taught a lesson.

A Ndebele male never parts with his knobkerrie. No religion or civilisation can make him part ways with it. Up to today, it is almost a certainty that underneath the seat of his car one would find a knobkerrie. Behind the headboard of his bed there is another one. In a wardrobe there is yet another one again.

**References**


Barriers that Impede the Effectiveness of Precautionary Measures of HIV and ADIS in Tertiary Institutions in KwaZulu Natal

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1. Background and problem statement

The aim of this study is to explore and identify the barriers that impede the effectiveness of precautionary measures of HIV and AIDS. Much has been said about HIV and AIDS and its dangers, however less has been said about the barriers that impede the effectiveness of its precautionary measures. The study also seeks to provide researchers and health professionals with information that may assist them in their decision making processes and take appropriate actions in the intervention programs. In addition, the study is intended to promote to sensitize and foster research on STDs in tertiary institutions and nationally.

In essence, AIDS can perfectly be described mainly as a sexually transmitted disease (STD). Thus, its transmission is via body fluids that harbour the Human Immunodeficiency Virus (HIV) (Djarova, 2003). It must be noted that HIV and AIDS are diseases that can affect anyone at any time. It is not a disease for gays, African people, or intravenous drug users. Moreover, it is not even exclusively sexually transmitted, because of cases of HIV and AIDS due to blood transfusion. Furthermore, the letter author points out that HIV and AIDS is the most dramatic, pervasive, and tragic pandemic (global epidemic) in recent history. Hubley (1995:01) and Smith (2002) lucidly define AIDS as Acquired Immune Deficiency Syndrome. As the name implies it is a disease caused by a deficiency in the body's immune system. The letter authors add that it is a syndrome because there are a range of different symptoms which are not always found in each case. Furthermore, they state that it is acquired because AIDS is an infectious disease caused by a virus, which is spread from person to person through a variety of routes.

It is evident that barriers that impede the effectiveness of precautionary measures of HIV and AIDS do exist. However, their nature and scope require a rigorous investigation. Surprisingly, is that some of the students in tertiary institutions still find it difficult to practice safe sex, notwithstanding the fact that government provides more information and lots of precautions to fight the spread of HIV and AIDS. This has been evident by high pregnancy rate among students. This view is shared by the United States Ag ency for International Development (2000) which states that despite the efforts of National Government and NGOs, Southern African populations have been slow to adopt safer sex practices.

Worth-mentioning is that as at the end of 2002, it was estimated that 40 million adults and children were living with HIV and AIDS (UNAIDS, 2004). The document adds that the total number of the newly infected HIV people in that year was 5 million while the number of those who had died from AIDS was estimated to be 3 million. In advancing this view Lupton, et al (2002) caution that 14000 people • 12000 adults and 2000 children become infected each day with at least 95 percent of these new infections occurring in developing countries. Onyacha, and Ocholla (2005) are of the opinion that with this kind of trend, and if the status quo remains, it is estimated that there will be 45 million new HIV infections by 2010. They add that an analysis of HIV and AIDS situation in eastern and southern Africa portrays a grave picture. They further point out that the two regions are home to 17.4 million people living with HIV and AIDS, forming 69.4% of the total number of people infected with HIV in sub-Saharan Africa.

2. Research methods and procedure

The study targeted only students in two purposively selected tertiary institutions in KwaZulu Natal province, namely: University of Zululand and Mangosuthu University of Technology. A stratified sampling was used to draw a list of students in the faculties selected. The population
being sampled here is as follows: Firstly, the University of Zululand had a population of five thousand two hundred and twenty two (5222) students, while Mangosuthu University of Technology had six thousand three hundred and eighteen students (6318). The researcher used a scientific method by drawing one percent (1%) from the targeted population. The number of students in both tertiary institutions was eleven thousand five hundred and forth (11 540). One percent of this total number is one hundred and forten (114). The scientific method applied is as follows (n/x * 100). The same percentage was applied in both tertiary institutions in the following manner: the University of Zululand had 5222 students and 1% of this is 52 and Mangosuthu University of Technology was composed of 6318 students and 1% of this is 63. The overall number of targeted students is 114.

A self administered questionnaire that was largely closed- ended or structured (80%) helped the researcher to capture data in the following broad areas: respondents characteristics, barriers that impede the effectiveness of precautionary measures of HIV and AIDS, strategies that may be applied to fight the spread of HIV and AIDS, and awareness of precautionary measures of HIV and AIDS. The response rate was 100% of 114 distributed questionnaires. Empirical data of the survey was analyzed using largely descriptive statistics and with the help of Statistical Package of Social Sciences (SPSS) and Ms Excel.

3. Results

3.1 Characteristic of respondents (n=114)
The majority of the respondents 58 (51%) were from the Mangosuthu University of Technology while 56 (49%) were from the University of Zululand. The respondents consisted of 63% females and only 36.5% were males, The majority of the respondents represented by 72 (63%) were between 15 and 22 years of age, with the majority of the respondents 111 (97%) being Africans and only 3 (3%) were Indians.

BARRIERS THAT IMPEDE THE EFFECTIVENESS OF PRECAUTIONARY MEASURES OF HIV AND AIDS

3.2 Awareness of the barriers that impede the effectiveness of precautionary measures of HIV and AIDS
The study sought to find out whether the respondents were aware of barriers that impede the effectiveness of precautionary measures of HIV and AIDS. The question required them to indicate either by yes or no. The responses are reported on the table below.

<table>
<thead>
<tr>
<th>TERTIARY INSTITUTIONS</th>
<th>KNOWING THE BARRIERS</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>UZ</td>
<td>20 (17.5%)</td>
<td>36 (31.5%)</td>
</tr>
<tr>
<td>MT</td>
<td>25 (22%)</td>
<td>33 (29%)</td>
</tr>
<tr>
<td>Total</td>
<td>45 (39%)</td>
<td>69 (61%)</td>
</tr>
</tbody>
</table>

Table 1 above shows that from both tertiary institutions 45 (39%) of the respondents were aware of the barriers, while a significant number represented by 69 (61%) were unaware at all. Therefore, going with the results it can be concluded that students are not aware of the barriers that impede the effectiveness of precautionary measures of HIV and AIDS.

3.3 Barriers that impede the effectiveness of precautionary measures of HIV and AIDS
The respondents were asked to indicate the barriers that impede the effectiveness of precautionary measures of HIV and AIDS. The question was open-ended and provided the respondents with flexibility of expressing themselves freely. Respondents were allowed to choose more than one option. In addition, the respondents were asked to indicate any other barriers not listed and thus, multiple responses were generated as presented in the table below.

**Table 2: Barriers that impede the effectiveness of precautionary measures of HIV and AIDS (N=114)**

<table>
<thead>
<tr>
<th>BARRIERS</th>
<th>INSTITUTIONAL AFFILIATION</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MT</td>
<td>UZ</td>
</tr>
<tr>
<td>Conservative cultures</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>Male migration</td>
<td>13</td>
<td>23</td>
</tr>
<tr>
<td>Access to Condoms</td>
<td>37</td>
<td>42</td>
</tr>
<tr>
<td>Re-Marriage</td>
<td>14</td>
<td>10</td>
</tr>
<tr>
<td>Commercial sex workers</td>
<td>27</td>
<td>22</td>
</tr>
<tr>
<td>Poverty</td>
<td>21</td>
<td>18</td>
</tr>
<tr>
<td>Multiple sexual relationships</td>
<td>27</td>
<td>23</td>
</tr>
<tr>
<td>Living single sex quarters</td>
<td>17</td>
<td>16</td>
</tr>
<tr>
<td>Wealth &amp; higher social status</td>
<td>22</td>
<td>29</td>
</tr>
<tr>
<td>Gender and prevalence of violence</td>
<td>10</td>
<td>8</td>
</tr>
</tbody>
</table>

The respondents were provided with the list of barriers to choose from as table 2 above demonstrates. The majority of the respondents represented by 79 from both tertiary institutions felt that access to condoms is the barrier (61), also male migration was considered to be a barrier and multiple sexual partners scored high (50).

### 3.4 The first time heard of HIV and AIDS

Table 3 below indicates responses to the question “when did you first hear about HIV and AIDS”. The respondents were provided with a list of years to choose from. The response are summarised below.

**Table 3: The first time heard of HIV and AIDS (N=114)**

<table>
<thead>
<tr>
<th>First time heard of HIV and AIDS</th>
<th>Tertiary Institutions</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>UZ</td>
<td>MT</td>
</tr>
<tr>
<td>1970s</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>1980s</td>
<td>16</td>
<td>7</td>
</tr>
<tr>
<td>1990s</td>
<td>35</td>
<td>43</td>
</tr>
<tr>
<td>2000</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>Total</td>
<td>56</td>
<td>58</td>
</tr>
</tbody>
</table>

Expectedly, the majority of the respondents represented by 68% first heard of HIV and AIDS in 1990s and also those who heard about HIV and AIDS in 1980s were also significant. Basically, these findings are not surprising on account of the fact that nowadays tertiary institutions are dominated by the youth under the age of 18.
3.5 Getting informed about HIV and AIDS
The respondents were asked to indicate the ways they got informed about HIV and AIDS. The respondents were provided with a list of possible sources to choose from and were allowed to choose more than one as was applicable to their situations. The results are summarized on the table below.

**Table 4: Getting informed about HIV and AIDS (N=114)**

<table>
<thead>
<tr>
<th>Sources</th>
<th>Institutional Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>UZ</td>
</tr>
<tr>
<td>Parents</td>
<td>1 (1%)</td>
</tr>
<tr>
<td>Television</td>
<td>28 (25%)</td>
</tr>
<tr>
<td>Teacher School</td>
<td>6 (5%)</td>
</tr>
<tr>
<td>Internet</td>
<td>2 (2%)</td>
</tr>
<tr>
<td>Newspapers</td>
<td>7 (6%)</td>
</tr>
<tr>
<td>Newsletters</td>
<td>-</td>
</tr>
<tr>
<td>Medical personnel</td>
<td>-</td>
</tr>
<tr>
<td>Priest</td>
<td>-</td>
</tr>
<tr>
<td>Friend</td>
<td>-</td>
</tr>
<tr>
<td>Radio</td>
<td>12 (11%)</td>
</tr>
<tr>
<td>TOTAL</td>
<td>56 (49%)</td>
</tr>
</tbody>
</table>

It can be seen from table 4 above that the overall response rate in both tertiary institutions indicates that media to include television and radio are playing a major role in distributing information about HIV and AIDS while the priest is used mostly less.

3.6 Awareness of precautionary measures of HIV and AIDS
The study sought to establish whether the respondents were aware of precautionary measures of HIV and AIDS. The respondents were required to indicate either by yes or no. The findings are discussed on the table below.

**Table 5: Awareness of precautionary measures of HIV and AIDS (N=114)**

<table>
<thead>
<tr>
<th>Tertiary institutions</th>
<th>Awareness</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes  N  %</td>
<td>N  %</td>
</tr>
<tr>
<td>UZ</td>
<td>56 (49%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>MT</td>
<td>58 (51%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Total</td>
<td>114 (100%)</td>
<td>0 (0%)</td>
</tr>
</tbody>
</table>

The table above shows that all the respondents 114 (100%) from both tertiary institutions were aware of precautionary measures of HIV and AIDS.

3.7 Abiding by precautionary measures of HIV and AIDS
The study sought to find out whether students do abide by precautionary measures. Respondents were asked to indicate their views on the scale of 1 (strongly disagree) through 5 (strongly agree). Table 6 below summarises the responses from the respondents.

**Table 6: Abiding by precautionary measures (N=114)**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Institutional Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>UZ</td>
</tr>
<tr>
<td>Total</td>
<td></td>
</tr>
</tbody>
</table>
Barriers that Impede the Effectiveness of Precautionary Measures of HIV and AIDS in Tertiary Institutions in Kwazulu Natal

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>39 (34.2%)</td>
<td>14 (12.2%)</td>
<td>1 (0.8%)</td>
<td>2 (1.7%)</td>
<td>56 (49%)</td>
</tr>
<tr>
<td>42 (37%)</td>
<td>13 (11.4%)</td>
<td>2 (1.7%)</td>
<td>1 (0.8%)</td>
<td>58 (51%)</td>
</tr>
<tr>
<td>81 (71.2%)</td>
<td>27 (23.6%)</td>
<td>3 (2.6%)</td>
<td>3 (2.6%)</td>
<td>114 (100%)</td>
</tr>
</tbody>
</table>

Table 6 above shows that a significant number 108 (98%) of the respondents from both tertiary institutions indicated that they do abide by the precautionary measures of HIV and AIDS, while only 6 (5%) do not abide by precautionary measures.

3.8 Precautionary measures used by students

The study sought to establish precautionary measures the respondents were using to combat the spread of HIV and AIDS. Respondents were provided with a list of precautionary measures to choose from. In addition, the respondents were allowed to choose more than one as was applicable to their situations. Table 7 below summarises the responses from the respondents.

Table: 7 Precautionary measures used by the respondents (N=114)

<table>
<thead>
<tr>
<th>Precautionary Measures</th>
<th>Institution</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>UZ</td>
<td>MT</td>
</tr>
<tr>
<td>Condoms</td>
<td>44</td>
<td>47</td>
</tr>
<tr>
<td>Abstinence</td>
<td>35</td>
<td>22</td>
</tr>
<tr>
<td>Faithfulness</td>
<td>32</td>
<td>41</td>
</tr>
<tr>
<td>No sex before marriage</td>
<td>31</td>
<td>34</td>
</tr>
<tr>
<td>I sexual partner</td>
<td>33</td>
<td>23</td>
</tr>
</tbody>
</table>

Table 7 above lucidly indicates that majority of the respondents represented by a significant number 91 (80%) from both tertiary institutions use condoms to prevent the fuel of HIV and AIDS, while the rest of precautionary measures were average.

3.9 Ways which can lead a person to contract HIV and AIDS (N=114)

Respondents were asked to indicate the ways which can lead a person to contract HIV. Respondents were provided with a list of different possible ways which can lead a person to contracting HIV and the respondents were allowed to choose more than one as was applicable to their situations. Table below shows the findings emanated from the respondents.

Table 8: Leading ways in contracting HIV (N=114)

<table>
<thead>
<tr>
<th>Variables</th>
<th>No of responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Having unprotected sex with an infected person</td>
<td>114</td>
</tr>
<tr>
<td>Contact with infected blood</td>
<td>114</td>
</tr>
<tr>
<td>Using same razor with infected person</td>
<td>114</td>
</tr>
<tr>
<td>Sharing of needles with infected</td>
<td>104</td>
</tr>
<tr>
<td>Sharing toothbrushes with infected</td>
<td>09</td>
</tr>
<tr>
<td>Bitten by mosquito with HIV</td>
<td>04</td>
</tr>
<tr>
<td>Swimming with infected person</td>
<td>00</td>
</tr>
<tr>
<td>Sharing food with infected</td>
<td>00</td>
</tr>
<tr>
<td>Kissing infected person</td>
<td>28</td>
</tr>
</tbody>
</table>

Table above shows that all the respondents 114 (100%) were of the opinion that having sex with an infected person, contact with infected blood and using same razor with infected person are the leading ways to contracting HIV and AIDS. Expectedly, none of the respondents were said sharing food and swimming are leading ways of contracting HIV and AIDS.

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3.9 Actions taken by tertiary institutions in combating the fuel of HIV and AIDS

Respondents were asked to outline measures taken or provided by their tertiary institutions in the fight against HIV and AIDS. Respondents were allowed to mention more than one action as was applicable to their situations. The following responses emanated from the respondents:

<table>
<thead>
<tr>
<th>Actions</th>
<th>Number of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Condoms are freely available</td>
<td>109</td>
</tr>
<tr>
<td>Information on HIV &amp; AIDS is provided</td>
<td>87</td>
</tr>
<tr>
<td>Students are taught about HIV &amp; AIDS</td>
<td>41</td>
</tr>
<tr>
<td>There is a Research centre for HIV &amp; AIDS</td>
<td>25</td>
</tr>
<tr>
<td>There are awareness programs for HIV</td>
<td>19</td>
</tr>
<tr>
<td>Students are encouraged to practice safer sex</td>
<td>13</td>
</tr>
</tbody>
</table>

Table 9 above reveals that the majority of the respondents 109 said that condoms are freely provided, 87 of the respondents from both tertiary institutions indicated that information on HIV and AIDS is provided to them, while only 13 out of 114 respondents revealed that students are encouraged to practice safe sex. In a nutshell, the results show that tertiary institutions do a lot in the fight against the spread of HIV.

3.10 Strategies that should be applied by the government of South Africa in combating the spread of HIV and AIDS

Respondents were asked to outline strategies that should be applied by the government of South Africa in combating the spread of HIV and AIDS. The following responses emanated from the respondents:

- Forming group amongst students who are well trained to deal with HIV and AIDS to teach other students about the dangers of HIV and AIDS;
- Re-instate values and morals;
- More voluntary HIV test centers must be established where people may go for HIV test;
- Students must be taught how to use condoms;
- Both females and males condoms need to be distributed in places where there is a lot of foot traffic;
- New design of condoms must be invented because students prefer something new, they are now used to these condoms which are provided by government and they have a negative attitude towards them, they are saying that are week, therefore, they easily break during sexual activity;
- Students need to be encourage to abstain not only to use condoms since condoms are not 100% safe;
- Invite severely infected people to visit tertiary institutions and teach about the dangers of HIV and AIDS;
- There must be a compulsory course on HIV and AIDS in all tertiary institutions, especially in first year;
- Condoms must be distributed to all places where they can be easily accessible to many people at anytime;

3 Discussions and Conclusions

The study revealed that the majority (61%) of the respondents were unaware of the barriers that impede the effectiveness of the precautionary measures of HIV and AIDS. However, worth-mentioning is that the results show that barriers do exist, nevertheless, their nature and scope still require a rigorous investigation. The review of literature has indicated that there are precautionary measures of HIV and AIDS which are essential to protect one from contracting this epidemic. The literature review has also brought to light the barriers that impede the
effectiveness of precautionary measures of HIV and AIDS to include unfaithfulness, many sexual partners etc.

According to the findings It can be concluded that the respondents are aware of the precautionary measures. This is evident by the majority 79% of the respondents who indicated condoms as their precautionary measure in the fight against spread of HIV and AIDS. Surprisingly, is that majority of the respondents do abide by precautionary measures of HIV and AIDS. However, this is inconsistent with the statistics of students infected with HIV in tertiary institutions (Quality Statistics for VCT, 2008:02).

The literature review and the results of the study have helped the researchers in drawing the conclusion of the study. There is an urgent need for the provision of information for the purposes of protecting young people against HIV and AIDS. Besides the provision of information to support researchers’ and decision makers’ activities, there is a need to provide relevant information on HIV transmission to the youths because, “while the young may be the most vulnerable population, they are also the most receptive to prevention messages and will easily and readily adopt more responsible behaviours” (Centre for African Family Studies, 2001:10).

5. Recommendations
The following recommendations are proposed for further study:

✓ Investigate the feasibility of rolling the study out to a wider cross section of tertiary institutions to build a database of HIV and AIDS information to assist with planning and decision making;
✓ Share best practice/experience between institutions regarding mechanisms/tactics/policies which are most effective in combating and controlling the spread of HIV and AIDS and promoting safe/protected sex; and
✓ Review current training provision for students in the recognition of precautionary measures of HIV and AIDS.

6 References
Revisiting the teaching of specific language structures in the Nominal Group and the Verbal Group in English

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The aim of the study is to establish what role specific language structures have in the internal structure of the Nominal Group and the Verbal Group respectively.

Objective of the study
The objective of the study is to establish that teaching specific language structures in the Nominal Group and the Verbal Group is a resource for effective learning.

Hypothesis 1
Teaching specific language structures in the Nominal Group and the Verbal Group significantly reduces cognitive deficit arising from syntactic impediments.

Hypothesis 2
Syntactic impediments arising from the lack of knowledge of sentential structure necessitates an overt instructional intervention strategy.

Motivation for the study
Although arguments have been advanced that teaching the structure of a language is not the most effective way of developing communicative competence in a language, we advocate the view that syntactic impediments in reading necessitate consciousness-raising on how English is structured and used. In our view, the making of an inventory of syntactic strictures which constitute common areas of difficulty for second language learners of English is a resource for effective learning. We argue that since syntactic impediments impair the cognitive abilities of second language learners of English, these syntactic structures need to be taught to the students in more overt ways. Thus, a pedagogical grammar which concentrates on those aspects that produce difficulty for learners needs to be adopted and be used alongside of other approaches. In Freeborn's (1993:104) view the way we learn a second language after we have already learned our first will differ from the way we learned the first one, because knowledge of our first language is abound to affect our learning of the new language, in helpful and unhelpful ways. This linguistic situation is, among other things, accounted for by the fact that second languages share little knowledge of the structure of the target language, English. As a consequence, the overall 'mutual intelligibility' becomes significantly restricted (cf. Politzer, quoted in Cox, 1993:53).

Notably, understanding the structure of a construction necessarily involves identifying its constituents. Thus, Tudor's argument that students without having to become linguists need at least a basic idea of how language is structured and used, for example, certain grammatical or functional categories, the ability to recognize formulaic expressions and some notion of register and appropriacy is germane to the topic under investigation, namely, Revisiting the teaching of specific language structures in the Nominal Group and the Verbal Group in English (Tudor in Hedge, 1996:275).

In attempting to account for the difficulty readers experience in reading texts in a language that is not their forst language, Okombo (quoted in Webb and Kembo-Sure, 2000:198) asserts that,

(a) ordinarily we tend to use a language we already know as a model for trying to understand the nature of an unfamiliar language;
(b) the building of linguistic constructions and the units used are not always readily obvious to the observer; we often need to make some effort to identify them:
languages are different not only in the techniques they use for building constructions, but also in the kind of elemental units they use to build them; and
we can chose to look at a language in a way that is different from what we are accustomed to.

As observed by Webb and Kembo-Sure (2000:5) cognitive development in a learner can occur only in and through a language the learner knows very well. The following cognitive skills as enumerated by Webb and Kembo-Sure can develop and only in and through a familiar language and that language is in the main the learner’s first language:

(a) The ability to understand the central purpose of a text or to summarise its mainline of argument;
(b) The ability to select information and to organize it into a new coherent whole;
(c) The ability to discover and formulate generalisations;
(d) The ability to understand abstract concepts and to manipulate them in arguments; and
(e) The ability to recognize relationships between events, for example, cause and effect.

In his recent study on the topic: The noun phrase and the verb phrase as immediate grammatical constituents in teaching the English language in a non-native speaker context, Mkhatshwa (2005) privileges the foregrounding of the syntactic categories subject noun phrase and predicate verb phrase as basic structures in the English language that express the core idea of each part of the sentence (Flower and Sitko, 1989:533). Mkhatshwa’s (2005) rationale of foregrounding the subject noun phrase and the predicate verb phrase derives from his advocacy of the distinction between ‘nuclear and non-nuclear’ constituents (Brown and Miller, 1991:92). Brown and Miller (1991:92) argue that nuclear constituents of the sentence are obligatory for the sentence to be accepted as grammatical and that non-nuclear constituents are optional and typically, modifiers. This fact notwithstanding, we argue, in Huddleston and Pullum’s terms that as modifiers are tightly integrated into the structure of the clause, their role of specification cannot go unnoticed (cf. Huddleston and Pullum, 2005).

The approach that foregrounds the subject noun phrase and the predicate verb phrase in teaching the English language is, in our view, more amenable to the reading of certain types of texts where the focus is on identifying the core idea. Our view in this regard is corroborated by Chilver’s (1992:46) assertion that adverbs and adjectives tend to be used rather sparingly in business where the emphasis is on factual reporting rather than ‘colourful’ descriptions. Similarly, McCallum and Strong (1990) argue that adjectives and adverbs add to the framework of a sentence by adding details.

Thus we argue that one cannot only foreground the subject noun phrase and the predicate verb phrase in reading complex texts without taking into account the functional role of the other linguistic structures that obtain within the logical structures of both the nominal group and the verbal group. This then necessitates that we probe further into the internal structure of both the nominal group and the verbal group to determine how the different linguistic units, be they single words, phrases or clauses, relate to one another within each sentence and what functional role they play within these constituent groups.

Research Methodology
Information in this study will be gathered from both secondary and primary sources.

Secondary sources
Useful information will be obtained from various publications such as textbooks and previous studies on the subject.

Primary sources
Information will also be gathered by means of an empirical study. Secondary schools and universities will be visited to establish whether the teaching of specific language structures is a resource for effective learning or not.
Significance of the study
The significance of the study is that it proposes the teaching of specific language structures in the nominal group and the verbal group that impair the cognitive abilities of second language learners of English. The study will attempt to probe into the internal structure of the both the nominal group and the verbal group to determine how the different linguistic units, be they single words, phrases or clauses, relate to one another within each sentence and what functional role they play within these constituent groups.

Anticipated dissemination of the research findings
It is envisaged that the end-product of the research will be converted into articles for publication. In addition, specific aspects of the research findings will be incorporated into the syllabus that deals with English as second language. On the basis of the outcome of the research, workshops on the role played by the English grammatical subject will also be conducted.

References
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Abstract
Many countries the world over are now well aware of the benefits e-government can bring to improve service delivery. In line with world trends, the government of South Africa has, over the last decade, recognized the importance of Information and Communications Technology (ICT) in improving the standards of service quality and increasing the overall efficiencies of government. As a result, investments in ICT infrastructure have been growing steadily. Information and Communication Technologies (ICTs) are critical in fighting poverty and uplifting the socio-economic and living standards of the people. When properly used, ICT has the potential to empower people to overcome development obstacles, address social problems, and strengthen democratic institutions. However, for a country to gain from the benefits of ICTs, technology must be implemented and used effectively. E-government is the use of ICT to improve public sector operations, accountability, transparency and service delivery. This paper reviews the impact of e-government on service delivery in South Africa.

Keywords: e-government, service delivery, South Africa, e-government readiness

Introduction
Critical to the success of government organizations is the ability to manage and deliver information and content to its citizens. E-government is the public sector's use of ICT in order to improve information and service delivery, encourage citizen participation in decision-making processes and make government more accountable, transparent and efficient (UNESCO, 2004). Likewise, e-governance - a term that was initially used interchangeably with e-government - now connotes the application of ICTs to facilitate social governance processes or objectives, such as information for political participation, consultation and consensus-seeking among governments, public servants, politicians and citizens (Sheridan and Riley, 2006). Both e-government and e-governance aim to enhance service delivery by simplifying bureaucratic procedures; enhancing efficiency and transparency; improving information sharing and innovation of services; and increasing the level of citizen empowerment. Because of the benefits that accrue from the implementation of e-government, the UN and World Bank have adopted e-government as a developmental instrument (Cloate, 2007). Service delivery, in this instance, refers to service level and quality, capacity, service continuity, availability, general management and financial management (ITIL, n.d). It is a term used to describe the manner in which customer needs are met.

In modern democracies and governments, e-government and service delivery are inextricably intertwined. Over the past decade, governments at all levels have begun initiating major public service delivery transformations, with the most significant of these being the delivery of citizen-centred and multi-channel services. These initiatives place particular emphasis on online delivery and the use of public-private partnerships to realize integrated and citizen-centred outcomes, such as: efficiency · cost reductions; service · better quality, easier access (i.e. 24/7), new services; and democracy · participation and interactive dialogue (Remmen, 2003). Most e-government websites have community portals to rapidly deploy electronic services, thus enabling
governments to create a community nexus of information; and online services that extend the government's outreach to its citizens.

E-government is perceived as a panacea to the deficiencies of traditional forms of government where citizens physically go to government offices to apply for passports, birth certificates or death certificates, or file tax returns, etc.; with the consequent delays that arise out of long queues, lost files or the absence of relevant officials. E-government enhances the overall service/product quality when compared to traditional forms of government where there is an unnecessary level of red-tape, bureaucracy and restrictive procedures and processes. E-government ensures that government processes and services observe the law and maintain their integrity in satisfying citizen needs through the delivery of relevant, value-added and high-quality services. Moreover, e-government is expected to enhance accountability and integrity in government. It also offers the prospect of cheaper and more effective management and processing of information; facilitates the free flow of information between departments; enhances transparency, especially with regard to the procurement of services; provides opportunities to work in partnership with the private sector; and enables citizens to participate directly in governance, especially in influencing policy decisions. Moreover, e-government improves the internal operations of government to reduce the cost and time of service delivery; increases access to information about public services in order to empower citizens; enhances accountability; and provides specific services electronically.

E-government is therefore inextricably linked to quality service delivery. This inextricable relationship is underscored by UNDESA (2005) in surmising that “the application of information and communication technology ... within public administration optimises its internal and external functions, [thereby providing] government, the citizen and business with a set of tools that can potentially transform the way in which interactions take place, services are delivered, knowledge is utilized, policy is developed and implemented, the way citizens participate in governance and public administration reform; and the way good governance goals are met”. The Economist Newspaper and The Economist Group (2005) point out that since the 1990s, there has been optimism that rural ICTs would allow previously excluded communities to leapfrog development, information societies and a host of other electronic age applications. The World Summit on Information Society (World Summit on Information Society, 2003) noted that the digital revolution, fired by the engines of information and communication technologies, had fundamentally brought new ways of... running government, ... providing speedy delivery of...healthcare, and improving the living standards for millions of people around the world. Chadwick and May (n.d., n.p.) observe that ICTs in government make it easier for business and individuals to deal with government; enables government to offer services and information through new media like the Internet; improves communication between different parts/levels of government so that people do not have to be asked repeatedly for the same information by different service providers; gives staff in offices better access to information so that they can deal with members of the public more efficiently and more helpfully; makes it easier for different parts of government to work in partnership with central government, local authorities, the post office or private sector companies; and helps government become a learning organization by improving access to organizational information (Chadwick and May, n.d.)

Policy, Regulatory Framework and ICT Infrastructure in South Africa
Several e-government initiatives in infrastructure, policy and regulatory initiatives are being undertaken by the South African government as part of its efforts to enhance service delivery to its citizens. These initiatives have top level government backing, exemplified by the Presidential National Commission on Information Society and Development (PNC on ISAD), which was established in 2001 to coordinate ICT initiatives. Some of the major initiatives being undertaken to enhance service delivery are described below.

a) Policy and Regulation: The Commonwealth Telecommunications Organization (2004) notes that a policy and regulatory framework is a necessary precondition for enhanced digital inclusion in an information society. South Africa meets this prerequisite, as it has the required policy and legal framework and infrastructure to implement e-government. These include the Freedom Of Information (FOI) policy, ICT policy, Universal Access policy, vision 2014, Universal Service and
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Access policy, and E-government Vision (Batho Pele). The FOI gives individuals the constitutional right to have access to information, and enables the sharing of information with the public and across government departments (Farelo and Morris, 2002). The ICT policy focuses on transforming interaction between government and society; improving e-government, e-services and e-business; and improving service delivery, productivity and cost effectiveness. The ICT policy has enhanced and largely liberalized the telecommunications environment; giving the country leverage to increase competition and reduce prices of access to the services electronically. The Universal Service and Access policy aims to achieve universal service delivery to all South Africans, and its implementation is monitored by the Universal Services and Access Agency of South Africa (Usaasa). The Agency also creates an enabling environment by stimulating public awareness of the benefits of ICT services and building the capacity to access these services. In addition, the Agency makes the necessary interventions to enable under-serviced communities to access ICT services.

The E-government Vision addresses three main domains: e-government (G2G); e-service (applications of IT to transform the delivery of public services, G2C); and e-business (G2B) (Farelo and Morris, 2002). The government has a web portal christened ‘Batho Pele Gateway Portal’ which provides information on government services and other information such as legislation, policies, etc. The portal has translated information into all of South Africa’s 11 national languages (Farelo and Morris, 2002). This initiative is buttressed by the Government Communication and Information System (GCIS) – a government information service that ensures the public is informed of government’s implementation of its mandate through direct dialogue with people in disadvantaged areas. There is also E-Cadre, a project of the South African Post Office (SAPO), which aims to use IT graduates as volunteers in educating the public on the use of ICTs (Department of Communications, 2008).

b) Telecommunications: Telkom is the main service provider of communications services in South Africa. It operates both fixed line and mobile communications services. Telkom’s broadband footprint of ADSL and WiMAX now covers about 90% of the country (Telkom, 2007). Prices have come down, albeit marginally (fast ADSL - 348 kbps rental is ZAR 152 per month, less by 66% than in January 2005: Faster ADSL - 512 kbps, ZAR 326, 52-59% less than in January 2005: Fastest ADSL - 4mbps rents at ZAR 426 per month), making access still beyond the reach of many institutions. In general, South Africa is a leader in ICT development in Africa and is reportedly the 20th largest consumer of Information Technology products and services in the world. The country has a network that is 99 percent digital and includes the latest in fixed-line, wireless and satellite communications. South Africa is considered to have the most developed telecommunications network on the continent (Kling, 1999). In 1999, government established SITA (State Information Technology Agency) to co-ordinate IT resources in government in order to increase delivery capabilities and enhance interoperability. It is a shared service provider between government departments. SITA was formed because the performance of information technology within the public service over the past few years has been inadequate, relative to the demands of the efficient and effective administration of operations performed by government.

i) Cellular/Mobile Industry: Cell phone infrastructure has not yet adequately been applied to provide e-government services, but holds great potential because of its ubiquity and high adoption rate among the country’s citizens. South Africa has, over the last decade, experienced tremendous growth in the cellular phone industry following the liberalization of various segments of the telecommunications sector. Today, the country has four mobile phone operators, namely Vodacom, MTN, Cell C and Virgin Mobile. 2007’s estimate of the population with cellular phones based on sim-card penetration was 89 percent. Some of the cellular phone providers are involved in promoting access to rural communities. For example, Vodacom deployed more than 90 000 community-service telephones to South Africa’s under serviced areas, where they have become invaluable sources of entrepreneurial activity for hundreds of community phone-shop operators. Since its launch in 1994, the Community Phone Shop concept has expanded into that of communication centres in which entrepreneurs, job seekers and schoolchildren access essential business communication services such as faxes, e-mails and the Internet daily (Department of Communications, 2008:116).
c) Infrastructure: In partnership with other African countries, the South African government is involved in a number of projects to construct several broadband fibre optic undersea cables to form a ring around Africa and link the continent to Europe and Asia. The Eastern African Submarine Cable System (Eassy) is currently under construction and is due for completion in 2009. It will link South Africa from Mtunzini to Sudan and provide landing stations in countries along the coast of East Africa. This would enhance communication within South Africa and the rest of Africa and other countries outside the continent (Department of Communications, 2008:116). The government is also involved in building a West Coast Marine Cable to link South Africa to Europe and another cable to the Americas. Known as UhuruNet, this west coast of Africa undersea broadband fibre optic cable will ride on a two-fibre link from Nigeria to Portugal (Hamlyn, 2008).

Meanwhile, SEACOM - another undersea fibre optic cable system - is being constructed on the East coast of Africa to connect South and East Africa to global networks in India, the Middle East and Europe. In particular, SEACOM will connect South Africa, Mozambique, Madagascar, Tanzania and Kenya to India and Italy, where other international cables currently exist. These recent infrastructure initiatives add on to the already existing SAT-3/WASC or South Atlantic 3/West Africa Submarine Cable, linking Portugal and Spain to South Africa, with connections to several West African countries along the route. All these developments are expected to provide affordable bandwidth that would encourage volume discounts and large bandwidth growth, which Africa badly needs.

i) Multi-purpose Community Centres (MPCC): These are public places where people can access computers, the Internet, and other digital technologies that enable them to gather information, and create, learn, and communicate with others while they develop essential digital skills (Benjamin, 2000). MPCC or telecentres exist in almost every country, but sometimes go by different names, such as village multi-purpose community telecentres, knowledge centres, information centres, community technology centres, community multimedia centres, or school-based telecentres (Fillip and Foote, 2007:v). South Africa has several Multi-Purpose Community Centres (including cyber labs in schools with ICT equipment to enable internet access and provide multimedia services) that provide ICT services on a cost recovery basis, particularly to rural areas (Farelo and Morris, 2002).

ii) Internet Infrastructure and Public Information Terminals (PITs): Internet infrastructure in South Africa is largely in place throughout the country (consisting of fixed lines and broadband ADSL), although the number of users in 2007 was estimated at 3.9 million. This number, small as it is, is an improvement by 121% over 2005’s figures. The number of online pages grew from 91 million in 2005 to 207 million in 2007. However, most Internet users speak English. The South African Post Office has based on the Universal Service and Access policy and in partnership with the Department of Communications - installed public information terminals in about 800 post offices throughout the country, especially in settlements without internet cafes or other forms of access to the internet (Department of Communications, 2008:115-118).

iii) Broadband Infraco Act
This Act was passed by parliament in 2007, and became operational from the 1st of February, 2008. The Act establishes the new state-owned enterprise with the aim to increase bandwidth capacity and ultimately reduce the cost of telecommunications within the country. Broadband Infraco is responsible for expanding the availability and affordability of access to electronic communications networks and services, including but not limited to underdeveloped and underserviced areas; national long-distance backbone networks; metro and access networks (other licensed operators); and international connectivity networks (Government Gazette, 2008).

d) Other Infrastructure Developments: Government established the African Advanced Institute for ICT (Meraka) in 2004. It focuses on research and applications development. In March 2008, the President launched the South African E-skills Academy to address the skills shortage in ICT (Department of Communications, 2008a). Government already had, in 2006, launched an Inter-governmental Relations Forum (IGRF) to speed up communication and ICT deployment across
the provinces and among traditional leadership areas. Also launched were website projects for all municipalities. For example, the Cape Gateway Portal provides web-based information about government services and departments, structured according to users’ life events. Websites are also being created for the House of Traditional Leaders in two provinces (Matsepe-Casaburri, 2008). Government has also commenced deploying wireless broadband to 500 Dinakredi schools, and target clinics, hospitals, libraries, post offices and Thusong Centres; to help increase the uptake and usage of ICTs and help deliver inclusivity in building an information society. Government is also undertaking the following G2G initiatives (SITA, 2002): Department of Justice automation of processes for state attorneys; court process pilot project for automated interaction between courts and attorneys and the sheriff; common databases for citizens; wireless internet labs for distance education; and computer centres in informal settlements using converted containers to provide training.

e) Poverty Alleviation Strategies
The government of South Africa has promulgated a number of programmes aimed at poverty alleviation. For example, the Reconstruction and Development Programme (RDP) makes a commitment to meet basic needs, in addition to the provision of safe portable water to all by 2008, and universal access to energy by 2012. The RDP is also concerned with bringing the private sector into a programme of service extensions. There is also the Municipal Public-Private Partnership Pilot Programme (MPPP), which is geared towards encouraging and supporting municipal public/private partnerships. Growth Employment and Reconstruction (GEAR) advocates reducing state spending and deficit. Furthermore, there is Black Economic Empowerment, which aims to enhance the socio-economic status of the black South Africans (in particular) who were marginalized from mainstream economy during the apartheid government (Niekerk, 1998; Burger, 2005; Mail and Guardian Online, 2008; Black Economic Empowerment, n.d).

Service Delivery Challenges in South Africa
The policy and infrastructure developments discussed above show, to a great extent, that South Africa can leverage e-government services to enhance service delivery to its citizens. As Farelo and Morris (2002) rightly observe, South Africa’s government understands the need to develop an information society and harness the power of ICTs for economic and social development for the benefit of the country and its citizens. As mentioned earlier, the tenets of service delivery in South Africa are guided by the principle of public service for all under the brand ‘Batho Pele’ (translated to mean people first). The eight Batho Pele principles serve as an acceptable policy and legislative framework regarding service delivery in the public sector. These principles include (Department of Public Service and Administration, 1996): consultation (engaging with customers in terms of what they want); service standards (continually improving services); access (enabling disadvantaged persons to access services, speaking in understandable languages, etc); courtesy (being polite, courteous and friendly to customers); information (reaching all customers to make sure they are well informed about the services government departments provide); openness and transparency (being open and honest about every aspect of work by publishing annual reports to tell citizens how resources were used, how much everything costs, including costs for staff, equipment delivery, services, etc); redress / dealing with complaints (providing a mechanism for customers to record when they are unhappy with a service, etc); and best value (giving customers the best service using all the resources, eliminating waste, fraud and corruption; and finding new ways to improve services at little or no cost).

Despite well articulated service delivery principles, South Africa is faced with a number of challenges in terms of service delivery, including problems with poverty, inequality, democracy, respect for human rights and corruption. A study by Johannesburg Business Day (2003) found that a third of the people surveyed felt that government was not delivering on its promises. Meyer (2007), in a study of the users’ use of Internet at provincial and local level, found that most were unhappy with the level of success in using the Internet to seek services. The low level of success discourages them from using these facilities meant to enhance service delivery. The Batho Pele strategy is aimed at transforming the ethos and culture of public service to improve service delivery. E-government can help in improving service delivery and addressing administration deficiencies through increased transparency and accountability, and in
addressing corruption (Gronlund, Andersson and Hedstrom, 2005). At the local level, e-government can help address poverty through education and training, business ventures, and access to information using e-government infrastructure.

During a conference in Stellenbosch (South Africa) in 2003, the frustration caused by poor service delivery to victims of crime by service providers because of problems within the criminal justice system and the bungling of investigations was discussed (Van Zyl, 2003). This was only the tip of the iceberg, because the challenges of service delivery in South Africa are wide ranging and diverse: as acknowledged by government, the media, parliament and during public hearings/meetings (imbizos). In 2008's State of the Nation Address, President Thabo Mbeki observed that although the housing programme had seen close to 300 000 new subsidies allocated in the past two years, the pace of roll-out had been much slower than expected. Moreover, 8 million people were still without running water. Many more were without electricity and sanitation. Furthermore, the fluctuating Matric pass rates indicated that much more needed to be done to stabilise the system and ensure steady improvement. There were also weaknesses in implementing the basic adult education programme ((Mbeki, 2008).

Search News24 (2007), quoting the KwaZulu-Natal director general, conceded that there were serious backlogs of unfulfilled service delivery promises in the province. It was reported that of 2 272 million households, 29 percent did not have basic access to clean drinking water, while 43.7 percent of the province's households did not have sanitation. He said that 34.1% of the province's houses were not connected to the national electricity grid. In addition, the challenge of municipalities' limited capacity remained a problem in dealing with backlogs because municipalities battled to attract technically qualified people. The frustration of President Thabo Mbeki with regard to poor service delivery was evident when he warned that "we have to deal with those within the public service who, because of their negligence and tardiness, deny many of our people services due to them, in instances where resources have been made available to deliver these services" (Mbeki, 2004).

In an article on August the 20th, the Mail and Guardian Online (2008) - citing the Democratic Alliance Party - pointed out that an enormous gulf exists between the levels of service provided by different provinces in South Africa. In particular, those reliant on the state for health, education and housing are better served only in the Western Cape, Gauteng and the North West provinces. Dismal services were recorded in the Northern Cape, the Free State, and Eastern Cape, with copious evidence of corruption and neglect in these provinces. Three key departments - housing, health, and education – were identified as holding the key to fulfilling the government's promise of a better life for all. Poor performance was particularly recorded in the housing and health departments, which were riddled with corruption, maladministration and inefficiency in their capacity to carry out their functions. This poor performance was attributed to corruption, a skills crisis, and the lack of sustained policies and procedures.

Challenges of E-Government in Enhancing Service Delivery in South Africa

The complaints about service delivery in South Africa may be attributed to constraints in leveraging the available infrastructure to improve the socio-economic status of the majority of the people in order to uplift their living standards. A study by the Business Leadership Group on 15 well performing economies worldwide found that ADSL (broadband) costs in South Africa were 139% higher than the average rate in the nations surveyed. On the 3rd of June, 2008, South Africa’s Minister of Communications told parliament that with regard to uptake as well as access and the cost to communicate “…we face great challenges… our goal in making these services universally affordable is yet to be achieved… the costs still remain high” (Matsepe-Casaburri, 2008). The study noted that local calls at peak hours were 199% more expensive (Naidoo, 2007). President Thabo Mbeki, in 2005 (Mbeki, 2005), noted that bold steps have been taken to liberalise the telecommunications industry... we believe that the unacceptable situation in which some of our fixed line rates are 10 times those of developed (OECD) countries will soon become a thing of the past.
45% of South Africa’s population is estimated to be living in rural areas, where ICT infrastructure is far less developed than in urban areas. In addition, PC penetration is quite low (Geness, 2004). South Africa also has a diversity of languages, with 11 official languages that need to be converted to the language of the Internet. Moreover, red tape and bureaucratic systems of government do not favour speedy service delivery. For example, the delays that characterized the introduction of the Second Network Operator (SNO) and VOIP; the conflict between Telkom and government on the pricing range of bandwidth; and state interference with telecommunications regulatory agencies; are cases that must have contributed in part to poor service delivery.

South Africa, during the better part of 2008, experienced a deficit in its electricity supply, which was necessary to power the ICT infrastructure for service delivery and socio-economic development. The March 2007 NEPAD Support Unit of Economic Commission for Africa (ECA) publication noted that without access to sufficient, quality and reliable energy, every social and development activity was critically constrained (Economic Commission for Africa, 2006). President Thabo Mbeki (State of the Nation Address, 2008) noted that the national emergency presented by the recent power outages posed the challenge...to the entirety of the [South African] nation … In essence the significant rise in electricity demand over the last two years outstripped the new capacity that was brought on stream. The resulting tight supply made the overall system vulnerable to any incident affecting the availability of energy. This situation precipitated the inevitable realization that the era of very cheap and abundant electricity had come to an end

Farelo and Morris (2002) point out that South Africa lacks a comprehensive and easily accessible evidence base to support strategic policy decision-making and programme design to leverage ICTs for South Africa’s information society development. This negatively affects the timely detection of service delivery challenges in order to effect corrective action, thereby impinging on the ability of the state to deliver effectively and efficiently in terms of the ICT development agenda. Moreover, although the e-government vision is articulated in various policy documents, reference to corruption in the vision is notably absent. Moreover, until recently, the e-government strategy did not include the G2E (Government to Employee) component, yet this is crucial for successful e-government implementation programmes. On the technical front, there are many challenges - particularly with legacy systems and the need to implement transversal systems - to overcome in order to achieve the horizontal integration required for cross-departmental integration.

The Department of Communications (2008a) points out that the central challenge to the implementation of the Information Society Development Plan (ISAD) in South Africa is the serious shortage of ICT skills and the state’s limited capacity to deliver the necessary task force. This skills shortage is exacerbated by the brain drain caused by skilled ICT personnel and professionals leaving to work in developed countries or moving from the public to the private sector. Education and training is unable to produce the essential and technical management skills that most employers seek. The 2000 School Register of Needs Survey reveals that the number of schools that used computers for teaching and learning was 12.3%, and those that had access to e-mail and the Internet was only 6.9%. Moreover, the 2003 Human Resource Development review showed that over the last ten years, only 12% of the graduates in 1999 obtained postgraduate qualifications in ICT. UNDP (2003:57) observes that government has not yet succeeded in building the human resource base at local level. Most efforts were directed at national and provincial level. No effective ways of attracting and retaining critical skills have been put in place by government. Additionally, government business and administration processes have been dogged with a number of problems related to the lack of a central accessible information pool for important personal details on citizens, and this has resulted in the unnecessary duplication and wastage of manpower.

President Thabo Mbeki (State of the Nation Address, 2005) noted that it is “…clear that more work will have to be done to raise the skills levels of our people. Moreover …we have taken note of the reasons for the delay in implementing some of the…programmes. These include…the subjective capacity of the implementing agents where at least financial resources were made available. Accordingly, the government has approved a new National Skills Development
Strategy for the period 2005-2010. In addition, improving the effectiveness of the skills development structures in government for the implementation of the Human Resources Development Strategy will be undertaken” (Mbeki, 2005). Mbeki (2004) observed that “… many of [the] people, including the youth, lacked the education and skills that [the] economy and society needs”.

Geness (2004), writing in the context of South African e-government initiatives, noted that the delivery of services was largely hampered by “…lack of equal access to all citizens especially with regard to rural-urban divide in the distribution of national resources”. Meyer (2007), in a study on the utilization of multipurpose community centres identified, among other constraints, the long distance travelled by users to the nearest centre (on average, travelling up to 7 kilometres); the shortage in the skills necessary to use the Internet, read or understand the content; long waiting times to use the internet; and the high costs of access. This is exacerbated by the growing theft of copper cables, which has had the effect of undermining the implementation of the local loop - thus unbundling policy in South Africa; and this is a threat to the country's security and socio-economic development (Matsepe-Casaburri, 2008). In general, within the e-government policy and strategic framework, there is no particular focus on how government will address the issue of the non-delivery of services or inefficient service delivery to citizens (Farelo and Morris, 2002).

**E-government Failures in Service Delivery Projects in South Africa**

Within the wider African context, e-government projects have tended to fail because of adopting technologies without the accompanying human skills and capacities to manage, integrate and sustain them; centralizing the use of technologies by national governments without extending the benefits to intermediary institutions such as local government, parliament, civil society, etc; not linking good governance to the broader and more inclusive democracy; high levels of digital illiteracy; and inadequate resources (Cloate, 2007).

Although South Africa has made significant strides in e-government, it does not seem to be leveraging the opportunities offered by such government systems. During 2005, SADC member states (including South Africa) were part of 180 countries that were reviewed according to the Digital Opportunity Index (DOI). The DOI is used to measure and evaluate the opportunities, infrastructure and utilization of ICTs by government and its people. DOI monitors recent technologies, such as broadband and mobile Internet access, the falling price of broadband, and increasing broadband speeds (World Information Society Report, 2006). The DOI ranking of SADC member states in general showed that although great opportunities exist for most member states to employ e-government, little was being done to take advantage of such opportunities. For example, South Africa was ranked 91st in the world behind Seychelles and Mauritius in the SADC region.

Benjamin (1999), in the context of post-apartheid South Africa, has shown how community-based ICT projects have failed due to the use of non-participatory approaches. A number of e-government projects in South Africa have not had remarkable success. Golaganang (coming together), a 2002 joint initiative between the South African government (represented by SITA and the Department of Public Service and Administration) and the private sector (HP, Telkom, CS Holdings, Standard Bank, Microsoft), was conceived to provide public service employees with affordable computer bundles (multimedia PCs, operating systems, application software, modem and internet connectivity, a printer, three year extended warranty and interactive tutorial software). Each school in the Golaganang community was also set to receive a computer. It was expected that through this project, inequitable access to technology would in part be addressed, and the digital literacy of public servants and utilization of ICT in their work would improve; thus bringing benefits to employment. The project was premised on shared risks and benefits. Cabinet approved the project on the 17th of April 2002, but the project failed to take off when HP asked government to give guarantees to the value of US$ 73m to allow the project to go ahead, which government did not do. The project failed for a number of reasons other than the financial viability (sustainability) of the project. For example, there was a lack of trust as much emphasis was placed on partnerships without any focus on where financing would be raised from.
Moreover, for a project on such a large scale, it was negligible on the part of the organizers to not first conduct a pilot. Although the project did not take off, it failed in the eyes of public servants because they were already aware of the project, and had heightened expectations (Levin, 2008). Kekana and Heeks (2008) found that the introduction of IT into the National Welfare Agency, which administers social security funds to the National Pension Fund (NPF) [paid to those who retired normally from work] and the Workers’ Compensation Fund (WCF) [paid to those forced to retire for various reasons] in part failed. The initial plan was to computerize 100% of the system in three years, but six years down the line, only 40% of the system is computerized. Cost cutting did not happen because of hiring consultants, and costs moved from US$43m to US$60m. Buitendag and Van Der Walt (2008) point out that the establishment of sustainable and viable community oriented projects around the country fail, with only a few of the many community centres still operational. They argue that one of the main reasons they fail is the top down design approaches used, with little or no initial user involvement.

Failure in certain e-government projects in South Africa may also be attributed to the fact that there are numerous players involved without an overall leader. There is also the lack of coordination or a tracking mechanism within and outside government about who is doing what and with what results. The main players in the e-government sector in South Africa include, among others: SITA, PNC-ISAD, the Department of Communications, Government Information Technology Organising Committee (GITOC), and MSA. For successful e-government implementation, the following principles should be observed: leadership and commitment on the part of government; integration of government systems transversally and vertically; inter-agency collaboration; adequate funding; adequate access to infrastructure; citizen engagement; and accountability, monitoring and evaluation (Cloate, 2007).

Successful E-government Service Delivery Projects in South Africa

Despite the challenges and complete failures of some e-government projects in South Africa, there have been some notable success stories. The Independent Electoral Commission (IEC) successfully developed an e-procurement system that allows for open and transparent bidding of government tenders aimed at preventing corruption. Moreover, the IEC leveraged tools of multi-access to promote free and fair elections. In 2004, for example, IEC, in partnership with cell phone service providers, enabled voters to Short Message Service (SMS) their identity number, and in return receive a message back indicating their eligibility to vote and the voting station’s details. Moreover, a satellite-enabled network made it possible for the commission to register voters: relay, collect and verify ballots: and relay results across the country. During the 2004 elections, the tabulation database system was linked via a wide area network to all district collation centres (Coleman, n.d.). Custom-designed handheld scanners captured information from bar-coded ID books and greatly streamlined the process of voter registration. Moreover, a number of projects in G2G, G2C and G2B have been implemented, and the coordination of government departments is happening with ministerial support (Farelo and Morris, 2002). For example, with regard to G2B, the South African Revenue Services’ (SARS) e-filing system already provides a way to conduct transactions related to tax returns on the Internet.

South Africa has documented good progress with regard to 355 Multi-purpose Community Centres (including cyber labs in schools), which aim to provide villages with access to ICTs. All the universities in the country and about 6000 schools are ICT enabled, with about 800 public information terminals. PITs have been established: over 80% of all health centres are connected to ICTs: all provincial and national government departments and many local governments have websites and e-mail addresses: an educational portal – Thusong - has been established to help teachers and learners access curriculum-related information: a language portal using all 11 official languages has been established: and an open source software desktop application has been translated into all of South Africa’s official languages (Farelo and Morris, 2002).

The horizontal integration of e-government across agencies and departments within the same level of government aims to cover financial, personnel, and supply chain management systems. Other efforts at integrating transversal systems in government include: case management systems (used by the police), motor vehicle registration systems, pensions and unemployment insurance systems and the subsidy management system used by Housing; Integrated Financial
Management Systems and projects (IFMS); the automation of fingerprints and the development of an electronic population registry; the Home Affairs National Information System (HANIS), through which citizens can access birth and death registration forms online; the pensions and unemployment insurance systems, used by Welfare and Labour respectively; and the subsidy management system used by Housing (Farelo and Morris, 2002).

The National Traffic Information System (eNaTIS) has also recently had successful results. During the first six months of 2008, more than 75 million transactions were performed on the National Traffic Information System (eNaTIS). With the exception of routine maintenance outside of business hours, downtime was virtually non-existent in the first half of the year, and phenomenal system processing time was experienced: the eNaTIS processed 96% of all transactions in less than two seconds, 99, 8% in less than 10 seconds, and 99, 95% in less than 60 seconds. eNaTIS is an e-government initiative that is used for the application for driving licenses and the registration and licensing of motor vehicles; notification of change of ownership/sale of motor vehicles; and application for learners licenses. The transactions and services can be provided by most transport offices across the eight provinces in the country (National Traffic Information System, 2008). Before e-NATIS was launched on April the 12th, 2007, its predecessor (Natis) managed an average of 300 000 transactions a day. Now, the average rate of daily transactions is 600 000 (Segar, 2008).

The UN Global E-government Readiness Survey for 2008 (United Nations, 2008) observes that South Africa has a strong online presence. In particular, the website of the Department of Labour is an excellent example of a public agency website that is well tailored to the needs of its stakeholders. The website is noted for being attractive and simple in design, allowing users to easily find the information they are looking for. In addition, there are various online filings/registrations, and the posting of online vacancies is available. Perry (2008) notes that the Department of Labour’s website is a fully featured site that is a one-stop shop for labour issues. Meyer (2007), in his study on the use of the internet for e-governance in South Africa, found that 38% of the respondents participated in opinion polls, 36% commented on white papers, 34% participated in policy making and 37% engaged with political leaders through e-mails. He concluded that there was a high usage of e-governance services by citizens.

While, as mentioned earlier, there were failures in the introduction of IT into the National Welfare Agency, the project also had some success (Kekana and Heeks, 2008). The purpose of the project was to integrate and decentralize the previously separate manual-based operations of NFP and WCF. The computerized system would address problems associated with payment delays, incorrect recording of figures, and the lack of communication between the two agencies. This project was partly successful because lead times were reduced. For example, the processing of funeral grants, which used to take three months, now takes 30 minutes; monthly bills are now accurate and timely, making debt chasing faster; the number of complaints have been reduced; and timeous status reports are available to managers. Key success factors in this project were attributed to consultants who were hired to fill the vacancies caused by the in-house and in-country shortage of skills; organization-wide user training exercises; and the fact that the project was accomplished incrementally, i.e. first through pilots.

There are some good e-government practices at local government levels. Cape Town, Johannesburg, Pretoria and Durban are cases in point. For example, the city of Cape Town has successfully integrated GIS applications that are considered to be the best practices in Africa (Cloete, 2007). Moreover, Leo van den Berg, Andre van der Meer, Willem van Winden and Paulus Woets (2006) compared eight cities – Barcelona, Cape Town, Eindhoven, Johannesburg, Manchester, Tampere, the Hague and Venice - on a range of innovative urban e-governance strategies with regard to access policies (aimed at improving access to ICTs for all citizens), content policies (to improve the use of ICTs in city administration and semi-public domains) and infrastructure policies (to improve the provision of broadband infrastructure). The selection of these cities was based on best practices. For each of the cities, e-strategies and policies were critically reviewed and compared. Another study in 2005 on the global digital government of 98 municipalities - carried out in countries with an online population of more than 160, 000 by the United Nations and the American Society for Public Administration - found that only the city of
Cape Town (South Africa) from Africa performed relatively well, claiming 31st place (Holzer and Kim, 2005). The evaluation focused on current practices in government with regard to digital governance (delivery of public services) and digital democracy (citizen participation in government). The variables that were studied included security, usability, content of websites, type of online services offered, and citizens’ participation in governance through websites established by city governments.

Generally, the South African government has made great strides in policy and infrastructure development (Van Zyl, 2003) with regard to e-government. Government is a strong supporter of e-governance, and the President wastes no time in imploring how ICTs can be used to address the social and economic problems facing South Africa. Progressive government national budgets (2004, 2005, 2006, and 2007) have been fairly generous to ICT infrastructure development (Department of Communications, 2008a).

Way Forward for South Africa

Despite these notable successes, South Africa faces a number of challenges. The UN E-government survey for 2008, already discussed, ranked South Africa at 61st position out of 192 UN member states (Perry, 2008). This was a drop from 58th position in 2005. The South African government must do more beyond laying infrastructure and improving policy if the service delivery targets are to be met. Coleman (n.d.) recommends that governments need to develop appropriate policy frameworks, supported by legislation for e-governance that are linked to strategic development objectives that target neglected rural communities.

Government should ensure that infrastructure and policy development are integrated into service delivery programmes. Moreover, there is a need for government to establish mechanisms to evaluate the extent to which the various projects and programmes in e-government are being attained. Gronlund, Andersson and Hedstrom (2005) point out that for e-government projects to be effective, focus must be placed on social and economic contexts. Government could take on board the recommendations of the Common Market of East and Southern Africa’s (COMESA) e-strategy (covering all major aspects of e-applications, including e-government, e-commerce, e-education, e-health, e-agriculture etc). The recommendations, which were released in 2004, include the promotion of ICT usage; enhancement of connectivity, especially among the rural poor; encouraging public-private partnerships; developing a nation-wide backbone; enhancing universal access and rural telephone networks; human resource development (university education, research and technology support networks, introduction of ICTs at secondary school level); and regulation (liberalizing ICT sectors) (Economic Commission for Africa, 2005). Government should also investigate new ways through which e-government can be deployed, such as mobile phones, which are highly pervasive in the South African society.

Southwood (2005) poses the following questions that may provide a basis for implementing e-government systems to enhance service delivery: Are data systems infrastructure-ready? Are management systems, records and work processes in place? Is the legal infrastructure ready (i.e. do we have the laws and regulations required to permit and support the move to e-government and facilitate the acceptance of digital signatures)? Are the institutional infrastructures needed to facilitate and drive e-government in place? Is our human infrastructure ready (i.e. do we have in place the attitudes, knowledge and skills required to initiate, implement and sustain e-government initiatives)? Is our technological infrastructure ready? And is our leadership and strategic thinking ready (i.e. is there the internal authority and vision to drive forward e-government)? The extent to which these questions are answered in the affirmative would determine the level to which South Africa is prepared to leverage e-government to enhance service delivery, particularly to those who live in rural areas.

Conclusion

The pace of e-government implementation across the world and in South Africa is gaining momentum. The South African government is making significant investments in ICTs, and has put in place enabling policies and legal and regulatory infrastructure in keeping with this global trend to enhance service delivery to its citizens. To date, government has established Multi-
Purpose Community Centres developed an e-government vision, established public information terminals, liberalized the telecommunications sector, etc. Despite government’s awareness of the potential of applying ICT for enhanced service delivery, concerns about poor service delivery to citizens at all levels of government (national, provincial, district and municipal councils) are growing, reflected in stories in parliament, the media, the street (as shown in common demonstrations), and imbizos (presidential public meetings). This means that the government’s investment and commitment to improving the lives of most South Africans with regard to service delivery is largely not getting the desired outcomes.

Anecdotal evidence suggests that various barriers are responsible for poor service delivery, including inadequate infrastructure: lack of essential skills (particularly ICT skills): corruption and fraud among government officials: miscomprehension of the potential of ICTs: and lack of appropriate tools and institutional mechanisms. In order for service delivery to be enhanced beyond enabling policies and legal frameworks, mechanisms of monitoring and evaluation are required. With regard to ICT infrastructure, the following is necessary: national information infrastructure to act as the backbone for service delivery: physical infrastructure, such as Internet access points in convenient places (e.g. public libraries, shopping malls, government offices, hospitals, clubs and relevant public places) for the citizens to use free of charge: technological infrastructure, meaning computers, servers, networks (broadband and wireless), mobile devices, and open and scalable technology standards: and e-government services, consisting of a portal that enables citizens to ask questions and receive answers on, for example, the payment of taxes and fines, issuance and renewal of drivers licenses, employment, social services such as health and education, etc. Until there is a paradigm shift in South Africa’s e-government strategy, improved service delivery will remain elusive for a long time to come.

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Some of the Problems in First Year Students' Academic Writing in Some SADC Universities

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Abstract

There are many problems that confront English as a Second Language (ESL) learners in academic writing in some Southern African Development Community (SADC) universities. Some observers and commentators have noted that most graduates from Historically Black Universities (HBUs) exhibit poor performance in English when compared to neighbouring countries like Lesotho and Swaziland. One of these problems is the low proficiency which manifests itself in numerous syntactic errors and inappropriate lexical selection in their use of the target language. The forms or varieties are simply mistakes or errors which can be eradicated by teaching. The learners need to learn and understand the structure and nature of the English language. The deviations and innovations arise owing to a number of processes. This article argues that the problem stems from the fact that the burden has placed on departments of English which seem not to want to abandon the literary tradition. It presents some of the problems that African learners of English in HBUs seem to exhibit in academic writing when they enter university education. It discusses what is done and what needs to be done to first years students when they enter university in HBUs. In HBUs English language programmes are not mandatory or do not exist as is the case with most SADC universities and some Historically White Universities (HWUs). The conclusion makes a suggestion that it becomes necessary to mount similar English language programmes at first year level in institutions which do not have these programmes. It is hoped that this would improve learners' language proficiency and hopefully competence as well as students acquire their education.

Introduction

A serious and honest inquiry in our students' poor standard and performance in English, though not a new call or observation, is desperately needed. There are many reasons why the situation should be like that. Graduates from departments of English are and should be looked up to as standard-bearers in the use of the language. They should be able to draft or edit scripts, letters, reports, memoranda, speeches, etc. and make decisions on ambiguous usage. They are expected to answer without hesitation "which is right: X or Y?" from which an obvious follow-up question comes: "Why?" The knowledge being sought here is not that of a linguist or a language practitioner.

Background

The discussions with language teaching colleagues in the SADC region indicate that a disappointing state of affairs seems to exist particularly in respect of students and graduates of former Historically Black Universities (HBUs) in South Africa. There is a great deal of general discontentment out there. Language practitioners in the departments of English from school to higher institutions of learning should shoulder the blame to a large extent. The major problem is the lack of or under preparedness of learners in Historically Black Universities (HBUs) and the responsibility of teaching or developing the English proficiency is shifted to departments of English where in most cases there is no capacity or programme to deal with the task. It is an indictment on their part because the business of teaching the language placed on them has not produced desired results.
Some of the Problems

There seems to be a wide disparity in English proficiency among the graduates within the SADC region. In South Africa the situation is serious and needs urgent practical attention than the lip-service it sometimes receives. Those from Historically Black Universities (HBUs) are said to be very weak in English proficiency when compared to those from Historically White Universities (HWUs), such as University of Pretoria, University of Cape Town, University of KwaZulu-Natal. Learners from countries like Lesotho and Swaziland are reported by Bloom (2008) to perform better than their South African counterparts on basic literacy and numeracy. The situation could be worse in under-resourced schools from where (HBUs) draw their student. Barkhuizen (1992) has made the point that “most high school teachers have had very little or no training at all in the structure of language.” The background of Black learners of English is that of ill-trained or unqualified teachers (see also Buthelezi, 1995). Therefore, most first year students in (HBUs) are weak or under-prepared and the situation continues during their university education.

Graduates are reported to be very weak, if not lacking the most basic language skills in this important official language. For example, they are reported to be unable to read and write competently yet some of them have been awarded a degree which reports that they studied English at university level. Third year students or students in their final year of university study cannot write sentences, paragraphs and essays and dissertations yet the expectation is that, they have this knowledge.

Students feel that they need or are encouraged to register for English modules or courses to improve their English. More often than not the students are disappointed to find that little if any is achieved, however. The main failures of twelve years of education are expected to be remedied in one term or a year’s teaching in the department of English or English department.

It cannot be an exaggeration to state that the contact period between the lecturers and students at university is too short to make a major impact on the students’ competency. It is an unrealistic expectation to expect lecturers who are in most cases, not trained language teachers, to remedy the problems the students bring to their university education.

It should not be forgotten that lecturers in departments of English are people that, in most cases, are not trained or certified language teachers but individuals who have distinguished themselves in their respective specialisations, such as, in literary studies and not in language studies per se.

The extreme end of the sad state of affairs is where disciplines that have nothing to do with language per se have been known to mount or claimed courses and labelled them language courses as long as they deal with writing skills or logical thinking. Philosophy, for instance, which requires the skills of writing and thinking, has been offered as a language module at the University of Zululand.

It is from this pool of graduates that teachers of English are drawn who prepare the first year students that come to universities after passing Matriculation or O level examinations in some SADC countries. This seems to be a recycled problem as little or nothing appears to be done about it even at university level.

The challenge of English teaching arguably lies more decidedly in developing and improving the literacy and communicative competence of the learners which goes beyond the literary tradition. The learners need to understand the structure and nature of the language to be able to handle its literature with greater efficiency. Departments of English should deal with both language and
literature and should take the explicit responsibility in addressing language-related problems through out the university.

These issues need to be raised within Departments of English and should involve knowledge about the structure of the language than is in the traditional context of English teaching where lecturers are steeped in the literary tradition. Young (1988:325) aptly points the following:

*English graduates clearly know a great deal about English literature and literary criticism and are able to apply this knowledge well in their own teaching of school based literature. But there are obviously many other facets to ‘English’ in the school curriculum. …These additional components of ‘English’ are embedded more in linguistic and sociolinguistic frames of knowledge than they are in literary ones. It is in these later two areas of understanding about language that we find graduates in English to be lacking in knowledge much needed in the classrooms, especially in the TESOL context.*

Moyo (1995) has reported that the main problem which confronts second language learners (ESL) in academic writing is their low proficiency which manifests itself in numerous syntactical and inappropriate lexical selections in the use of English: the Target Language (TL).

Forson, (1992:48) observes that when degree courses in English were first introduced in South Africa’s universities, almost all the students were native speakers of the language and the departments could afford to teach literature justifiably assuming that there would be no language problems in the learners’ way. None-native speakers had attained a relatively higher proficiency in the language before being admitted at university. He further records that:

*now … things have changed: the majority of the students in …possibly all English departments in the country, are users of English as a second language: Indians, speakers of African indigenous languages and Afrikaans · who need to understand the structure and nature of the language to be able to handle its literature with greater efficiency.*

According to Forson (*ibid*:48)

*Student numbers in the departments of English at that time were relatively small, and lecturers in English literature, most of whom were native speakers, could at least perceive and “correct” errors in expression while marking exercises (even if they didn't, wouldn't, or most probably, couldn’t assign reasons for the “correction” beyond the feeling that it “doesn’t sound right…”)*

English language teachers expect that their students will write in fully formed sentences, with cohesive paragraphs, with a variety of lexical items, with tensed verbs and numbered nouns. Accordingly, they generally tend to correct the absence of tense or number markings on verbs and of determiners on nouns. The use of *phrases or fragments* instead of *complete sentences* and a lack of *paragraph development* are characteristic of students’ work.

The historically White institutions may not have needed language programmes because their learners had the required competence when they entered university. In fact, these learners had studied the structure of the English language. Now the situation has changed. Native English speakers are in the minority among students in the English Departments. There are more Black learners with weak proficiency in Historically White Universities (HWUs) and also in Historically Black Universities (HBUs). Most of these learners might not have studied the structure of the English language. However, it is ironical that Academic Development (AD) appears to have collapsed in HBUs, while it has remained at the University of Witwatersrand, the University of Cape Town and at Rhodes University.

The HBUs which previously admitted student without matriculation symbols have decided to close the doors and only admit student with a pass in English. The HBUs are no longer places where students who failed could get a chance for university education but are competing with the
best for admission. The unfortunate situation is that in these institutions the need for proficiency among the students has been recognized but there is practical effort in place other than lip-service and memorandum circulation.

Forson (1992:49) has quoted Barkhuizen (1992) as having made the point that “most high school teachers have had very little or no training at all in the structure of language.” The background of Black learners of English is that of ill-trained or unqualified teachers. (see also Buthelezi, 1995). Therefore, ill-formed structures are passed on or taught to learners and become fossilised. Undoubtedly, their competence is bound to be weak when they enter university education. Students exhibit deficiencies in academic writing owing to lack of linguistic competence in terms of use of appropriate vocabulary, lack of familiarity with the writing modes and skills concerned with effective conventions for written work which is all too unfamiliar within the academic community.

**Some Examples of Errors and Mistakes**

According to Dulay, Burt and Krashen (1982:138:139) researchers have found that like L1 learners’ errors, most of the errors L2 learners make indicate they are gradually building an L2 rule system. The most common are:

1. **Omitting grammatical morphemes**, which are the items that do not contribute much to the meaning of sentences, as in *He buy goat*.

2. **Double marking** is a semantic feature (e.g. past tense) when only one marker is required, as in *She didn’t went back*.


4. **Using wrong pronouns**, use one form in place of other, such as the use of *her* for both *she* and *her*, as in *I see her yesterday. Her dance with my sister*.

5. **Using two or more forms in random alteration**, even though the language requires the use of each only under certain conditions, as in the random use of *she* and *her* regardless of the gender of the person in question.

6. **Misordering**, items in constructions that require a reversal of word-order rules that had been previously acquired, as in *What you are doing? Or misplacing items that may be correctly placed in more than one place in the sentence, as in *They are all the time late*.

**The Distinction between Error and Mistake**

Sometimes researchers distinguish between errors caused by conditions such as fatigue and inattention (what Chomsky, 1965, calls “performance” conditions), and errors resulting from lack of knowledge of the rules of the language (what Chomsky, 1965, calls “competence”). In some of the language literature, performance errors have been called “mistakes” while the term “errors” has been reserved for the systematic deviations. It is claimed that the learner is still developing knowledge of the L2 rule system (Corder, 1967).

The distinction between performance and competence errors is extremely important. However, for our purposes we use **error** to refer to any deviation from a selected educated norm of language performance, no matter what the characteristics or causes of the deviation might be.

It is interesting to note that preliminary research has been carried out on some of the deviations and innovations of English in Southern Africa. Studies such as those by Buthelezi (1995), Chisanga (1997) and Magura (1985) seem to suggest the existence of local varieties of English. However, Chishimba (1991) and Mpepo (2000), from a pedagogical point of view, argue that these
forms within varieties of English are simply mistakes or errors which can be dealt with by teaching even if it involves drilling. In fact every speaker of any language would like to use the correct forms to be considered to be competent in the language.

Among the most common deviations and innovations in Southern Africa are:

- **Buggered** (broken down or out of order)
- **Lekker** (nice, good)
- **Braai** (barbecue)
- **Baas** (boss)
- **Robots** (traffic lights)
- **Lobola/ed** (brideprice)
- **Offed** (switched off)
- **Oned** (switched on)
- **Moveous** (not staying in one place)
- **Now now** (very soon, shortly)
- **Costive** (expensive)
- **Gate-crash** (enter without authority)
- **Discuss about** (talk about)
- **Too good** (very good)
- **Emphasise on** (elaborate on)
- **Cope up with** (cope with)
- **Demanded for** (asked for/demanded)
- **Requested for** (requested/asked for/called for)
- **Somehow useless** (somewhat useless)
- **Picked him to his house** (took him to his house)
- **Putting on jeans** (wearing jeans)
- **Borrow me** (lend me)

These deviations and innovations arise owing to a number of processes:

1. **Lexical transfer**: there is no distinction made between the verbs **lend** and **borrow** in Bantu languages. Bantu languages have only one for both verbs. Consequently sentences such as abound:
   
   - i. *Can you borrow me your car?* (lend)
   - ii. *I can borrow you my pen.* (lend)
   - iii. *Please borrow me some money.* (lend)
   - iv. *Why did you borrow her so much money.* (lend)

   In fact the verb **lend** is hardly used in the colloquial Local Forms of English (LFE).

2. **Subject copying**
   In Bantu languages in general, and in the indigenous languages spoken in Southern Africa in particular, a subject noun phrase must agree with the verb by means of an agreement prefix. This feature, which corresponds to a subject pronoun in English, is carried over into the LFE, as illustrated below.
   
   - i. *Sipho he is going to town.*
   - ii. *These people they cheat a lot.*
   - iii. *Children these days they misbehave.*

3. **Question formation**
   The following structures illustrate a general pattern of question word which is kept in conformity with the syntactic structures of the Bantu languages.
   
   - i. *People are how?*
   - ii. *You want to go with who?*
   - iii. *You are leaving when?*
   - iv. *You are going where?*

4. **Overgeneralization of the –ING form**
   Here, the progressive form is often extended to stative verbs, as shown below.
“He goes about condemning corrupt practices when his own back yard is stinking” (Schmied 1996:312).

I am loving this person (I love this person).

She is having a problem (She has a problem).

They are having an examination (They have an examination).

I am having a new friend, Nkosi (I have a new friend, Nkosi).

This is stemming from lack of news (This stems from lack of news).

You are having my dictionary. (You have my dictionary)

5. Number and Gender

The distinction between the pronouns he and she does not exist nor inflect verbs for the third person singular. This is because Bantu languages, which mark the syntax of the students, do not have these features. This feature is, therefore frequent as can be seen in the following sentences, where she and her refer to masculine nouns, my father and the man, respectively.

My father is going to the States and she (he) will come back next year.

The man stays (lives) with a girlfriend who is not her (his) wife.

Number is sometimes marked where it is not needed, and vice versa, as illustrated below.

Otherwise, why is the President (of Malawi) and his ministers wasting (wasting) their time preaching what they do not practice. (Schmied. 1996:312)

He talks (speaks) English all the time.

Everyday he plays (plays) soccer.

My feet (feet) hurt.

6. Phrasal verbs

Phrasal verbs such as apply to, look for, look after, and similar others are commonly used without their respective particles; while ordinary verbs such as reverse, return, seek request and discuss are often used with a particle, e.g. back, for and about. Platt et al (1984) observe that such usage may be influenced by verbs such as ‘talk’ and ‘ask’ which take the preposition ‘about’ and ‘for’. Thus, it is not unusual to find structures such as the following:

We discussed about the performance of the team in the World Cup.

The farmer requested for more money at the bank to buy cattle.

7. Adjectives and adverbs

In the English of the student under discussion, there seems to be no distinction between some types of adjectives, such as long and tall, alone and single, good and well, as illustrated below.

When I met her she told me she was alone (single). Now I've discovered she is a married woman.

Listen here my friend and listen well.
(iii)  Vusi is moving with your sister. (dating)
(iv)  She is moving with bad boys. (socializing)
(v)   Will you please escort me to Durban. (accompany)
(vi)  They bounced at your room. (They went to your room but you weren’t there.)

The expression a tall person, for instance, is sometimes rendered as a long person. Again, this is because in most Bantu languages no distinction is made between these two adjectives, long and tall.

What is Done and what Needs to be Done?

Students entering university are expected to be at an advanced level in English. They should have passed with a credit in English (see, Schmied. J.1991). In countries like Botswana, Malawi, Zambia, Zimbabwe and Swaziland students would rather fail their mother tongues though they speak them fluently than fail to pass English with credit. The importance of English world-wide is obvious and a lot of literature has dealt with this matter.

Even if students obtain a credit in English, for most SADC countries, such as, Botswana, Lesotho, Swaziland, they still have a programme of English at university level which students need to pass or they do not graduate.

In South Africa, Historically White Universities (HWUs), such as, the University of Pretoria, the University of Cape Town and the University of KwaZulu-Natal have each a programme for first year English course to deal with second language speakers of English.

First year students in Historically Black Universities (HBUs) exhibit serious problems in English language. Admittedly, this is to be expected as most of them come from a very weak background academically. They have been taught mostly by untrained English language teachers and may arrive at university without any matriculation exemption.

Knowledge of the structure of language is not there which leads to the use of inappropriate lexical items. Logical development of points in the written work is hampered e.g. lack of cohesive devices, such as, nevertheless, therefore and however. The result is weak or poor incoherence in written work, apart from the problems of language proficiency highlighted in this paper.

The problems raised in this paper are not incurable. The extent to which the departments in Historically Black Universities (HBUs) will address these problems will depend on the extent to which the teaching staff will transform. The English programmes will need to be redesigned to focus more on speaking, the structure of English or grammar and writing. Other skills such as asserting, negotiating will also need to be covered. Young (1988:324) argues as follows:

...the teaching of English at school level can no longer be understood in its traditional sense of transmitting a culture of literature, aesthetic sensibilities and English values to a predominantly white elite [sic] elite. The immediate future and challenge of English teaching arguably lies more decidedly in improving the literacy and communicative competence in English of over seven million black [sic] children who have English as a medium of instruction in their daily schooling.

Definitely, the redesigned English programmes will better serve the weak and under prepared students by turning them into confident and effective useful work force the development of South Africa.

Conclusion

This article has presented some of the problems that confront English as a Second Language (ESL) learners in academic writing in some SADC universities. One of these problems is the low proficiency which manifests itself in numerous syntactic errors and inappropriate lexical selection in their use of the target language. It has argued that the major problem is the lack of or under preparedness of learners in Historically Black Universities (HBUs) and the responsibility of teaching or developing the English proficiency is shifted to departments of English where in most cases there is no capacity or programme to deal with the task. The
article has discussed some of the problems that African learners of English seem to exhibit in academic writing when they enter university education. These problems are not incurable. It has presented what is done and what needs to be done to first years students when they enter university. The suggestion is that what is done in most of the SADC countries and HWUs be implemented. They can be dealt with by effecting similar English languages programmes in universities, such as, the University of Fort-Hare, the University of Limpopo, the University of Venda and the University of Zululand.

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Challenges of Doing Research in sub-Saharan African Universities: Digital Scholarship Opportunities
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Abstract
Universities the world over are responsible for research, knowledge generation, scholarship and innovation. They also serve as conduits for the transfer, adaptation, and dissemination of knowledge generated across the world. Universities are expected to guarantee the most efficient utilization of research results and their possible application to economic life. Globally, universities are facing renewed external and internal pressure as the push for them to meet the changing needs of society intensify as a result of trends in the transition towards a knowledge-based economy; massification of higher education; and the integration and assimilation of Information Technology (IT) into the academic environment. Moreover, the emergence and use of IT in higher education has led to an increasingly virtual education system, with implications for the dynamics and conduct of university research. Universities no longer remain citadels of research activities, seeing as private or government research institutes are increasingly involved in knowledge creation and dissemination. The internationalisation of higher education, coupled with growing student mobility and increased competition for funding, have recently occasioned efforts to rank universities in terms of their academic quality and productivity at national, regional and global levels.

Despite the increased demands on universities, they remain constrained by declining state funding, increasing enrolments, limited physical facilities, etc. New technologies now offer lifelines for African universities to reengineer and reposition themselves in order to effectively meet these ever increasing societal demands. This paper discusses the challenges of doing research in African universities, and assesses the opportunities digital scholarship can engender for these universities. The focus of the paper is on universities in sub-Saharan Africa, excluding North Africa and to some extent, South Africa. North African higher education is largely influenced by practices in Europe and the Middle East. South Africa has had a separate and distinct political history and governance that differs from other African countries. The country also has a fairly well developed technological and industrial economy, which is quite ahead of other African countries. Their system of higher education is older (most universities were established during the pre-World War II phase, while in most sub-Saharan countries, universities were established post-independence, beginning in the late 1950s) and their universities are well endowed with good libraries, well equipped laboratories, long traditions of scholarship based on European models, and a well established ICT infrastructure that is accessible to both faculties and students.

Keywords: research, digital scholarship, e-research, e-learning, sub-Saharan Africa, higher education

Introduction
Recent university rankings generally show that African universities - save for some South African universities - are performing poorly. Other than research, ranking takes into account the teacher-student ratio, proportion of international faculties in relation to local staff, and the number of international students (The Standard, 2006). Other criteria used include universities’ research outputs and general contribution to new knowledge; levels of training and application of science and technology; presence on the Internet and use of Information and Communication Technologies (ICTs); volume of published material on the web; visibility and impact of the universities’ web pages as measured by the citations (site visits) or links they receive (inlinks); perceived quality; institutional statistics; websites and surveys of students, scholars or employers to make comparisons between institutions; the number of Nobel and Fields Medal winners;
articles published in Nature and Science; articles in citation indexes; and academic performance with respect to the size of an institution.

There is a significant amount of debate and controversy surrounding university rankings, especially with regard to the criteria used. Some universities feel that the methodologies used are flawed because the assessors do not visit the universities. Moreover, not all information can be found on websites, or the information used is outdated (e.g., the qualifications of faculties obtained from the Association of Commonwealth Universities). Linking employment to the relevance of courses is also wrong because the job opportunities available in any given economy influence the employment rates and may not directly relate to quality of graduates. Additionally, universities in different regions face different challenges, and this in itself suggests that different criteria should be used. For example, across many institutions the number of students and the number of faculty or postgraduate programmes differ (Siringi, 2005). Nevertheless, university rankings are used by students and others to inform them in their decisions about universities, while at the same time providing them with an indication of the quality of graduates. In some countries, rankings are used to determine the proportion of funding given to universities. Rankings also summarize the global performance of any university, and reflect the commitment to the dissemination of scientific knowledge. Rankings may be used as proxies for employment opportunities as they have the potential to serve as screening devices for employers, and may also function as indicators of research quality. Employers compete strongly for the acquisition of postgraduate students from reputable academic institutions, and even offer positions well in advance of these students' completion of academic programmes. According to the authors, evaluation has had a significant impact on the performance of universities worldwide. For example, evaluation has prompted researchers to increase their publication output in visible journals. Ranking has also increased awareness among academics on how best to make their research activities public (The Standard, 2006).

World university rankings are dominated by institutions in wealthy countries, particularly those situated in Europe and the United States. However, some South African universities perform relatively well and dominate in Africa. Four of South Africa's 23 universities, or 17% of the country's institutions, were placed in the top 500 globally by the 2006 Academic Ranking of World Universities. These institutions were the University of Cape Town (at 252), University of the Witwatersrand (396), University of KwaZulu-Natal (470), and the University of Pretoria (481). The only other ranked African institution was the University of Cairo in Egypt, which was placed at 402 out of 500.

### Academic Ranking of World Universities - Africa Rankings

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<thead>
<tr>
<th>Rank</th>
<th>Country</th>
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<tr>
<td>252</td>
<td>South Africa</td>
<td>University of Cape Town</td>
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<tr>
<td>396</td>
<td>South Africa</td>
<td>University of the Witwatersrand</td>
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<td>402</td>
<td>Egypt</td>
<td>University of Cairo</td>
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<tr>
<td>470</td>
<td>South Africa</td>
<td>University of KwaZulu-Natal</td>
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<td>481</td>
<td>South Africa</td>
<td>University of Pretoria</td>
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According to 2008's global ranking of world universities, produced by the Institute of Higher Education at Shanghai Jiao Tong University in China, only three African universities remain in the top 500. The Universities of Cape Town, Witwatersrand and KwaZulu-Natal are in the top 500; however, two other universities have fallen off this list. A similar ranking by the Spanish-based Internet Lab Ranking of 30 top African universities places UCT (398); Stellenbosch (566); UP (718); Wits (720); Rhodes (738); UNISA (1449);... UZ (3724) (InternetLab, 2008)
Although African universities have been known to suffer from various constraints that affect the quality of research and learning, the ranking of universities has ruffled some egos, especially because of the impact such ranking could have on resource allocation and attracting students and staff in a globalised competitive environment. The National Universities Commission (2006) in Nigeria points out that universities in that country do not have web presence and perform poorly in webometric ranking - factors that can make them lose their esteem in the eyes of stakeholders, such as potential students and funding agencies. This in turn may affect academic exchange with reputable universities from other parts of the world for teaching and research. The National Universities Commission pointed out that Nigerian universities were performing poorly with regard to research in a digital dispensation because of the scant attention paid to presenting research findings in web-searchable forms; low impact local journals without Internet links; lack of publication in electronic journals; and the absence of Nigerian universities on the Internet (i.e. no web addresses). Most indicators used in the rankings of universities rely, to a great extent, on applications and the use of ICT. However, the International Education Association of South Africa (2008) points out that whereas ICT should underpin technology, innovation, research, communication and the development of the knowledge economy. In most SADC states, ICT resources are poor or virtually non-existent in sub-Saharan universities, with 80% of the region’s universities inadequately connected.

Sawyer (2004) observes that research capacity development in most African countries represents an instance of market failure because explicit public policy does not exist to reinforce and ensure that higher education and research receive adequate investment from both private and public sectors for infrastructure development in the form of laboratories, equipment, libraries, and a system of information storage, retrieval, and utilization. The poor performance of African universities in international rankings, especially with regard to research, is exacerbated by the fact that some universities do not offer PhD programmes. For those that do offer PhD programmes, the rates of student completion are too low to compete globally, let alone meet the national needs of government, private sectors and universities. This is exacerbated by the fact that it takes on average 6-8 years to complete a PhD as a result of inadequate resources and bureaucracy in the approval process involving departments, faculties and universities (Szanton and Manyika, 2001). Due to limited staff capacity, most PhDs are based on dissertations alone, and do not include course work, comprehensive exams, and multi-disciplinary supervisory committees. Szanton and Manyika (2001) provided some statistics on the number of PhDs produced in African countries as follows: the University of Ghana, in Legon, awarded 15 PhDs between 1998-2001 in all disciplines; Makerere University granted 43 PhDs between 1990-1998 in all the sciences; the University of Dar es Salaam issued 56 PhDs in all fields between 1990-1999; the University of Zimbabwe granted 32 PhDs in agriculture, arts and social sciences in 2001; UCT produced 382 PhDs between 1996-2000; and the University of Pretoria produced 1100 PhDs between 1991-2000.

Challenges attributed to scholarly research in most African universities also include the descriptive nature of research and the lack of empirical rigor (in part due to a lack of resources); paucity of cross-disciplinary research endeavours; limited collaborations between practitioners and academics; limited linkage between research and the national development agenda (Moahi, 2007); decreasing state subsidies (Botha and Simelane, 2007); shortage of research expertise and experienced supervisors (Biermann and Jordaan, 2007); high subscription costs of scholarly journals; limited publishing infrastructure; lack of incentives for researchers; inadequate mentoring frameworks; and weak or non-existent partnerships (Lor, 1998). Moreover, research done in African universities tends to focus on local or national development issues by putting an emphasis on applied research at the expense of basic research. The focus on national or regional issues may mean that research outcomes are generally not widely applicable to international issues. This is exacerbated by inadequately equipped libraries, with limited access to modern journals and the Internet. Szanton and Manyika (2001) note that because African university libraries have suffered huge financial losses, neither doctoral students nor their local faculty supervisors are likely to have access to current theoretical and comparative literature that might provide new and valuable insights in their dissertation projects. In most libraries, books are ancient, unavailable or the pages largely mutilated. University presses are under-funded or non-
existent, and university journals are either few or unavailable. Due to inadequate experience and
the lack of contacts, junior members of staff find it difficult to publish in international journals.
Consequently, dissertations end up being stacked in libraries, leading to inbreeding.

1960-1980s: Post-independence Challenges of African Universities

African countries began attaining their independence in the 1950s, and made fighting poverty,
iliteracy and disease their major preoccupation in order to improve the lives of their people, who
had been downtrodden and marginalised from mainstream or national economic activities under
colonial governments. Soon after independence, there was heavy investment in education
(especially the training of graduate and technical personnel) in order to develop adequate
manpower to take up newly available positions, especially in the civil service.

universities experienced a boom when many governments pumped investment into new and
existing universities. For instance in Nigeria, the pre-independence era had one university with
1,000 students in 1961; 30 years later it had 41 universities with 131,000 students. Most African
universities generally succeeded in providing high level personnel to the civil service, schools and
to the applied sciences – medicine, agriculture and the social sciences (Halsey, 1992; Slaughter,
1998). The initial enthusiasm in higher education by governments after independence was short-
lived, as this was followed by a sharp decline in the number and quality of universities,
attributed to factors such as falling commodity prices, a sharp rise in the price of crude oil, trade
barriers, declining GDPs, political instability, and debt crises. Sutherland-Addy (1993) observed
that by the 1980s, universities were in a state of crisis. The decay of physical facilities, with
much of the facilities in need of maintenance and refurbishment, and the lack of modern
electronic and technological infrastructure and poorly stocked and managed libraries; were
widespread features of African higher education. Ahemba (2006) notes that in Nigeria, Cô’té
d’Ivoire, Kenya and Uganda, crumbling faculties and campuses, overcrowded lecture halls and
hostels and depleted libraries and laboratories bear sad witness to (former and still prevalent)
chronic shortages of funding and investment. The situation was further exacerbated by poor
governance, characterised by a lack of democracy, single party states, coups, detentions without
trial and political assassinations.

These negative developments for universities were happening against the backdrop of the
universal massification of universities’, where according to the World Bank (2000), student
numbers rose from 350,000 in 1975 to 1.7m in 1995 in African universities. At the same time,
mmost African countries faced the challenges of rapidly growing populations and declining
economic growth, slow degree of industrialisation, unemployment, disparity in the distribution of
income, escalating costs, declining academic achievements, etc. The economic difficulties forced
the countries to turn to the World Bank and IMF for donor support. In return, the World Bank
and IMF demanded these countries to undertake Structural Adjustment Programmes (SAPs),
which included significantly reducing government expenditure on social services. In addition to
the SAPs, the World Bank argued that economic and social returns on primary and secondary
education were higher than on tertiary education (Psacharopolous, 1980). Universities
consequently suffered reduced government funding in line with these demands. Kenya, for
example, decreased its national recurrent budget on education from 38% in 1987/88 to 19% in
1993:88). This was accompanied by government reducing per student expenditure from an

As a result of these declining fortunes, Szanton and Manyika (2001) say that African universities
had to endure a period of approximately 15-20 years during which salaries remained flat or were
lowered; research funding dried up; faculties could not maintain membership in professional
associations or attend international conferences; libraries stopped purchasing books and journals;
physical facilities (classrooms, hostels, labs, etc.) crumbled; the building of new structures was terminated; scholarships for faculties were either declined or stopped; pensions for staff became uncertain; and the hiring of new staff stopped while brain drain increased. In addition, medical covers that faculties enjoyed were eliminated, as was subsidised housing, car loans, etc. When the situation within universities became unbearable, student and faculty activism against government emerged on campuses. Feeling threatened, governments started to clamp down heavily on universities, leading to an exodus or exile of faculty staff members and students to foreign countries, especially to Europe and North America, while others were detained in places like Kenya and Nigeria without trial. Faculties that endured and remained were lured locally into consultancies to undertake applied research on behalf of donor communities, without being replenished by the universities from which they came. Blair and Jordan (1994) say the massive brain drain of well trained and skilled academic staff mainly to Europe and North America was estimated by the World Bank at 23,000 qualified academic staff leaving every year.

Figures vary, but currently it is estimated that there are more than 300,000 highly skilled and experienced professionals from Africa living and working in Europe and North America (of these, more than 40,000 are PhD holders), comprising doctors, lecturers, researchers, nurses and professional managers (Kenya Times, 2006 quoting deliberations at UNESCO Conference 14 February 2006). In Kenya alone, the World Bank reports that nearly 40% of the country’s highly skilled professionals emigrated to rich countries. The rate of emigration in Kenya’s case is about double that of Africa as a whole, with about 20% of its skilled workers having moved from Africa to the developed world. The migration of the highly skilled cadre of academic professionals and students has led to an acute shortage of academics in Africa’s higher education institutions, especially in key fields such as science and engineering (Oketch, 2000). President Kibaki of Kenya lamented that the country was losing Ksh 20 billion (ZAR 2 billion Rands) annually in capital flight paid by students in fees abroad because of the country’s incapacity to absorb all those seeking higher education locally (Siringi and Kago, 2006).

Prospects for Universities in Africa

By the turn of the new millennium in 2000, there was a wind of change following the collapse of the Berlin Wall, which was followed by the increased democratisation of Africa as pressure from the international community mounted and donor funding became tied to good governance. That aside, there was also an emerging crop of new leadership in Africa with democratic credentials, such as Yoweri Museveni of Uganda, Frederick Chiluba of Zambia, Meles Zenawi of Ethiopia, Joachim Chissano of Mozambique, John Kuffor of Ghana, etc. The unbanning of the ANC and the release of South African freedom icon Nelson Mandela renewed the hope of many in African countries and their universities.

The post 1990s period has seen a unified international approach to alleviating global poverty (Millennium Development Goals) by increasing the use of ICT to enhance good governance (e-government), enhancing economic development (e-business and e-commerce), bridging the digital divide (WSIS), and increasing access to education (e-learning, etc); thus, putting universities back in the limelight. The World Bank (2001) now acknowledges that in order for countries to deal with the challenges of the new millennium, such as globalisation, reducing poverty, working within the knowledge based society, and bridging the digital divide; there is a need for a highly skilled workforce, a role universities are well placed to play. The World Bank (1993) noted that any country aspiring to lay a strong foundation in socio-economic development must put the responsibility on higher education institutions to equip individuals with the advanced knowledge and skills required for positions of responsibility in government, business and other professions. Universities are perceived as important entities in helping government develop policies and strategies to meet MDGs targets, and produce much needed skills for industrialisation in the knowledge economy.

The African Association of Universities (AAU) and South African Vice-Chancellors, realising the strategic importance of universities in the new millennium, started a campaign for the revival of
universities by petitioning government through the African Union and NEPAD to try and address the malaise afflicting universities on the continent. The campaign was given impetus by the increased democratisation of the continent, and the wind of economic reform as characterized by economic liberalization, pluralist-political reforms, the emergence of multi-party democracies and the clamour for good governance by both governed and international development agencies. Responding to the request by the AAU at the 11th conference in 2005, held in Cape Town, President Thabo Mbeki called on universities to raise their voices and actively assist development and respond to the unprecedented support from developed countries (MacGregor, 2005). The president outlined three major challenges faced by universities, i.e. the need to analyse problems and offer practical solutions; the need to set up centres to measure progress in key areas such as democracy, peace, stability, human rights and development; and the need to support socio-economic development on a continent that “now speaks with one voice” about Africa’s pressing needs. Similarly, the Commission for Africa’s (2005) report argued that stronger universities could help improve the accountability of governments and build participation and citizenship, and generate independent research and analysis that supports vibrant debate. This, in turn, can greatly improve the effectiveness of government policy and other services. Universities are also critical to tackling a chronic skills shortage on a continent that loses many, if not most, of its scholars through brain drain.

Increasingly, most universities have now also awakened to the fallacy of solely depending on government for full financial support. Following reduced donor funding, governments in Kenya, Zambia, Uganda, Tanzania, Malawi, etc. started to take extraordinary measures to survive. For example in Kenya, the Higher Education Loans Board was established to facilitate the financing of university education to more deserving Kenyans and improve the recovery of loans that had been advanced to beneficiaries of university education who were now in employment. At that point in time, only 20-25% of loan recipients ever paid back their loans because of poor tracking systems and follow ups on the part of government (Woodhall, 1991:55).

Moreover, governments have started to encourage the private sector to participate in the provision of higher education. In Kenya and Zambia, tuition fees were also introduced during the late 1980s, and universities were required to adopt corporate models so that they could become self-financing. Kenyan universities introduced parallel degree programmes for those in working positions who met university entry requirements and fresh students from high school who did not secure entry into universities because of the competitive selection process. Those who now gain entry to parallel degree programmes pay fees at global market rates. Saint (1992) reported that the University of Zambia and Eduardo Mondlane University in Mozambique established internet nodes linked to local electronic networks that sell subscriptions to non-university affiliated businesses, organizations and individuals. The University of Ghana was reported to be making a profit of 9% on a total income of US $22700 in 1991 through its consulting centre. Similarly, Nsukka University claimed a profit of US $35,238 through its consulting activities over the period 1982-1991, on a turnover of US $90398, with the consultants receiving 50% of the profits, and the university and departments receiving 30% and 20% respectively.

Most universities in Africa are now thinking strategically by developing strategic plans and mission statements that aspire to offer practical experiences to encourage innovativeness; introducing performance management systems to enhance the quality of education; and seeking partnerships with industry, government, NGOs and communities. Although the challenges of the new millennium have seen universities begin to regain their former glory, they are coming under renewed pressure of a different kind. Szanton and Manyika (2001) outline these pressures as the need to produce highly skilled graduates who can globally compete in the knowledge economy; relate curriculum to labour demand; reconstruct the curriculum to meet African needs; increase equity of under-represented populations; support critical, basic research, theory building, experimentation and teaching; deal with HIV/AIDS; lead in social transformation rather than act as conservative or elitist institutions; forge links with industry and government in order to
Challenges of Doing Research in sub-Saharan African Universities:
Digital Scholarship Opportunities

become more innovative and relevant to society; and participate in or form part of government policy making organs.

Digital Scholarship Opportunities for African Universities

African universities have, for the last five years (since 2004) in a row, been ranked behind their counterparts in the global league of universities with regard to frontiers of knowledge and research. Some of the indicators used in evaluating universities are ICT-based, such as visibility, web links (in-links and outlinks), statistics maintained, webometric citations, etc. Szanton and Manyika (2001) noted that in African universities, there is little emphasis given to the careful collection and consolidation of information, and they attribute this to the inadequate deployment of ICTs in the learning and research environment of the universities. Moreover, given the resource constraints universities face, the record keeping of research (degrees, disciplines, completion rates and topics of research) has not been prioritised. Most research is still kept offline. Onyancha (2008) found that Africa only represents 1% (13) of global repositories, with the leaders being Europe 48% (521), North America 38% (328), Asia 8% (106), Australasia 6% (66), South America 4% (41), the Caribbean 0% (1) and Central America 0% (1). South Africa dominates in Africa with 10 institutional repositories, followed by the remaining three in Uganda (1), Zimbabwe (1) and Namibia (1). The South African institutional repositories include: AHERO (African Higher Education Research Online); CSIR Research Space; Durban University of Technology IR; Electronic Thesis and Dissertation Database of the University of Johannesburg; University of Pretoria's Institutional Research Repository; Rhodes eResearch Repository; Stellenbosch University Institutional Repository; UCT Computer Science Research Document Archive; University of Pretoria Electronic Theses and Dissertations; and University of Western Cape Theses and Dissertations.

Tarpeh (1994), in a report for the African Association of Universities based on studies in universities in Cote d'Ivoir, Ghana, Nigeria and Zambia, emphasised the need for strengthening the statistical database of the universities. Although libraries are expected to maintain lists and also keep theses and dissertations, this information is not easily available to the university community as a whole because digital technologies have not been applied. Moreover, limited internet connectivity, low bandwidth, limited access to computers and limited support still remain challenges. The World Bank's 1998/99 World Development Report calls for radical changes - such as the infusion of ICTs in post-secondary education - if Africa is to equip its labour force with the skills needed to survive in the new technological age.

African universities that choose to ignore the deployment of ICT in learning and research do so at their own peril. The academic environment in universities the world over is undergoing tremendous transformation. The teaching and research work of academic institutions, historically based on the printed page as expressed through libraries and their physical collections of books, journals and documents, have been at the heart of universities. However, academic work is being transformed as the shift takes place from print media, such as books, to the internet and digital media. In addition, a different kind of student is also emerging, with greater computer literacy and a different approach to information seeking, mainly through Google (Youngman, 2007). In sum, digital scholarship is now emerging in universities. Many definitions of ‘digital scholarship’ abound, but Prof. Kirsten Foot from University of Washington's Department of Communication sums it up coherently “as any element of knowledge or art that is created, produced, analyzed, distributed, published, and/or displayed in a digital medium, for the purpose of research or teaching”.

Digital scholarship may also be perceived as a “networked, scholarly or academic environment with pervasive integration of digital technologies in everyday learning and research, the necessary physical infrastructure both on and outside campus for access, integration of university information systems such as institutional repositories, online public access catalogues and content management systems, that allow seamless access to content needed for research, publication and scholarly communication. From these definitions, it is clear that digital
scholarship is broad-based and may include one or more of the following: submission of articles, peer review and publication, all done electronically; teaching using pure or blended electronic means; evaluation and assessment of academic work electronically; electronic collaborative research; and electronic communications, e-journals, e-books, and a variety of databases and digital libraries.

The other concept closely related to digital scholarship is e-research, which, according to O'Brien (2005), refers to large-scale, distributed, national or global collaboration in research [that] typically entails harnessing the capacity of information and communication technology (ICT) systems, particularly the power of high-capacity distributed computing, and the vast distributed storage capacity fuelled by the reducing cost of memory, to study complex problems across the research landscape. E-research is quite beneficial in university environments. It provides researchers with opportunities to develop whole new areas of valuable research and to view existing research in new ways. Through cyber infrastructure, it is possible to link expensive equipment and provide data mining and curation, thus enabling scholars to work in large global research teams on large amounts of data. By making this form of data accessible, some of the stored data may be used up several times for different aspects of research. Access to common data can allow parallel research projects to take place simultaneously. Digital scholarship offers the opportunity to develop cyber infrastructure that is critical for collaborative research and the sharing of resources. Through e-research and collaboration, it is possible to gain access and archive global, rare field-recordings that are at risk of being lost. The archived data can also be enhanced by subsequent students’ projects, where metadata is added and stored in a digitally sustainable format, further building this rich research resource. Such records can be made accessible to researchers internationally, allowing new research to occur.

Among the many transformations taking place in universities is the increasing tendency to deliver information online, with libraries responding by making attempts to digitize material that was once only in print format. This action is necessary because it enables collections to be delivered to users 24/7 via intranets, the Internet and other fast and emerging networks. Similarly, digital information resources are increasingly being relied on as primary or complementary information sources of scholarship. Scientific journals that were, a few years ago, produced largely in print format, are now rolled out first as e-versions. Libraries are also transforming their print collections through digitization or subscription to e-journals, with or without print alternatives, as a strategy to make them more accessible and to enhance resource sharing.

The potential for digital scholarship is enhanced by the increased sophistication of search engines and global library digitisation projects, such as the one that was undertaken by Google in 2004. Moreover, the net generation students also enhance digital scholarship because they are digitally literate and largely dependent on Google or other search engines for discovery of information resources rather than consultation of library web pages, catalogues and databases as the main sources of information (Lippincott, 2005). Besides, the possibilities offered by Web 2.0 for modern libraries expand the opportunities for implementing digital scholarship projects. Web 2.0 refers to second generation, internet-based services, such as social networking sites, wikis, communication tools and folksonomies that emphasise online collaboration and sharing among users (O’Reilly, 2005). Web 2.0 provides new possibilities for creating metadata, virtual references, information literacy, digitisation, and creating digital repositories.

Through Web 2.0, it is possible to develop e-research opportunities. E-research is defined as a collection of distributed computing resources (data repositories, specialised scientific equipment, computing power, knowledge services etc.) that appear to users as one virtual system (O'Brien, 2005). The concept of Library 2.0 has emerged to refer to libraries that integrate all e-resources into a single point of access with a uniform interface, OPAC (consisting of federated search engines), RSS (used for cataloguing and searching results), a ‘physical’ library that is a loud
space for collaboration and conversation through the use of mobile devices, and the integration of
the library with e-learning. Likewise, the Patron 2.0 concept enabled by Web 2.0 is making it
possible for patrons to not only be content consumers, but creators as well (Pienaar, 2008).
In order for digital scholarship to be institutionalised, a number of interventions are required,
such as: an e-strategy; a research portal that would facilitate data transfer; knowledge sharing,
including protocols of uploading; open access standards; institutional repositories; digital
scholarship/e-research librarians responsible for training, re-orientation and liaison; digital
curation services, including standards, software, marketing and training; and portable
access/cyber infrastructure (Pienaar, 2008). The e-research strategy would help focus the
organisation, keep the organisation on the cutting edge of new developments, provide a
framework for capacity building, define operational standards, integrate e-information
applications in the organisation, cater for adequate cyber infrastructure, define information
products and services, enable the creation of digital repositories, define procedures for digital
archiving, define the mandate for digital scholarship, explain sustainability issues, provide
quality assurance, and define open access procedures, to name a few. Pienaar (2008), citing the
context of the University of Pretoria, maps out the e-environment for scholarship as: e-research,
e-learning, e-resources, open scholarship, digitisation, Web 2.0/Library 2.0, institutional
repositories, and Library Web.

According to Pienaar (2008), the e-research component is responsible for:

- Digital data curation (data acquisition, creating meta data, annotation, provenance, data
  storage, data cleansing, data mining, curation and preservation)
- Liaisons with other institutions
- Developing the virtual research environment, and
- Establishing digital scholarship advocacy.

E-learning would be responsible for developing e-skills, the seamless integration of library
information, and carrying out information literacy. Digitisation would be responsible for
developing digital preservation strategies, equipment requirements, and providing space for
digitisation, while open scholarship would be responsible for developing strategies for open
scholarship and integrating accredited journals with journals that support open access.
Repositories would develop strategies for digital repositories and integrate various e-resources.
Library web is basically the portal and gateway to the information in the repository. Web
2.0/Library 2.0 would develop strategies that enhance the user environment i.e. content creation,
learning spaces, etc. E-resources would deal with acquisition, the organisation of e-resources,
and transforming resources into interactive interfaces. For effective operationalisation, each of these
components may be assigned a group of specialists in the area, or a committee.

O’Brien (2005) proposes the following requirements for e-research:

Technological infrastructure and services - ICT infrastructure (high performance computing),
networks, data management and storage, repository management, grids, digitization, data
mining, statistical support, data preservation, authorization and authentication mechanisms,
and help desks.

Leadership and coordination - brokering the needs of academics by providing connections to
necessary support structures or expertise on campus; providing a management structure for e-
research across the university; and collaborating with other relevant bodies on campus to foster
knowledge and resource sharing across campus communities.

Buchhorn (2004) posits that researchers’ e-research requirements include:

- Access to storage and computational resources
- Access to computational software and services
- Videoconferencing and collaboration tools
User-friendly, application-specific, web-based portals
Shared access to large data repositories for searching, replication and updating
Assistance with organizing and managing research data sets
Collaborative steering of remote research experiments and the ability to collaborate in international projects

Digital repositories form one of the most important components of the digital scholarship environment. A digital repository enables easy access to scholarly literature and provides the quickest means of accessing and also disseminating research output. It increases the visibility of authors, making their works widely read. Pienaar and van Deventer (2007) observe that institutional repositories enhance researcher efficiency; integrate systems (across the entire research cycle) and cut out personal duplication; facilitate the utilization of colleagues’ results, which cuts out duplication across organisational boundaries; enable real time communication of research results; and help students and staff easily identify research areas. Repositories can vary in scope, and may be departmental, institution-wide, individual, disciplinary or governmental repositories. Institutional repositories can enable access to documents such as theses and dissertations that are often not disseminated widely. Technical reports can also be archived, including standards, best practices, etc. Such repositories can help prevent the duplication of research work, facilitate access to local content, enable the publication of local content, and make contributions to global scholarly knowledge. A list of institutional repositories can be found through search IR directories such as Directory of Open Access Repositories (DOAR) and Register of Open Access Repositories (ROAR) (Onyancha, 2008).

The digital scholarship environment can facilitate access to a wide range of literature in electronic databases, digital libraries and the institutional repositories of other universities, and consequently help address the dearth of information resources that universities in Africa are faced with. Through digital scholarship, it is possible for universities to enhance quality research; make contributions to global knowledge; enhance content development; help bridge the digital divide; provide access for greater numbers of students to higher education; and make access to higher education more democratic and liberalized.

Kraut et al. (2003) note that the Internet has changed communication and is enabling researchers to observe new or rare phenomena online and conduct research more efficiently, enabling them to expand the scale and scope of their research. The Internet has also enabled scientists to collaborate by increasing the ease with which they can work with geographically distant partners or share information (Walsh & Maloney, 2002). Research enabled through the Internet lowers many of the costs associated with collecting data, especially with regard to human behaviour, as ICT enables the hosting of online experiments and surveys, allows observers to watch online behaviour, and offers the mining of archival data sources. Through online research, data can be collected from thousands of participants with minimal intervention on the part of experimenters, for example through Internet chat rooms and bulletin boards, which provide a rich sample of human behaviour for studies on communication (Nosek, Banaji, & Greenwald, 2002).

### Challenges of Digital Scholarship

Despite the potential ICT offers in research, there are several challenges facing researchers in a digital environment, especially within the context of the developing world (in this instance, in Africa). Mutula et al. (2006), in an empirical study of e-learning at the University of Botswana, identified the following problems facing students:

- A shortage of computers
- Lack of clarity of online content
- Poor Internet connectivity
Challenges of Doing Research in sub-Saharan African Universities: Digital Scholarship Opportunities

- Difficulty in finding information on the Internet
- An inability to cope with the workload
- Poor formats of presenting online content
- The lack of appeal of online content, etc.

When asked how well the materials were presented online, some felt that the presentation was inadequate. As to whether the online course was designed with their needs in mind, 58 (67.4%) of the 86 respondents said yes, 17 (19.8%) said no and 11 (12.8%) did not know. Gerhan and Mutula (2005), in a study on the bandwidth problems at the University of Botswana, similarly found that a shortage of computers is often cited as a major setback hampering effective e-learning. In addition, students often complain of poor Internet connectivity.

Digital dispensation places a heavy demand on library and information professionals. Stueart (2006) notes that information facilitators in the information age are being called upon to help people use resources: enhance outreach services to various users, such as faculties; and work with users at the desktop to show them how to use databases. The librarian is also being seen as an information consultant involved in behind-the-scenes activities, such as helping software designers develop systems that fit users' information seeking behaviour. They are also increasingly getting involved in developing and imparting information literacy while also acting as negotiators responsible for identifying needs; facilitators for providing effective search strategies; educators familiar with literature and information in many formats; and information intermediaries responsible for providing current awareness services and liaisons between the information seeker and the information itself. The librarian is now also perceived as a knowledge manager responsible for supporting the knowledge access process by directing users to other knowledge experts.

Doing research in the digital era is made difficult because there is currently no sampling frame that provides an approximate random sample of Internet users. Unlike what can be achieved by randomly dialling telephone numbers, which provide an approximate sample of countries’ populations, the problem associated with achieving a reasonable level of ‘representativeness’ is exacerbated by the fact that online surveys and experiments rely on opportunity samples of volunteers. As a result, it is not clear how one should go about the task of appropriate generalization (Kraut et al., 2003). Moreover, Internet–based surveys pose challenges of generalisation because response rates to online surveys are typically lower than comparable mail or telephone surveys and, when given the choice of Internet or paper questionnaires, respondents still overwhelmingly choose paper (Couper, 2001). The researcher also does not have control over the environment in which the research is conducted, especially when compared to other experimental settings, given that when people are not identified, they feel less accountable for their actions (Sproull & Kiesler, 1991). The basic ethical principles underlying research involving human subjects, namely respect for persons, beneficence and justice, are difficult to uphold in Internet-based research. This is because, as pointed out by Kraut et al. (2003), Internet research involves two potential sources of risk: harm resulting from direct participation in the research (e.g. acute emotional reactions to certain questions or experimental manipulations), and harm resulting from breach of confidentiality.

Hedstrom (2002) outlines some of the research challenges in a digital dispensation. In particular, digital collections are vast, heterogeneous, and growing at a rate that outpaces our ability to manage and preserve them. There are no effective and cost-effective methods to preserve dynamic databases, complex websites, analytical tools or software for long-term retrieval. In addition, digital resources are impossible to interpret or use without accompanying tools for analysis and presentation. Besides, digital content can also not withstand some unspecified period of neglect without this resulting in total loss. There are questions of intellectual property rights, privacy and trust which must be addressed by researchers. Access to digital content sometimes experiences interoperability problems, especially across widely distributed and heterogeneous digital archives.
Most of the content providers of digital material are in the developed world, and they are increasingly moving away from the purchasing model to licensing, which often overrides conventional exceptions to copyright as contained in national legislations, such as fair use and fair dealing. This makes it difficult for the information provider to freely avail such information for academic use without breaching agreements of license, further alienating developing countries from mainstream information (Kiggundu, 2007). In addition, the high costs of access to external databases and for the procurement of digital information makes it increasingly difficult for libraries in the developing world to subscribe to new journals and books, or even maintain existing subscriptions.

Way Forward and Conclusion

O’Brien (2005) notes that since research is changing dramatically, i.e. becoming more multidisciplinary, more collaborative, more global, and more dependent on the capabilities offered through advanced networks and large data storage; there are new opportunities and challenges for information professionals within higher education. Actively engaging in strengthening partnerships with foreign colleagues and with the researchers within our own institutions is an important way to maintain relevance and be beneficial to the research endeavours of our institutions.

The evolving democratic and technological environment provides a window of opportunity for the universities in Africa to re-engineer themselves and reclaim their lost glory. But for universities to optimise the benefits they can accrue using technologies, a number of interventions are needed. Universities need to develop research strategies that will define resource needs; determine quality assurance measures; elaborate on ethical issues online; define peer review processes, collaboration and partnerships with industry and government; and define mechanisms for the commercialisation of research products, mentorship and complaint resolutions.

Scholars should be encouraged to self archive pre-prints and post-prints of their papers in open access archives or institutional repositories to help address the paucity of research materials that face African universities. Institutional repositories can make significant contributions to the visibility and international standing of universities and research organizations in the realm of scholarly communication. Libraries have a critical role to play in digital scholarship. O’Brien (2005) observes that libraries have traditionally been central to the research endeavour by managing and preserving scholarly resources, now increasingly in digitized form, and making these resources accessible to the researcher, often through collaboration and partnerships with other libraries. Libraries have know-how not only in managing, providing access to, and preserving scholarly resources, but also in forming federations and collaborations to share published scholarly work. Moreover, libraries are responsible for developing mechanisms that perfect tools and procedures for enhancing easy access to e-information and e-content, such as portals, gateways, and hypertext links to resources.

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The provision of recreation services for the aged in the Durban Metropolitan Area (DMA).

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1. INTRODUCTION
This paper is about the provision of recreation services for the aged in the Durban Metropolitan Area (DMA). Its foundation among others is based on the premise that “The joy that comes from engaged in recreation activities should be experienced by everyone”, (Weiskopf (1982: 21). For people to be involved in recreation activities, irrespective of the age structure under which they fall, recreation facilities, services and opportunities need to be made available. Why? Recreation participation is reward laden for almost all age groups. Carlson et al (1979) list the recreation participation rewards to be the following: physical well being; emotional health; the quest for identity, commitment, or “a piece of action”; sense of community; learning; self image, self-esteem, and self-fulfilment; personality development; social interaction and social integration; adventure, and the opportunity to find an acceptable balance.

This paper holds an assumption that the majority of the aged population especially those who come from the previously disadvantaged communities background partially neglect using their leisure time by participating in recreation activities. This partial neglect of recreation participation from the aged population has something to do with lack of retirement preparation programmes, the inadequate provision of relevant recreation services, as well as, the absence of relevant recreation programmes. A problem of such a nature may also be underpinned by the fact that the recreation needs/demands of the aged population are not well catered for by the providers of recreation opportunities.

This research paper has been undertaken with a view of seeking to answer the following questions about the aged found in the Durban Metropolitan Area:

(a) Are the aged in the Durban Metropolitan Area adequately provided with recreation services?
(b) To what extent are the recreation demands or needs of the aged found in the Durban Metropolitan Area are met? and
(c) What is the local government policy towards providing recreation services in the Durban Metropolitan Area?

2. AIMS
The general aims of the paper have been the following:

- to investigate the provision of recreation facilities for the aged population taking into consideration the cultural background of the various population groups found in an area; and
- to draw the attention of the decision-makers in as far as what to provide and where to provide the recreation facilities for the aged population.

The general hope has been that the research will come out with scientific proof in as far as the needs of the aged population from various racial groups when it comes to the provision of recreation services.

3. OBJECTIVES
In order to achieve the above aims this study had the following objectives:
(a) To reveal the existing recreation services that has been provided for the aged in the Durban Metropolitan Area.
(b) To see the need of providing the aged in the Durban Metropolitan Area with recreation services.
(c) To establish whether there is a need to conduct a need analysis survey prior to put in place any recreation facilities for the aged in the Durban Metropolitan Area.
(d) To ascertain the role that can be played by the provision of relevant aged recreation programmes in increasing the aged recreation participation in the existing recreation services within the Durban Metropolitan Area.
(e) To determine the views that the aged population holds towards the aged recreation participation.
(f) To determine the distance that the aged are prepared to travel to a recreation facility.
(g) To establish concessions that can be granted to the aged by the recreation service providers in using the offered recreation services.

4. HYPOTHESES

The operational hypotheses upon which the paper based its findings were that:
(a) The aged population in the Durban Metropolitan Area is not adequately provided with recreation and tourism facilities.
(b) There is a lack of need analysis when it comes to the provision of recreation and tourism facilities for the aged population in the Durban Metropolitan area.
(c) Recreation participation of the aged living in the Durban Metropolitan Area can improve if relevant recreation programmes can be conducted.
(d) Participation of the Durban Metropolitan Area’s aged populace in recreation activities benefits them physically, emotionally, socially and educationally.
(e) The aged in the Durban Metropolitan Area who are participating in recreation activities value their participation.
(f) The aged prefers a location of a recreation facility to be easily accessible for them to use.
(g) The aged must be granted a special concession by the recreation services providers in making use of the latter’s recreation services.

5. THEORETICAL FRAMEWORK

The general theory that has been postulated by different authors including South Oldman (1996); African White Paper (1998); Ngcobo (1998); Kraus (2001); Torkildsen (2001); Edginton et al (1995); Marsland (1987); Rodgers (1985); Smith and Theberge (1987); Weiskopf (1982); Voskanyan et al (2003) to mention only a few states that human beings involve themselves in recreation because there are certain natural needs that must be fulfilled (Needs Serving Approach) FIGURE 1 below: and that human beings recreate because of certain benefits that are derived from recreation (Outcomes Based Approach).

**FIGURE 1: APPROACHES IN RECREATION**
OUTCOMES BASED APPROACH

6. DEFINITION OF TERMS
In this paper recreation, recreation provision, recreation demand, leisure, and youth are the only terms that are going to be defined. The reason for defining these terms was that of casting away some doubts in as far as their interpretation and usage.

6.1 Recreation
Recreation is an activity or experience carried within leisure, usually chosen by the participant, either because of satisfaction, pleasure or creative enrichment derived, or because he or she perceives certain personal or social values to be gained from them. (Edginton et al. (1995); Torkildsen (2001); Magi (1988) and Bucher (1983).

6.2 Leisure
Leisure is one term that has brought about innumerable debates to the authors writing about this field. Like recreation, leisure has failed to have a universally accepted definition. According to Edginton et al. (1995) leisure means different things to different people. Figure 1.1 gives us the different ways in which people view leisure.

In the context of this paper, an explanation of leisure by Murphy (1981) has been adopted. The concept, leisure according to Murphy (1981) is categorised into time, function, spatial-environment and an integrative - synthesising perspective, holism. What is striking in Murphy’s (1981) categorisation of leisure is that, leisure is not defined as an activity but rather includes time, and attitudes toward time and non work activities. Leisure, therefore throughout the paper is treated as free time related, that is, time at the disposal of the individual, during which the individual can spend it as he or she choose

6.3 Recreation Service
Recreation services in the study take into consideration the available recreation facilities, offered recreation programmes, and participation in recreation activities. In essence the term recreation services encapsulate all recreation opportunities that are accompanied by recreation facilities, recreation programmes and recreation activities. Consequently, the usage of the term recreation services will be limited to recreation facilities, recreation programmes and recreation activities. Further on it would be appropriate to clarify that the usage of the term recreation facility will be limited to recreation resources.

6.4 Metropolitan Area
According to Eckstein and Noah (1973) e a metropolitan area is a special form of the urban environment, whose influence is great and extends beyond its boundaries. The influence and the importance of a metropolitan area are clearly recognized in commerce, communications and politics. A metropolitan area is characterized by social and economic heterogeneity, high levels of population mobility, and a disproportionate concentration of skilled manpower and economic activities of particular types.

6.5 Aged
The term aged in this paper will be specifically referring to people who have already retired from work. Initially females could retire when they reach the age of fifty-five and males when they reach the age of sixty. Act 108 of 1996 section 9 (3) states that people may not be unfairly discriminated on the basis of race, gender, sex, pregnancy, marital status, ethnic or social origin, colour, sexual orientation, age, disability, religion, conscience, belief, culture, language and birth.
In terms of this act, therefore, males who have reach the age of fifty-five can also retire from work, hence the age of fifty-five has been considered as people who are the aged.

7. RESEARCH FRAMEWORKS AND DATA MANAGEMENT

As this research was examining the provision of recreation services for the aged in the Durban Metropolitan Area the policies related to the provision and management of recreation facilities, services, opportunities and activities within the study area, the collection of data were therefore limited to the aged.

7.1 DATA COLLECTION

There are four data collection strategies or methods that have been employed. These strategies are questionnaires, interviews, observations and available data. The four strategies have been preferred among others because of the nature of the research problem and the kind of information desired by the researcher.

7.1.1 The Questionnaires

Before distributing the questionnaires, more especially the main questionnaire to the main population sample, a pilot study, or a pre-test was conducted. Three sets of questionnaires were distributed to the aged population in the study area (the main population sample), the general public, and the service providers. Owing to the fact that the main population sample might experience language constraints, the researcher decided to provide the questionnaires in both English and IsiZulu. Most of the questions in the questionnaire have been closed-ended questions. There were about 260 questionnaires that were distributed.

7.1.2 The Interview

The interview method has been used in this research to collect data from mainly service providers. In conducting the face-to-face interview the researcher used the structured questionnaire approach. The structured questionnaire was used in this instance for consistency purposes. The reason for conducting face-to-face interviews with the recreation service providers is that most of them wanted to know the aim behind conducting the research, as well as how is the research of this nature going to benefit them, as they had the feeling that the aged population is a neglected sector when it comes to recreation services provision. In addition, it was the intention of this study to clarify and give a better understanding about the issues that are revealed by the questionnaire.

7.1.3 Observation

In this study the non-participant observation type has been used. The use of the non-participant observation type has been preferred over the other types in that the researcher can find the main sample population in their natural form. The non-participant observation type has been used in order to confirm whether the aged population do participate in some of the recreation activities designed for them by the recreation service providers. The local councils that the researcher visited with an aim of determining the participation of the aged group in recreation activities included the inner west, south central, and north central. These areas were visited because their aged organisations indicated that they host days for the aged day. In addition, it was the intention of the researcher to identify the nature of the recreation facilities and services that are used to cater for the needs of the aged population. This would also serve to confirm some of the responses that the main population sample has provided in the questionnaire.

8 THE RESEARCH SAMPLE

The total research sample of the study was 260. This figure was arrived at by the researcher after making use of Magi’s (1998) Table of Estimation of Sample Size from a Given Population, where he suggested that the sample need to be within ±0.05 of the population proportion, $P$, with a 95% level of
confidence. In this study therefore the population at the time when the study was conducted has been in the region of 300,000.

Table 1 shows the number of the distributed questionnaires to the main research sample and the number of questionnaires that were returned.

**TABLE 1 DISTRIBUTION OF QUESTIONNAIRES (ACTUAL FREQUENCIES)**

<table>
<thead>
<tr>
<th>LOCAL COUNCILS</th>
<th>DISTRIBUTED QUESTIONNAIRES</th>
<th>RETURNED QUESTIONNAIRES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percentage</td>
</tr>
<tr>
<td>North Council</td>
<td>040</td>
<td>08</td>
</tr>
<tr>
<td>North Central Council</td>
<td>145</td>
<td>29</td>
</tr>
<tr>
<td>Outer west Council</td>
<td>030</td>
<td>06</td>
</tr>
<tr>
<td>Inner west Council</td>
<td>065</td>
<td>13</td>
</tr>
<tr>
<td>South central Council</td>
<td>195</td>
<td>39</td>
</tr>
<tr>
<td>South Council</td>
<td>025</td>
<td>05</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>500</td>
<td>100</td>
</tr>
</tbody>
</table>

From Table 1 it is clear that the number of questionnaires distributed varied from one local council to another. The determining factor for this unequal distribution has been the concentration of the population. As one moves from the urban areas towards the rural areas the number of people starts to drop in terms of concentration. The trend in the Durban Metropolitan Area is that the North and the South Central Local Councils have more people than the other local councils because these two local councils also incorporate the city of Durban.

The research sample did not only limit itself to the aged as the main population sample. In addition, the general members of the public and the recreation service providers for the aged (organisations and associations) were also included. The researcher randomly selected one hundred and twenty (120) members of the public and ten (10) recreation service providers for the aged. In determining the recreation participation of the aged the study also argues the question of recreation demand (consumers) and recreation supply (agencies) in the Durban Metropolitan Area.

10. DATA PRESENTATION ANALYSIS AND FINDINGS

10.1 Socio-Economic Demography of the Respondents

In this section the respondent were required to give information on their socio-economic demography. The variables that were considered include gender, age, educational level, marital status, occupational status, source of income and income per month. The broad outcomes of the collected and analysed data is depicted in Table 2 below.

**TABLE 2: SOCIO-ECONOMIC DEMOGRAPHY OF THE RESPONDENTS (AGED) – (N = 260)**

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>SUB-VARIABLE</th>
<th>FREQ.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>095</td>
<td>36.5</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>165</td>
<td>63.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>260</td>
<td>100</td>
</tr>
<tr>
<td>Age</td>
<td>55yrs. – 64 yrs.</td>
<td>096</td>
<td>37.0</td>
</tr>
</tbody>
</table>
Furthermore, the respondents have been requested to indicate in their questionnaires the local council in which their residences are found. This has been done with a view of establishing whether all the local councils that fall under the Durban Metropolitan Area have been represented or not. Consequently, Table 3 gives a broad overview of the number of respondents who represented each metropolitan local council.

**TABLE 3 : RESPONDENTS’ PLACE OF RESIDENCE IN TERMS OF LOCAL COUNCILS**

<table>
<thead>
<tr>
<th>LOCAL COUNCIL</th>
<th>FREQUENCY</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Central Council</td>
<td>100</td>
<td>38.46</td>
</tr>
<tr>
<td>Inner West Council</td>
<td>033</td>
<td>12.70</td>
</tr>
<tr>
<td>North Council</td>
<td>024</td>
<td>09.23</td>
</tr>
<tr>
<td>Outer West Council</td>
<td>016</td>
<td>06.15</td>
</tr>
<tr>
<td>South Council</td>
<td>011</td>
<td>04.23</td>
</tr>
<tr>
<td>North Central Council</td>
<td>076</td>
<td>29.23</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>260</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>
From Table 3 it can be inferred that 67.69 percent of the aged population are concentrated in both the North and South Central Local Councils. This may be due to the fact that the North and South Central Local Councils include the city centre of Durban where the majority of the old age homes are found. In addition, both the North and the South Central Local Councils incorporate many townships which are known for their large concentration of people.

### 10.2 RECREATION AND LEISURE INTERPRETATIONS

The respondents were asked to furnish their meanings to the key concepts that underlie this study, that is, recreation and leisure. Tables 3 and 4 below what meanings the respondents attach to the concepts recreation and leisure.

#### TABLE 4: UNDERSTANDING OF THE CONCEPT OF LEISURE

<table>
<thead>
<tr>
<th>CONCEPT</th>
<th>CONCEPT MEANING</th>
<th>FREQ.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leisure</td>
<td>Time when you are not working</td>
<td>106</td>
<td>40.8</td>
</tr>
<tr>
<td></td>
<td>Time when you are free from work and doing nothing</td>
<td>027</td>
<td>10.4</td>
</tr>
<tr>
<td></td>
<td>Time when you do not know what to do</td>
<td>024</td>
<td>9.2</td>
</tr>
<tr>
<td></td>
<td>Time when you free from daily obligations</td>
<td>038</td>
<td>14.6</td>
</tr>
<tr>
<td></td>
<td>Time when you are involved in recreation activities</td>
<td>065</td>
<td>25.0</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>260</td>
<td>100</td>
</tr>
</tbody>
</table>

About 40.8 percent of the respondents understand leisure as time when one is not working but doing something other than work. At the same time 25 percent of the respondents perceive leisure as that portion of time in which they involve themselves in recreation activities. This interpretation of leisure was in line with that propounded by Murphy (1981), Nakhooda (1961) and Carpenter (2003), in that leisure is that part of the individual’s daily life in which he or she finds himself free from the demands of his regular calling and able to enter upon any line of activity he may choose within his own interests whether it be work or play or meditation.

#### TABLE 5: UNDERSTANDING OF THE CONCEPT OF RECREATION

<table>
<thead>
<tr>
<th>CONCEPT</th>
<th>MEANING</th>
<th>FREQ.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recreation</td>
<td>Making yourself happy and enjoyable during your leisure time</td>
<td>100</td>
<td>38.5</td>
</tr>
<tr>
<td></td>
<td>Entertaining yourself at your determined pace</td>
<td>30</td>
<td>11.5</td>
</tr>
<tr>
<td></td>
<td>Involving yourself in sports, games and play</td>
<td>25</td>
<td>9.6</td>
</tr>
<tr>
<td></td>
<td>Engaging yourself in activities from which you can derive pleasure and personal worth</td>
<td>45</td>
<td>17.3</td>
</tr>
<tr>
<td></td>
<td>Involving yourself in any activity during your leisure time</td>
<td>31</td>
<td>11.9</td>
</tr>
<tr>
<td></td>
<td>Refreshing yourself</td>
<td>9</td>
<td>3.6</td>
</tr>
<tr>
<td></td>
<td>Enjoying yourself during leisure time</td>
<td>10</td>
<td>3.8</td>
</tr>
<tr>
<td></td>
<td>Being with yourself during your leisure time</td>
<td>10</td>
<td>3.8</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>260</td>
<td>100</td>
</tr>
</tbody>
</table>

It is interesting to note from Table that about 58 percent of the respondents associate recreation with activities that take place during leisure time. In addition, 38.5 percent of the respondents indicate that the activities should make them happy and be enjoyable.
About 94.2 percent of the respondents indicated that they do have leisure time at their disposal. What can be inferred from Figure 4 is that the majority of the respondents, that is, 82 percent, have leisure time that ranges from one hour to six hours per day. Only 18 percent of the respondents were recorded as having more than seven hours per day as their leisure time. These respondents indicated that they have leisure time that ranges from seven hours to 10 hours.

10.3 RECREATION PARTICIPATION OF THE AGED

In order to determine whether the aged in the Durban Metropolitan Area are provided with adequate recreation services or not, and if so, whether they engage in recreation activities, the study started by investigating the recreation activities in which the aged are engaged.

Figures 3 and 4 below depict the active and passive recreation activities in which the aged in Durban Metropolitan Area involve themselves respectively. A distinction of this nature is necessary in order to determine whether the facilities can be said to be in surplus or under-provided. Such a distinction can also help the providers in determining the facilities that are provided but under-utilised by the aged. In this case the providers can decide whether relevant programmes accompanying the provision of a recreation facility are needed or not.

In Figure 3 it is noticeable that the majority of the respondents (more than 44%) engage themselves in green bowling. Green bowling, is well known in many circles of life as the sport of the aged, also known colloquially among African urban communities as (Umdlalo womagrizza) ‘the grand-parents’ sport’ or (umdlalo wamakhehla) ‘the sport of the old men’. Although in recent times some aged people have been found to engage themselves in casino gaming or gambling as a form of recreation, this study established that less than 4.3 percent of the aged in the study area participates or regard gambling as a form of recreation. The participation of the few elderly people in gambling as a form of recreation has been affirmed by Harahousou and Kabitsis (2002), in that few elderly people involve themselves in money making activities such as gambling as a form of recreation.
The study also revealed that about 39.7 percent of the aged engage in pleasure walks (taking a walk) and 29.5 percent of the respondents use jogging as a recreation activity. The increase in the number of aged that involve themselves in physical related recreation activities is also likely to be caused by the fact that some medical doctors, encourage the aged to participate in physical related exercises. This is affirmed by Kraus (2001) in that some medical experts have testified to the proven benefits of regular exercise that results in better health, stronger muscles, greater endurance and a general feeling of well-being and energy that the aged population needs at this stage of life.
In an attempt to establish the response of the aged to passive recreation activities, some of the related findings are indicated in Figure 6. From the analysis it seems that passive activities appeal more to the aged than active recreation activities. On ranking these passive activities, and understanding that each respondent selected more than one passive recreation activity, it emerged that watching television ($247 f = 95.1\%$) and radio listening ($129 f = 49.6\%$) were the most preferred activities. The moderately preferred passive activities included watching spectator tournaments, watching cultural events, watching sports events and going to the movies. The least preferred passive activities were attending dance festivals ($13 f = 6.9\%$) and music festivals ($29 f = 11.1\%$).
FIGURE 5  PREFERRED ACTIVE RECREATION ACTIVITIES

Figure 5 shows that are table tennis (1.3%); tennis (1.3%); art drawing (4.1%); swimming (5.4%); and board games (5.4%). With the exception of board games and art drawing, other recreation activities need some form of endurance. Fisher et al (2002) cautioned by saying that endurance is a barrier to seniors' participation in physical recreation activities.

In contrast to the preferred active recreation activities discussed above, Figure 6 depicts the perceived preference of passive recreation activities by the non-active participants (aged).
FIGURE 6: PREFERRED PASSIVE RECREATION ACTIVITIES [FREQUENCY]

About 95.1 percent (57 of) prefer watching television, followed by 65 percent (39 of) who prefer radio listening. Very similar to the active participants, the non-active participants’ moderately preferred passive activities include watching spectator tournaments, watching cultural events, watching sports events and music festivals.

10.4 ATTITUDE OF THE AGED TOWARDS RECREATION

10.4.1 Provision of Recreation Facilities for the Aged in the Durban Metropolitan Area

About 19.6 percent thinks that the recreation facilities for the aged are fairly sufficient or adequate as against 80.4 percent that thinks that the facilities are inadequate or not available at all. Furthermore the local council perceived as having the most recreation facilities is the Durban City area.

TABLE 6.: OPINIONS ON AVAILABLE RECREATION FACILITIES PER LOCAL COUNCIL (AGED)

<table>
<thead>
<tr>
<th>DMA</th>
<th>RESPONSES</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
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<td></td>
<td></td>
</tr>
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<td>North</td>
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<td>07</td>
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<td>33.3</td>
<td>03</td>
<td>12.5</td>
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<td>00</td>
<td>00</td>
<td>00</td>
<td>01</td>
<td>33.3</td>
<td>02</td>
<td>66.7</td>
</tr>
<tr>
<td>Outer West</td>
<td>00</td>
<td>00</td>
<td>03</td>
<td>21.4</td>
<td>08</td>
<td>57.2</td>
<td>03</td>
<td>21.4</td>
</tr>
</tbody>
</table>
The provision of recreation services for the aged in the Durban Metropolitan Area (DMA)

The local councils that are not in close proximity to the city centre and are predominantly occupied by the historically disadvantaged communities are seen by the respondents to be inadequately provided with recreation facilities for its aged population. Hence 8.5 percent and less of the respondents think that they have the most recreation facilities for its aged population. This apparent way of thinking seems to be addressing the first hypothesis, that reads:

*The aged population in the Durban Metropolitan is not adequately provided with recreation facilities.*

10.4.2 Recreation Facilities and Activities' Needs Analysis Survey

The respondents were asked whether they would prefer a needs analysis survey to be conducted in their area prior to the provision of recreation services. The question of a needs analysis survey in this study is an attempt to address the hypothesis that reads:

*There is a lack of a needs analysis when it comes to the provision of recreation facilities for the aged population in the Durban Metropolitan Area.*

More than 90 percent of the respondents feel that there is a lack of a needs analysis survey when it comes to the provision of recreation services for the aged population in the Durban Metropolitan Area. Only less than 10 percent indicated that there is no lack of a needs analysis. Hence the above hypothesis was proved to be valid.

Providers can determine the type of recreation services that need to be provided for the aged.

10.4.3 Location of Recreation Facilities

About 29 percent of the respondents preferred that a recreation facility should be in the most central place. At the same time, more than 50 percent indicated that a recreation facility should be located in a place that is accessible by different means of transport. Therefore it can be inferred that about 81 percent of the respondents, prefer the location of recreation facilities to be either at a central place or a place that is easily accessible by whatever mode of transport. This way of thinking happens to be consistent in almost all the local councils with the exception of the North Central Local Council. This line of reasoning happens to be in line with the recreation policy enshrined in the South African White Paper on Sports and Recreation (1998), which states that recreation participation is a fundamental right. All people of South Africa, irrespective of gender, age, race, language, culture, political persuasion, affiliation, disability or status should afford and access the offered recreation programmes and facilities.

The question of location has not been limited to responses that come from the different local councils. It was the intention of the study to further solicit information from all the respondents about their feeling in the following cases:

(a) Whether the aged population should be provided with recreation facilities; and
(b) The place within the local council that they think the recreation facilities for the aged should be located.
TABLE 9: FACILITIES PROVISION AS AGAINST LOCATION

<table>
<thead>
<tr>
<th>OPINIONS ON FACILITIES PROVISION (RESPONSES)</th>
<th>OPINIONS ON FACILITIES LOCATION (RESPONSES)</th>
<th>TOTAL</th>
</tr>
</thead>
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<tr>
<td></td>
<td>Central Place</td>
<td>Accessible Place</td>
</tr>
<tr>
<td></td>
<td>% F</td>
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<tr>
<td>Yes</td>
<td>63 27,6</td>
<td>12 6</td>
</tr>
<tr>
<td>No</td>
<td>01 16,7</td>
<td>04 06</td>
</tr>
<tr>
<td>Do Not Know</td>
<td>11 42,3</td>
<td>06 23, 1</td>
</tr>
<tr>
<td>TOTAL</td>
<td>75 29</td>
<td>13 6</td>
</tr>
</tbody>
</table>

About 87.7 percent of the respondents are agreeable to the provision of recreation facilities for the aged. Inferring from Table 9 above, it can be safely stated 81 percent of the respondents felt that the recreation facilities should be located at either the central or the most accessible place.

FIGURE 7: TRANSPORT FARE THE AGED ARE PREPARED TO PAY

The location of recreation facilities and the minimum fare that the aged are prepared to pay have been seen by the researcher as two sides of the same coin. From Figure 7 it is noticeable that the majority (66.2%) of the respondents (aged) only wants to be charged a return fare that ranges between R3, 00 and R6, 00 to access their recreation facilities. Only 33.8 percent of the respondents indicated that they feel that they need to be charged more than R6, 00. The reason why the aged prefer to pay far less than what the present economy demands, has been correctly summarized by Kaplan (1953) and Sul Tcha and Lobo (2003) in that economic problems among the senior citizens act as a constraint and a barrier in accessing some of the available recreation services.
10.4.5 Benefits of Recreation Participation to the Aged

The question of recreation benefits in the study was closely aligned to the hypothesis that reads: Participation of the Durban Metropolitan Area’s aged populace in recreation activities benefits them physically, emotionally, socially and educationally.

### TABLE 10: PERCEIVED RECREATION BENEFITS (AGED)

<table>
<thead>
<tr>
<th>RESPONSES</th>
<th>Fully Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>FULLY DISAGREE</th>
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<td>%</td>
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<td>03</td>
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<tr>
<td>Coloureds</td>
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<td>13</td>
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<td>01</td>
</tr>
<tr>
<td>Indians</td>
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<td>64,7</td>
<td>09</td>
<td>26,5</td>
<td>01</td>
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<td>(C) SOCIAL BENEFIT</td>
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<td></td>
<td>F</td>
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<tr>
<td>Blacks</td>
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<td>Whites</td>
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<td>67,6</td>
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<td><strong>TOTAL</strong></td>
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<tr>
<td>(D) EDUCATIONAL BENEFIT</td>
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</tr>
<tr>
<td></td>
<td>F</td>
<td>%</td>
<td>F</td>
<td>%</td>
<td>F</td>
</tr>
<tr>
<td>Blacks</td>
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<tr>
<td>Whites</td>
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<td>37,9</td>
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<tr>
<td>Coloureds</td>
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<td>27,3</td>
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<td>10</td>
<td>29,5</td>
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<td><strong>TOTAL</strong></td>
<td>135</td>
<td>51,9</td>
<td>112</td>
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<td>( X^2 = 13.66 )</td>
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<tr>
<td>( p &gt; 0.05 )</td>
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</tr>
</tbody>
</table>

About 86.9 percent of the aged perceive recreation participation as benefiting them. The rest of the population, that is, 3.1 and 10 percent, indicated that recreation does not benefit them or they do not know.
Another area of interest to the study was the provision of relevant recreation programmes for the aged. The hypothesis postulated under this area was that if the aged in the Durban Metropolitan Area can be exposed to recreation programmes, such exposure can improve their recreation participation. Respondents were subjected to a four point scale table that included the following:

<table>
<thead>
<tr>
<th>Fully Agree (FA)</th>
<th>Agree (A)</th>
<th>Disagree (DA)</th>
<th>Fully Disagree (FDA)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>

93.8 percent of the respondents agree that exposure to different recreation programmes coupled with recreation facilities provision, have a positive impact on aged recreation participation. Only 6.2 percent of the respondents do not think so. It is interesting to note that of the respondents from the various racial backgrounds, more than 90 percent share the same views about exposure to various activities as one form that can increase recreation participation of the aged.

Another viewpoint that this study solicited from the respondents related to the provision of special concessions by recreation service providers. The hypothesis that this section of the study has been addressing is that:

*The recreation service providers must grant special concessions to the aged for the utilization of their services.*

![Figure 8: Recreation Service Providers to Grant Concessions](chart)

It is believed that the transport industry is leading this list because many aged who are in the Durban Metropolitan Area feel that they are far away from places that offer recreation opportunities. One way, therefore, of accessing the recreation facilities is through the use of public transport.
10.5 PUBLIC PERCEPTIONS ON AGED RECREATION
In order to avoid bias, the study also collected information from the unaffected parties who are the general public. The focus area in this section was the opinions of the general public with regard to recreation participation of the aged in the study area.

### TABLE 10: PUBLIC PERCEPTIONS OF THE RECREATION PARTICIPATION OF THE AGED (N=100)

<table>
<thead>
<tr>
<th>EDUCATION LEVEL</th>
<th>Very High</th>
<th>High</th>
<th>Fair</th>
<th>Low</th>
<th>Very Low</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F %</td>
<td>F %</td>
<td>F %</td>
<td>F %</td>
<td>F %</td>
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</tr>
<tr>
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<td>00</td>
<td>00</td>
<td>02</td>
<td>02</td>
</tr>
<tr>
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<td>00</td>
<td>00</td>
<td>00</td>
<td>10</td>
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</tr>
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<td>02</td>
<td>22</td>
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</tr>
<tr>
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<td>00</td>
<td>00</td>
<td>04</td>
</tr>
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<td>Post Matric.Phase</td>
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<td>06</td>
<td>04</td>
<td>06</td>
<td>08</td>
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<td>06</td>
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<td>05</td>
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<td>06</td>
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<table>
<thead>
<tr>
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<td>00</td>
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What can be inferred from Table 10 (A) is that 80 percent of the general public feel that the participation in recreation activities of the Blacks’ aged living in the Durban Metropolitan Area is low. All the members of the public irrespective of the educational level share the same opinion. Only 11 percent think that the recreation participation is fairly high, while the remaining respondents, that is, about 9 percent, think that it is fair or rather within acceptable standards.

10.5.1 Availability of Recreation Services in the Study Area
The general public has been requested in this study to air their views when it comes to the provision of both the recreation facilities and recreation programmes for the aged in the Durban Metropolitan Area. This was based on the following hypothesis:

*That the aged population in the Durban Metropolitan Area is not adequately provided with recreation facilities.*

48 and 25, percent think that the facilities are inadequate or not available. Only 14 and 13 percent respectively think that the facilities are many or fairly sufficient.

Following the adequacy of recreation programmes, another hypothesis postulated in the study is:

*That recreation participation of the aged living in the Durban Metropolitan Area can improve if relevant recreation programmes can be conducted.*

95 percent of the respondents are of the opinion that the exposure of the aged population to recreation programmes will most likely improve their participation in recreation activities. 100 percent of both the Blacks and Indians strongly agree that this exposure will improve the participation of the aged in recreation activities. Only 17 percent of both the White and the Coloured respondents do not agree that the exposure to recreation programmes will improve participation. Once more the significance of this hypothesis was subjected to the chi-square test. The results obtained of 0, 000 shows that the level of significance is very high. A result of this nature suggests that a significant number of participants believe that there is a strong relationship between exposure to recreation programmes and recreation participation.

10.5.2 Needs Analysis Survey In Recreation Provision
The aged population in the Durban Metropolitan Area as the targeted population sample were requested to comment on the hypothesis that reads:

*“There is a lack of a needs analysis when it comes to the provision of recreation facilities for the aged in the Durban Metropolitan Area”* In order to ascertain whether the public share the same perception with that of the aged, the researcher decided to pose the same question to the general public.

About 92 percent of the respondents are of the opinion that there is a lack of a needs analysis survey when it comes to the provision of recreation facilities for the aged in the Durban Metropolitan Area. It is interesting to note that that 100 percent of the respondents from both the Indian and the White communities that were interviewed also share the same sentiments. The 5 percent who disagrees to this is made up of both the Blacks and the Coloureds.

10.5.3 Perception On Recreation Values
The respondents were requested to give their opinions in areas where they think the aged are benefiting from recreation participation. Soliciting the views of the public about the values of recreation was based on the hypothesis that reads: *That the aged in the Durban Metropolitan Area who are participating in recreation activities value their participation.*

About 100 percent of the respondents from the White population group think of recreation participation as benefiting the aged population. A result of this nature might be caused by the exposure of the Whites to various recreation activities. Only 3 percent of the respondents from the Black population group are of the opinion that the participation of the aged in recreation activities does not benefit them.

Another area of concern that relates to recreation participation in the study has been that of benefit. This study wanted to establish the exact areas where recreation participation is seen to be benefiting the aged. The appropriateness of such an investigation was in line with the research hypothesis that reads:

*That participation of the Durban Metropolitan Area’s aged populace in recreation activities benefits them physically, emotionally, socially and educationally.*

An average of 97 percent of the respondents is of the opinion that recreation participation benefits the aged physically, emotionally, socially and educationally. It is interesting to note that from both the White and Coloured respondents 100 percent of the respondents are of the same opinion. Both the Blacks and the Indians share the 3 percent of the respondents that do not perceive recreation participation as benefiting the aged. The hypothesis that reads that:

*Participation of the Durban Metropolitan Area’s aged populace in recreation activities benefits them physically, emotionally, socially and educationally* is thus proved to be valid.

### 10.5.4 Location Of Recreation Facilities

The order of preference as viewed by the general public when it comes to the location of a recreation facility, is accessible place (53%); central place (27%); within walking distance (18%); and local town (02%).

The importance of the location of a recreation facility is important especially in dealing with the aged population. Torkildsen (2001:247) in re-emphasizing the question of location says:

Ideally, a public leisure facility should be located on or near a main road that is well served by a public transport system, in close proximity to other leisure facilities, with good direct access to and off the site. In this way the accessibility of the facility is improved and the catchment area is extended along the main road. The main road will ensure that the people travelling along the route will have a high level of awareness of the facility, and this can be exploited in terms of promotion.

### 10.5.5 Concessions in Recreation Services Utilization

In considering the question of the supplier and the consumer, the researcher found it proper to request the opinions of the general public when it comes to granting concessions by recreation service suppliers. About 90 percent of the respondents are of the opinion that the aged should be granted special concessions in utilizing the recreation services. The racial group which feel strongly about granting the aged special concessions are Blacks (97%), followed by Indians (91%) and thereafter Coloured (83%) and Whites (66%). Only 9 percent of the total number of respondents thinks that these special concessions should not be granted to the aged.

### 11. INTERPRETATION OF DATA
The construction of both the hypotheses and objectives underpinning this study has so far centred around four areas of investigation. The areas are:

- Recreation participation;
- Recreation provision;
- Recreation demand; and
- Recreation concessions.

11.1 Recreation Participation
Recreation participation of the aged is therefore seen to be vital to the aged population’s quality of life. Taking into consideration that the aged are faced with multi-faceted problems related to their well-being, the majority of the respondents in the study indirectly indicated that physical fitness activities are needed as they are likely to help in facilitating an active, dynamic, and healthy quality of life. More than 80 percent of the aged and more than 95 percent of the public indicated that recreation participation of the aged benefit the aged. The hypothesis that reads: participation of the Durban Metropolitan Area’s aged populace in recreation activities benefits them physically, emotionally, socially and educationally was proved to be valid.

11.2 Recreation Provision
Considering that the provision of recreation facilities is one of the services, facilities must therefore be located in both accessible and central places for the aged. In short it seems that the majority of the respondents (aged and public) prefer either a central area or easily accessible area when it comes to the question of location of recreation facilities.

11.3 Recreation Demand
The Durban Metropolitan Area being an area that has been subjected to two major political eras, that is, the era of apartheid that mainly benefited the Whites, and the democratic era that intends to benefit everybody, has a task of correcting the imbalances of the past through conducting a needs analysis survey when it comes to recreation provision. The respondents from both the aged and the public have indicated that there is a lack of a needs analysis survey in aged recreation services provision, and this also seems to be evident in all the local councils that make up the Durban Metropolitan Area.

11.4 Recreation Concessions
The majority of the respondents, that is, 91 percent, think that the aged should be granted special concessions in utilizing recreation resources. This shows that even the general public is aware of the financial limitations that the aged are confronted with. The opinion that is shared by the general public is that participation by the aged in some recreation activities is dependent on financial affordability or alternatively, the aged must be met half way in encouraging them to participate in recreation-related activities.

11.5 Integrative Discussion
The findings that have been arrived at so far in this chapter suggest that recreation service providers need to follow certain guidelines in the provision of recreation services for the aged. The guidelines need to take into consideration all the findings that have been arrived at with respect to recreation participation, demand, provision and concessions.
Figure 9 is a schematic model of how recreation service providers in a multi-cultural area like the Durban Metropolitan Area should go about in providing the recreation services for any targeted population group.

From Figure 9 it is clear that having identified the group for which the recreation services have to be provided for, a needs analysis survey as suggested by the Boston Metropolitan Area Planning Council (1978-79) should be undertaken. From the needs analysis survey a service provider may be in a position to determine the different types of demand (effective demand, deferred demand and latent demand) that are required. A recreation service provider may from the different types of demand be in a position to determine recreation facilities that are urgently needed, as well as determine the constraints.

The model further suggests that prior to putting in place the required recreation facilities as inferred from the demand, policies governing the usage of facilities / services need to be established. It emanated from the findings that the question of concessions and location manifested itself as one of the constraints in the aged utilizing the available recreation services.

Furthermore the required recreation programmes must accompany the usage of facilities in order to ensure their maximum utilization. Having conducted the recreation programmes coupled
with the utilization of facilities, the model also suggests that a service provider must constantly assess the utilization of facilities and the provided programmes. Thereafter a service provider must constantly evaluate the usage of facilities and programmes in order to determine whether the community are still benefiting from participation and the programmes offered.

The researcher believes that if service providers could use a model of this nature, this is likely to remove the problems of providing recreation facilities that are thought to be needed by people, rather than those that are actually needed by people. Furthermore the provision of facilities that are actually needed by people can also guarantee the maximum participation of people.

12. RECOMMENDATIONS

This study revealed some issues that warrant attention by those responsible for aged recreation services. Consequently, some actions need to be undertaken. The main issues raised in the study revolve around the operational hypotheses and objectives of the study. This includes recreation participation, recreation provision, recreation demand and recreation concessions. All of these main issues are focussed on the targeted population that is the aged.

12.1 Recreation Participation of the Aged

The findings relating to the theme of recreation participation have shown that the aged participation in recreation activities within the Durban Metropolitan Area is rather limited. The limitations of participation of the aged in recreation activities tend to be common among the previously disadvantaged population groups. For the participation of the aged to improve in recreation activities, it is recommended that this group be exposed to multi-faceted recreation activities.

In exposing the aged, especially those belonging to the historically disadvantaged group, recreation programmes for the aged need to be introduced. The introduction of these recreation programmes is seen primarily to be the function that can be performed by both the public and private sector. The recreation programmes designed for the aged need to be deployed in all the local councils found within the Durban Metropolitan Area. Both the public and private sector need to ensure that professionals in the field conduct these programmes.

What has also been deduced from this study is that the aged within the Durban Metropolitan Area are aware of the benefits of recreation participation. The message that recreation participation benefits the aged can further be spread through the use of media. Local television and radio stations must be encouraged by the government to feature programmes aimed at making the aged aware of active recreation participation benefits. Furthermore, the local newspapers need to feature a special section that is aimed at making the aged aware of active recreation participation benefits. This is likely to improve the participation of the aged in active recreation activities.

12.2 Recreation Services Provision for the Aged

Exposing the aged to different recreation programmes can be a futile exercise if these are not accompanied by the provision of recreation services. What has come clear in this study is that the aged in the Durban Metropolitan Area are inadequately provided with recreation services. It is therefore recommended that a needs analysis survey aimed at what can be provided for the aged in the Durban Metropolitan Area be conducted. A needs analysis survey of this nature can be conducted by the Recreation and Parks section within the municipality. The implementation of a needs analysis survey results is one way of ensuring that the recreation service providers are distributing the required recreation facilities for the aged. The problem of being aged is not a once off problem but is a problem that everyone is going to face at some time. Consequently, the provision of recreation services for the aged has a potential of benefiting everyone in the long run.
12.3 Recreation Concessions

It is understood that the majority of the aged has financial limitations. These financial limitations act as a barrier in making them to access recreation services. In addressing this problem of financial limitations of the aged the recreation service providers need to meet them halfway. It is recommended that the government put in place a policy towards granting the aged concessions. A policy of this nature need to prescribe to the recreation service providers a percentage that need to be granted to the aged when they want to utilize recreation facilities. At the moment it appears that it is at the discretion of a recreation service provider to grant concessions. Some recreation service providers grant concessions while others do not. A policy of this nature will help the aged to know what they are entitled to and what they are not entitled to.

13. CONCLUSION

As this study is most concerned about provision of recreation services in an area that is undergoing drastic transformation, it will be appropriate to conclude by a quotation from Grey (1984) in Edginton et al. (2001:181)

“This is a time of great concern, uncertainty, ambivalence, and ambiguity in the recreation and park movement. It is a time of change. Change brings crisis and opportunity. In periods of rapid change, reforms are possible that could never be accomplished in periods of stability. Flexibility, recognition of opportunity, escape from pessimistic thinking, and leadership are required to respond to this period.”

References


A conceptual perception of a serpent by Africans: The study of symbolic representation and role of snakes in the lives and beliefs of African people.

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Since the emergence of the biblical story of creation and the events that took place at the Garden of Eden in the book of Genesis, snakes have been perceived as symbolic to satanic beliefs by mainly Christians. Besides, human beings fear snakes for their venomous bites. This paper is an attempt to shift the focus from viewing snakes as perpetual enemies of the people rather to demonstrate that the opposite is possible.

The paper shall first try to unlock the mystery around the serpent that appeared in the Garden of Eden and clarify symbolic, scientific and historical significance attached to it. The paper shall then go further investigate the role of the serpent in myths of creation, Legends, Magical practices, Medicine and Ritual ceremonial practices by African people.

To understand the story of creation and the Garden of Eden, we need to go back into ancient Egypt. Today it is pointless to over-emphasize the fact that Egypt is the cradle of all civilizations and modern knowledge: particularly when we talk of Astrology, Mathematics, Medicine and Geometry. We all know the mathematical expressions contained by $\pi$ (Pi) and $\phi$ (Phi), which have been a source of fascination to mathematicians for thousands of years. Egypt also seems to bear one of the ancient evidences of the presence on earth of flesh and blood gods; in the form of the Pyramids at Giza. Giza remains today one of the most fascinating sites both mathematically, astrologically, historically and religiously.

Alford, (1997) after close scrutiny of the biblical story of creation and of the Garden of Eden in chapters 1, 2 and 5 of the book of Genesis, argues that there seems to be two Gardens of Eden: one on the West and one on the East. The one on the East seems to be the one most modern Scholars and writers on religion have focused on. In the Bible it is said that there were four rivers that watered the Garden of Eden, those being, Pishon, Gihon, Tigris and Euphrates. Pishon and Gihon (which flow all around the land of Kush) have an African connection, while the Tigris and Euphrates have the eastern connection.

Alford (1997) also suggests that there was a rivalry between two sons of Elohim (the supreme God), Enki and Enlil. This suggests that God Elohim had allocated both his sons with a garden each, since the word Eden is derived from the Sumerian language E.DIN which literally means the ‘home of the Righteous Ones’. The western Eden belonged to Enki while the eastern Eden belonged to Enlil.

Malachi in the series of article under the pseudo name ‘The ancient Anunnaki’ suggests another dimension to the concept of God. Malachi claims that God Elohim assigned the rule of the heaven to Enlil and the rule of the earth to Enki. This is in line with Alford’s claims that it was Enki who created mankind. Hermes Trismegistus or Tau Tau Harama taught us that ‘As above, So below’. This suggests that both Enki and Enlil were the true reflection of the nature of the supreme God- Elohim. So, the ‘above’ represents the male principle while the ‘below’ represents the female principle. Therefore, god Enki was right to speak to the woman at the Garden of Eden (maybe Enki was not a son after all- Enki might have been a daughter). I don’t believe that God would have created just two sons in his image because God’s image is not just male instead it both male and female.

Judging from the story of creation on Genesis 1 and 5, it is clear that male and female were created at the same time in the image of God. But the story is twisted when in Genesis 2 it is suggested that a male in the form of Adam was created first and then a female (Eve) was created from man. This is regarded by many scientists as the first evidence of cloning of man by the god.
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Genesis 2 strongly suggests that the male (man) already existed when he was placed by God in the Garden of Eden. *The Lord God also planted a garden to the east in Eden, and there He placed the man whom he had formed, (Genesis 2 verse 8).*

There is no evidence in Genesis 1 and 5 suggesting that God had given orders to both male and female not to eat the fruit of the tree at the centre of the garden, the story of God’s orders only appears in Genesis 2: the eastern Eden. This is the time and place we are introduced to the story of the serpent conniving with Eve. The question we need to ask ourselves therefore is: who was this serpent and what was it doing in the Garden of Eden before it met the woman? What is a symbolic significance of the serpent-woman: serpent-tree of knowledge relationship? We might as well speculate that this was a god of some kind, equally capable and influential.

Again we shall be forced to go back to Egypt and the western Eden in order to assert our speculation. In the book ‘The secret in the Bible’, Bushby (2003) suggests that the ancient Egyptian priests held a tradition that ‘A serpent lies coiled in the great Pyramid’, which confirms that the serpent was revered as god by ancient Egyptians. Bushby (2003) further mentions that the *Book of Thoth* and the Great Pyramid were directly associated with a serpent in ancient Egypt.

But, the question on the association of the serpent and the ancient Egyptian God still persists. Alford (1997), on giving the meaning of the serpent according to the Egyptian people draws our attention to the river Nile and its significance on the lives of the Egyptians. Alford (1997: 275), states:

> The connection of the serpent symbol with the Enkiite gods lies in the African lands.

The Nile is said to be crawling along the ground just as a snake and it regularly reverse southwards (sometimes) about 200 miles and rediscovers its northwards direction. Today the Nile flows through ten (10) countries. The Nile was seen as a life provider to all the people who lived around it. So it was obvious that all the Enkiite gods were to be associated with the symbol of the snake.

Further investigations reveal that the snake was associated with the gods of wisdom. The clue for such association can be found in the Hebrew word for the biblical Serpent- *nahash*. This word literally means ‘to find things out, to solve secrets’. *Enki* is described as the chief scientist of the gods, and of his sons (Africans) to whom he passed on his knowledge. It is for this reason that we find the snake being associated with the God of wisdom which *Enki* the creator of mankind, the saviour of man from floods and the God who possessed all the scientific knowledge which was bequeathed to man, had.

The association of the woman and the term Sophia explains why the snake in this regard was associated with the god of wisdom and why the Serpent in the Garden of Eden spoke to the woman.
The association of the wisdom (Sophia) and a woman or Mary Magdalene (to be precise) formed the bases for the belief and behavior of organizations such as the Night templar, the Freemasons and the Priory of Sion. They all more or less claim the roots of their belief from Egypt. This aforesaid belief system was to be later rebuked as heresy by the orthodox Roman Christianity. Gardner (1996), in the book, 'Bloodline of the Holy Grail' p 98, emphatically states:

According to Gnostic tradition, Mary Magdalene was associated with wisdom (Sophia), represented by the sun, moon and a halo of stars.

Gardner (1996; 104-5), further states:
In fact, the long standing Magdalene cult was closely associated with Black Madonna locations. She is black because Wisdom (Sophia) is black, having existed in the darkness of chaos before the creation.

Picknett and Prince, in their book: The Templar Revelation, (1997), state:
Eve and the serpent made a powerful team; this is hardly surprising because snakes were ancient symbols of Sophia, representing wisdom not wickedness.

Picknett and Prince's argument portrays Eve/woman as Gods creation with a capacity to think for itself independent of Adam, showing initiative and autonomy in the eating from the Tree of Knowledge-wanting to learn (Philosophy).

It is therefore not surprising to learn that when the church of Rome during the middle ages wanted to create a society that was to be lead into blindly believing in its dogma without questioning, the woman had to be silenced first and eventually taken out of the Bible. This reached a point where even the mother of Jesus, Mary had to say nothing in the Bible. We all know that this period in the history of Europe is sometimes referred to as the ‘Dark Ages’. It is referred to as such because learning to know and free thinking was totally suspended except for monasteries manned by and catering only for men indoctrination.

The best way to describe the Dark Ages would be “that time in history when people were told that salvation comes by faith not by knowledge”. This was made possible by the coming into power of Constantine over the Roman Empire in 324 AD. In 325 he summoned all the bishops of his empire (at Nice) and ordered them to re-look at the Bible, particularly the New Testament. After that meeting, we all know what happened. We also know about the fate that befell the two libraries in Alexandria-Egypt.

Alford further claims that Adam (male) from whom Eve (female) was to be created was by force removed from the western Eden (Africa) by Lord the God Enlil. So the snake that appeared to Eve was in actual fact, God Enki to warn Adam about the wrong motives of his brother, Enlil.

To further illustrate the significance of the serpent among the Egyptian people, the serpent became an emblem of royalty. Egyptian kings and princes could be identified by the crown with the serpent at the front, just above the forehead. Alford, (1998: 220) also asserts:
A conceptual perception of a serpent by Africans: The study of symbolic representation and role of snakes in the lives and beliefs of African people.

Statues of the Egyptian kings were rarely if ever made without a single *uraeus* on the forehead. The Pyramid Texts indicate that this single *uraeus* was an ‘Eye of Horus’, which had to be returned to Osiris in the ‘other world’ to replace an eye which had been destroyed by Seth.

The idea of a serpent worn on the forehead of a king can be linked to the third eye of the far-eastern cultures. Alford, (1998: 220) further states:

This eye was called ‘She who Protects’ the Osiris, and was acquired by the Horus-king at his accession to the throne, and held in trust, pending return to its original owner.

This claim by Alford further explains the reason why the snake was to be associated with the female principle and why the serpent in the Garden of Eden had to talk to Eve.

But it was not just any serpent, it was a specific kind of serpent known as *Uraeus*—the cobra. *Uraeus* can grow up to two meters in length. It seem like it was the greatest snake in Egypt and the most fierce and fearsome one.

The serpent was later to become a symbolic representation of wisdom, worship and particularly that of medicine. For instance, the Greek mythological god of medicine, Aesculapius, was always depicted as carrying knotty wooden staff entwined with a single snake standing on its tail.
Aesculapius: The mythological Greek god of medicine. But the story of the serpent coiling the staff can be traced back from the Bible at the time of Moses in Egypt. First it is well known that when Moses was instructed to return to Egypt to deliver the Israelites, God had turned the stick into a snake. It was this stick that Moses used to produce miracles which eventually subdued Pharaoh’s might. It is important to note that at that time the serpent was a symbol of kingly authority. All the Pharaoh’s chief ministers were given a staff with a handle carved into the shape of the royal cobra. So Moses’s staff was presumably a symbol of God’s authority over the pharaoh.

Around 725 BCE, when Israel was invaded by Assyrians they had to seek refuge in Judea and they took with them a staff with a bronze serpent coiled around it. This was the staff created by Moses himself during the wandering in the wilderness.

> And the lord spoke unto Moses, make thee a fiery serpent, and set it upon a pole....and Moses made a serpent of brass, and set upon a pole. (Exodus 21:8-9)

Unfortunately the staff that the Israelites brought to Judea was destroyed by King Hezekiah who saw it as a form of idolatry forbidden by God’s law. Hezekiah’s hostility towards the serpent represented a change of perception of the snake by the Judeans who had broken off the greater Israel. To the majority of the Israelites, the serpent was viewed as a conduit through which the power of God flows. It was referred to as the Rod of God. It was the power of God in a form of a snake that freed the Israelites from Egypt. It was the power of God in a form of a snake that saved the Israelites from dying from snake bites in the wilderness. It was that act of God which formed the root of symbolic staff coiled by the serpent which was later adopted as the emblem for medical profession.

Bushby (2003: 239), claims that in 1910, the American Medical Association adopted the staff as its insignia, and the British and the French armies, World Health Organization, US Air Force Medical Service and other groups the world over, also used the single-snake staff to identify their medical professions. The two snakes design dates back some thousands of years to Egypt and reappears in Greek mythology with a pair of wings added, as Hermes wand or staff. We should not forget that, Hermes was an Egyptian sage associated with medicine, mathematics/geometry, science and astrological wisdom.
A conceptual perception of a serpent by Africans: The study of symbolic representation and role of snakes in the lives and beliefs of African people.

A snake did not just become a symbol of medical profession but it formed part of medicinal ingredients among the Africans. For instance, when AmaZulu talk of Isibiba or Isihlungu, they talk of a substance extracted from a snake which is either used as an inductive to inflict pain or as an antidote to pain. But this part of the paper will be explored later, for now we shall continue looking at the mythological perception of serpents around the African continent.

A serpent also became the symbol of Alchemy in the form of a snake biting its tail (Greek- Ouroboros). There are many symbolic meanings attached to the Ouroboros. The first and foremost would be the cyclic nature of the Universe. Sometimes it can mean the creation out of destruction or life out of death. The Ouroboros's eating of its own tail suggests the self sustaining life in an eternal cycle of renewal.

In the above drawing, from a book by an early Alchemist, Cleopatra, the black half symbolizes the Night, Earth and the destructive force of nature. The light half represents Day, Heaven, the generative and creative force. This is where the Heaven meets the Earth: 'As above So below'- Hermes Trismegistus.
Ourboros (tail-eating snake) also symbolizes the eternity of time. Africans perceived time as more cyclical than linear. Time was viewed through life experiences which kept on repeating themselves daily, monthly, annually and seasonally. To Africans life was a perpetual return to the beginning in order to move to the end. “The end of the first is the beginning of the last”.

As a young child I was told of a snake, Inkanyamba that lives in great waters and pools. I was told that this snake has got seven heads and it can cause a thunderstorm. The fascinating story about Inkanyamba was that it can fly or travel on air when it is changing locations. This was always accompanied by clouds and heavy thunder-storms. People believe that if your house is roofed with a corrugated iron, it causes Inkanyamba to look down on it thinking that the house is a pool which results in the roof being blown off.

The Venda people are known all over the world for their Domba (Python) dance during girls’ initiation. Some people regard the Domba dance as a symbol for the movement of the womb at birth while on the other hand some regard it as the movement of the penis during intercourse. Whatever the story might be, Domba is the dance about fertility which is central to all human existence. Fertility depends on the cosmic principles of Gender, Complimentary and Polarity found in all beings.

The Python is known for its strength, steady movements and patience, and it is for this reason that the Zulus use its skin to wrap-up Inkatha which is said to be the national symbol and emblem for unity and the strength of the Zulu nation. It is the same Inkatha on which King Cetshwayo was kneeling when the Zulus were crushing the British troops at Isandlana in less than two hours.
As a young boy, I remember every-time new cows were incorporated into the main herd of cattle at home, my father would send us to fetch dried grass found where paths cross or separate; he would then mix that with the python fats and burn it so that the cows can inhale it. This was done in order to stop the new members of the herd from running away or going back where they came from.

Great diviners are those who have fetched the python from the deepest and darkest waters (Iziziba). The black Mamba is also another common feature during the training to become a diviner. The black Mamba is associated with the ancestors, hence the call to divination is said to be the call by the ancestors. Many diviners have claimed to have woken-up one day next to an Imamba which acted as a confirmation of the presence of the ancestral spirits.

Different snakes represent different ancestral spirits among the Zulu, for instance, Kings-ancestors and diviners spirits are normally manifested in a form of the Black Mamba. Indlondlo (old powerful) black Mamba is known to have a feather on its head which is associated with the Kings. King Shaka and King Dingani are known for the feather they wore on their heads.

A portion in King Shaka’s praises goes as follows:

Ulusiba gojela ngalaphaya kweNkadla,
Lugojela njalo ludl'amadoda,
Indlondlo yakithi kwaNobamba,
Indlondl'ehamb, ibang’amacala

Gumede (1990: 18), also assets on the conception of the Mamba by the Zulu:
When the Zulus show obeisance to their king they shout Bayete! Uyindlondlo! Indlondlo is an old powerful Mamba. When poised to strike it stands head high in the air. The snake has a feather on its head.

Indlondlo and Uraeus have one thing in common, that is, standing head high when poised to strike.

Bryant (1917) and Berglund (1976), have also written extensively on the subject of the Zulu conception of the snakes and their association with the ancestral spirits. Berglund (1976: 94-5), mentions a conversation he had with an old man at Echelezini who explained to him why only those snakes that shed their skin are associated with the ancestors. The shedding of the old skin...
marks the growth of a new one; this is symbolical with the rebirth of a person. The old man also told Berglund that a snake can only shed its skin at night and when the grass is wet; so it has to happen at summer. This notion further associates the snake with water/rain, fertility and with the Goddess (Unomkhubulwana).

A dead Puff-adder buried at the gate of the cattle byre helps to slow down the cattle from traveling a lot during grazing which helps the cattle grow fat and also enables the herd boys find time to play. The eggs of a Puff-adder are an important medical ingredient for curing ailments such as stroke.

The ancient Egyptian ceremony of ‘opening of the mouth’ performed to magically activate the ka and the ba of the deceased pharaoh took place at the Antechamber leading to the King’s chamber in the great pyramid. The two instruments employed during the process of ‘opening the mouth’ were sebur and urheka.

The Kabbalist tree of life is sometimes referred to as the Jacob’s ladder. This is what Jacob saw on his sleep on his way to the land of Edom. In the Bible it referred to as the Angels ladder. It is true that the ten Sefirot are in line with different levels of the angels. But the Sefirot are also aligned with Gods and patriarchs. In the Jacob’s ladder, the serpent symbolizes the spiraling up of consciousness towards God, and in the Garden of Eden the serpent is shown spiraling down the tree of life/knowledge this is the symbol of God’s wisdom spiraling down towards mankind.

The story on the Garden of Eden continue to suggests that man was blind until the woman decided to take a step towards knowledge by eating from the tree of knowledge.

In conclusion, I would like to say every time we come across a serpent we must know that we are confronted by a symbol of life (DNA), wisdom, fertility, sexuality, health and authority.

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The Planning and Management of Umkhosi Womhlanga (Reed Dance) as a Tourism Enterprise in KwaZulu-Natal: Policies, Practices and Perceptions.

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Introduction
Successful events do not happen by chance, the event organizers, event managers or organizing committees require comprehensive knowledge, skills in planning and management, good intuition and eye for beauty (Wolf, 2005). Historical trends indicate that the event industry, particularly ceremonial events is not a completely new domain. Special events of different kinds were celebrated ages ago in a form of religious festivals and ritual ceremonies as milestones for particular communities. We can always wonder how the event organizers of that time hosted these events as little has been documented about them.

Events vary in terms of their size, impact and significance. What is common in all events is that, their success depends mostly on their planning and management. Events that are not strategically planned and managed result in the production of unsuccessful events which will dent the image of the event itself, the reputation of the organizers and even the host destination or community (Tassiopoulos, 2005).

The researcher, through this study, intends to investigate how uMkhosi Womhlanga is planned and managed to ensure that its tourism potential is maximized. Furthermore, the researcher intends to find out about policy frameworks in place that govern the event as well as practices and perceptions of all stakeholders linked to this colourful event. This study is still in progress. The researcher hopes that upon completion the findings and recommendations to be made will be of value to the production of the event in future.

Background of the study
uMkhosi Womhlanga, also known as the Reed Dance, is a ceremony celebrated by the Zulu nation once every year, in September. The event takes place at the King of the Zulu’s royal residence at eNyokeni palace. Thousands of Zulu maidens and visitors gather at the King’s palace to celebrate this ceremony and it has become more popular over the years.

The aim of this ceremony is for maidens to celebrate their purity, showcasing that they are proud of their bodies while they are being prepared for womanhood, thus giving the king and the nation to marvel at, appreciate and motivate the young maidens through lexis and cheer. According to the Zulu tradition only virgins are supposed to take part in the ceremony, which marks their purity. If the young maiden carrying the reed is no longer a virgin the reed will break, thus embarrassing the maiden and her entire family in public. During this event, maidens wear colourful beads, sing and do Zulu dancing for the king and the nation. [www.zulu.org.za (2008)].

Due to the high standard at which events are now staged thoughtful planning, management and evaluation have become essential requirements. Events contribute significantly to any country, economically and socio-culturally. It is important to note that the impact of hosting an event, especially on the environment must be strictly monitored and controlled to ensure the sustainable use of resources. It is vital to conduct an environmental impact assessment (EIA) for any event in order to assess and plan for any potential impacts on the environment, socio-economic conditions and cultural heritage, especially for events that have major physical impacts, (Tassiopoulos, 2005).
Events have a potential of attracting tourists to the host destination hence there is what is called event tourism. This is the case with uMkhosi Womhlanga (Reed dance), it has a great potential of attracting tourists and generating revenue for the host communities of KwaNongoma, KwaZulu–Natal and South Africa as a country depending on the interests of visitors or event tourists. Tassiopoulos (2005) believes that it is essential to develop a framework which will ensure that planning and management of events is focused, co-ordinated and aligned to other areas of tourism development and rural management. uMkhosi Womhlanga, like any other event, either organizational, personal, leisure or cultural events should yield certain benefits for the host community and contribute to the economic development of the region.

Events vary in terms of their size, impact and significance. What is common in all events is that, their success depends mostly on their planning and management. Events that are not strategically planned and managed become a fiasco, which will dent the image of the event itself, the reputation of the organizers and even the host destination or community (Tassiopoulos, 2005). The researcher through this study intends to investigate how this event is planned and managed to ensure that its tourism potential is maximized. Furthermore, the researcher intends to find out about policy frameworks in place that govern the event as well as practices and perceptions of all stakeholders linked to this colourful event.

More emphasis should be focused on planning and management of an event to guarantee its success. Shone (2004) emphasizes financial planning, good and careful financial control as the most important aspects of the event management process. He further argues that good financial control is vital even for events that are not intended for profit making.

Continuing to celebrate this traditional ceremony of uMkhosi Womhlanga, it is important to understand the aim and the reasons for the event as initiated by Zulu nation’s forefathers. Even though the planning and management of the event maybe totally different from that of the initial stages due to modern changes, the planning and management has to be stringently performed to keep up with the world standards.

The aim and objectives of the study
This study seeks to find out about the planning and management of this ceremonial event, uMkhosi Womhlanga, through the following objectives:

a) To find out whether local communities understand the meaning and objectives of celebrating uMkhosi Womhlanga as a traditional and ceremonial event;

b) To find out about policies governing the planning and management of the event;

c) To ascertain the extent of planning and management of the event in ensuring its success;

d) To identify participation patterns/levels of local communities in the event;

e) To investigate whether the local communities benefit from the event;

f) To explore the tourism potential of the event in relation to the events and

g) To establish the current practices and perceptions of stakeholders and surrounding communities about uMkhosi Womhlanga.

Literature review
This study is still in progress. In terms of literature, very little ground has been covered so far, the challenge that the researcher is faced with is that very little information is documented especially for traditional ceremonies celebrated for young girls.

In Kwa-Zulu Natal, the Zulu nation celebrates uMkhosi Womhlanga (Reed dance) at Enyokeni Royal palace where young maidens gather dressed in colorful beads, singing and dancing. This event lasts for four days. On the first day maidens arrive, day two they wake up and go down to Ntsonyane River to bathe and move up to their marquee to practice and prepare for the following day, day three they have their bath at Ntsonyane River, regroup at oSuthu palace to pick up the reed (harvested from KwaSokhulu area) before proceeding up to eNyokeni palace to present the
reeds to the king. After that they move down to the arena for speeches and Zulu dancing. On day four, maidens wake up early to bathe at Ntsoyane River, before moving up to the arena to sing and dance for the king and nation. On this day different groups from different districts showcase their bead, song and Zulu dance styles. After the festivities the king bids farewell to all present and people depart. In the Zulu culture, it is the Zulu princesses that pick up the reeds first and lead the maidens to the palace and the princess to present the first reed to the king is the one who has just received her first periods. Still to come is the Ngwavuma, Northern KZN Reed dance early next month.

In Swaziland the Reed dance is celebrated differently from the Reed dance in KZN. The maidens travel to cut the reeds at night, hence they carry torches to symbolize that. It is the royal princess that presents the first reed to the Queen mother. In Swaziland the king is just a guest and is expected to choose a wife. The maiden is chosen at Ludzidzini reed dance only to be revealed at Shiselweni reed dance by standing along the royal princesses, but wearing a different traditional attire. Royal princesses wear red feathers (Ligwalagwala bird) on their heads. If the royal princess is not available to lead the maidens the Induna yetintfombi (leader of the maidens) can take her place.

In Zambia, a three-nation traditional ceremony of the Chewa people of eastern Zambia is celebrated. It is known as the Kulamba festival, which lasts for five days. The Kulamba traditional ceremony of the Chewa people is held every August near Katete town. The Kulamba traditional ceremony is also an annual initiation ceremony for young teenage girls who are about to join the celebrated womanhood. The important function of the Kulamba is the girls’ initiation ceremony. As Kulamba is celebrated “Anamwali,” the young teenage girls who come of age leave their confinement home where they would have spent time learning life skills and responsibilities of adult womanhood. The new graduates aged between 13 to 19 years, bare-breasted and painted in bright colours dance in the main arena. When dancing the girls go down on knees and sit on their heels while gyrating their waists. It's a great display of rhythm and coordinated movement [www.zambia-the-african-safari.com (2008)]. Review of more and relevant literature is still in progress.

**Methodology to be used to collect research data**

The study area for this study is KwaZulu-Natal, which has 11 districts, the sample data will be collected from only 5 districts, Umkhanyakude, Zululand, Amajuba, Umzinyathi and uThungulu as shown in Figure 1.

A quota sampling method coupled with random sampling will be used to select respondents for the communities’ and maidens’ questionnaire. Purposive sampling will be used to select respondents for both the tourists, the officials and services providers’ questionnaires. Data collected will be analyzed and interpreted electronically using the Statistical Package for Social Sciences (SPSS) computer programme. Bar graphs, tables and pie charts will be created through the programme to represent findings from respondents.

**FIGURE 1**
2008 KZN Reed Dance Experience

The reed dance has become very popular about 30 000 maidens participated this year. Based on my observation a lot of planning went into production of the event, making it possible even though there were minor gaps which needed attention in order to ensure the smooth flow of the event as a whole.

Aspects that needs attention
- Time management.
- Access control.
- Audience control.
- Seating arrangement (the Kings'entourage).
- Clear directions for guests.
- Events calendar.

Conclusion
The study is still in progress. The hypotheses stated above are still to be accepted or rejected, after extensive collection of data on the field both from officials involved in the planning and management of uMkhosi Womhlanga and other respondents made up of service providers, local communities and tourists, in the successive chapters. The researcher hopes that the findings and recommendations still to be suggested will be of value to the production of uMkhosi Womhlanga in future.

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Cultural Diversity in Social Work Practice

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Abstract
South African society is constituted of diversity of cultures. Social Work students are exposed to a practice environment which is inherently multicultural due to the diversified nature of the cultural composition of our communities. Therefore, specific and structured efforts need to be directed towards enhancing the cross-cultural competence of a social worker who finds him or herself at the beginning of his or her professional development.

It is important to note that in cross-cultural practice the social worker, not the client is attempting to adjust to the client’s cultural context. The Department of Social Work at the University of Zululand, in its curriculum has a course in cross-cultural practice. The course intends to prepare students as future social work practitioners to work with persons (clients) of different cultures, and to be culturally competent in their practice.

This paper will examine the importance of cultural competence in working with clients who are different from the social work practitioner. The terms social worker and counselor will be used interchangeably in this study.

INTRODUCTION
The concept of cultural diversity is rather a chameleon like notion that tends to take on different hues depending on who is speaking, who is being addressed and in what context this conversation is taking place. The meaning attached to it depends on one’s interpretation of the concept of culture and on the way in which it is related to the concepts of race and ethnicity.

The constitution of the country Act no:108 of 1996 stipulates that everyone is equal before the law and has the right to equal protection and it further states that everyone has inherent dignity and the right to have their dignity respected and protected. Section 31(1) of the Constitution reads thus: Persons belonging to a cultural, religious or linguistic community may not be denied the right with other members of that community
(a) to enjoy their culture, practice their religious and use their language and
(b) to form, join and maintain cultural, religious and linguistic associations and other organs of society. We cannot discriminate solely on the grounds of race, colour, ethnic or social origin, sex religion or language.

Social work education about diverse population tends to emphasize demographic data, characteristic traits, historical backgrounds, intergroup relations and societal responses to diversity. Social workers need more than information about the descriptive aspects of diverse populations. Social work practitioners need to understand those practice dynamics and skills that allow them to relate effectively to the clients who are diverse from them.

There are many ways of seeing and experiencing the world that depend on our upbringing and beliefs. Having respect for another person’s views without losing sight of our own core values can be challenging. We need to recognize both the differences and the similarities between groups of people (Gibson and Swartz, 2002:74). This paper is concerned with the problems that frequently result from the separation between the world of the social worker(counselor) and the world of the client. Culture, ethnicity, gender, class, age, race, language and sexual orientation are some of the factors that separate the counsellor and the client, increase social distance and limit empathy and understanding.
Some clients would like to be served by social workers who are similar to them in terms of their race, culture, language and ethnicity. Self exploration (self awareness) on the part of the therapist/social worker is very important as there are clients she/he might not feel comfortable to work with.

The White Paper for Social Welfare in South Africa (1997) set out its central aim as bringing about transformation to a non-discriminatory, egalitarian and developmental social welfare. Knowledge of the client’s cultural milieu is necessary in understanding the client as well in helping in problem solving. “A client who may appear to be withdrawn and excessively passive may be only reflecting the norms of his group (Kadushin: 2000).

Motivation arose out of researcher’s past and present work experience in the field of cultural diversity in social work. The researcher had worked in a psychiatric hospital where family members would believe that the client was not mentally ill but was possessed by spirits. They would then request for a leave of absence from hospital so that the patient goes home and perform some rituals. Also as a probation officer, relatives of the offender would say the juvenile has committed a crime because the ancestors are angry for some reasons known to them. The researcher is also teaching a module on cross-cultural practice to second year social work students. The purpose of the module is to introduce students to cross-cultural practice. Students should be able to work with clients who are different from them in terms of gender, race, ethnicity, language, sexual orientation and cultural practice.

South African society is constituted of diversity of cultures. Social Work students are exposed to a practice environment which is inherently multicultural due to the diversified nature of the cultural composition of our communities. Therefore, specific and structured efforts need to be directed towards enhancing the cross-cultural competence of a social worker who finds him or herself at the beginning of his or her professional development.

In the past social work practice took place mainly in settings segregated rigidly along racial lines, and therefore, in which the opportunity for social workers to engage with clients, groups, families and communities other than their own was extremely limited.

The current task is to reconstruct a social work theory and practice that is capable of addressing the needs and concerns of the most vulnerable and marginalized groups in South Africa. The challenge is on the creation of an appropriate culturally inclusive social work practice.

Given the nature of South African society, more responsibility is placed on social workers to acquire skills, knowledge and values on cross cultural competence( a competence which will not only benefit the individual client to whom social services are provided, but also facilitate the positive transformation of society by normalizing the constructive, yet sensitive managing of cultural difference among South Africans( and African foreigners of all class, color and creed ( Jonker & Cronje:2000).

There is an increasing demand for effective multicultural competence within the South African social service sector.

**OBJECTIVES OF THE STUDY**

The objectives of the study are:

(a) To investigate whether or not social work practitioners are implementing cross cultural practice in their direct service with clients.

(b) To explore the cultural competencies of the social work practitioner.

(c) To determine the training nature of cross-cultural practice.

(d) To examine the importance of cultural competence among social workers.

(e) To recommend to the Department of Social Development the training needs of social workers in cross-cultural practice.

**KEY QUESTIONS TO BE ANSWERED**

(1) Are social workers competent enough to work with clients who are diverse from them?
(2) Do social workers serve all clients irrespective of their race, ethnicity or culture?
(3) What could be the solution to address cultural competence for all social workers?

CONCEPTUAL FRAMEWORK
Concepts to be studied have to be specified and conceptualized.

Cultural Diversity
Cultural diversity is a broad concept that includes among others racial, ethnic and social identity (Du Bois & Miley: 2005:162). Cultural differences identify groups and distinguish them from one another by the way behaviour is guided, structured and ascribed with meaning. Differences among groups emerged in relation to world views and in perspectives on the nature of humankind, and values conveyed in language.

Cultural Competence
Sikhitha (1996) in Jonker & Cronje(2000) defines -cultural competence has been conceptualized as the ability to cut across the powerful effects of class differences, gender, ethnicity, age, race and all other such observable differences among people. Green & Leigh (1985) in Du Bois & Miley (2005) define cultural competence and ethnic competence as the provision of culturally relevant services that are sensitive to the requirements of cross-cultural situations.

Race
Race is a classification that emphasizes biological or physical differences.

Ethnicity
Ethnicity refers to distinct population groups bound by common traits and customs, closely associated with this is ethnocentrism.

METHOD
The study will make use of descriptive research design. A major purpose of many social scientific studies is to describe situations and events (Babbie & Mouton: 2001:80). Both quantitative and qualitative methods will be utilized for this study. Purposive sampling in selecting the respondents will be used. Data collection methods that will be used are questionnaires and focus groups. Data will be analyzed using a simple method of data analysis. The study will comprise of social workers who falls under Ulundi Welfare Region.

FACTORS THAT IMPACT ON SOCIAL WORK PRACTICE
Culture, ethnicity, gender, class, age, race, language, sexual orientation and religious diversity are some of the factors that separate the social worker and the client, increase social distance and limit empathy and understanding.

Gender
There has been considerable interest in the question of how gender difference influences social work practice.

Coolt (1993) cited by Pope-Davis & Coleman (1997)found that male counsellors asked female clients more questions related to their family relationships than they did to male clients. She suggested that male counsellors expected that family issues would be more imported in the treatment of women than in the treatment of men, even when the presenting problems were virtually identical. Male and female counsellors often perceive the same behaviours in female clients yet describe them differently. Male counsellors tend to be more positive in their descriptions of female clients.

In applying the framework of gender in counselling issues, the component regarding attitudes suggests that pervasive societal sexism and gender socialization may limit both the female
clients and the counsellor’s vision of what is possible for the client. Coolt (1993) as cited by Pope-Davis & Coleman, states that this may be particularly salient in career counselling where the differential impact of socialization and sexism on women and men is most apparent. For example counsellors might unwittingly encourage female clients into traditionally female careers, which tend to be lower in status and pay than those that are traditionally male and that also may represent underutilization of the female clients.

Cosmos-Dias & Reynolds(1991) as cited by Pope-Davis & Coleman(1997) state that a skill area of critical importance in working with female clients is understanding and being able to work with the impact of their multiple roles and identities, as well as multiple layers of environmental oppression. Thus accurate counselling and diagnosis must include exploration of contextual issues, for example acculturation, racism, socioeconomic realities, discrimination and intergenerational relationships that the client faces.

**Sexual Orientation**

Sexual orientation is another consideration that makes for cross-cultural difficulties. Homophobia, fear and dislike of homosexuals, is pervasive in a heterosexual society. For many social workers therapeutic neutrality and acceptance are difficult to achieve with gay and lesbians clients (Kadushin: 2000). We have all grown up in a culture that takes heterosexuality for granted and stigmatizes homosexuality as deviation from which we need to defend. Social workers who pride themselves for having a great measure of tolerance might want to ask themselves a question: How would they feel if their child or spouse came out to them as lesbian or gay. Some therapists would tend to see heterosexual relationships as more “natural” and “healthier”.

The therapist/ social worker should not assume that the client the problem is bringing is necessarily related to sexual orientation.

Sue & Sue (1990) as cited by Pope-Davis & Coleman (1997) state that both female and male counsellors can also hold negative stereotypic views of women. Both heterosexual and lesbian/gay/bisexual counsellors can exhibit internalised homophobia in the form of negative assumptions regarding sexual minority clients.

Heterosexual counsellors however face particular challenges in assimilating information and affirmation about populations with which they may have little contact.

A heterosexual counsellor may not realise, for example that heterosexuality is simply one possible orientation out of several or may firmly believe that heterosexuality is better than other forms of intimacy.

They further state that the heterosexual counsellor may not be comfortable with the client’s sexual orientation or choices and either may gloss over them and ignore critical lifestyle issues or be so preoccupied with them that perspective on presenting issues is lost.

Regardless of person’s sexual orientation, the counsellor also may be defensive about her or his therapeutic appropriateness, may be unwilling to refer the lesbian/gay/bisexual client to more appropriate resources, and may be defensive about his/her own sexual orientation. The counsellor may inappropriately assess the normative coming out issues as pathological and plan intervention according to negative views of the client. For example a client in early phases of the coming out process often will express feelings of depression, frustration, self hatred and fear about being lesbian or gay. A counsellor who interprets such feelings as justification for engaging in gay aversive strategies aimed at changing the client’s sexual orientation will do a severe disservice to an individual who is more likely seeking acceptance and affirmation. Because of the general lack of knowledge about lesbian/gay/bisexual people, the heterosexual counsellor also may be unable to determine how existing theoretical and procedural elements of therapy may apply differently to sexual minority (clients).
Culture
Miller (1987) as cited by Folcroft & Roodt (2001) mentions that our culture has an all pervasive influence on the way we learn, think about things and behave. Whenever one communicates with people who are unknown or unfamiliar, one enters into a cross-cultural conversation. When communicating with strangers, the initial aim is to reduce the uncertainty that is present.

In counselling the aim would be to reduce this uncertainty in ways that would be respectful of clients and would not stereotype or devalue them in anyway. From this point of view all counselling are cross-cultural, for all clients are initially at least strangers to counsellors. However you may correctly argue that some clients may be culturally closer to the counsellor than others and that this will influence the counselling relationship. Culture cannot be considered as a separate factor exerting an influence apart from other factors in the person’s environment, thus it is an integral part of that environment.

The Counsellor’s Culture
According to Katz (1985) cited by Pope-Davis and Coleman (1997) a major assumption for culturally effective counselling is that counsellors acknowledge basic tendencies the way they comprehend other cultures and the limits their own culture places on their comprehension. It is essential that counsellors understand their cultural heritage and world view before they set about understanding and assisting other people.
Adherence to a specific theory or method may impact the success of counselling. Many cultural groups do not share the values implied by the methods and thus do not share the counsellor’s expectations for the conduct or outcome of the counselling session. These differences may negatively impact the counselling process if counsellors are not effective enough to investigate their client’s cultural background.

The Client’s Culture
As counsellors incorporate a greater awareness of their clients’ culture into their theory and practice, they must realize that historically cultural differences have been viewed as deficits. Adherence to white cultural values has brought about a naïve imposition of narrowly defined criteria for normality or culturally diverse people.

Individual Differences
There is always danger of stereotyping clients and confusing other influences, especially race and socioeconomic status with cultural influences. The most obvious danger in counselling is to oversimplify the client’s social system be emphasising the most obvious aspects of their background. Katz (1985) Cited by Pope-Davis and Coleman (1997) states that universal categories are necessary to understand human experience but losing sight of specific individual factors would lead to ethical violations. Individual clients are influenced by race, ethnicity, national origin, life stage, and educational level social class and sex roles.

Language
Language is seen as another cultural barrier. Language differences may perhaps be the most important stumbling block to effective multicultural counselling. Language barrier impede counselling process when clients cannot express the complexity of their thoughts and feelings or resist discussing affectively charged issues. Counsellors too may become frustrated by their lack of bilingual ability. At its worst language barriers may lead to misdiagnosis and inappropriate
Counsellors should value bilingualism and do not view another language as an impediment to counselling.

**Race**

It is generally acknowledged that racial groups differ in their values, beliefs, and behaviours, as well as their counselling needs and expectations. If the counsellor is not sensitive to such differences, they may serve as impediments to effective counselling. This notion has given rise to the suggestion that in the absence of specific training, the individual who shares similar backgrounds may work together more effectively than those of different backgrounds. In support of this reasoning, some work suggested that clients prefer racially similar counsellors and that this similarity may actually enhance counselling effectiveness.

Other evidence is consistent with these findings; however Proctor and Rosen (1990), for example found that treatment satisfaction and termination is unrelated to the racial make up of counselling dyads. Even when the preference for a racially similar counsellor was violated there appeared to be no advice on client satisfaction. Cross-cultural counselling may be as effective as same-racial counselling.

If the interview is not concerned with matters that may call attention to race relations, the interaction is less to suffer from distortion. To proclaim colourblindness is to deny the real difference that exist and need to be accepted. The long history of segregation and oppression between Whites and Blacks, the Black client might feel mistrust of the white social worker, while the white client might doubt the competence of the black social worker.

**CROSS-CULTURAL COUNSELLING IN SOCIAL WORK PRACTICE**

The South African population is diverse in terms of race, gender, religion and other factors. Before the demise of apartheid in 1994 service providers in various disciplines and sectors served the population along racial lines. Because of this history service providers are now more than ever before challenged to work with groups from diverse cultural backgrounds.

Hence this culture sensitive orientation has been called the multicultural competence approach (Vasquez & Han, 1995:123). Most South African universities have developed modules on the multicultural practice approach to prepare their students to work meaningfully in diverse communities.

Toseland & Rivas (2000) highlights the conceptual framework which can be used for working with diverse cultural groups. They pin point three main advantages of the mutual approach. These advantages are (1) to develop cultural competitiveness, (2) to assess the influence of culture on individual action and last but not least (3) to offer a tool to handle various population groups while remaining sensitive to cultural differences.

**SELF EXPLORATION IN THE CONTEXT OF CULTURE, RACE AND ETHNICITY**

A desire to explore one’s identity as a person who has been socialised in a culture, race and ethnicity is characteristic of counsellors who are committed to develop multicultural counselling competences. The process involved in cultural exploration afford one the opportunity to develop awareness of one’s collective self, which is of particular importance in facilitating the dyadic process of a multicultural counselling relationship.

In the self exploration of their own cultural and racial identity, counsellors are involved in openness to critical self examination of the cultural aspects of their own identity, such as discovering value orientation, their racial attitudes in endorsing stereotypes and discrimination and in enacting individual racism and their identification with a sense of belonging to reference group. This self exploration helps counsellors to increase their level of comfort with the client’s
belief systems, racial and ethnic behavioural norms, and physical attributes quite different from those of the counsellor.

Sue & Sue (1990) as cited by Pope-Davis and Coleman (1997) further state that multicultural counsellor evolves from being culturally unaware to being aware and sensitive to his or her own cultural heritage and to valuing and respecting differences.

**CONCLUSION**

It would be naïve to expect the social worker/counsellor to master all the culture specific beliefs and customs in relation to sickness, health caring and curing that there likely to encounter among their clients/patients. Rather it is important for them to develop understanding of culture as well as gender, class and age linked conflicts and develop guiding principles for appropriate response. Psychologists should be fully aware of these factors in an effort to improve their effectiveness with clients whose cultures are different from them. Knowledge on the client’s cultural milieu is necessary in understanding the client as well as in helping the client towards her problem. Good counselling with a client who differs from the social worker in some significant characteristics requires more than knowledge of the culture and lifestyle of the client. It also requires an adaptation of counselling techniques- pace of interview, choice of appropriate vocabulary, modification of non-verbal approaches to be in tone with the needs of the client.

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The Constitution of the Republic of South Africa

The nexus between sustainable livelihoods and ecological management of the World Heritage Sites: Lessons from iSimangaliso World Heritage Park, South Africa.

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1. INTRODUCTION
This paper explores the suitability of the ecological management approach to the management of the world heritage sites with an aim of linking sustainable livelihoods of the people living within and around these sites and the conservation imperatives of the resource using Isimangaliso Wetland Park as a case study. The world heritage sites are in most cases perceived as tourism resources and yet by their nature, these sites are sensitive environments that need protection from any form of degradation. Tourism has proved to have a potential to positively contribute to socio-economic and cultural environments, while at the same time it may cause degradation of the environment and loss of local identity (Pigram and Wahab, 2004).

In KwaZulu-Natal there are two World Heritage Sites, uKhahlamba Drakensberg and Isimangaliso Wetland Park. iSimangaliso Wetland Park was the first site in South Africa to receive World heritage status in 1999 based on three main characteristics – its unique ecological processes, its superlative natural phenomenon and its exceptionally rich biodiversity (Mkhize, 2007). Due to its world heritage status, iSimangaliso has become one of the prime tourism destinations in KwaZulu-Natal. With an increase in the number of tourists iSimangaliso Park Authorities have to explore sustainable approaches to management that would address social justice issues while meeting nature conservation objectives. There is therefore a need for an approach that integrates biodiversity conservation with regional development that ensures sustainable livelihoods for local communities that depend on the resource for their survival. It is, after all, incumbent upon the authorities to orient tourism growth towards meeting its socio-economic objectives (Pigram and Wahab, 2004).

Ecological management is deemed to be one of the approaches that have a potential to link nature conservation and people’s livelihood to a point where there is a symbiotic relationship between the two. Ecological management refers to the management of human activities so that ecosystems, their structures, function, composition and the physical, chemical and biological processes that shape them, continue at appropriate temporal and spatial scales. This approach is sometimes referred to as ecosystem management or ecological approach to management. The implementation of the ecological management approach requires that all stakeholders understand the status of the ecosystem, species and genetic resources. It is therefore important to develop comprehensive and reliable biological inventories at landscape as well as at ecosystem level before the ecosystem management approach is implemented.

2. BACKGROUND TO THE STUDY
In South Africa, generally, and specifically world heritage sites such as Isimangaliso Wetland Park, ecotourism and conservation are deemed as regional drivers for economic development and poverty alleviation. This pronouncement implies that the authorities and custodians of these sites have to align themselves with the shift in national priorities from a strong focus on conservation to a new approach that integrates biodiversity conservation with regional tourism development. This shift also necessitates that opportunities and policies have to be created to support sustainable tourism development that encourages new uses of the biodiversity that might provide new diversification and investment which would contribute to the improvement of the lives of the local communities.
In line with the political changes in the country, the tourism and conservation policy framework has brought positive changes to the South African tourism landscape. These changes necessitated the integration of all activities by government, the private sector and the individual members of the local communities that are aimed at promoting sustainable tourism development. While the government is mainly responsible for developing policies that support tourism development, local communities are expected to participate actively in conservation as well as tourism development and also to take advantage of the entrepreneurial opportunities created by the private sector (Rogerson & Visser, 2004).

Many communities and individuals have a wealth of knowledge that is relevant to conservation and the sustainable use of biological resources. The knowledge may relate to harvesting of various resources, planting of crops, and using natural herbs and other materials for medicinal purposes. Traditional knowledge can provide an excellent basis for developing programmes and policies that integrate and address social, economic and environmental issues.

Isimangaliso Wetland Park stretches northwards from Mapelane Nature Reserve and incorporates St Lucia Game and Marine Reserves, False Bay Park, Cape Vidal, Sodwana Bay, Mkuze Game Reserve and the Maputaland Marine Reserve, covering 230 000 hectares. Four sites of the iSimangaliso Wetland Park are registered as wetlands of international significance under the Ramsar Convention. Besides the unique 38 000ha expanse of St Lucia Lake, islands and the estuary, the iSimangaliso Wetland Park incorporates a variety of ecosystems ranging from the Lebombo mountain ranges to grasslands, forests, wetlands, mangroves, dune forests, massive stretches (nearly 200km) of unbroken white beaches and off-shore coral reefs as well as the largest estuary in Africa.

Local people depend on this resource for their livelihood and therefore there is perpetual conflict between users and the custodians of the park. The main challenge therefore is that various ecosystems within the site have to be managed such that there is optimal benefit for local communities who depend on the land for subsistence and at the same time making sure that the resource is protected from degradation. This challenge is exacerbated by an increase in the number of tourists which, not only heightens the expectations of the local communities to reap benefits that accrue from tourism development but also necessitates stringent management strategies that would ensure that the ecological integrity of iSimangaliso Wetland Park is protected from degradation.

Some of the main threats to sustainable ecotourism management as identified by Isimangaliso Wetland authority include (a) land claims (b) the prevalence of evasive alien plants (c) large scale commercial afforestation in endemic grassland and water catchment (d) land use and land tenure (e) degradation due to the closure of the mouth of the St Lucia estuary.

FIGURE 1: THE LOCATION OF THE STUDY AREA, THE ISIMANGALISO WETLAND PARK WORLD HERITAGE SITE
The objectives of the research were:

- To explore the possibility of introducing and implementing ecological management approach at the world heritage sites.
- To establish the local communities’ understanding of the impacts of human-use on ecosystems and biological resources.
- To assess the extent to which local communities are involved in biodiversity related programmes.
- To find out if the programmes currently in place are directed at integrating social, economic and environmental issues of the study area.

4. LITERATURE REVIEW

Studies have indicated that an increase in the number of tourists is accompanied by an increase in the consumption of the biodiversity and negative impacts on the form and structure of natural as well as socio-cultural environments of the local communities are inevitable (Dowling & Page, 2002; Hunter & Green, 1997; Perrow & Davy, 2002; Pigram & Wahab, 2004). This means that since iSimangaliso Wetland Park has become a prime tourist destination changes in the natural
environment mainly the structure and form of ecosystems are inevitable if there is no proper management of the resources and users. The users include both local people who live within and on the buffer zone of Isimangaliso who depend on the resource as a source of their livelihood e.g fishing, cultivation, creating products for tourists such as art and craft using local grass and wood and the tourists who use the resource to derive quality experiences. The real challenge in this case is to manage the risk to biodiversity loss posed by community encroachment on the park.

The conflict between tourism development and protection of the biodiversity has a long history stretching back from the 1960s when it became clear that the natural environment is an exhaustible resource and hence the need to analyse the impact of tourism on the natural and built up environment (Bosselman, 1978; Dowling & Page, 2002; Farrell & McLellan, 1987; Holden 2000; Pearce, 1985; Young, 1985;) which in most cases indicates inequality in the ownership, management and the flow of benefits from use and conservation of resources (Furze, de Lacy & Birckhead, 1997). Gunn (1978) maintains that the demand for tourism, rather than causing conflict with conservation, requires that the appeal which attracts tourists to a destination should not be eroded.

In the case of iSimangaliso Wetland Park, the main attraction is the quality of the ecosystems within the resource itself which led to it receiving the world heritage status. Isimangaliso Wetland Park, like many other protected areas has a dual mandate of being the protector and conserver of biodiversity and of acting as a catalyst for local and regional tourism development. Managers of such protected areas find themselves faced with a dilemma because they have to execute both the protective and the economic development functions.

Ideally, tourism development and ecological sustainability should be complementary and mutually reinforcing (Pigram & Wahab, 2004). WRI et al (1992) in (Furze, de Lacy & Birckhead, 1997: 21) identify six fundamental causes of biodiversity loss. These are (a) the unsustainably high rate of human population growth and natural resource consumption (b) the steadily narrowing spectrum of traded products (c) economic systems that fail to value the environment and its resources; (d) inequity in the ownership, management and flow of benefits from both use and conservation of biological resources; (e) deficiencies in knowledge and its application and (f) the legal institutional systems that promote non-sustainability. Some of these apply to the study area. As an example SA Tourism Growth Strategy is founded upon five objectives:

- To increase tourism volume at high and sustainable rates;
- To increase the total spending by tourists in South Africa;
- To optimise the length of stay in order to maximise revenue yield;
- To improve the volume of spending and distribution of revenue throughout the year; and
- To improve activity and spending patterns to enable transformation and promote Black Economic Empowerment.

These objectives seem to encourage consumption of the resource with less emphasis on the protection of the biodiversity.

Furze, de Lacy and Birckhead (1997: 28) summarise the threats to protected areas as follows (a) conflict with local people (b) lack of policy commitment at national and provincial levels to adequately protect the systems (c) ineffective management by inadequately trained staff of individual protected areas (d) insufficient funding and (e) inadequate public support. In the case of iSimangaliso Wetland Park it is the commitment of the national government to conservation issues that led to the conflict with local small business owners who felt alienated by the government’s enforcement of environmental protection regulations. Local communities and business people living in and around iSimangaliso Wetland Park questioned sustainability in the face of their collapsing businesses, due to the enforcement of environmental protection.
regulation, which translated to the elimination of the two major benefits of tourism which, according to Vanhove (2004), are income creation and generation of much needed jobs.

Pigram & Wahab (2004) maintain that a key to tourism success is the ability and willingness of the stakeholders to recognize the change and use it to their advantage for long term sustainable growth. To address these concerns the government needs to come up with policies that would protect the environment and simultaneously encourage sustainable and responsible tourism development.

Pigram & Wahab (2004) maintain that while natural attributes form distinctive advantages for developing nations, the use of human intelligence and creativity can make the difference. Creativity comes into play when new approaches have to be followed in an attempt to adapt businesses and daily activities to the environment. Environmental adaptability is seen by many as a means of economic competition (Aronsson, 2000). Faced with these changes it is important to adapt to the new circumstances and find ways that would lead to new uses of biological resources and identify new opportunities which might serve as incentives to private landowners and other stakeholders to become involved in biodiversity related programmes as well as identify areas where new uses of biological resources may provide the basis for further economic diversification that would allow them to compete favourably within the tourism industry.

5. METHODOLOGY
With a view of addressing the main objectives of the study, a random sample of 226 respondents was drawn from the study area. The sample consisted of officials from Ezemvelo KZN Wildlife, the custodian of the iSimangaliso Wetland Park, owners of small businesses, particularly those specialising in art and craft products, and local community members. Person to person interviews were conducted on selected days using structured questionnaires.

The distribution of the respondents was as follows:

<table>
<thead>
<tr>
<th>RESPONDENTS</th>
<th>FREQ</th>
<th>FREQ %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ezemvelo KZN Officials</td>
<td>28</td>
<td>14.3</td>
</tr>
<tr>
<td>Local community members</td>
<td>112</td>
<td>52.4</td>
</tr>
<tr>
<td>Small Business Owners</td>
<td>86</td>
<td>33.3</td>
</tr>
<tr>
<td>Total</td>
<td>226</td>
<td>100</td>
</tr>
</tbody>
</table>

6. THE FINDINGS
The questions that were asked revolved mainly around three issues (a) whether local communities understand the impacts of human-use on ecosystems and biological resources (b) the possibility of introducing and implementing ecological management approach at iSimangaliso Wetland Park (c) the extent to which local communities are involved in biodiversity related programmes, and (d) whether the programmes currently in place integrate social, economic and environmental issues of the study area.

6.1 Impacts of human-use on ecosystems and biological resources
In an attempt to enhance a balance between maximising the sustainable use of the environment and protection thereof, it is imperative that local people understand the issues that relate to the relationship between the protection of the biological diversity, tourism development and management within the park. The implementation of the ecological management approach is also highly dependent on the stakeholders’ understanding of the nature, structure and
functioning of the ecosystem. Local people should understand the significance of promoting the sustainable forms of tourism that have the capacity of integrating biodiversity conservation and sustainable livelihoods for all communities living within and around world heritage sites.

The respondents were asked to express their opinions based on their understanding of the impacts of human use on the ecosystem. The findings indicated that the majority of the people who live and work at iSimangaliso Wetland Park, Ezemvelo KZN Wildlife Officials (60%), local community members (52%) and small business owners (58%) have a general understanding of the impacts of human use on biodiversity. The questions were on the impact of over-harvesting of natural resources such as wood, grass, fish, and also on draining the wetland for crop farming etc on the ecosystems. They were asked to provide suggestions about how to ameliorate negative impacts of human use on biodiversity.

Their responses can be summarised as follows:

- Protecting the ecosystems is everybody’s responsibility (62%);
- There should be more education/training programmes about the functioning of the ecosystems (60%);
- There should be a limit to the harvesting of resources (58%);
- Harvesting periods should be specified and adhered to (57%);
- Alien evasive plants should be removed (55%);
- Cultivation should be done in ways that dehydrate the wetland (54%);
- Sand dune stabilization (53%);
- Degraded habitats should be rehabilitated (49%); and
- Cultural heritage should be protected (48%).

These responses indicate that people living inside and on the buffer of iSimangaliso Wetland Park are aware of the activities that may lead to the degradation of the ecosystems. They are also willing to learn more about the ways in which the resource can be optimally used for their economic survival but at the same time protected from overuse.

The respondents were also asked to respond to the question of whether there were any changes on the environment since the banning of the 4X4 recreational vehicles at the beach. Regarding the changes in the natural environment since the banning of the 4X4 vehicles in December 2001, the responses of the three groups of respondents indicated that even though they live and work at the same area their observations are quite different. The responses included the following:
The KZN Ezemvelo officials [78%] mainly those who have worked in the same area for a long time and have had an opportunity to observe the natural environment before and after the 4X4 vehicle ban regulations were implemented expressed themselves as follows:

- The ecosystem has recovered and blossomed (88%);
- There are more loggerhead and leatherback turtles (82%);
- More crabs can now be observed crawling at the beach (76%);
- Species that breed at the beach are more protected (67%);
- Plants along the beach show signs of recovery (54%);
- Observable sand dune stabilization (53%); and
- Beach users are no longer interrupted by vehicles (49%).

Responding to the question of whether the 4X4 vehicle ban regulation be upheld or not, the majority of the local community members (62%) and 48% of the business community indicated that the regulation should not be upheld mainly due to economic reasons, while the majority of the KZN Ezemvelo officials (56%) felt that it should be upheld so as to protect the ecological integrity of the park.

### TABLE 2: THE NECESSITY TO UPHOLD THE 4X4 VEHICLE BAN

<table>
<thead>
<tr>
<th>Responses</th>
<th>Community</th>
<th>KZN Ezemvelo Officials</th>
<th>Business Owners</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>24%</td>
<td>56%</td>
<td>48%</td>
</tr>
<tr>
<td>No</td>
<td>62%</td>
<td>31%</td>
<td>37%</td>
</tr>
<tr>
<td>Not sure</td>
<td>14%</td>
<td>13%</td>
<td>15%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

The reasons that were given by those who felt that the regulation should be upheld include the following:

- The natural environment should be protected for iSimangaliso Wetland Park to maintain its world heritage status;
- The removal of 4X4 vehicles from the beach will promote new forms of tourism such as ecotourism;
- New forms of tourism will open new domestic and international markets; and
- New types of tourists will demand new forms of products.

The reasons that were given by those who felt that the regulation should not be upheld include the following:

- The regulation reduces the number of tourists who stay longer and buy in bulk from local businesses;
- There are other ways of protecting the turtles and the crabs such as putting the tape around sensitive areas such as those where there are eggs of turtles;
- The regulation is too drastic and robs local people of their livelihood;
- Destruction of the socio-economic environment;
- Distabilisation of the local communities;
- Closure of some businesses;
• Increase in the crime rate; and
• Increase in poverty.

6.2 The possibility of introducing and implementing ecological management at iSimangaliso Wetland Park

The implementation of ecological management approach requires integrated planning that involves local communities. Integrated planning should incorporate ecological, social, cultural and economic objectives and accommodate public and stakeholder participation to prevent and resolve conflicts among various resources users. Integrated planning processes can be applied in several ecosystems by providing opportunities for multi-stakeholder participation to determine resource use and conservation approaches. The activities currently observable at iSimangaliso Wetland Park indicate that Park Authorities are striving to put in place the mechanisms that could lay a foundation for the introduction of the ecological management approach.

iSimangaliso Wetland Authority has taken strides to involve local communities in the biodiversity management of the park. Regular outreach workshops are held to foster communication between iSimangaliso Wetland Park and its neighbours. There are various programmes that are run by the Parks’ Authority in partnership with the local communities and the private sector. These programmes will enhance the local communities’ understanding of the ecosystems and enable them to determine the impacts of human use of resources on biodiversity. The findings indicate that iSimangaliso Wetland Park has adapted its management activities and thus it is amenable to the use of the ecological management approach.

6.3 The extent to which local communities are involved in biodiversity related programmes

World Heritage sites and other protected areas need to empower local communities to progressively share in the responsibility of managing the biodiversity of the site. The government imperative for these sites is that there should be broad participation of local communities in management, sharing of economic benefits and conflict resolution mechanisms. Engaging local communities could be hampered by their reluctance in grabbing the opportunities that are created for them to participate in activities and programmes aimed at enhancing their understanding of the biodiversity. This reluctance can be ameliorated by the introduction of incentives that would motivate them to engage in activities that lead to conservation and sustainable use of the resources. The finding of this study indicated that the majority of the people who live and work at iSimangaliso Wetland Park, Ezemvelo KZN Wildlife Officials (67%) local community members (38%) and small business owners (52%) participate in biodiversity protection related programmes. There is still a need for more awareness programmes aimed at reaching out to those local community members who are still operating at the periphery of the biodiversity discussion platform. Engaging and educating as many people as possible is imperative to achieving a broad based participation of local communities in the protection and management of the world heritage resource.

Through the efforts of iSimangaliso Authority, local communities have become more aware of the significance of engaging in activities that simultaneously protect the environment and boost their levels of income. iSimangaliso Wetland Authority has further engaged local communities in the management of the park so as to enhance their understanding of the issues relating to the protection of the ecological integrity of the park while allowing these people to reap economic benefits through participating in ecotourism. This understanding has led to entrepreneurship creativity and innovation in terms of creating a variety of eco-products most of which make use of the resources that are harvested within the park. The Park authorities have also created opportunities that allow community members to participate in activities that are aimed at enhancing their understanding of functioning of the ecosystem such as the community based natural resource harvesting programme: removal of invasive alien plants programme, projects on planting of indigenous trees, etc.

6.4 Programmes that integrate social, economic and environmental issues of the study area.

Currently iSimangaliso is engaged in various programmes that integrate social, economic and environmental issues. There are programmes that focus on creating job opportunities through
infrastructural development. Some programme focus on capacity building and empowerment through specialised training and equity partnerships in tourism development. New entrants in the small business sectors are provided with training and mentoring to ensure the sustainability of their businesses. Most of the land claims which presented a challenge to sustainable development of the park have since been settled. Capacity building programmes were provided in order to introduce the land claimants to the sustainable forms of resource use and management. ISimangaliso also hosts mobile outreach workshops with key community partners, as part of its “people and parks programme” to enhance communication with the local communities within and on the buffer zone of the park (Isimangaliso News, August – October 2008)

7. **RECOMMENDATIONS**
The findings of this study point out to the following recommendations:

- The ecological management approach should be considered for implementation at all world heritage sites because of its capacity to integrate social, economic and environmental imperatives of the resource, and
- World heritage sites authorities should articulate the ways by which local communities would be encouraged to participate fully in activities and programmes that would enhance their understanding of the nature and structure of the ecosystems of the site.

8. **CONCLUSION**
The findings of this study have indicated the significance of the symbiotic relation between the sustainable use of natural resources and the protection thereof. Integrated planning should form the basis for the implementation of the ecological management approach and enhance the effectiveness of environmental assessments. These assessments are useful in determining any adverse impacts of economic developments on the ecosystem, species and genetic resources and to recommend appropriate mitigation measures. Ecological management ensures that communities such as those living inside and around iSimangaliso Wetland Park which depend mainly on tourism for their survival participate in discussions that will enhance their understanding of the nature and structure of the ecosystems that support their livelihoods.

**References**


Does Indigenous Knowledge Research at the University of Zululand have an Impact?

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Abstract
The University of Zululand has been identified by the Department of Science and Technology of South Africa as one of the main Indigenous Knowledge (IK) centres in the country. IK research is one of its key activities. This paper explores the definition(s) of IK, IK marginalization, and the status and challenges of IK at the University of Zululand using bibliometric methods to analyze the trend of IK research at the institution. This is done using research data reflecting on on-going and completed IK research publications by staff and students from 1983 – 2007 based on research records originating from the University Research Office for the period. Data analysis was done by categorizing research output by nature of research, author, source of publication, affiliation, influence of IK research, and subject and research collaboration. The challenges of IK research were also discussed. Results indicate that IK research exists at the university, and most research output is in the form of journal articles and conference papers. There is also postgraduate research output in the form of masters and doctoral dissertations. Furthermore, IK research is multidisciplinary in nature, covering disciplines in the applied and natural sciences as well as the humanities and social sciences. The research impact, partly measured by the rate of citations using Google Scholar, was not strong. It is noted that the system for capturing completed masters and doctoral research reports at the university is inadequate. The paper raises other issues that are important for IK research and development.

1. Introduction
The aim of this paper is to explore the research status and impact of Indigenous Knowledge (IK) at the University of Zululand. The paper is divided into six parts. The introduction provides definitions of Indigenous Knowledge and briefly shows the relationship between IK and Knowledge Management (KM). Part two discusses the marginalization of IK in order to show how that could have affected its recognition, development and impact. The third part highlights the status and challenges of IK, with reference to the University of Zululand. Parts four and five submit to the bibliometric method for the analysis and demonstration of the status and trend of IK research at the University of Zululand. This was accomplished by using research data reflecting on on-going and completed IK research publications by staff and students from 1983 – 2007 based on research records originating from the University Research Office for the period. Finally, part six concludes this paper and suggests an agenda for further exploration.

There are several definitions of IK in current literature, some of which were identified by Njiraine, Ocholla and Le Roux (2007), which we would like to bring to the fore. To begin, Semali and Kincheloe (1999:3) claim that Indigenous Knowledge aims to "reflect the dynamic way in which the residents of an area have come to understand themselves in relation to their

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environment and how they organize that folk knowledge of flora and fauna, cultural beliefs, and history to enhance their lives. The World Bank (1998: i) states that “IK is unique to a particular culture and society. It is the basis for local decision-making in agriculture, health, natural resource management and other activities. IK is embedded in community practices, institutions, relationships and rituals. It is essentially tacit knowledge that is not easily codifiable”. Chisenga (nd: 94) refers to the World Bank (WB) and Southern African Research and Documentation Centre (SARDC, nd: np), which define IKS as “a body of knowledge and beliefs built by a group of people, and handed down generations through oral tradition, about the relationship between living beings and their environment. It includes a system of organizations, an system of self-management that governs resource use.” A broader definition that we would like to use is a “complex set of knowledge and technologies existing and developed around specific conditions of populations and communities indigenous to a particular geographic area” with an emphasis on the notion that “these forms of knowledge have hitherto been suppressed ... therefore, IKS should be brought into the mainstream of knowledge in order to establish its place within the larger body of knowledge” (NRF, n.d.). Essentially, we view Indigenous Knowledge (also known as local/traditional/folk knowledge or ethno science) as a dynamic archive of the sum total of knowledge, skills and attitudes belonging to and practiced by a community over generations, and expressed in the form of action, object and sign language for sharing (largely through oral traditions) [see Ocholla, 2007]. Thus, Indigenous Knowledge, as observed by several authors, may also be referred to as local knowledge (Anand, 2006; Kargbo, 2005: 200), traditional knowledge (IDRC, 1992; Ellen and Harris, 1996: 3), indigenous and traditional knowledge, (Kawooya, 2006), ethno-ecology, folk knowledge, folklore, ecology, and knowledge of the land (Kargbo, 2005: 200), among others. There are several examples (e.g. Kaniki and Mphahlele, 2002:4-6) of how IK thrives in beliefs, medicine (traditional African medicine that utilizes herbs), community development (based on community or the ubuntu support system), technology (e.g. pottery, sealing, energy production through charcoal burning techniques etc), education (the transfer of knowledge over generations), communication and entertainment (festivals, drama, songs, dances, story telling (“reading clubs”), farming practices (soil conservation, intercropping, farm rotation etc), food technology (fermentation techniques, preservation), and arts and crafts (painting, curving, weaving, decoration etc). These skills, knowledge and attitudes, when shared, adapted and refined, sustain communities, bring development in areas such as healing (e.g. alternative/traditional/herbal medicine: physical and mental fitness - acupuncture, yoga, tai-chi: the Masai’s treatment for foot and mouth disease: and Fulani’s treatment of cattle’s tick bites with euphoria plants), nutrition (vegetarian cuisine: hoodia stem/cactus used by the San people to stave off hunger and control thirst - “slimming drug” on hunting trips etc), wealth/income/business (e.g. intellectual property, tourism, and the informal sector or SMEs), education (customs, traditions, culture, language, values etc), entertainment (e.g. traditional music and dance), politics (conflict resolution, debates-indaba, baraza, imbizo, kgotla etc), architecture and design (e.g. houses - some wonderful African architecture exists in South Africa: clothes/attire), industry ( the informal sector) and countless more.

One of the focus areas of Knowledge Management (KM) is the conversion of intangible knowledge (e.g. Indigenous Knowledge) to tangible knowledge. Nonaka and Takeuchi (1995:62) define intangible knowledge as personal knowledge that is created through individual experiences. This knowledge is largely embedded within the culture and traditions of individuals or communities. Tangible knowledge, on the other hand, is recorded, documented or codified knowledge, widely conveyed through formal language, i.e., in text, or electronic or digital format. The manner in which this kind of knowledge is presented has made its storage, conveyance and sharing extremely easy, and its popularization overwhelming. However, Nonaka and Takeuchi (1998:8) caution that tangible and intangible knowledge are not entirely two separate entities - they supplement each other. This is an area in which the integration of IK in mainstream knowledge, and more particularly in Knowledge Management, has been considered fuzzy or unethical, largely because greater emphasis is placed on exclusion, and less on inclusion. Knowledge, according to the two authors, is created and extended through the social interaction between tangible and intangible knowledge, and may follow four basic patterns:
Does Indigenous Knowledge Research at the University of Zululand have an Impact?

1. Intangible to intangible (socialization) – where individuals share intangible knowledge through personal contact.
2. Intangible to tangible (externalization) – where the knowledge base is extended by the codification of experience, insight and judgment so that it may be utilized by others.
3. Tangible to tangible (combination) – where individuals combine the tangible knowledge of others to create a new whole.
4. Tangible to intangible (internalization) – where individuals use the codified knowledge of others to broaden their own intangible knowledge.

2. Is Indigenous Knowledge Marginalised?

Ocholla (2007), in an article entitled “Marginalized Knowledge: An Agenda for Indigenous Knowledge Development and Integration with other Forms of Knowledge” published recently in the *International Review on Information Ethics*, observed that IK unfortunately has, for a long time, been marginalized and underdeveloped. Marginalization refers to the exclusion or insufficient attention to something. There are many speculative causes or reasons why it occurs. One of these stems from the characteristics of IK, i.e. that: tacit knowledge is not codified or systematically recorded and is therefore difficult to transfer or share; it lives solely in the memory of the beholder and is oral by nature, therefore it dies with the beholder; it is embedded in the culture/ traditions/ideology/language and religion of a particular community and is therefore not universal and difficult to globalize; and it is rural, commonly practiced among poor communities, and is therefore not suitable for multicultural, urban and economically sated communities. There are other stranger reasons as well. For example, the marginalization of IK can also be viewed from the perspective of how some global organizations, such as the World Bank and NUFFIC, associate IK with the poor. For example, on the NUFFIC website, IK is viewed to be “an important part of the lives of the poor. It is a key element of the social capital of the poor, their main asset to invest in the struggle for survival to produce food, to provide for shelter or to achieve control of their own lives”.

Marginalization has also occurred because families and communities are becoming increasingly disintegrated and globalized, partly due to the over-extensive supply of mass products, services, and mass media gadgets and content to private spaces where IK once thrived. It has further been caused by the stigma associated with IK. For example, during periods of domination, which have been varyingly described using words and phrases such as forced occupation, invasion, colonialism, servitude, apartheid, ethnic cleansing and imperialism: IK was subject to yet another form of marginalization. It was often referred to with negative words and phrases such as primitive, backward, archaic, outdated, pagan and barbaric. This kind of demeaning reference to a people’s knowledge did not create space for its integration with other knowledge, specifically scientific, western or modern knowledge (largely products of explicit knowledge). Thus, interest, access and the use of IK came to be associated with inferiority. Quite simply, a person or community practicing or using IK was stigmatized. In some instances, even within their own community, IK practitioners were often treated with suspicion. IK has been vindicated, illegitimated, suppressed and abandoned within some communities, and the countries and people practicing it were condemned and associated with backwardness - a characteristic most people are afraid of. This form of marginalization produced a generation that for the most, does not understand, recognize, appreciate, value or use IK, not necessarily as a fault of their own, but also because IK is dynamic, innovative, and adaptable and develops over time. Arguably, this situation has produced an intellectually “colonized” mindset. These are communities that the celebrated world novelist, Ngugi wa Thiongo, in his essay “Decolonizing the Mind: The Politics of Language in African Literature” once referred to as liberated. The question is how much have they gained through loosing? Or put another way, how much have they lost through gaining?

Stereotypes have also led to marginalization. There has been a tendency to associate IK with conservative (more derogatory terms are used here as well) communities. For example, studies on IK tend to focus on the Aborigines of Australia, the Maoris of New Zealand, the Saskatchewan of Canada, the American Indians of the United States, the Masai of Kenya, and the San people of South Africa, to name a few. The questions most of these studies pose are numerous. Are the
studies done to improve the welfare of the communities? Or are they done to demean such communities? Would such studies be done in order to gain and share knowledge on how well the communities solve problems by using IK methods? Are they done to unravel or demystify the stereotype paradigm? Alternatively, are such studies merely adventurous outlets for spending leisure time or justifying where research money has been spent? Would it not perhaps also be interesting to study the Indigenous Knowledge of western or industrialized communities? Whereas much can be gained if IK studies were conducted among any community in the world, seeing as each community carries a dose of IK, the focusing of IK studies on conservative communities has tended to demean IK, and this has led to marginalization and lower research impact in this burgeoning area.

We ask whether marginalization also occurred in the way we define IK in relation to broader knowledge or in the context of Knowledge Management. We would like to view knowledge as what a person or community knows, or what exists in their minds - an intellectual or mental property/capital. In Bells words, “knowledge is that which is objectively known, an intellectual property, attached to a name or a group of names and certified by copyright or some other form of social recognition [e.g. publication](Bell, 1973:176). Bell’s definition of knowledge is a good example of modern or eurocentric definitions of knowledge that could easily be used to marginalize/exclude IK, particularly if knowledge must be “attached to a name or a group of names and certified by copyright or some form of social recognition”. By all appearances, this is a biased approach that favors modern knowledge, recognizes explicit knowledge at the expense of tacit knowledge, and emphasizes codification and the ownership of knowledge, which IK does not necessarily comply with. Therefore, what we ask, is the Knowledge Management concept rescuing IK? And is the concept explicit or implicit?

3. Status and Challenges of Indigenous Knowledge Development at the University of Zululand

It is observed (see Section 5) that the University of Zululand has been involved in IK research and development since 1981. For instance, of the 1307 registered research projects by the university since 1983, 62 (4.7%) belong to IK research. Furthermore, of the 2598 research publications submitted to the University Research Office since 1983, 153 (5.9%) are IK-based. It was noticed that the university’s IK research output is mainly through research publications in the form of journal articles and through conference proceedings. Postgraduate masters and doctoral research output has also increased over the last ten years. The Faculty of Arts, particularly the Department of IsiZulu Namagugu, has been at the forefront of research output in this category. Unfortunately, a system of recording completed theses and dissertations at the university, which would deliver the postgraduate research for indexing, research and dissemination, is incomplete. It is therefore possible that research output from theses and dissertations that has not been translated into publications in journals, conference proceedings, chapters in books, books, and copies submitted to the research office, has been omitted. Fortunately, as was learnt from a report by Themba Gumbi(2008), the IKS Manager, entitled “The Indigenous Knowledge Systems (IKS) Centre of the University of Zululand: A pilot documentation project” presented at the conference an IKS centre has been created at the university to coordinate IKS activities, which is to include IKS research, community outreach and the IKS journal, “Indilinga: African Journal of Indigenous Knowledge Systems

There are several challenges to be tackled. Fundamentally, the integration of IK with other knowledge systems begins with knowledge creation and development processes that can be viewed in many ways, some of which have been recognized by the World Bank and Department of Science and Technology [DST] (SA). First, IK needs to be recognized and identified. The recent creation of the IKS centre in 2008 at the University of Zululand as part of the implementation of IKS policy - developed by the Department of Science and Technology [DST] ( Indigenous Knowledge Policy 2005, section 8.6) - and the university’s acceptance to host the centre within its premises, is an example of such recognition. Thus IK has to be recognized in order to be essential or important for development. IK also has to be validated or affirmed by identifying its significance and relevance: only then can it support problem solving and knowledge transfer. For example, the HIV/AIDS scourge, particularly in Africa, has invited several IK experiments, most of which have not been validated (i.e. tested over time and used for problem solving). There is
also the fact of IK's codification/recording/documentation. Explicit knowledge thrives through its tangibility, sharability, transferability, and storability; all of which depend on or originate from knowledge codification or documentation. Although there are some contestations against the recording of IK, the argument being that IK owners easily loose their moral and material ownership of their intellectual capital (renegade to third parties or IK intermediaries such as researchers and the media), explicit knowledge thrives because of its visibility, access and use. Ultimately, the principles used for the protection of explicit knowledge have to be applied to IK in order for it to be developed. IK also needs to be stored for retrieval. This requires the creation and development of IK repositories and content management systems requiring taxonomies, codification, indexing and archives for easy access and use. The work of creating meta-data capturing capabilities is becoming increasingly essential. Multiple storage approaches are essential as well. Following this, is the transfer or sharing or dissemination and use of IK. This challenge or requirement may not occur without the creation and popularization of knowledge sharing platforms which would, for example, enable the university community to converse and share knowledge and experiences as they have occurred at this conference, or allow IK practitioners to showcase, exhibit or display their knowledge products and services as scholars would in publications or visual artists do at exhibitions in galleries for instance..

The benefits of IK also need to be popularized or advertised For example, IK is increasingly used for health services, particularly herbal/ traditional/alternative medicine. Aside from this, business and trade through tourism has shown that there is significant interest in indigenous food, arts and craft (weaving, painting, sculpture and pottery etc). There has also been significant growth driven by pharmaceuticals. Unfortunately, most IK practices are currently being held in the informal sector/unregulated economy, and are therefore subject to abuse. It is acknowledged (see http://www.worldbank.org/afr/ik/basic.htm that IK provides skills, experiences and insights into individuals and communities that are in turn used to improve livelihoods, largely in the informal sector of the economy. However, this document strongly views IK to be a survivalist instrument of development, meaning that its use is likely to occur less in areas where the lives of communities are better. This may not be the case for pharmaceuticals, IK intermediaries and even users, some of whom come from elite groups in the community. Despite this rather sad denigration of IK, the World Bank recognizes that IK could be relevant to the local communities in which IK knowledge owners live and practice. There are unique examples: for example in South Africa, the government has integrated IK health workers, such as traditional healers, in the mainstream of national health care services by passing a “Traditional Health Practitioners Legislation”, which mandates the establishment of a “Traditional Health Practitioners Council to preside over the activities of approximately 200 000 South African Traditional Healers” (Indigenous Knowledge Policy 2005, section 1.2) . The Policy also notes that it has been recognized by the Traditional Medicine Strategy of the World Health Organization that the use of traditional medicine is widely growing - within Africa alone, up to 80% of the continent's population uses traditional medicine for their health-related needs, largely because of its accessibility, affordability and appropriateness. Indigenous Knowledge therefore forms part of global knowledge. In this context, it has a value and relevance in and of itself. Thus, IK can be preserved, transferred, or adopted and adapted.

4. Methodology
In addition to a literature review and the authors' experiences and observations, a bibliometric method was used for the analysis and demonstration of the status and trend of Indigenous Knowledge (IK) research at the University of Zululand. This was done using research data reflecting on ongoing and completed IK research publications by staff and students from 1983 to 2007 based on research records originating from the University Research Office for the period. The research database for registered research projects captures the following categories: the researcher, department, faculty, project code, project status (i.e. whether active or not), and the project title, among others. The publication data captures the following information: name of author, journal (year of publication, volume, pages, etc) publication status (i.e. whether SAPSE-accredited or not), department, faculty, and title, to name a few. Indigenous Knowledge records were selected from the university's registered research projects and the recorded research publications submitted by staff and students to the University Research Office from 1983 to
2007. The records were then indexed using the titles of the registered research projects and research publications for the period. The first part of data analysis was quantitative, and was done by categorizing research output by nature of research, source of publication, affiliation and subject using the Pivot Table, which was successfully used in a recent study, [Ocholla & Ocholla, 2007], and the excel Spreadsheet.

In order to assess the impact of IK research as produced at the University of Zululand, the titles of the IK literature were used to extract data from Google Scholar (GS). GS is a web search engine that provides data about authors’ publication output and citations in a way that mimics the ISI citation indexes, and is being touted by scholars as an alternative tool for measuring the research performance of authors (see Harzing, 2007; Pauly & Stergiou, 2005:34; Noruzi, 2005). Each IK title was fed into Publish or Perish software’s ‘general citation search’ interface, as developed by Harzing (see Fig. 1 below). The software was instructed to search for ‘all of the words’ that were supplied in the search query. This technique was successfully employed by Onyancha & Ocholla (2008) to assess the possibility of using GS to study the performance of researchers in developing countries.

![Fig 1: The ‘General Citation Search’ interfaces of PoP software](image)

According to Harzing (2008), the author of the program, PoP uses Google Scholar queries to obtain citation information, which is then analyzed and converted to obtain, among other statistics, the following: number of papers; total number of citations; average number of citations per paper; average number of citations per author; Hirsch’s h-index and related parameters, shown as \( h^-\)index; Egghe’s g-index, shown as \( g^-\)index in the output; the age-weighted citation rate; and an analysis of the number of authors per paper. At this stage, we were only concerned with the total number of citations received by each IK paper.

In order to identify the core terms that are used to describe IK literature as produced by researchers at the University of Zululand, we extracted keywords from the IK titles and saved them in a text format file (words.txt) compatible with the TL.exe computer software that was used to analyze the data. This software uses the words.txt file to count the frequency of occurrence of the keywords within the titles (text.txt) and generates several output files. One of the output files (COSINE.DBF), which contains a normalized count of the co-occurrence counts of
words, was used to determine the core terms that describe IK literature. We imported this file into UCINET analytical technologies software and applied the core/periphery model to generate terms that constituted the core IK terms. Because the generated illustration was too large to reproduce in Microsoft Word, only a descriptive explanation of the core terms is provided in Section 5.6. The mapping of the list of IK terms, as contained in the COSINE.DBF file, was done using Pajek software, which generated the social network of keywords shown in Fig 7.

5. Results
The results are presented in Sections 5.1. to 5.7 below.

5.1. IK Research Output by Author(s)

5.1.1. All IK Publications
The University Research Unit, under the Vice Rector of Research and Academic Affairs, maintains a database of all research publications submitted to the unit by university researchers, faculty academics and students. Qualifying publications for the Department of Education subsidy (known as SAPSE) are forwarded to the ministry for the subsidy, which is calculated in units (i.e. one article equals one unit). The financial gain for such submission per unit for the university is substantial, and both the department of the authors’ affiliation and the author normally receive a portion of the money allocated for the unit. These publications are normally in the form of journal articles, books, chapters in books, conference papers and conference proceedings, public lectures, newspaper and magazine articles, book reviews, editorials and short communications, among others. Although it is a requirement that staff submit such publications for recording and storage by the unit, there is no mechanism to ensure that all researchers comply. Therefore the number of publications referred to here may not necessarily reflect the volume of research produced by the university during this period. A total of 2598 publications/titles captured by the unit from 1981-2007 were indexed for IK based titles. One hundred and fifty three (153 or 5.9%) IK titles were identified. The figure below shows that Steve Edwards produced the largest number of publications during the period (13), followed by Themba Moyo (10), Ann Hutchings (9), and NG Biyela and Gina Buijs (8 each). Others that topped the list were the late Professor Charles Dlamini (7), GC Oosthuizen (7), AM Zobolo (7), DN Ocholla (6), JB Hlongwane (4), EM Makhanya (4), AR Opoku (4) and SE Terblanche (4). Most of the contributors come from the Faculty of Arts. It is noted that of the 58 authors appearing in this figure, more than 75% have left the university due to retirement, death or relocation. This is a significant loss to IK research at the university, and needs to be considered for capacity building and IK research planning. The figures provided also show that most IK research publications were published in the last eight years (NRF uses 8 years to determine the currency of research output). The most consistent publisher for this duration was Steve Edwards, while the most recent contributors were Biyela,
5.1.1: SAPSE Publications

The authors’ publication output was also analyzed according to whether or not the publications are peer-reviewed and recognized by the Department of Education for Subsidy (SAPSE). At the moment, the government of South Africa has recognized well over 260 South African journals for SAPSE subsidy in all disciplines, in addition to the journals indexed by ISI and the Bibliography of Social Sciences. All the journals are peer-reviewed. In addition to journal articles, qualifying research publications such as books, and chapters in books, can also be submitted to the department for consideration. It is believed that SAPSE publications are important as they reflect the quality of the research that strongly impact on research and development, both within the country and globally. IK publications belonging to this category would therefore be considered valuable and result in greater impact. It was found that 44 authors/researchers produced 86 (52%) SAPSE rated publications of the 153 IK publications submitted to
Does Indigenous Knowledge Research at the University of Zululand have an Impact?

5.2. Affiliation
Currently, the university has four faculties and forty eight teaching/academic departments.

5.2.1. IKS Output by Faculty
Indigenous Knowledge research output by faculty shows that the Faculty of Arts leads with 98 publications, followed by the Faculty of Science and Agriculture with 46 publications. There is insignificant IK research going on in the Faculties of Commerce, Administration and Law, and

the office for the period. In terms of individual productivity, CT Moyo (10), Ann Hutchings (9), SD Edwards (7), CRM Dlamini (4), GCV Buijs (3), NV Makunga (3), GC Oosthuizen (3), SE Terblanche (3) and AM Zobolo (3) topped the list. Unfortunately, even among these eight authors as a sample, 4 retired and one died. Coincidentally, most of the publications were produced during the last eight years, and the majority of the authors (28) published only once.

Figure 2: IK Publication is SAPSE Journals
Education. The research picture also reflects the overall research productivity at the university, where the two faculties (Faculty of Arts and Faculty of Science and Agriculture) always lead.

Figure 3: IK Output Distribution by Faculty

5.2.2. Publication output by Department, 1981-2007
The university has 48 teaching departments. As reflected in the figure below, IK is a multidisciplinary domain at the university that attracts research from 24 academic departments, with most departments based in the Faculties of Arts and Science and Agriculture. The leading departments, with 10 or more publications, were: Psychology (24), Botany (15), Biochemistry and Microbiology (13), Theology (13), Isizulu Namagugu (12), General Linguistics (10) and Library and Information Science (10). The leading IK researchers in the respective disciplines would therefore be based in these departments. However, due to retirement, death and relocation, Theology has suffered the most loss. Other departments such as Psychology, Botany, Biochemistry and Microbiology, and Isizulu Namagugu have also lost key IK researchers.
5.2.3. Registered Research Projects by Faculty and Department

The university requires that researchers register their research with the university, even if research funding does not come from the institution. However, it is not unusual to find unregistered research at the university, particularly when the university does not fund the research or when the research is ad hoc or small in nature, for example studies conducted at undergraduate level by students or research reactive to a particular need (specifically conferences or workshops of limited magnitude). There are also collaborative studies that are registered under the institutions with which the principal researcher is affiliated. From 1983 to 2007, 1037 research projects were registered by the university, of which 62 (6%) were IK based. The distribution of registered research projects by faculty and department is consistent with previous findings, where the Faculty of Arts was in the lead. Of the 25 registered IK research projects, the leading 6 departments, with 3 or more registered research projects, were the Centre for Arts and Culture (10) [note that Drama is categorized under Arts and Culture], Isizulu (8), Psychology (6), Theology (5), Botany (4) and Biochemistry and Microbiology (3). Interestingly, the Centre for Arts and Culture leads in registered IK research, but does not feature anywhere in terms of IK research publications. This trend also occurs more broadly. For example, as reflected in Table 1, of the 40 researchers with IK registered research projects, 12 (30%) have published their research results thus far. Similarly, of the 56 IK authors, only 12 (21%) have registered IK research projects with the university.
Figure 5: Distribution of IK Registered Research Projects by Faculty and Department

Table 1. Registered Research Projects Vs Research Publications

<table>
<thead>
<tr>
<th>Count of STATUS</th>
<th>Count of PUB STATUS</th>
<th>Count of STATUS</th>
<th>Count of PUB STATUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Researcher</td>
<td>Total Author</td>
<td>Total Author</td>
<td>Total Author</td>
</tr>
<tr>
<td>Baloyi-Sikhakhane VJG</td>
<td>1 Biyela NG</td>
<td>8</td>
<td>Oosthuizen GC</td>
</tr>
<tr>
<td>Bengu EEC</td>
<td>1 Buijs GCV</td>
<td>8</td>
<td>Opoku AR</td>
</tr>
<tr>
<td>Biyela NG</td>
<td>2 Chetty I</td>
<td>1</td>
<td>Pewu CN</td>
</tr>
<tr>
<td>Borsten GF</td>
<td>2 Christison KW</td>
<td>2</td>
<td>Pewu ES</td>
</tr>
<tr>
<td>Boshoff E</td>
<td>1 Cilliers G</td>
<td>1</td>
<td>Sabelo NO</td>
</tr>
<tr>
<td>Chetty I</td>
<td>1 Claasen JW</td>
<td>1</td>
<td>Schmittinger G</td>
</tr>
<tr>
<td>Coetzee M-H</td>
<td>1 Collins-Lusweti E</td>
<td>2</td>
<td>Seleke NH</td>
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<tr>
<td>Collins-Lusweti E</td>
<td>1 Cubbin AE</td>
<td>1</td>
<td>Shongwe JP</td>
</tr>
</tbody>
</table>
5.4. Publication Output by Source

Publication may occur in different sources, such as in books, conference proceedings, journals, newspapers or on the Internet, to name a few. Academics are encouraged to submit their research publications to the University Research Office/Unit for processing. The Research Office normally categorizes publications as SAPSE or non-SAPSE. SAPSE publications generate income to the university through subsidies from the Department of Education, as was alluded to earlier. The analysis in Figure 6 is based on SAPSE Journals. IK research was published in 41 SAPSE accredited journals from various disciplines. The seven leading journals, i.e. in which four or more papers were published, include: Journal of Ethnopharmacology (8), South African Journal of African Languages (7), African Journal of Range and Forage Science (5), Journal of Social Psychology (5), Indilinga: African Journal of Indigenous Knowledge (4), International Mental Health Journal (4) and Nomina Africana (4).

In Table 2, the IK research publications are analyzed according to their citedness in Google Scholar, which is more inclusive in the indexing of research publications than ISI and Scopus (see Onyancha and Ocholla, 2008). A total of 26 articles were cited in Google Scholar (see Table 1). Interestingly, the top 10 most cited papers originate from non-SAPSE publications. For example, the proceedings from the Faculty of Arts Conference - “Local and Global Issues in Research in Humanities and Social Sciences” - that was held in 2007 (see http://www.arts.uzulu.ac.za) came in 3rd position in terms of most cited papers. Topping the list in Google Scholar were articles by NG Biyela and GCV Buijs. There are several reasons behind why a paper may be cited, among them availability, visibility and access. The SAPSE journals indexed in Google scholar, for example, may not be accessible due to licensing constraints, while a source such as the Arts Conference Proceedings is open access in full text, meaning that it is accessible and available and would ultimately score more citations. Although there are many ways of measuring the impact of a publication, such as by using impact factor analysis, the impact of research output can also be based on how many times it is cited and used. In this case, papers appearing in open access platforms would be more accessible and invite more citations, which ultimately translates into some form of impact.
5.5 Cited IK records in Google Scholar

The citation counts of the University of Zululand’s IK papers are given in Table 2. Altogether, a total of 26 records received at least one citation. At the top of the Table are 8 papers authored by Biyela NG. “Screening of Zulu medicinal plants for prostaglandin-synthesis inhibitors” recorded the highest number of citations (i.e. 63). The paper’s year of production/presentation was 2006. Apparently, the most cited papers were published in non-SAPSE accredited sources/journals. In fact, of the 26 cited papers, only 11 were published in SAPSE-accredited journals. The top 8 cited papers were published in non-SAPSE accredited sources. It was also noted that most of the cited papers originated from the Natural Science Departments (e.g. Botany and Microbiology).

Table 2: Cited articles in Google Scholar
# Does Indigenous Knowledge Research at the University of Zululand have an Impact?

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Journal(or Source)</th>
<th>Title</th>
<th>SAPSE</th>
<th>Year</th>
<th>Dept</th>
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<td>1</td>
<td>Biyela NG</td>
<td>Strategic Planning Workshop</td>
<td>Screening of Zulu medicinal plants for prostaglandin-synthesis inhibitors</td>
<td>N</td>
<td>2006</td>
<td>Botany</td>
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<td>3</td>
<td>Biyela NG</td>
<td>The Fourth Literature &amp; Ecology Colloquium</td>
<td>Observations on plant usage in Xhosa and Zulu medicine</td>
<td>N</td>
<td>2007</td>
<td>Botany</td>
<td>17</td>
</tr>
<tr>
<td>4</td>
<td>Biyela NG</td>
<td>Faculty of Arts Conference: Local and Global Issues in Research in Humanities and Social Sciences</td>
<td>Anti-diarrhoeal evaluation of some medicinal plants used by Zulu traditional healers</td>
<td>N</td>
<td>2007</td>
<td>Biochemistry &amp; Microbiology</td>
<td>14</td>
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<tr>
<td>5</td>
<td>Biyela NG</td>
<td>3rd Annual National Oral History Conference: Culture, Memory and Trauma</td>
<td>Traditional and modern medicine in South Africa: A research study</td>
<td>N</td>
<td>2006</td>
<td>Psychology</td>
<td>15</td>
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<tr>
<td>6</td>
<td>Biyela NG</td>
<td>Pan South African Language Board (PANSALB) &amp; KwaZulu-Natal Provincial Language Committee</td>
<td>Exocarpic acid and other compounds from tubers and inflorescences of sarcophyte sanguinea</td>
<td>N</td>
<td>2007</td>
<td>Botany</td>
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<td>8</td>
<td>Biyela NG</td>
<td>3rd Annual National Oral History Conference: Culture, Memory and Trauma</td>
<td>Preliminary screening of some traditional Zulu medicinal plants for antineoplastic activities versus the HepG2 cell line</td>
<td>N</td>
<td>2007</td>
<td>Biochemistry &amp; Microbiology</td>
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<td>9</td>
<td>Buijs GCV</td>
<td>Challenges for Anthropology in the ‘African Renaissance’</td>
<td>The In Vitro Antioxidative Activity of Some Traditional Zulu Medicinal Plants</td>
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<td>2005</td>
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<td>Faculty of Arts Conference: Local and Global Issues in Research in Humanities and Social Sciences</td>
<td>Performance of Nguni, Afrikander and Bonsmara cattle under drought conditions in the North West Province of Southern Africa</td>
<td>N</td>
<td>2007</td>
<td>Agriculture</td>
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<td>Buijs GCV</td>
<td>Identity and Networks: Fashioning Gender and Ethnicity Across Culture</td>
<td>The use of traditional forms in community education</td>
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<td>Estuarine macrocrustacea of Richards Bay Harbour, South Africa, with particular reference to the penaeid prawns</td>
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<td>17</td>
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<td>Studia Historiae</td>
<td>Female chiefs and their wives: Tradition and modernity in Venda, South Africa</td>
<td></td>
<td></td>
<td></td>
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<td>18</td>
<td>Christison</td>
<td>Microscopy Society of Southern Africa –</td>
<td>Community Psychology: A Zululand Perspective</td>
<td>N</td>
<td>2001</td>
<td>Psychology</td>
<td>1</td>
</tr>
</tbody>
</table>
Table 3: Uncited records in Google Scholar (N=14)

<table>
<thead>
<tr>
<th>Author</th>
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<th>SAPSE</th>
<th>Year</th>
<th>Dept</th>
<th>Journal (Or Source)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buijs GCV</td>
<td>Stranger - Queens: a discussion of some aspects of the ritual and executive roles of women rulers and court officials in pre-colonial empires in East and Southern Africa</td>
<td>N</td>
<td>2007</td>
<td>Anthropology &amp; Development</td>
<td>Faculty of Arts Conference: Local and Global Issues in Research in Humanities and Social Sciences</td>
</tr>
<tr>
<td>Dhlomo M</td>
<td>Ubuntu: a Cultural Method of Mental Health Promotion</td>
<td>Y</td>
<td>2004</td>
<td>Psychology</td>
<td></td>
</tr>
<tr>
<td>Dlamini CRM</td>
<td>The future of African customary law</td>
<td>N</td>
<td>1990</td>
<td>Law</td>
<td></td>
</tr>
<tr>
<td>Dlamini CRM</td>
<td>The transition from the traditional to the modern legal system</td>
<td>Y</td>
<td>1988</td>
<td>Law</td>
<td></td>
</tr>
</tbody>
</table>
## Does Indigenous Knowledge Research at the University of Zululand have an Impact?

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Title</th>
<th>Year</th>
<th>Journal</th>
<th>DOI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dlamini CRM</td>
<td>The role of customary law in meeting social needs</td>
<td>1991</td>
<td>Law</td>
<td>Acta Juridica</td>
</tr>
<tr>
<td>Dlamini ET</td>
<td>Comparative and Science</td>
<td></td>
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<tr>
<td>Edwards SD</td>
<td>Ubuntu: a Cultural Method of Mental Health Promotion</td>
<td>2004</td>
<td>Psychology</td>
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<tr>
<td>Edwards SD</td>
<td>African breathing and spiritual healing</td>
<td>2007</td>
<td>Psychology</td>
<td></td>
</tr>
<tr>
<td>Hutchings A</td>
<td>Plants used for stress-related ailments in traditional Zulu, Xhosa and Sotho medicine. Part 1: Plants used for headaches</td>
<td>1994</td>
<td>Botany Library &amp; Information</td>
<td>Journal of Ethnopharmacology</td>
</tr>
<tr>
<td></td>
<td>The marginalized knowledge: Informetric analysis of indigenous knowledge</td>
<td></td>
<td></td>
<td></td>
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<td>The marginalized knowledge: An informetric analysis of indigenous knowledge</td>
<td></td>
<td></td>
<td>Proceedings of ISSI 2005</td>
</tr>
<tr>
<td>Ocholla DN</td>
<td>Facing the reality of the Ethiopian encounter</td>
<td>2005</td>
<td>Theology Alternation</td>
<td></td>
</tr>
</tbody>
</table>

### 5.6 Core keywords describing IK literature

The core/ periphery model was used to generate the core terms that describe IK literature. The terms that constitute the core include the following: Medicinal Plants; Toxic; Liliiflorae; Medicine; Traditional; Antineoplastic; Cell; Vitro; Antioxidative; Illness; Psychiatric; Community; Education; Language; Chitumbuka; Female chiefs; Wives; Tradition; Modernity; Parasuicide; Indigenous Knowledge; World-wide web; Muthi; Propagation; Gardens; Ritual; Women rulers; Court officials; Pre-colonial; Empires; Ubuntu; Mental; Health Promotion; Marginalized; Informetric; IsiZulu language; Multilingualism; Heritage resource; Izibongo; Forest; Afrikaans; Information; Communication; Technologies; Promotion; Auditing; Systems; Vegetable; Mustard; Bantu; Mother-tongue; Animals; and Oral Literature.

### 5.7 Mapping IK terms

Fig 7 is an illustration of the co-occurrence of terms within the titles of the IK papers produced by various researchers at the University of Zululand. The nodes represent title keywords (as labeled) and the lines show links/relationships/ties between the terms. The assumption is that keyword co-occurrence in the title implies a relationship. The thicker the line that joins two words/terms, the stronger the relationship between the said terms. Some of the terms that exhibited a higher number of co-occurrences include: language, traditional, medicine/medicinal, plants, rituals, woman, and health. Seemingly, most research is concentrated on medicine or health and plants, a practice which is as old as the human race. The use of herbs, particularly for treating various diseases, is an old practice in Sub-Saharan Africa.
Conclusions

We note that Indigenous Knowledge definitions tend to concur that IK is a unique, culturally and historically based, ethnocentric (or traditional/local/folk/community) form of tacit knowledge. It tends to be found in the living environments and conditions of a community largely deprived of modern living conditions due to poverty and marginalization, leading the community to resort to such knowledge for material, spiritual and intellectual survival. IK’s marginalization has affected its development and impact in a rapidly changing society, despite the benefits that such knowledge still brings to those who depend on it for survival and for material and moral gain. The challenges facing Indigenous Knowledge development are numerous and affect its impact universally. Fortunately, there is evidence of IK research publication at the University of Zululand, where it constitutes 5.9% (153 of 2598) of the publications captured by the research unit from 1981-2007. Although most of the publications originate from the Faculty of Arts, with leading authors based in the Departments of Psychology and General Linguistics, there is also strong contribution from authors in Botany, Biochemistry and Microbiology in the Faculty of Science. It was also found that over 75% of the IK authors in this study have left the university due to retirement or relocation, among other reasons. The most consistent IK author was Steve Edwards, who has also retired from the university. That aside, most of the IK publications were produced in the last 8 years and are therefore quite recent. It is encouraging to note that there is a growing breed of new IK researchers, such as Moyo, Biyela, Zobolo and Ocholla, to replace those leaving the university. IK research of good quality (and perhaps impact) was also noted in SAPSE journals. For example, 44 IK researchers produced 86 (52%) SAPSE rated publications during this period. An analysis of the publications by affiliation, i.e. faculty and department, show that the Faculty of Arts was leading, followed by the Faculty of Science and Agriculture. The leading departments/disciplines were IsiZulu, Psychology and Theology in the Faculty of Arts, and Botany, Biochemistry and Microbiology in the Faculty of Science. IK is a multidisciplinary domain, given that 24 of the 48 departments at the university conduct research and publish in the field. Although 6% (62 of 1037) of the registered research projects at the university during this period were IK based, the distribution of registered research by faculty and department is, to some extent, consistent with the distribution of registered research at the...
University. Unfortunately, most of the registered IK research does not end in publication, and most published IK research is not registered. It is worth reiterating that IK publications actually land in SAPSE rated journals. In the period under review, IK researchers published in 41 SAPSE rated journals. Regrettably, as far as the citing of IK authors is concerned and based on the analysis using Google scholar, fewer of the university’s IK authors were cited in SAPSE journals than in non-SAPSE sources. Most of the citations occurred in open access, full text sources, such as the Arts Conference Proceedings of 2007, suggesting that more citations occur with open access sources. Lastly, the subject coverage is diversified and multidisciplinary in nature as shown in Table 4 below.

**Table 4: Subject Coverage**

- Arts
- culture
- Isizulu
- Psychology
- Theology
- Botany
- Biochemistry
- Microbiology
- Agriculture
- Afrikaans
- Recreation
- Tourism
- Home economics
- Comparative Education
- German
- Human Movement Science
- Sports science
- Law
- Library science
- Information science
- Philosophy
- Sociology
- Drama
- Music
- Consumer Science

It is recommended that an IKS agenda at the University should address the following fundamental questions:

- Does IK research at the University of Zululand have an impact?
- How can we improve on IK research and Impact?
- What indexing language is appropriate for IK?
- How can collaboration on the creation of IKS content be achieved?

**References**


Chisenga, J. (nd). Indigenous knowledge: Africa’s opportunity to contribute to global information content. Indilinga - African journal of indigenous knowledge systems


Kawooya, Dick.2006. Copyright, Indigenous Knowledge and Africa’s


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and

Maluleka, Jan R
E-mail: maluljr@unisa.ac.za

University of South Africa, Department of Information Science, P.O Box 392, UNISA 0003, Pretoria, South Africa

Abstract
This study uses bibliometric techniques to examine the frequency and patterns of referencing in articles published in the South African Journal of Libraries and Information Science (SAJLIS) from 1996 to 2007. The authors believe that an analysis of references and referencing patterns in a journal is vital because references play an important role in scholarly communication, which is defined as the process of sharing and publishing research findings in order to reach a wider scholarly and professional community. This paper thus seeks to determine, among other objectives: the growth of publications in the journal; the growth of references; articles with the most number of references; types of sources consulted by SAJLIS authors; language used to publish the consulted sources; and whether the length of articles influences the number of references. It was found that SAJLIS has maintained regular publication for all but one year, 1999, when the journal was not published. On average, SAJLIS published 15 articles per year between 1996 and 2007; journal articles were the most commonly consulted document type by SAJLIS authors (2241; 46.6%), followed by books (1512; 31.5%), Internet-based sources (665; 13.8%), and conference proceedings (189; 3.9%); Internet-based sources and electronic journals were growing in popularity among the researchers; the average number of references per article equated to 29.13; and the highest and lowest number of references recorded in a single article were 101 and 4, respectively. We also observed that the number of references in an article does not influence the length of the article; the average length of SAJLIS papers is 10 pages and there was an increased usage of electronic resources by SAJLIS authors from 2001. Finally, this paper draws several conclusions based on the findings of the study and provides some recommendations for further research.

Key words: References; South African Journal of Libraries and Information Science; Informetrics; Information Science; Citations; journals; South Africa

1. Introduction

3 Omwoyo Bosire Onyancha, Ph.D., is a post-doctoral researcher and temporary senior lecturer at the Department of Information Science, University of South Africa and deputy librarian, University of Eastern Africa, Baraton - Kenya

4 Jan Maluleka is a post-graduate honors student at the Department of Information Science, University of South Africa
The South African Journal of Libraries and Information Science [ISSN: 0256-8861] (SAJLIS) celebrates 74 years of its existence this year (2008). The journal began its publication in 1933. Its former titles before 1983 include “South African Journal of Librarianship and Information Science” [ISSN: 0256-887X] and “South African Libraries - Suid-Afrikaanse Biblioteke (South Africa)” [ISSN: 0038-240X]. SAJLIS was known as the “South African Journal of Library and Information Science” until 2002, when it changed to its current name. The journal was supposed to be published quarterly, largely in the English language. Manuscripts in the Afrikaans language (which is ranked as the 3rd most common language of communication in South Africa) [Onyancha, 2006:61] were also accepted for publication in SAJLIS. Presently, SAJLIS is owned by the Library and Information Science Association of South Africa (LIASA), which took over ownership and management from the defunct South African Institute of Library and Information Science (SAILIS). It is published in South Africa by Forum Press, which replaced the South African Bureau for Scientific Publications. The journal publishes original, scientifically viable contributions on any area of Library and Information Science (LIS), including library science, information science, archives and records management and Information and Communication Technologies (ICTs). Specific areas of publication focus on literacy, management, children’s literature, ethics, globalization, impact of the digital divide, technology, communications, Indigenous Knowledge Systems (IKS), knowledge management, etc. According to the journal’s editorial policy (available on LIASA’s website), SAJLIS publishes a range of documents, including scholarly articles, review articles, practical library work, short communications, book reviews and letters to the editor. More information about the journal can be found at: http://www.liasa.org.za/publications/sajlis.php.

Information provided in the Ulrich’s Periodical Directory ©2008 reveals that the journal’s articles are available electronically in the following databases: Die Elektronische Zeitschriftenbibliothek (Zeitschriften (alle); Zeitschriften (kostenpflichtig) and EBSCOhost (Academic Search Complete; Academic Search Elite; Academic Search Premier; Academic Source Premier; Advanced Placement Source; Business Source Corporate; EBSCOhost MegaFILE; Education Research Complete; Library, Information Science and Technology Abstracts with Full Text; MasterFILE Premier; Professional Development Collection; and World Magazine Bank). It is indexed in 25 world renowned electronic databases, including EBSCOHost’s 15 bibliographic databases and H.W. Wilson’s Library Literature & Information Science Full text database. Other indexing services that index SAJLIS include: Index to South African Periodicals (ISAP-online); Information Science & Technology Abstracts (Online) (1986-); Inspec (Dec. 1985-); Internationale Bibliographie der Rezensionen Geistes- und Sozialwissenschaftlicher Literatur; LISA: Library & Information Science Abstracts (2004-); Library Literature & Information Science (Mar.1984-); Library, Information Science & Technology Abstracts (Jan.1995-); World Banking Abstracts (Jan.1995-) and World Magazine Bank.

Its current Editorial Board features 26 established and experienced scholars in the field of library and information science/studies (LIS), mostly from South Africa, with others from Australia, Botswana, Canada, Denmark, Ghana, Hungary, Kenya, Namibia, Nigeria, the United Kingdom and the United States of America. According to Ocholla (2005), the journal draws its funding from subscriptions, government subsidies, advertising and donations (e.g. Lotto Development Trust Fund), and page fees. Based on these developments (especially changes in the leadership of the journal’s management team) as well as the 74th anniversary of SAJLIS, we conduct this study in order to examine the performance of the journal since 1996, two years after South Africa was accepted into the international scholarly arena, among other incentives. We believe that a review of SAJLIS will inform researchers/authors, the journal management and the owners and other stakeholders about the current status and future prospects of the journal as far as publication trends are concerned. Informed decisions can then be made regarding the improvement of the quality of the journal. This study specifically deals with one of many aspects that influence the quality of scholarly publishing or communication, i.e. references and referencing patterns in SAJLIS.
2. The concepts – references and citations

The terms ‘reference’ and ‘citation’ are commonly used interchangeably. There is, however, a difference between the two terms. Smith (1981:83) defines a citation as an “acknowledgement that one document receives from another”, while a reference is the “acknowledgement that one document gives to another”. The difference therefore lies in the words ‘receives’ and ‘gives’, which introduce other terms such as cited and citing documents. Diodato (1994:136) explains that a reference is a “publication mentioned in a document, usually in the document’s footnotes, endnotes, bibliography or list of references” and describes a citation thus: “When document A is mentioned in document B, the mention is a citation for document A”. Simply put, one document’s reference is another’s citation. In order to clearly appreciate the difference between the two terms, Diodato’s (1984:32) explanation is graphically illustrated in Fig 1.

![Fig 1: Relationship between a reference and citation](image)

Assume that document B appears in the footnotes (bibliography or list of references) of document A. It follows therefore that:

- Document A gives document B as a reference;
- Document A refers to document B;
- Document A cites document B;

and that:

- Document B receives a citation from document A;
- Document B receives a reference from Document A; and
- Document B is cited by document A.

Using the citation count and analysis approach, document B can be said to have received one citation from document A. In other words, document B will be credited with one citation, while document A will be said to be containing a reference to document B. Document A, in this case, is not credited with any citation count or frequency. In this study, it is this latter category of acknowledgement that will be the subject of analysis. That is, we focus on the publications mentioned in SAJLIS as opposed to the analysis of the publications that mention SAJLIS in their footnotes, bibliography, endnotes or list of references. Only references in SAJLIS as opposed to references to SAJLIS will be analyzed in this study.

According to Neville (2007:1), referencing is the practice of acknowledging, in one’s own text or writing the intellectual work of others - specifically work that has been presented in some way in the public domain. It is a way that uniquely identifies the sources of

information. Ojedokun (2007) explains that referencing is necessary to: avoid plagiarism; help support a scholar’s arguments and add credibility to their writings; trace the origin of ideas; and spread knowledge. By looking at the list of sources cited, Neville (2007:8) posits that the reader can follow up and explore the text more comprehensively, or extract further sources for their own writing. Thomas & Goldman (2007:3) suggest that references should be used when one: quotes the exact words of another author; presents someone else’s ideas, theories, arguments and/or research in one’s own words; presents another author’s interpretation, point of view, opinion or understanding of an issue; and provides specific, factual information in the form of statistics, graphs, verbal interviews, diaries etc.

In bibliometrics, references play an important role in research evaluation and/or citation analysis. In scholarly communication and sociology, references can be used to study how and why scholars communicate with each other by analyzing who cites who and why (the latter is used to explain the motivations behind one scholar’s use of another’s work). Citations can also be used to measure an author’s, journal’s or institution’s research influence. However, the use of citations as a measure of influence is based on a number of assumptions and has several limitations, some of which are as follows (Ungern-Sternberg, 2000):

- Citing a document is supposed to mean that the author has been used by another author.
- Citing a document reflects quality.
- The best works are cited. Often factors other than quality determine what is cited, e.g. availability, coverage by bibliographic databases, format, age, language etc.
- The content of a citing document is related to the content of the cited document.
- All citations are equal.
- Formal influence is not always cited.
- Biased and incorrect citations are common.
- Informal influence is not cited.
- The types of citations vary.
- Variations in the degree of citation are dependant on the type of publication, nationality, time period, size and type of speciality. The citing behaviour varies in different subject fields, but the general trend is towards more citations.

3. Related studies

Similar studies have been undertaken in different subject fields and disciplines (including LIS), where bibliometric research techniques were applied in an attempt to identify bibliometric characteristics of articles in scholarly journals. Specifically, the study of references and referencing patterns in journal articles has also received a considerable amount of interest from LIS researchers. The scope of some of the studies is broad, but they nevertheless analyze references. For instance, Tiew, et al (2002) conducted a bibliometric study on the Malaysian Journal of Library and Information Science (MJLIS) in which about 76 journal articles published in MJLIS from 1996 – 2000 were examined. Among the factors that the authors examined were: the range of articles published per volume, the average number of references, average length per article and the authorship patterns. Glanzel & Schoepflin (1999) conducted a study that analysed the percentage of references to serials, the mean references’ age and the mean reference rate in their paper entitled “A bibliometric study of reference literature in the sciences and social sciences”. In his paper, “The influence of references per paper in the SCI to impact factors and the Matthew effect”, Biglu (2008) studied the references in 10,000 records randomly selected from the Science Citation Index, and observed that the number of references per paper has continued to increase, while most cited references were in the form of journal articles, followed by meetings’ abstracts, notes and editorial material. He also noted that most references were in the English language, implying that the majority
of the publications consulted were published in English. Other languages included German, Russian and French. A similar study was carried out by Krampen, Becker, Wahner & Montada (2007), who conducted a content analysis on the references and citations in psychological publications and found that more than 50% of the examined references were journal articles, and up to 40% were books and book chapters. Internet references (or references to internet-based sources) have also been subjected to research. Aronsky, Madani, Carnevale, Duda & Feyder (2007) examined 840 internet sources in order to determine the prevalence and inaccessibility of internet references in the bibliography of biomedical publications. The authors discovered that 11.9% of the references were already inaccessible within two days of the articles’ release to the public, and concluded that the inaccessibility rate at the time of publication was substantial. On their part, Vallmitjana & Sabate (2008) conducted a bibliometric study to ascertain the types of documents most frequently used in the research process, the most frequently consulted journals, and the obsolescence rate of the journals, and noted that of the 4203 citations analyzed, scientific papers accounted for 79%; 33 journals met 50% of the information needs; and 50% of the citations were no older than 9 years.

In Sub-Saharan Africa, Mabawonku (2001) conducted a study in which papers published in the African Journal of Library, Archives and Information Science (AJLAIS) during the 1996-2000 period were analyzed. The study focused on the country in which the papers were submitted; where the authors received their professional training; major disciplines covered in the profession; format of the cited publication; time-span of citations; and the ranking of cited journals. The intention was to map the changing pattern of LIS research in Africa. Similarly, Ocholla & Ocholla (2007) conducted a study that aimed to promote awareness of the overall research output about Library and Information Science in South Africa. The publication count and analysis approaches were used to determine the nature, type and range of research output in LIS in South Africa. Omotayo (2004) and Kirchler (2006) also conducted bibliometric studies that analysed the Ife psychologia and the Journal of Economic Psychology respectively. Foster in Ocholla (2007:5) notes that a manuscript is rated as good when its references are current and concise. In his study on the “Common errors and challenges in publishing in a peer refereed library and information journal”, Ocholla (2007) expounds further on the role of references in scholarly communication. Among the referencing errors that are committed by authors, he cites: inappropriate referencing styles, lack of South African references, weak bibliography and poor electronic referencing (Ocholla, 2007:10). The author observed thus:

“... we also noted that referencing (33: 38.8%), conclusions and recommendations (33: 38.8%), among others ... are errors that require attention. For instance, although journals provide guidelines on referencing style, authors grapple with referencing, particularly with electronic referencing. Also common, although not easily detected, are mismatched references between the body of the manuscript and those presented in the reference list/bibliography at the back” (Ocholla, 2007:10).

As illustrated by the aforementioned studies, South African LIS journals have received very little attention from LIS researchers. It is worth noting that most of the studies under review in this study are based in the developed countries and their findings may therefore not reflect the status of journals published in South Africa or Sub-Saharan Africa. Given that journal publishing in the developing countries and more particularly in Africa faces more severe challenges than those published in the industrialized nations, it is imperative that we continuously evaluate them to ascertain their scholarliness and quality. One of the factors that influence the quality of articles (and by extension, the journal) is references. As Foster in Ocholla (2007:5) notes, a manuscript is rated as good when its references are current and concise. This study, unlike some of the studies reviewed above which analyzed a broad spectrum of variables, will concentrate on the analysis of references in SAJLIS. SAJLIS is South Africa’s leading LIS journal in terms of LIS research productivity and impact. It is the mouth piece of LIS in the country. Other active LIS journals in South Africa include Mousaion, Innovation, Indilinga, South African Journal of Information Management, and Journal of the Eastern and Southern Africa Regional Branch of the International Council on Archives (ESARBICA journal).
4. **Purpose of the study**
This study builds on some of the aforementioned studies and examines the references and referencing patterns in articles published in the *South African Journal of Libraries and Information Science* (SAJLIS) between 1996 and 2007 in order to determine the:

- Growth of publications;
- Distribution of records by document type;
- Number of references per year;
- Average number of references per article per year;
- Articles with the most number of references;
- Language of publication of the cited sources;
- Relationship between the length of articles and the number of references; and
- Types of sources most consulted by SAJLIS authors.

5. **Methodology**
This study applied bibliometric research techniques to analyse articles published in SAJLIS between 1996 and 2007. Bibliometric research methods can be divided into two broad categories, namely descriptive (i.e. publications count and analysis) and evaluative (citations count and analysis) research methods. Both approaches were used in this study. Whereas publications count was used to obtain the number of articles (and other documents) published in SAJLIS within the period of review, evaluative techniques were employed to study the referencing patterns in the journal. Three electronic sources of data, namely Academic Search Premier; Master File Premier; and Library, Information Science & Technology Abstracts (LISTA); were used to collect relevant data. The journal’s name was used to search for SAJLIS’ published records as indexed in the above databases. The full-text documents were then identified, downloaded and stored for analysis. In cases of uncertainty about the total number of articles in each issue, or where some issues were missing from the electronic databases, the UNISA library journal collection was consulted. The missing issues or articles were then photocopied and their references obtained for further analysis. Extra care was taken to ensure that most (if not all) articles were obtained by additionally searching Google Scholar using Harzing’s Publish or Perish Software. The data obtained from Google Scholar was used to confirm the number of articles published in SAJLIS between 1996 and 2007. It was noted that in some years, Google Scholar yielded more documents but fewer articles than the bibliographic databases mentioned above. This information was used to conduct further searches in the UNISA library for the missing articles.

The references were manually counted and electronically fed into spreadsheets that were prepared using Microsoft Excel software. Data was then analyzed to determine:

- The growth of publications in SAJLIS by obtaining the number of records published in each year, from 1996 to 2007;
- The type of documents published in SAJLIS based on information that was available in the ‘document type’ field;
- The number of references per year, by first counting the number of references in each article in a given year, and then summing up the figures for each year;
- The average number of references per article per year, which was calculated as the total number of references divided by the total number of articles in a given year;
- The articles with the most number of references, accomplished by identifying the articles that contained the highest number of references in their list of references;
- The language of publication of cited sources, by examining the language in which the title of the cited sources was written;
- The relationship between the length of the article and number of references, which was measured using the Pearson correlation formula as explained further.
below. The length of the articles was measured in terms of the total number of pages of each article.

- The types of sources consulted by SAJLIS authors, which were obtained by examining the titles of the sources of the consulted documents. For instance, if the sources’ titles were italicized and/or contained the volume and issue number and pagination (e.g. *The International Information & Library Review, 36:95-103*), the reference was categorized as a *journal article*. If, it additionally contained a Uniform Resource Locator (URL) or website address, the reference was categorized as an *electronic journal article*.

In addition to the mean, other descriptive statistics (e.g. mode, median and standard deviation) were generated using Microsoft Excel’s descriptive statistics option by selecting Tools >> Data analysis >> Descriptive statistics, as shown in Fig 2. The generated statistics are provided in Table 8.

![Data Analysis](image)

**Fig 2: Microsoft Excel’s data analysis option for various statistical analyses**

The following Pearson’s correlation formula was used to calculate the correlation between the number of references and the length of articles in each year.

\[
r = \frac{\sum (x - \bar{x})(y - \bar{y})}{\sqrt{\sum (x - \bar{x})^2 \sum (y - \bar{y})^2}}
\]

This formula is one of the most commonly used methods to determine the relationship between a set of variables. The formula returns the Pearson product moment correlation coefficient \(r\), a dimensionless index that ranges from -1.0 to 1.0 (inclusive), and reflects the extent of a linear relationship between two data sets.

6. Results

In this section, the results of the study are presented under the following subheadings: growth of publications in SAJLIS; distribution of records by document type; number of references per year; average number of references per article per year; articles with the most number of references; relationship between the length of articles and the number of references; average number of pages per article; language of cited sources; and types of sources mostly often consulted.

6.1 Growth of Publications in SAJLIS

In total, 165 articles were published by SAJLIS between 1996 and 2007, as shown in Table 1. Evidently, the publication of SAJLIS has been regular over the years except for
1999, when no issue was published. Most articles were published in 2005 (25), followed by 1997 (23), 2006 (22), 1996 (18), 2007 (17), 1998 (16), 2004 (12), 2002 (10) and 2003 (10). The least number of publications was recorded in 2000 (5), followed by 2001 with 7. On average, and with the exception of 1999, SAJLIS published 15 articles per year. Table 1 also reveals that between 1999 and 2003, the journal published relatively fewer records than the period preceding 1999 and following 2003.

Table 1, Growth of Articles in SAJLIS

<table>
<thead>
<tr>
<th>Year</th>
<th>Articles</th>
<th>change in %</th>
<th>cumulative</th>
<th>Change in cumulative</th>
<th>% in cumulative change</th>
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<tr>
<td>2007</td>
<td>17</td>
<td>-22.72</td>
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<td>2006</td>
<td>22</td>
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<td>148</td>
<td>22</td>
<td>8.77</td>
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<td>2005</td>
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<td>126</td>
<td>25</td>
<td>42.85</td>
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<td>20</td>
<td>101</td>
<td>12</td>
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<td>89</td>
<td>10</td>
<td>12.65</td>
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<td>10</td>
<td>42.85</td>
<td>79</td>
<td>10</td>
<td>14.49</td>
</tr>
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<td>7</td>
<td>40</td>
<td>69</td>
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<td>11.29</td>
</tr>
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<td>-</td>
<td>62</td>
<td>5</td>
<td>8.77</td>
</tr>
<tr>
<td>1999</td>
<td>0</td>
<td>-100</td>
<td>57</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1998</td>
<td>16</td>
<td>30.43</td>
<td>57</td>
<td>16</td>
<td>39.02</td>
</tr>
<tr>
<td>1997</td>
<td>23</td>
<td>27.77</td>
<td>41</td>
<td>23</td>
<td>87.77</td>
</tr>
<tr>
<td>1996</td>
<td>18</td>
<td>85.71</td>
<td>18</td>
<td>18</td>
<td>87.77</td>
</tr>
</tbody>
</table>

6.2 Distribution of records by document type

Table 2 reveals that a total of 165 articles, 85 book reviews, 10 editorials, 2 commentaries and 3 reports were published in SAJLIS between 1996 and 2007, equating to a total of 265 documents. The highest number of documents was published in 1997, with 42 records comprising 23 articles and 19 book reviews. The second highest number of documents was published in 2006, when 22 articles, 16 book reviews and 3 editorials were recorded; followed by 2005 (39), 1998 (31), 2007 (28), and 1996 (25). The least number of records were published in 2000 and 2001, which recorded 5 and 7 publication respectively. Throughout the entire period of review [i.e.1996-2007], the journal articles constituted the majority document type. For instance, there were 18 journal articles in 1996 as opposed to 5 book reviews and 2 commentaries in the same year. The distribution pattern of documents in Table 2 reveals that there were 23 journal articles in 1997, 16 in 1998, 5 in 2000, 7 in 2001, 10 each in 2002 and 2003, 12 in 2004, 25 in 2005, 22 in 2006 and 17 in 2007. Book reviews were the second most published document type with a total posting of 85, followed by editorials (10), reports (3) and commentaries (1).

Table 2, Distribution of records by document type

<table>
<thead>
<tr>
<th>YEAR</th>
<th>Articles</th>
<th>Book reviews</th>
<th>Editorials</th>
<th>Commentary</th>
<th>Reports</th>
<th>Total</th>
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</thead>
<tbody>
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<td>1997</td>
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<td>19</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>42</td>
</tr>
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<td>15</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>31</td>
</tr>
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<td>-</td>
<td>-</td>
<td>-</td>
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<td>-</td>
</tr>
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<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
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<td>2001</td>
<td>7</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2002</td>
<td>10</td>
<td>2</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>16</td>
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<td>2003</td>
<td>10</td>
<td>5</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>16</td>
</tr>
<tr>
<td>2004</td>
<td>12</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>15</td>
</tr>
<tr>
<td>2005</td>
<td>25</td>
<td>12</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>39</td>
</tr>
</tbody>
</table>
The total number of references discerned from a total of 165 articles published in SAJLIS between 1996 and 2007 was 4807, as indicated in Table 3. The year 2006 produced the highest number of references (i.e. 810), which implies that a total of 810 sources were consulted by SAJLIS authors in that year alone. The second highest number of references was recorded in 2005, which yielded a total of 784 references, followed by 1997 (626), 2007 (514), 1996 (458), 2004 (384), 1998 (375), and 2003 (336).

The least number of references were recorded in the years 2000 (103) and 2001 (183). There was a negative growth in the percentage of references in the years 1998 (-40.10%), 2000 (-72.53%) and 2007 (-36.54%), implying a decline in the number of sources consulted by SAJLIS authors. Other than the above mentioned years, a positive growth rate was generally witnessed, with the highest percentage growth rate recorded in 2005 (104.17%), followed by 2001 (77.67%), and 1997 (36.68). Generally speaking, the percentage change in the cumulative number of references shows a positive growth rate, from 458 references in 1996 to the accumulative total of 4807 references by 2007.

### Table 3: Number of references per year

<table>
<thead>
<tr>
<th>Year</th>
<th>References</th>
<th>%Change</th>
<th>Cumulative references</th>
<th>%Change in cumulative references</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>514</td>
<td>-36.54</td>
<td>4807</td>
<td>11.97</td>
</tr>
<tr>
<td>2006</td>
<td>810</td>
<td>3.32</td>
<td>4293</td>
<td>23.26</td>
</tr>
<tr>
<td>2005</td>
<td>784</td>
<td>104.17</td>
<td>3483</td>
<td>29.05</td>
</tr>
<tr>
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<td>384</td>
<td>14.29</td>
<td>2699</td>
<td>16.69</td>
</tr>
<tr>
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<td>336</td>
<td>43.59</td>
<td>2315</td>
<td>16.98</td>
</tr>
<tr>
<td>2002</td>
<td>234</td>
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<tr>
<td>2001</td>
<td>183</td>
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<td>1745</td>
<td>11.72</td>
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<td>-72.53</td>
<td>1562</td>
<td>7.06</td>
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<tr>
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<td>375</td>
<td>-40.10</td>
<td>1459</td>
<td>34.59</td>
</tr>
<tr>
<td>1997</td>
<td>626</td>
<td>36.68</td>
<td>1084</td>
<td>136.68</td>
</tr>
<tr>
<td>1996</td>
<td>458</td>
<td></td>
<td>458</td>
<td></td>
</tr>
</tbody>
</table>

6.3 Number of references per year

The total number of references discerned from a total of 165 articles published in SAJLIS between 1996 and 2007 was 4807, as indicated in Table 3. The year 2006 produced the highest number of references (i.e. 810), which implies that a total of 810 sources were consulted by SAJLIS authors in that year alone. The second highest number of references was recorded in 2005, which yielded a total of 784 references, followed by 1997 (626), 2007 (514), 1996 (458), 2004 (384), 1998 (375), and 2003 (336).

The least number of references were recorded in the years 2000 (103) and 2001 (183). There was a negative growth in the percentage of references in the years 1998 (-40.10%), 2000 (-72.53%) and 2007 (-36.54%), implying a decline in the number of sources consulted by SAJLIS authors. Other than the above mentioned years, a positive growth rate was generally witnessed, with the highest percentage growth rate recorded in 2005 (104.17%), followed by 2001 (77.67%), and 1997 (36.68). Generally speaking, the percentage change in the cumulative number of references shows a positive growth rate, from 458 references in 1996 to the accumulative total of 4807 references by 2007.

6.4 Average number of references per article per year

One of the most commonly used measures of central tendency is the mean (known as the arithmetic mean or simply, the average). Other measures of central tendency include the mode, median and standard deviation (see Table 8). Overall, the average number of references per article for all the articles published in SAJLIS between 1996 and 2007 was 29.3 (see Table 4). Table 4 further reveals that the average number of references per article ranged between 20.6 (recorded in 2004) and 36.81 (in 1997). Thus, the years that produced the highest average number of sources consulted between 1996 and 2007 by SAJLIS authors were as follows: 1997 (36.81), 2001 (33.60), 1996 (30.23), 2006 (27.21), 2003 (26.14), and 2007 (25.44).
Table 4: Average number of references per article per year

<table>
<thead>
<tr>
<th>Year</th>
<th>References</th>
<th>Articles</th>
<th>References/Article</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>458</td>
<td>18</td>
<td>25.44</td>
</tr>
<tr>
<td>2006</td>
<td>626</td>
<td>23</td>
<td>27.21</td>
</tr>
<tr>
<td>2005</td>
<td>375</td>
<td>16</td>
<td>23.43</td>
</tr>
<tr>
<td>2004</td>
<td>103</td>
<td>5</td>
<td>20.60</td>
</tr>
<tr>
<td>2003</td>
<td>183</td>
<td>7</td>
<td>26.14</td>
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<td>10</td>
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<td>336</td>
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<td>33.60</td>
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<td>2000</td>
<td>384</td>
<td>12</td>
<td>32.00</td>
</tr>
<tr>
<td>1998</td>
<td>784</td>
<td>25</td>
<td>31.36</td>
</tr>
<tr>
<td>1997</td>
<td>810</td>
<td>22</td>
<td>36.81</td>
</tr>
<tr>
<td>1996</td>
<td>514</td>
<td>17</td>
<td>30.23</td>
</tr>
<tr>
<td>Total</td>
<td>4807</td>
<td>165</td>
<td>29.13</td>
</tr>
</tbody>
</table>

6.5 Articles with the most number references

Appendix A shows the top 20 articles that recorded the highest number of references. The articles that yielded 60 or more references each, in descending order, were: Fourie I (101); Ikoja-Odongo R & Mostert (87); Stilwell C & Morris C (82); Ngulube P & Magazi L (73) and Migiro, S O (73). Others were Fourie J A (71), Dick A L (62), Dube L & Ocholla D N (61), and Murray K (60). Therefore, the article with the most number of references contained 101 references, while the article ranked 20th had 45 references. Of the 20 highest ranked articles, 6 had over 70 references. The bottom 5 articles, i.e. with the least number of references, had 11, 9, 7, 6 and 4 references respectively.

Table 5: Length of articles in relation to the number of references

<table>
<thead>
<tr>
<th>Year</th>
<th>Total no. of Pages</th>
<th>Total no. of References</th>
<th>Pearson's correlation Coefficient (r)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>145</td>
<td>458</td>
<td>0.364686</td>
</tr>
<tr>
<td>2006</td>
<td>196</td>
<td>625</td>
<td>0.526694</td>
</tr>
<tr>
<td>2005</td>
<td>131</td>
<td>375</td>
<td>0.628247</td>
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<td>2004</td>
<td>49</td>
<td>103</td>
<td>0.823239</td>
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<td>2003</td>
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<td>183</td>
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</tr>
<tr>
<td>2002</td>
<td>109</td>
<td>234</td>
<td>0.451834</td>
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<td>2001</td>
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<td>336</td>
<td>0.747442</td>
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<td>2000</td>
<td>127</td>
<td>384</td>
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<td>1998</td>
<td>293</td>
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<td>0.167688</td>
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<tr>
<td>1997</td>
<td>261</td>
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<tr>
<td>1996</td>
<td>197</td>
<td>514</td>
<td>0.262795</td>
</tr>
</tbody>
</table>

6.6 The length of articles in relation to the number of references

The analysis of the relationship between the number of references and the number of pages per article is presented in Table 5. To obtain Pearson’s correlation value, each article’s total number of pages and references in each year were entered into two separate columns in Microsoft’s Excel software, following which the Pearson’s function, already explained under methodology, was applied to the data. Each year’s articles and
references produced the correlation values shown in column 4 in Table 5. The highest $r$
value was recorded in 2004 (i.e. $r = 0.82$), followed by 2001 (0.75), 2005 (0.63), 2000 (0.54)
and 2006 (0.53). The rest of the years produced a Pearson’s correlation value of less than
0.5 each. Overall, the Pearson product moment correlation coefficient stood at 0.407898.

### Table 6: Language of consulted sources by SAJLIS authors

<table>
<thead>
<tr>
<th>Year</th>
<th>English</th>
<th>Afrikaans</th>
<th>Others</th>
<th>TOTAL</th>
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<tbody>
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<td>506</td>
<td>5</td>
<td>3</td>
<td>514</td>
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<tr>
<td>2006</td>
<td>809</td>
<td></td>
<td>1</td>
<td>810</td>
</tr>
<tr>
<td>2005</td>
<td>770</td>
<td>14</td>
<td></td>
<td>784</td>
</tr>
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<td>2002</td>
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<td>234</td>
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<td>2001</td>
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<td>183</td>
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<tr>
<td>2000</td>
<td>98</td>
<td>5</td>
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<td>103</td>
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<tr>
<td>1998</td>
<td>371</td>
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<td>1997</td>
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<td>626</td>
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<td>1996</td>
<td>438</td>
<td>19</td>
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</tr>
<tr>
<td>TOTAL</td>
<td>4728</td>
<td>72</td>
<td>7</td>
<td>4807</td>
</tr>
</tbody>
</table>

### 6.7 Average number of pages per article

The average number of pages per article was as follows: 1996 (11.6), 1997 (11.9), 1998
(11.7), 2000 (10.6), 2001 (8.8), 2002 (10.9), 2003 (9.1), 2004 (9.8), 2005 (8.2), 2006 (8.5),
and 2007 (8.1). Illustrating this distribution pattern in a line graph shows a general
decrease in the length of articles (see Fig 3).

### Fig 3: Number of pages per article

![Fig 3: Number of pages per article]

$$y = -0.39x + 12.267$$

$$R^2 = 0.776$$

### 6.8 Distribution of references by language
The language of most of the consulted published literature by SAJLIS was obtained by examining the language in which the cited reference’s title was written. It was observed that most of the cited sources in SAJLIS were in English, which yielded a total of 4728 references. In this category, the year 2006 produced the highest number (i.e. 809), followed by 2005 (770), 1997 (609) and 2007 (506). Sources in the Afrikaans language were also noted. They equated to 72 in total, with 1996 yielding the highest number (i.e. 19). With the exception of 2005, when a total of 14 references were recorded in the Afrikaans language, it appears as though since 1998, Afrikaans language sources are seldom consulted by SAJLIS authors. ‘Others’ comprised the Dutch and French languages.

Table 7: Types of sources consulted

<table>
<thead>
<tr>
<th>Year</th>
<th>Journals articles</th>
<th>Electronic journals</th>
<th>Internet sources</th>
<th>Books</th>
<th>Conference papers</th>
<th>Others</th>
<th>Total</th>
</tr>
</thead>
<tbody>
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<td>7</td>
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<td>120</td>
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<td>514</td>
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<td>445</td>
<td>6</td>
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<td>136</td>
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<td>28</td>
<td>810</td>
</tr>
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<td>2005</td>
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<td>14</td>
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<td>251</td>
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<td>784</td>
</tr>
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<td>89</td>
<td>32</td>
<td>10</td>
<td>384</td>
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<td>8</td>
<td>25</td>
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<tr>
<td>2002</td>
<td>63</td>
<td>6</td>
<td>57</td>
<td>91</td>
<td>7</td>
<td>10</td>
<td>234</td>
</tr>
<tr>
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<td>72</td>
<td>2</td>
<td>4</td>
<td>91</td>
<td>13</td>
<td>1</td>
<td>183</td>
</tr>
<tr>
<td>2000</td>
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<td>0</td>
<td>1</td>
<td>56</td>
<td>1</td>
<td>1</td>
<td>103</td>
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<tr>
<td>1998</td>
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<td>0</td>
<td>74</td>
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<td>8</td>
<td>6</td>
<td>375</td>
</tr>
<tr>
<td>1997</td>
<td>364</td>
<td>0</td>
<td>14</td>
<td>225</td>
<td>12</td>
<td>11</td>
<td>626</td>
</tr>
<tr>
<td>1996</td>
<td>212</td>
<td>1</td>
<td>1</td>
<td>220</td>
<td>12</td>
<td>13</td>
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<td>54</td>
<td>665</td>
<td>1512</td>
<td>189</td>
<td>146</td>
<td>4807</td>
</tr>
</tbody>
</table>

6.9 Types of sources mostly consulted by SAJLIS authors

It is evident from Table 7 that researchers who publish in SAJLIS largely make use of journal articles when publishing their research articles. Table 7 indicates that journal articles were the most commonly consulted document type. This document type produced 2241 (46.61%) references, followed by books (1512 or 31.45%), internet sources (665 or 13.83%), and electronic journals (189 or 3.93%). There was a sixth category that we named ‘others’ (personal interviews; emails; reports; letters, etc) that recorded a total of 146 (3.03%) references. There were also 54 (1.12%) referrals to conference proceedings. The number of internet-based sources was also found to have tremendously increased, from just 1 in 1996 to 157 in 2005, and thereafter decreasing to 152 in 2006 and 111 in 2007.

7. Discussion

Table 8 provides a statistical summary of SAJLIS’ publications and reference patterns from 1996 to 2007. Generally, the publication of SAJLIS has been regular over the years under review, with the exception of 1999 when no issue was published. It was not immediately clear why the journal was not published in 1999. However, a telephone call to the outgoing Editor-in-Chief intimated that the situation could have been caused by changes in the management team and ownership of the journal. It was noted that some years yielded more documents than others: a situation that can be attributed to more issues of the journal being produced in a given year (e.g. special issues). According to the out-going Editor-in-Chief, the journal is officially expected to publish only two issues per year. An additional (third) issue was introduced to reduce the backlog of articles, and also to check whether the publication of a third issue was feasible. It is widely known that irregular patterns of publication – wherein a journal publishes more issues or does not publish on time in a given year – are characteristic of journal production in Sub-Saharan Africa.
on the year. To a large extent, this can be attributed to funding issues - whenever there is a shortage of funds, journals are more likely to publish fewer issues in a year.

The findings reveal that whereas there has been a continued increase in the number of references per year since 2000, there was generally a mixed pattern of growth, whereby some years recorded positive increases while others experienced negative growth. It is, of course, possible that fewer issues or articles were published in some of the latter's years. To better understand this pattern, we computed the average number of references per year, which showed that there were at least 20.60 references per article per year. This is a relatively high number of references. Source consultation by SAJLIS authors can therefore be said to be relatively impressive, going by an aggregated average of 29.3 references per article. However, it was observed that the range between the article with the most number of references and the article with the least number of references was quite high (i.e. 97) - the article with the highest number of references had 101, while the one with the least had only 4 references. Whether the number of references per article can be used to gauge the quality of an article is a matter of debate. In their paper entitled “What do third world researchers lack? Documenting the peer review data”, Jacobs & Pichappan (2008) found that references played a significant role in the acceptance (or rejection) of manuscripts. The authors observed that the mean number of references in the rejected journal papers (i.e. 16.55) was approximately one-half (½) of those in the accepted journal papers (i.e. 32.46). Rejected conference papers recorded even fewer references (mean = 8.3). Does this mean that the less the number of references the higher the chances that the manuscript will be rejected? And if so, is there a standard minimum number of acceptable references in a manuscript?

Another objective of this study was to determine the use of various document types by SAJLIS researchers. As in several similar studies (e.g. Krampen, Becker, Wahner & Montada, 2007; Vallmitjana & Sabate, 2008), we noted a high use of journal articles by SAJLIS researchers. The preference for journal articles compared to other document types could be because journal articles are peer-reviewed, which makes them more reliable. Unlike books, they also provide current information. The use of internet-based sources and electronic journals is also on the rise. In the period under review, electronic journals first became visible in 2001 with 2 citations, and this number grew to 14 in 2005. This may have affected the use of books, as shown in Table 2. Books were mostly consulted between 1996 and 2002, following which they were no longer the preferred source of information for most researchers. The information age has resulted in speedy access to current information, which is largely available electronically through e-databases, e-journals, and other e-resources that publish/index research findings. This may have caused the lesser frequency with which books are used. Furthermore, books do not always publish research findings which are commonly used by researchers to either conduct further research or support their own research.

### Table 8: Descriptive statistical summary of references in SAJLIS

<table>
<thead>
<tr>
<th>Year</th>
<th>Mean</th>
<th>Median</th>
<th>Mode</th>
<th>Std deviation</th>
<th>Sample Variance</th>
<th>Skewness</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>25.44</td>
<td>23.5</td>
<td>11</td>
<td>14.61</td>
<td>213.44</td>
<td>1.37</td>
<td>57</td>
</tr>
<tr>
<td>1997</td>
<td>27.22</td>
<td>22</td>
<td>22</td>
<td>13.42</td>
<td>180.09</td>
<td>0.80</td>
<td>44</td>
</tr>
<tr>
<td>1998</td>
<td>23.44</td>
<td>22.5</td>
<td>20</td>
<td>10.12</td>
<td>102.40</td>
<td>0.13</td>
<td>32</td>
</tr>
<tr>
<td>2000</td>
<td>20.60</td>
<td>20</td>
<td>20</td>
<td>6.39</td>
<td>40.80</td>
<td>0.31</td>
<td>18</td>
</tr>
<tr>
<td>2001</td>
<td>26.14</td>
<td>21</td>
<td>14</td>
<td>12.01</td>
<td>144.14</td>
<td>1.52</td>
<td>36</td>
</tr>
<tr>
<td>2002</td>
<td>23.40</td>
<td>21.5</td>
<td>-</td>
<td>10.46</td>
<td>109.38</td>
<td>0.42</td>
<td>27</td>
</tr>
<tr>
<td>2003</td>
<td>33.60</td>
<td>31</td>
<td>29</td>
<td>32.23</td>
<td>1038.71</td>
<td>1.51</td>
<td>97</td>
</tr>
<tr>
<td>2004</td>
<td>32.00</td>
<td>31.5</td>
<td>25</td>
<td>10.84</td>
<td>117.45</td>
<td>0.32</td>
<td>33</td>
</tr>
<tr>
<td>2005</td>
<td>31.36</td>
<td>28</td>
<td>25</td>
<td>14.74</td>
<td>217.32</td>
<td>0.75</td>
<td>49</td>
</tr>
<tr>
<td>2006</td>
<td>36.82</td>
<td>33.5</td>
<td>38</td>
<td>20.83</td>
<td>433.77</td>
<td>0.92</td>
<td>76</td>
</tr>
<tr>
<td>2007</td>
<td>30.24</td>
<td>29</td>
<td>28</td>
<td>10.12</td>
<td>102.44</td>
<td>0.26</td>
<td>50</td>
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</table>

<table>
<thead>
<tr>
<th>Minimum</th>
<th>10</th>
<th>12</th>
<th>7</th>
<th>12</th>
<th>14</th>
<th>11</th>
<th>4</th>
<th>18</th>
<th>13</th>
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<tr>
<td>Maximum</td>
<td>67</td>
<td>56</td>
<td>39</td>
<td>30</td>
<td>50</td>
<td>38</td>
<td>101</td>
<td>51</td>
<td>62</td>
<td>86</td>
<td>56</td>
</tr>
<tr>
<td>Sum</td>
<td>458</td>
<td>626</td>
<td>375</td>
<td>103</td>
<td>183</td>
<td>234</td>
<td>336</td>
<td>384</td>
<td>784</td>
<td>810</td>
<td>514</td>
</tr>
<tr>
<td>Count</td>
<td>18</td>
<td>23</td>
<td>16</td>
<td>5</td>
<td>7</td>
<td>10</td>
<td>10</td>
<td>12</td>
<td>25</td>
<td>22</td>
<td>17</td>
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<tr>
<td>Confidence Level (95.0%)</td>
<td>7.27</td>
<td>5.80</td>
<td>5.39</td>
<td>7.93</td>
<td>11.10</td>
<td>7.48</td>
<td>23.06</td>
<td>6.89</td>
<td>6.09</td>
<td>9.23</td>
<td>5.20</td>
</tr>
</tbody>
</table>

There is no clear evidence of any relationship between the length of an article and the number of pages per article, despite the positive correlation between the two variables. The overall Pearson correlation coefficient of 0.41 is low, which means that the relationship between the length of articles and the number of references is too weak. It therefore follows that the length of an article does not influence the number of references, and vice versa.

An examination of the length of articles revealed that the average number of pages per article has continued to decrease over time from 11.9 in 1997 to 8.1 in 2007. In terms of word count, the size of an average article in SAJLIS has therefore reduced from about 5950 to 4050 words, when calculated at approximately 500 words per page set at a font size of 12 and Times New Roman font type. This is a worrying trend as journals have standards to maintain. In its policy, SAJLIS stipulates that acceptable manuscripts should be 5000 to 7000 words in length. Despite this condition, articles with as few pages as 5 (or 2500 words) were published in the journal. In fact, out of the 165 articles that SAJLIS published between 1996 and 2007, 58 were 8 or less pages long. The distribution pattern of the number of articles according to the number of pages were as follows: 5 pages (8); 6 pages (8); 7 pages (23); and 8 pages (19). This trend, if unchecked, is likely to compromise the quality of the journal.

In terms of the document types that are published in SAJLIS, it was observed that most were journal articles, followed by book reviews and editorials. Editorials, which in most cases provide a summary of the contents published in an issue, came into being in 2002 when new members of the journal’s management team (including the Editor-in-Chief) were appointed.

The language of publication of the consulted sources was another variable that was analysed in this study. It was found that most of the consulted sources by SAJLIS authors were written in the English language. Although they are minimal, sources in the Afrikaans language were also visible. A trend analysis of the references indicates that the consultation of sources published in the Afrikaans language by SAJLIS authors is dwindling. This is perhaps because English is increasingly becoming the main language of scholarly communication, not only in South Africa, but also in the rest of the world. In fact, in its policy, SAJLIS stipulates that all manuscripts should be submitted in the English language - a departure from its previous policy, where it allowed the submission of manuscripts in the Afrikaans language. In our view, the current policy is likely to ensure that SAJLIS remains internationally visible, which would increase its chances of being cited. Perhaps this explains why SAJLIS has improved in terms of its citation rate and impact factor (see Onyancha, 2008).

Going by Neville’s (2007) assertion that references are provided to assist readers who wish to follow up the sources that the researcher cited, or to support their own arguments and develop further ideas for research; it follows that the more cited references in an article the better. We believe that a longer list of cited references provides a gateway to a larger amount of information related to the content in the citing article than a shorter one. With respect to this, we identified the articles with the highest number of references. In the analysis, it became immediately evident that some of the top-citing articles originated from the authors’ Masters or Doctoral dissertations and theses. Possibly, the authors had a longer time to conduct a literature review during their studies, hence the
high number of references. Further research, however, is recommended to find out whether or not this hypothesis is valid.

8. Conclusion and recommendations
In conclusion, SAJLIS, being the oldest and core journal through which LIS research in South Africa and the rest of Sub-Saharan Africa is disseminated (see Onyancha, 2008), needs to maintain regular publication so that it remains visible and viable, both nationally and internationally. The journal’s delayed production could negatively affect its visibility and impact, hence the need, on the part of the sponsor to ensure that it is produced regularly and on time. The management team should consider nominating the journal for indexing in Thomson Scientific’s citation databases and in Scopus in order to increase visibility and demonstrate quality. Currently, there is only one LIS journal from Sub-Saharan Africa included in Thomson Scientific’s citation indexes, i.e. African Journal of Archives, Library and Information Science. These citation indexes are the most commonly used tools to evaluate research, researchers (individuals, institutions and even countries) and journals. Regular publication of the journal should therefore be maintained not only for purposes of visibility and impact but also continued subsidy from South Africa’s Department of Education. The journal’s owners and its management team should also consider publishing the journal online, i.e. the journal should have its own website. In addition to the information that is already posted on the LIASA website about the journal, the management team is advised to freely provide the abstracts and references of each article on the website. This would ensure that if an individual browses the Internet and comes across a reference (that is of interest) contained in SAJLIS, he/she may request the article that contains the cited reference. In this way, we believe that SAJLIS can broaden its circulation and thereby increase its visibility and impact in the scholarly community.

References


### Appendix A

**Top twenty Articles with the most number of references**

<table>
<thead>
<tr>
<th>Rank</th>
<th>Author(s)</th>
<th>Title</th>
<th>No of References</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Fourie, I.</td>
<td>Suggestions for a research frame work in south Africa: how can we learn from web information seeking/searching studies?</td>
<td>101</td>
<td>2003</td>
</tr>
<tr>
<td>3</td>
<td>Stilwell, C &amp; Morris, C.</td>
<td>Getting the write message right: Review of guidelines for producing readable print agricultural information materials</td>
<td>82</td>
<td>2003</td>
</tr>
<tr>
<td>4</td>
<td>Migiro, S O.</td>
<td>Diffusion of ICTs and E-commerce adoption in manufacturing SMEs in Kenya</td>
<td>73</td>
<td>2006</td>
</tr>
<tr>
<td>5</td>
<td>Ngulube, P &amp; Magazi, L</td>
<td>Protecting documents against disasters and theft: the challenge before the public libraries in KwaZulu-Natal, South Africa</td>
<td>73</td>
<td>2006</td>
</tr>
<tr>
<td>6</td>
<td>Fourie, J A.</td>
<td>Co-Operation between schools and public libraries: meeting pupils' needs for information in independent learning</td>
<td>71</td>
<td>1996</td>
</tr>
<tr>
<td>7</td>
<td>Dick, A L</td>
<td>'Send your books on active service': The books for troops scheme during the Second World War, 1939-1945</td>
<td>62</td>
<td>2005</td>
</tr>
<tr>
<td>8</td>
<td>Dube, L &amp; Ocholla, D N</td>
<td>Insight into the management and diffusion strategies of HIV/AIDS Information in institutions of Higher Education in South Africa</td>
<td>61</td>
<td>2005</td>
</tr>
<tr>
<td>9</td>
<td>Murray, K.</td>
<td>Preservation education in South African library and archive degree programmes</td>
<td>60</td>
<td>2006</td>
</tr>
<tr>
<td>10</td>
<td>Weideman, M.</td>
<td>FOIOTI: An implementation of the conceptualist approach to Internet Information Retrieval</td>
<td>57</td>
<td>2005</td>
</tr>
<tr>
<td>11</td>
<td>Fairer-Wessels, F</td>
<td>Information management education: Towards a holistic perspective.</td>
<td>56</td>
<td>1997</td>
</tr>
<tr>
<td>13</td>
<td>Stilwell, C</td>
<td>First professional, in-service and continuing education and training provincial library staff...</td>
<td>52</td>
<td>1997</td>
</tr>
<tr>
<td>15</td>
<td>Onyancha, O B &amp; Ocholla,D N</td>
<td>An informetric analysis of the corruption literature based on Africa between 1990 and 2001</td>
<td>51</td>
<td>2004</td>
</tr>
<tr>
<td>16</td>
<td>Leach, A</td>
<td>Information provision in a rural context: the perspectives of rural adults.</td>
<td>50</td>
<td>2001</td>
</tr>
<tr>
<td>17</td>
<td>Hart, G</td>
<td>Public libraries in South Africa - agents or victims of educational change?</td>
<td>47</td>
<td>2004</td>
</tr>
<tr>
<td>18</td>
<td>Machet, M.P. &amp; Olen, S.I.I.</td>
<td>Literacy environment of pupils in urban primary schools.</td>
<td>47</td>
<td>1997</td>
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<tr>
<td>19</td>
<td>Masango, C A</td>
<td>Digital licence agreements and their effects on acquisitions and academic library users</td>
<td>46</td>
<td>2005</td>
</tr>
<tr>
<td>20</td>
<td>Radebe, T</td>
<td>Experiences of teacher-librarians in the workplace</td>
<td>45</td>
<td>1997</td>
</tr>
</tbody>
</table>
after completion of the school librarianship...
ABSTRACT
This article looks at Chinese shops in South Africa, focusing on how much they have infiltrated the local emerging market. A qualitative research study was done using clandestine methods. By using law enforcement techniques, mostly personal observation, conversations and informal interviews, information was secretly collected over the past few years in order to better understand the modus operandi of the Chinese shop owners in South Africa. The Chinese have a unique way of operating. Not only are they not complying with the basic labour laws of this country, but their blatant refusal to comply with the tax laws are robbing the country of billions of rands annually.

INTRODUCTION AND PERSONAL REMARKS
While busy gathering information for different academic projects all over South Africa, especially during and after 2001, it became apparent that there are very many Chinese shops in the country, a situation that I believe deserves some attention. It also became apparent that a lot of mainly black South Africans buy goods from these shops and inadvertently support Chinese traders. With my curiosity piqued, I made it a habit to visit the shops with my wife so that I could observe the Chinese and their employees and how they conduct business. Personal observation and conversations/informal interviews provided me with the scope I needed to learn about the habits of the shop owners and their employees. In the course of 1999, I was also lecturing Chinese religion (Ras, 1999) to Religious Studies’ students from the Faculty of Theology at the University of Zululand. Although the background is familiar, I was quite surprised to learn about what happens at grass-roots level in most Chinese shops. “The Chinese invasion in South Africa”, which specifically deals with Chinese shops, was presented to a few interested members during July 2008. This paper is a shortened version of that work.

RESEARCH APPROACH
My research approach was qualitative in nature (Ras, 2006:80-82). A lot of time was spent observing the shops and employees before conversations were initiated with some of the people that work in them. I deliberately implemented what we in law enforcement call clandestine measures (Ras, 2008b). People thus went or were sent to these shops to observe and make contact and friends with the mainly black female employees in order to gather more information. The modus operandi that was followed is typically used in police crime intelligence and in organized crime units, also known as intelligence-led policing (Khalidheen, 2008:136-138; Ras, 2008b).

From a practical and ethical point of view, it is not possible to mention the names of the people who helped gather the necessary information. For safety reasons as well as to protect their identities for future research and investigative purposes, it will have to suffice to say that the sources listed at the end of this paper are not comprehensive and exhaustive (Ras, 2006:114-115). Open sources are quoted where applicable and whenever the researcher thought it would not cause any problems or any inconvenience to those mentioned at the end of this research paper.

ABSENCE OF AFRICAN CLOTHING STORES
One very seldom comes across any Zulu, Xhosa, Venda, Sotho or any other black South African-owned shops in the same style and manner as the Chinese. Chinese shops are very cheap, to the point that no other well-known brand or shop, e.g. Pep Stores or
Ackermans, can really compete with them. During the beginning of my investigations, I strongly believed that we need to find a way to oust these people because they damage our economy and take away the jobs of our local people.

However, I changed my mind in 2004 and now believe that this would be impossible and damaging. Let me explain: during 2003, while doing another Doctorate focusing on body guarding, I literally travelled all over South Africa into the most remote corners of the country. I was surprised to find Chinese shops in all the different provinces and impressed with the number of these shops, where they are situated, and how they operate, and realized the impact that these people and shops have on the local people that they serve.

The Chinese are so much ingrained in South Africa’s emerging economy and spread throughout black communities that one cannot possibly ignore or move forward without them. It is especially the poorest of the poor, the majority of local black South Africans, that benefit the most in this country from the very low prices that they pay for Chinese products. It was especially in the Eastern Cape, in places from Kokstad to East London, that I saw how deeply entrenched the Chinese are in the local economies of the different areas. The same can be said for all of South Africa’s nine provinces.

THE IMPACT OF CHINESE SHOPS ON SOUTH AFRICA

Although the Chinese definitely do not pose any militant or revolutionary threat at present to our South African government, they would damage the economy of the country if they had to withdraw their businesses overnight (Ras, 2008c:3). Poor people would not be able to buy cheap products anymore. After the Chinese stores, Pep Stores is probably the cheapest clothing store in South Africa, but it is still far more expensive than Chinese stores. If the Chinese should pack up and leave, many South Africans, if not most, would not be able to access cheap merchandise.

The Chinese have, over many years and on a massive scale, either legally entered the country in search of work or illegally invaded the country through various smuggle networks (Chinese Mafia or Triads), and essentially made themselves an integral part of the South African economy. However, they have also evaded the South African Revenue Services en masse and still do not pay taxes. I mean, let us be honest, have you ever received a till slip after buying anything from a Chinese shop? Never! Which is very clever. No till slip means nothing went through the till (Ras, 2008c:3-4).

With the present declaration that the Chinese are now part of the BEE in South Africa, we can only hope that the Department of Labour and the South African Revenue Services will come up with more meaningful mechanisms to ensure that the Chinese comply with all the tax and labour regulations that have been expected from them over the years.

PURPOSE OF THE RESEARCH

My research remains ongoing and is far from complete, therefore my present remarks are open to further change and to regional fluctuations. I hope that my words will at least stimulate readers and serve as a wake-up call for those who haven’t considered their unknown neighbors next door.

Although the Chinese are now an integral part of our multi-cultural national identity, there is still a lot that remains unknown about them. This is especially the case when it comes to the local South African population. All that most black South Africans know about the Chinese is that the local Chinese shop is cheap and ‘the man there knows karate’ (Ras, 2008c:4).
SOCRATIC METHOD

The philosopher Socrates was famous for the ‘question-and-answer-method’ he used to teach his followers. I have used this principle in this paper to discuss the Chinese and their modus operandi in their shops. Although Socrates used his answers to formulate further questions, I opted to keep things simple.

WHY DO THE CHINESE COME TO SOUTH AFRICA?

The Chinese move to South Africa because the population in China is vastly expansive, and there are simply too little economic opportunities for them in their home country. There is an estimated 1 321 851 888 million people in China (https://www.cia.gov/library/publications//the-world-factbook/geos/ch.html). It is part of the Chinese government’s intention to gain a strong foothold in Africa and South Africa in order to dump their goods in the region and generate billions of rands for their own economy. It is also strategically part of their plan to gain better access to the rich minerals and economic opportunities in Africa, including South Africa.

WHERE DO YOU FIND CHINESE SHOPS?

There is not a single town or even township in South Africa where one cannot find a Chinese shop. These shops are mostly strategically placed closest to the bus and taxi ranks in every town, where there is a very high amount of local traffic. They target mainly black lower income South Africans and erect their shops where this population gathers and moves most of the time (Ras, 2008a).

WHERE DO THE LOCAL CHINESE COME FROM?

Although there are many South African Chinese who’ve been here since the beginning of the previous century, most of the present Chinese come from Shanghai in mainland China where they speak Mandarin, although a few are from Hong Kong. Others speak Cantonese. Every young child or adult comes here because they believe that in South Africa they can be their “own bosses” and make more money than in their own country (Ras, 2008a).

WHAT DO THEY SELL?

Ninety percent or more of what they sell consists of cheap clothes and shoes. They also sell bags, handbags, electronic devices like radios, torches, batteries, knives, small things like watches, combs, and so forth. Sometimes they also sell blankets, tv sets and bicycles, but not that much. They mostly stock only Chinese stock (Mhlongo, 2008).

WHY ARE THE PRICES SO CHEAP?

All the clothes and shoes come from China where very cheap products can be manufactured because they do not have the same labour laws that we have in South Africa. In South Africa, labour movements like COSATU demand a “living wage” and force the South African government (which needs the votes of the workers in order to stay in power) to make and enforce legislation that ensures that minimum wages are paid to all workers (Ras, 2008a).

In contrast to the South African situation (which is considered “oppressive” by some, especially South African employers with small businesses who do not have government contracts and black political friends high up that can pull BEE-strings), in China they make use of very cheap labour (even child labour), so most products are very cheap to make. No minimum wages are set in China and people simply work because they are happy to have a job. There are so many people who want to work that they do not complain when they get the opportunity (Ras, 2008c:8).

South Africa is an excellent market to sell (“drop”) all these products to because the local people are poor and need cheap prices in order to survive. The cheap prices of the Chinese are also one of the main reasons why black people in South Africa keep on buying from them and do not chase them out of the country as they have other foreigners.
HOW DO THE CHINESE OPEN A SHOP IN SOUTH AFRICA?

A ring leader looks for an empty shop, rents it, and then brings in young Chinese people to run the store. They pick the store very carefully. They specifically look for where there are a lot of black South Africans, especially close to the bus and taxi ranks. The Chinese come from an overpopulated country, so they are comfortable in a place where there are lots of people (Ras 2008c:8). From a strategic point of view, being situated in a place with a lot of traffic is a good business move.

WHERE DO THE LOCAL CHINESE GET THEIR MERCHANDISE?

Once they have their shops in South Africa, most Chinese stores stock up with cheap Chinese goods that they buy from Jeppestown (Chinese town) in Johannesburg. The stock is mainly off-loaded in the evenings, although it is also sometimes off-loaded during the day. Every night all over South Africa, you will come across typical Isuzu bakkies with high (box-like) closed canopies on the roads that belong to the Chinese traders (Ras, 2008a; 2008c:9).

Many of these bakkies with canopies come from different provinces. For example, those that drop goods in Empangeni (KZN) come from Durban or the Free State. A lot of the merchandise comes by boat in containers to the Durban harbour. From there, it goes to Johannesburg and other warehouses before it is collected and delivered to ordinary stores all over the country. Even in remote places like Bergville, which is close to the Drakensberg mountain range in KwaZulu-Natal, stock is delivered either from Johannesburg or Durban (Mhlongo, 2008).

The fact remains that the cheapest warehouses are in “Chinatown”, which is basically Mayfair and Jeppestown in Johannesburg (Qiang, 2007). Even the Somalis and Ethiopians buy their clothes from the Chinese warehouses to sell in their own shops. The Somalis and Ethiopians reduce their prices even more than the Chinese in order to try and hijack the market, but they are never successful because local African people do not support them.

MUSIC IN CHINESE SHOPS

In Zululand, as well as in the rest of the country, Chinese stores tend to play the music that the local black South African people like. They play a lot of Maskande and Ximba music or other traditional or popular African music (Gumede, 2007). This is done deliberately to encourage the locals to buy. There is of course no intention or desire from the local Chinese from China to learn the local languages of the people, like Xhosa or Zulu. Now and then they play their own Chinese music which they often sing along to, although this was only observed with women and not men (Ras, 2008c:9-10).

HOW ARE CHINESE SHOPS LINKED?

Chinese shops organize themselves into small “town cells” that operate together. All Chinese shops are linked, normally by two-way radios. At times they also have sellers outside on the streets with radios. Whenever they need something in a store, they call and ask for what they require over the radio. This was observed in towns in the Eastern province like Grahamstown, also in Piet Retief in Gauteng, and in KwaZulu-Natal (Ras, 2008a; Mhlongo, 2008).

WHO RUNS THE STORES?
At first it seemed as though most of the time, young Chinese men were running the stores. Later on I discovered that there are also a few older Chinese men. Nowadays a lot of Chinese women are in charge. This may seem quite surprising, but one gets a lot of women working alone in these stores.

The person behind the till is the person who runs the store. In Chinese shops, the manager is the person in charge and he or she runs the till and deals with the money. Now and then you will find that a Chinese woman runs the till before passing on the money to a Chinese man, as was observed in Pretoria (Ras, 2008c:10).

It was noted that they never let any local black people work any till in their shops. The reason is simple: they do not trust the local people or any other people, save for themselves (Ras, 2008a). They may use one or two black South African ladies, not males, inside their stores to translate for them and to speak to the visiting customers, but they never allow them to operate the till or to deal with the money. (Ras, 2008c:10).

**LOVE AND RELATIONSHIPS IN CHINESE SHOPS**

Many young Chinese men and Chinese women who work inside these shops appear to be lovers. Although they are all very young, it seems they arrived here as couples. This seems logical, as they spend a lot of time together after hours and live in the same compartments. These young Chinese people, who come from mainland China or Hong Kong, seem glued together because they come from far and perhaps believe that they can only rely on each other. They arrive in a foreign country like South Africa without knowing much about the country or what to expect.

**MARRIED CHINESE COUPLES AND BABIES IN THE SHOPS**

On a few rare occasions, couples have spoken to me and told me that they were married, such as in Winterton, close to the Drakensberg mountains. This couple was quite exceptional in the sense that they spoke to me and my wife – something that normally does not happen. (Ras, 2008a).

Many young couples have a baby in the shop, normally in a pram parked deep inside the shop and almost completely covered with baby blankets so that no one can see inside. One never sees the couple carrying the baby in their arms, or breast feeding the child in public (as traditionally done by African women), or giving them a bottle. In fact, these babies appear to sleep the whole day. Assumedly they are more active at night. Chinese women tend to sit behind or close to the till, which is close to the only exit, and constantly watch the people and the pram.

**WORKING HOURS**

Chinese shop owners open their stores early in the mornings and close them late in the afternoons. Depending on the area’s safety and security, they are normally open after seven in the morning and remain open until five in the afternoon. They are also sometimes open on Saturdays and even on Sundays the whole day, depending on where they are situated. On busy main streets such as in Piet Retief, the shops are open seven days a week (Ras 2008a; Mhlongo 2008).

**ATTRACTING CUSTOMERS**

The Chinese never advertise their goods in newspapers. They also do not hand out flyers or pamphlets. They opt instead to display some of their goods outside in front of their stores, mostly clothes like dresses and t-shirts, and also bags, especially sports or camouflage bags. At times they also display bicycles, but these are chained out of fear of theft (Gumede, 2007).
COMPETITION

In some places like Carolina, there are different shops selling the same kinds of products situated next to each other. Sometimes one finds that even while two Chinese shops are next to each other, this does not automatically mean that the people are connected. In some cases, one finds that one store has Chinese who are from mainland China, while the shop next door has Chinese from Hong Kong. This at times leads to a cold war that ordinary people do not easily pick up.

WHERE DO THE CHINESE STAY?

On several occasions, I have been told that when they start a shop, the Chinese normally stay inside the shop until they have funds to rent a place. At the back of the shop, there is very often a curtain or a place that is separated or divided from the front part of the store. This is where the owners put their private things and store their goods. However, it was observed that in most cases they do not stay inside the store. They normally rent a flat in a quiet and secure area where they all stay together. All the Chinese in a town, say from four different Chinese shops, will normally stay close together in a complex. They tend to keep a very low profile wherever they stay (Ras, 2008a).

THEIR SECURITY AND SAFETY MEASURES

The Chinese are very suspicious and trust no one. They will open their stores with someone watching to ensure that all is well. They do not have legal firearms because they are not legal citizens of South Africa. They also do not (by most appearances) have illegal ones in their shops. I have never seen them carry any firearm covertly, or any form of weapon for that matter. There are, however, some tills with a lot of different kinds of dangerous knives within reach (Ras, 2008a).

No martial arts equipment of any kind has ever been spotted in a shop, e.g. things like a baton, tonfa, chaka sticks or any throwing stars. There always appear to be umbrellas very close to the front and near the till in one or other basket. I do not know if these are there to use in case of emergency or as weapons in self-defence.

One young man was spotted sitting behind his till with an air rifle to protect himself in one of the Chinese shops near the railway in Empangeni, where there is normally a high crime rate. This, however, was an exception (Ras, 2008a; Mhlongo, 2008).

In transporting their money, they try to look ordinary: two Chinese men were observed transporting their money to the bank in ordinary plastic (like Checkers or Shoprite) bags, with two younger men walking a few meters ahead of them (Ras, 2008a). They moved in a box-like formation (Ras 2002:8-9; 2006:214).

CHINESE DRIVERS

Many Chinese shops and Chinese shop owners were spotted, but not many Chinese drivers. The drivers are treated with respect because they are mobile and important when it comes to delivering merchandise. As described earlier, the drivers all drive bakkies with high closed canopies, like Isuzu bakkies. At times I spotted the drivers transporting other Chinese shop members inside these canopies while the doors at the back were open. These canopies are meant to be closed and locked at all times and are not passenger-friendly. In Empangeni, bakkies with Free State number plates were spotted delivering goods. This indicates that the Chinese drivers come from far, probably Harrismith. At times they also come from Gauteng, Durban or Mpumalanga (Ras, 2008a).
Normally there are two or three Chinese people delivering the products - a Chinese
driver, a Chinese lady and perhaps another male. In the Eastern Cape, the drivers were
observed to drive fast (120-140 km/h), especially between Kokstad and East London
during the evenings. The same was noted in KwaZulu-Natal. It would seem that (the
drivers) also work night shifts and transport goods during the evenings when it is quiet.
For me, “quiet” means there are basically no police and traffic officials on the road to stop
and inspect them or ask them about any papers.

SMOKING AND DRINKING
Many of the bakkie drivers were seen to smoke while the Chinese people working inside
the shops, didn’t. Now and then there was an old Chinese man who would smoke outside
the shop, never inside. They generally never appear to smoke anything but cigarettes. I
also never came across a Chinese person drinking alcohol out of a bottle or can in public
or in private.

KARATE
The Chinese very often have different kinds of knives in their shops, always at the
counter and under the glass where only they can reach, and where the till is. They are
also very interested in anything that has to do with karate, and when a person anywhere
in town or in public exercises or gives demonstrations, they will very often stop, look,
smile, and then continue on their way (like Tai Chi Chu’an) is part of their traditional way
of life (Ras, 2008a; Peters, 1999:224-227).

OBSERVATION AND MODUS OPERANDI
The Chinese very often sit on a step ladder immediately inside and next to the door of
their shop from where they can watch the floor to see who wants to buy or who wants to
steal. They either do this or sit next to or behind the till. They very seldom go and stand
at the back of their shops because this is too far away from the till where they keep the
money and where customers pay (Ras, 2008a).

TILL SLIPS
One never gets any till slips because most Chinese shops never issue one, even if you
request one. All the money that goes into the till is not subject to any government taxes.
It goes straight into the owners’ pockets or to the bosses in charge. I have only once in my
life received a till slip in a Chinese shop, and that was in the heart of Tswane (Pretoria)
when I bought a jacket for almost R 200.00 (Ras, 2008a).

BLACK FEMALE SHOP ASSISTANTS
There is/are always one or at times two, but never three or more, shop assistants in the
shop. These assistants are black South African ladies whose main task it is to talk to the
customers in their own mother tongue. The ladies are always underpaid and always
complain about their low salaries or wages. They work long hours and normally get
anything from R 300.00 to R 500.00 per month for their work (Ras, 2008a).

Many of the ladies I spoke to had matric and owned a cell phone. I befriended them to get
more detailed information about the Chinese owners. However, this also had its
limitations because many were not in a position to provide any details because they did
not know the Chinese people intimately. Generally, the women spoke English and the
local language and did whatever the owners ordered them to do. Most of them did not
want to work inside the Chinese shops because they said they got far too little money. It
would seem as though some of the ladies were also asked by the owners not to talk to outsiders.

THE CHINESE AND BLACK MEN

The Chinese basically never use black South African men to work for them because they do not trust them and find it difficult to control them. The size and attitudes of black men are perhaps intimidating. Black women are perhaps easier to handle, and seem to have less problems working with “foreigners.” Most Chinese goods also focus on female items like hand bags, make up kits, dresses, t-shirts, shoes, blankets, curtains for the house, etc. These cater more for female needs.

The most difficult part of the work is perhaps off-loading merchandise from the bakkie to the shop. Where one normally expects a black man to do this based on the economic and social situation in South Africa, this is not practiced in Chinese shops. They do the work themselves or sometimes use their female employees. They appear not to trust black African males (Ras, 2008c: 16-17).

THE CHINESE AND THE SOUTH AFRICAN GOVERNMENT

Generally the Chinese are a very hard working people because their shops remain open for long stretches of time, but they definitely do not respect the government laws in terms of tax compliance and the basic conditions of service when it comes to the labour laws. An honest observation would be that the Chinese deliberately play “stupid” when it comes to English in South Africa. They often pretend that they do not understand English when you speak to them. This makes it impossible for the Department of Labour officials to clarify matters. Once they are cornered after several visits, they change tune and say they will comply without any intention to do so. Upon being cornered further, they get an attorney to retard the prosecution process. They then move shop with other Chinese or with pre-arranged friends to avoid any prosecution and close down the shop as ordered by the Magistrate and requested by the Department of Labour official from the beginning.

This is normally their modus operandi in Northern KwaZulu-Natal. It is hopeless trying to force them to comply because they deliberately play hide and seek. At no stage did I or anyone else ever receive any till slip for anything that we bought. This means that they evade tax. Furthermore, they severely underpay the black South African women that work for them in their shops (Ras, 2008a).

In general, there needs to be drastic government intervention to ensure that the Chinese shops comply with basic legislation which would also force them to pay taxes. The South African government is literally losing millions of rands every month because of the Chinese methods of tax evasion.

The Chinese stay here and make money without returning any money to the government. The situation may be different at ports and borders where there is some government control, and even at warehouses in Jeppestown, but at grass-roots level, it is quite a different story. Chinese shop owners make money while the government gets nothing. (Ras, 2008a: 2008c:17-18).

CHINESE UBUNTU

When requesting an item that the owners do not have in their shop, they normally immediately use a two-way radio to call another Chinese shop in the same town to ask if they have that item in stock. Alternatively they will immediately send one of their employees to quickly go to another Chinese shop or store to get it there. There is no doubt that these stores are linked and that they all work together (Ras, 2008c:10,18,19).
Chinese Ubuntu could perhaps be surmised as: “I will get anything for you because I know you are going to buy it the moment I hand it to you!” (Ras, 2008a).

**CHINESE PAPERWORK**

I have never come across a Chinese person doing paperwork in their shop, e.g. doing stocktaking. Any form of financial reconciliation never takes place in front of a customer. How they manage to remember everything is a mystery. I also have never been physically present in their shops when the bakkies come to drop off their goods. I have seen the drivers and the goods in the shops, but not what they do in terms of paperwork. I think it is safe to assume that the paperwork is probably only between the drivers who deliver the goods and the shop owners or managers who receive the goods. Any other paperwork (reconciliation) is basically non-existent (Ras, 2008a).

**CHINESE BUSINESS STRATEGIES**

Not a lot is known about the Chinese at grass-roots level when it comes to business strategies. However, a few matters stand out.

In general they are friendly and helpful. With friendliness I don’t mean they follow you when in the shop and ask if they can help you. They send their shop assistants instead. However, when you need something or ask for something, they immediately respond. It is strange to note how they always immediately attempt to help you when you ask about sizes and certain numbers, when they know there’s a sale coming up, but when you ask other things they act dumb.

They are helpful because they will go out of their way, literally sending someone out of their shop, to go and fetch something for you. Some shop owners also have sellers outside on the street selling Chinese products. The owners are in contact with them through radio (normally other Chinese employees that are also on the pavement), as observed in Grahamstown, or they are very close by, like in many Northern KwaZulu-Natal towns where the sellers are actually outside the shop.

Another thing that is common with many Eastern foreigners is that when they see you buy one item, they will immediately try to sell you another item that they think may interest you. This happens very often in Chinese and Indian shops.

**CHINESE FOOD**

The Chinese very often eat inside the shop, especially during lunch times, typically opting for a Chinese dish, like noodles. I never observed them eating local food like bread and putu (Ras, 2008a; Mhlongo, 2008).

I was quite surprised when I passed a Chinese lady in KwaDukuza busy eating rice and noodles: when I came to the till point to pay, she immediately told the other lady at the till the price of the article that I wanted to buy. The article was not priced and I was walking in such a way that she could not see the article clearly. This perhaps indicates how observant they are when it comes to their stock (Ras, 2008a).

**CHINESE ELECTRONICS**

Some of the Chinese shops sell very cheap television sets to the public. However when you want to buy one, they are quick to inform you that there is no guarantee on the product. They do not take the product back if it is faulty. The same can be said for all the radios that they sell and other small electronic things like watches, wall watches, torches, and so forth.
They never repair any electronic items, like the Pakistani traders for example, in their shops. The electronic products are only there to be sold. The electronic products are also always very close to the till, while the clothes, especially the men's clothes if they stock them, are far inside the shop at the back. The assumption is that they want to make sure that someone, and they perhaps have black men in mind, don’t come in and grab something and quickly run away.

**OTHER CHINESE BUSINESS INTERESTS**

As mentioned already, the Chinese mostly sell ladies clothes, shoes, hand bags, jackets, jeans, lingerie or underwear, belts and sports bags and men's sports shoes, etc., virtually anything one can wear. This is in addition to umbrellas, bicycles, and various small electronics, but very seldom any cell phones.

However, there are a few Chinese shops that are now also selling cell phones. In Empangeni, there are also Chinese who have opened a shop to sell sweets, food, washing powder, plastic buckets, and all kinds of small items that one typically expects to buy from Indian vendors in the area (Mhlongo, 2008). It seems that the Chinese are now also moving into business ventures that traditionally were regarded as Indian or Pakistani (specializing in cell phones).

**LEGAL ADVISORS**

The Chinese also have their own legal advisors. While visiting my attorney early one morning, I noticed two Chinese men waiting for my attorney. This indicates that they also make use of legal advisors when it is absolutely necessary or when they cannot solve their own matters.

**CHINESE FUND-GENERATORS AND BUSINESS MARKETING STRATEGIES**

The biggest money-maker for most of these stores is the very low prices on offer. They focus on the black lower income market and it is safe to say that almost all of their shops, ninety five percent or more, are situated in black areas or where there is a high flow of black African people. They seldom cater for the higher-end social market. As mentioned before, handbags, shoes, t-shirts, trousers and radios are the main products on offer.

The clothes are almost the same in every Chinese shop. They always stock their shops full so that the impression is created that they have new stock all the time. The stock is packed from floor to eye level from outside leading into the store in order to dazzle, distract and draw attention. Stock visibility and playing traditional music inside and outside on the street immediately in front of the shop are typical marketing strategies used to grab attention in KwaZulu-Natal (Ras, 2008c:21-22).

Another important factor is that they are visible nationwide, and their main warehouses and their advisors, including their drivers, can provide them with valuable information about what is happening in other places and how people do things there in order to make money and to survive. This direct link to the main centers and to knowledge about prices elsewhere, including the fact that there are many family members working in different geographical regions, selling the same products, also contributes to their success.

A young Chinese man in Piet Retief (Mpumalanga) told me one day that he had a relative who ran a store in Empangeni, which is 300 kilometers away. It would seem that once they move away from the main city centers, like Johannesburg and Durban, to smaller places, they then spread from these small towns to other possible towns close by. They appear to be highly successful when it comes to multiplying their shops and always
staying in business. The fact that they remain open for years, suggests that they make enough money to survive and to make a proper and decent living.

For many years, I came across an old strongly built Chinese man selling on the street (pavement) everyday, who parked his red BMW next to his merchandise. Over time, one can therefore notice who is making money as their lifestyle improves. The networks behind the scenes, however, are still mainly unexplored (Ras, 2008a).

ATTACKS ON CHINESE

The Chinese are very seldom attacked or robbed by black Africans, who are responsible for most theft and robberies in South Africa. Many black people believe that it is because the (Chinese) are very good at karate, perhaps because of what is portrayed through popular media (videos and TV).

Other black people see the Chinese as people who have always helped the poor (mainly Africans). Since they can remember, Chinese people were always there with their cheap prices. They always seem to cater for the poorest people and never try to make too much money out of black people. That is why the majority of black Africans see the Chinese not as a threat, but rather as a blessing (Ras, 2008c:22-23).

LEGAL CLASSIFICATION OF THE CHINESE AS AFRICAN PEOPLE

In a recent court case, the constitutional court ruled that the Chinese should be regarded as African. This means that they can now benefit from BEE (Black Economic Empowerment) deals. Only white males are regarded as not African.

Many people, especially within black communities and including the Minister of Labour, have argued that this decision is not right. According to the Minister, the Chinese can never be regarded as black. However, the court ruling is decisive and means that in practice, Chinese businessmen will get more recognition and government deals in future in South Africa (Ras, 2008c:23).

HOW MANY CHINESE SHOPS ARE THERE?

Prominent Chinese shops that I personally visited are situated in Stanger, Piet Retief, Hendrina, Carolina, Vryheid, Ladysmith, Tongaat, Grahamstown, Umtata, Durban, Ermelo, Winterton, Empangeni, Richards Bay, Springs, Pretoria, and Sabie. In all these shops, Chinese women are the main people selling who try to approach you if the shop assistants already haven’t.

There are basically about 7 000 towns, cities and townships in South Africa. If one argues that there are about ten Chinese shops in every town or township (including the cities that obviously have many more) and multiply this number by ten, one would estimate that there are approximately 70 000 Chinese shops in the country (Cf. Ras, 2006:461-462).

HOW MUCH MONEY DO THE CHINESE SHOPS GENERATE PER MONTH?

If every one of these 70 000 Chinese shops generates just R 10 000.00 per month (gross total), that means that there is about R 700 000 000,00 (seven hundred million rand) that is in circulation every month in South Africa. Imagine now how much the government is losing every month when it comes to taxes that they never receive because no till slips are handed out because the money doesn’t really go through the tills, books, auditors and through the South African Revenue Services (SARS).
What is worrying is that most Chinese shops by far exceed this amount. Some shops generate at least R 2000.00 (two thousand rand) per day, which leads to an estimated average of about R 60 000.00 (sixty thousand rand) per month per shop. If you multiply that amount with the 70 000 Chinese shops in the country, you get an astronomical amount of R 4 200 000 000.00 (four thousand two hundred million rand) per month! This is just an estimation; the figure would be higher if one thinks of the gross total income of the total number of Chinese shops which by far exceeds 10 per city or major suburb.

**HOW MUCH MONEY DO THE CHINESE SHOPS GENERATE PER ANNUM?**

If about R 4 200 000 000.00 (four thousand two hundred million rand) is the estimated gross total that 70 000 Chinese shops generate per month, meaning that each generates about R 2000.00 (two thousand rand) per day, then one can expect a staggering annual income. When one multiplies R 4 200 000 000.00 with 12 (number of months per year), one gets the amazing and unbelievable amount of R 50 400 000 000.00 (fifty thousand four hundred million rand) per annum!

What this basically means is that the South African Revenue Services is losing millions and millions of rands per annum because Chinese shop owners have free rein in this country. They make money and multiply everywhere and do not put back the taxes that other honest and hard working citizens do. This perhaps needs to be addressed at presidential level in order to ensure a tremendous cash injection into the almost empty coffers of the national government (Ras, 2008a).

**CHINESE TACTICS OF DELAY**

The Chinese shop owners play hide and seek with Department of Labour officials on a day to day basis all over South Africa. As mentioned before, they do not comply with basic labour regulations at grass-roots level. When the department wants to close down a shop after several visits and threatens to close the shop, the owners get a lawyer and suddenly understand English, or move the shop to another place.

When there really is a problem, they ensure that they have already organized new premises from which they can operate. They move to another town while someone else (other Chinese) moves into the same town where they closed down. In this way, they keep on operating while the officials from the department are tied up in red tape and thus unable to do follow-ups in areas outside their normal jurisdiction.

**THE POLICE AND THE CHINESE**

The police (SAPS) very often visit Chinese shops and ask for the identity documents of the various employees. In Carolina, for example, one young Chinese man told me that the police expect small amounts of money from the shop owner in order to let them go without South African Home Affairs approval. The young man personally showed me his Chinese passport and told me that on two or three occasions, he had to give a black policeman money (R20.00 or more, but not too much) in order not to get into trouble.

In Carolina, the shops of the Chinese, Somalis and Pakistanis are opposite each other. The Pakistanis sell cell phones and the Somalis clothes and curtains. The Chinese here sell mostly clothes, shoes, bags and radios. In this town there is also one Chinese woman (in her forties) who is the sole owner of her shop. She did not want to talk – her family is from mainland China and I struggled to get even the most basic information out of her (Ras, 2008a).
THE CHINESE IN TOWNSHIPS

In the Eastern Cape, many of the Chinese shops are in the heart of the townships, where the Chinese people also appear to stay. In the rural area of Ntambanana, which is outside Empangeni, there is a Chinese shop directly next to the police station; the Chinese driver was also spotted parking his vehicle inside the police station. More and more, the Chinese seem to be moving into black rural areas, perhaps as they would have in the Chinese countryside, to do business there.

In many small towns, from Amsterdam, Hendriena, KwaMbonambi to Vryheid, one notes the presence of Chinese people in the towns and in the rural areas. But their presence and expansion is done in such a subtle way that no one fully realizes how they have become such an integral part of our economy (especially in the case of black South Africans). They are like a convenient 24-hour garage or fuel service station.

A FEW RECOMMENDATIONS

The Chinese are well spread across the country and have nestled themselves deep into the hearts and minds of local black South Africans, who support them tremendously. In fact, their shops are the cheapest places to go for those wishing to buy clothes and trifles, even beating a mighty national brand like Pep Stores.

The suggestion would therefore be to appoint a few Chinese translators who work hand in hand with the Department of Labour and SARS to start ensuring that the shop owners comply with the country’s labour laws and meet their financial obligations. The millions of rands going through Chinese tills every month in South Africa need to be monitored legally and continuously through sound business practices. Border police also need to ensure thorough investigations into Chinese goods and people. The same applies to organized crime syndicates: intelligence services and agencies need to coordinate all their efforts in order to investigate and closely monitor this economic giant.

At grass-roots level, Chinese shop owners need to start issuing till slips. There should be a Chinese Imbizo with the Chinese Consul that implements a plan to legalize the businesses and to keep them tax compliant. Chinese shop owners should also be encouraged to work together in partnership with other locals to ensure local empowerment. At this stage, only the Chinese seem to benefit from their profit making, definitely not the government, save perhaps for those taxes the Chinese pay when they bring in goods that go through legal channels.

CONTINUOUS RESEARCH

I realize that I have not even touched the proverbial tip of the iceberg. A lot of research needs to be done on the Chinese as a people. Within China, the Chinese are exploring and attacking cyberspace aggressively in order to control cyberspace within the next ten to twenty years. It is scary to think that this economic giant will be bigger and more powerful than the mightiest countries in the world, mainly because they have the numbers (people), but also because they have the attitude that makes it okay to use questionable methods to spread their way of doing things. It wouldn’t be too far fetched to call them economic imperialists (Ras, 2008a).

They know they need to expand, and I believe that they could go to war in order to create markets for all their products and people. They also know that if they do not get raw materials for all the people in their country, they will have to instigate war to get what they need. By allowing them into South Africa and making them our friends, we prevent them from becoming our enemies in the long run, but by allowing them in without drawing the line, we are strangling our own people. We need to do proper research into
the Chinese to ensure that we at least know what is coming and what the impact will be on ordinary South Africans.

CONCLUDING REMARKS

As a final anecdote, I saw this beautiful pair of shoes for R 120.00 in a Chinese shop in perhaps one of the most remote rural areas of our country which I decided to buy for a friend. The outside label on the shoes announced that the shoes were made from bison leather (American buffalo skin), the label inside the shoes said that the shoes were styled in Italy, and underneath each shoe, it was written that they were made in China.

How proud I felt knowing that I could buy this unique pair of shoes, especially knowing that my shoes had “travelled” all around the globe! From the mighty United States of America, to Europe’s Italy, to mainland China, and here I was, buying them in a remote countryside in South Africa. I felt small and proud and thought, “This just shows you what the Chinese can do!” Although in reality I knew that the shoes could not have been made of real American leather, the style was illegally copied, and everything was probably made in one or other cheap factory in China.

My one Chinese colleague once quoted a Chinese saying that says, “When you come to the end of a book, you close the book”, which is beautiful. But I say, “When you get a Chinese book, read it, but when you reach the end, don’t put it down, go and find the Chinese author and see what he is doing.”

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Abstract
According to the authors of MXit (2008), MXit (pronounced "mix it") is an instant messaging program for mobile phones and PCs (personal computers). This means that you can chat to other MXit users on their mobiles and PCs, anywhere in the world. It enables you to send and receive text messages to and from mobile phones and PCs via the Internet using GPRS (General Packet Radio Service) or 3G (third generation of mobile phone standards), rather than by using standard SMS technology. MXit software application was developed in SA running on GPRS/3G mobile phones with Java support and on PCs, using Adobe Flash Player. Users pay as little as 1 cent per message as compared to the normal SMS rates of approximately 75 cents to express themselves on their mobile phone, meet people and play games. While MXit has grown to over 5 million log-ins per day, it poses a danger to society, providing an avenue for sexual predators to prowl innocent young victims. MXit has wreaked havoc at schools, with slut lists being circulated, leading to disruption, violence and chaos. This paper seeks to explore the MXit phenomenon, highlighting the dangers of this application and focussing on its effect on the intellectuality and social skills of children, while providing strategies in parental monitoring and supervision.

INTRODUCTION
Fielding (2006: 9) defines communication as a transaction with people working together to create meaning by exchanging symbols. For communication to be effective, people have to take one another into account, work according to a set of rules, and share the same meaning when they use words. Skinner et al. (2007: 160) state that in examining individual-to-group communication, we must be aware that the style, vocabulary and tone of the speech may vary according to its purpose.

All sign systems have a set of elements that are combined according to certain rules, codes and conventions (O'Shaughnessy and Stadler 2005: 113-114). The twenty-six letters of the English language can be combined into words and grammatical patterns. Sentences are constructed according to the conventions of grammar. We become so used to these codes and conventions that we decode them automatically, without noticing.

O'Shaughnessy and Stadler (2005: 114) add that e-mail and SMS messages communicate using a special code that is more informed and abbreviated than written language usually is, making use of emoticons and acronyms. Emoticons are graphic depictions of emotions, utilised in communication that is not face-to-face. For instance, :-) or☺ is the emoticon used for smiling, :-( or is the emoticon used for sad. Acronyms and abbreviations are suitable for the small screens of cell phones, and the quick style of communication used. In SMS conventions, vowels are often excluded, so ‘text message’ becomes ‘txt msg’. The sounds of certain letters and numbers can replace longer spellings. The phrase ‘Great, see you later!’ can be converted into the code ‘g@t, c u L8R’. O'Shaughnessy and Stadler (2005: 114) state that this code is sometimes referred to as ‘digital literacy’ or ‘net-speak’ and it is increasingly being incorporated into mainstream language use and media advertising.
**MXIT**

MXit is a communication tool allowing users to send short text messages (similar to SMS messages) at a very low cost. MXit differs from regular SMS messaging in that it allows users to send and receive messages on both cell phones and PCs, over the Internet and not through the mobile networks. MXit allows users to access chat rooms from a cell phone or a PC and to interact with other chat communities and social networking services.

Thomas (2006) states that before users can install MXit, they have to check if their cell phone make is supported. In most cases if the phone is less than 1 year old, it is guaranteed to work. The basic steps are as follows:

1. Check if the phone is supported
2. Set-up GPRS or 3G on the phone
3. Download MXit onto the phone
4. Register as a MXit user

Users agree to the terms and conditions of use, select a username and password and submit a nickname. MXit users can only chat with other MXit members and decide on so-called “contacts” (others who may possibly chat with the user).

The Content and Use Policy, Guidelines and Position Statement (2006) contends that a very important characteristic of MXit is that it is a service provider and not a content provider. They state that only the necessary software and the platform is provided that allows users to chat from their cell phones or PCs, not any form of content. MXit is compared to a post office that allows people to send and receive letters and parcels, providing only the posting and delivery service, not the content of letters and parcels. The post office has no idea what is written in every letter or packed inside every package. MXit is only a communications service provider delivering text messages created by users to others.

MXit dangers include:

- addiction,
- unregulated chatrooms,
- abuse (cyber-bullying)
- exploitation by sexual predators
- solicitation of minors
- school performance declines
- unlimited distribution of X-rated media
- anti-social behavioural problems

Momberg (2006) claims that MXit have gone on the defensive after accusations that the application was addictive and that pornography was worse than on the internet. MTN spokesperson Ntombizodwa Mhangwani said that in an attempt to reduce the number of under-age children receiving unacceptable material, MTN is currently developing an adult verification system which would require consumers to enter their age before material is sent through their phones (MXit Exposed: 2007).

**RESEARCH METHODOLOGY**

This research consists of a qualitative as well as a quantitative component. The qualitative phase reports on recently published literature on the MXit phenomenon. In the quantitative, empirical phase of the study, a sample of learners was surveyed by means of a questionnaire to determine their perceptions about MXit. These learners provide snapshots of their experiences and involvement with this technology. The data analysis was compiled by using SPSS 16.0
Questionnaires relating to the MXit phenomenon were administered to 140 learners at Richards Bay Secondary. 57 of the respondents were female while 83 were male. Questions related to the advantages and disadvantages of MXit, frequency of use, parental involvement, divulging of personal details, chatting to strangers and pretending to be someone else.

44% of children indicated that they spend many hours chatting on MXit till late at night. Learners admitted to finding it difficult to concentrate because of lack of sleep. This has an adverse effect on the schoolwork. While boys, (69.57%), have a greater tendency to divulge personal details on the internet a large percentage of girls, (30.43%), also gave out their personal information.

According to Thomas (2008) 60% of MXit users are now aged 18-25 years old, although a year ago this segment accounted for 30% of MXit users, while 12-18 year olds accounted for 33% of total users. There is a marked shift to older users.

Some of the advantages of MXit cited by learners at Richards Bay Secondary are as follows:

- Can chat to family and friends
- It is cheap
Mobile Communication: The Revolution

- Can get local news fast
- Can keep in touch with friends without leaving home
- Enjoy meeting new people
- It's fun
- Easy way to communicate
- Can have many dates and boyfriends/girlfriends
- Prevents loneliness and boredom
- Fingers get exercise
- It's the coolest thing in the whole planet
- It's better than being a human being
- It's like eating ice-cream
- Juicy gossip is good to keep you in style

Disadvantages include the following:
- Gossip is a problem
- It’s a distraction
- It’s addictive
- Stops you from spending time with family
- Your number gets distributed without your permission.
- Meet strangers who are dangerous and can stalk, kidnap or rape you
- Lose touch with reality
- Name gets published on lists
- Learn to use vulgar language
- Mind gets damaged
- Do not do homework, begin spelling poorly, fail tests and exams because of poor concentration
- Tricked into giving personal details to strangers
- Make enemies
- Can fall in love with someone you don’t know
- Feel suicidal when you realise you are talking to your parent or brother or sister
- Get into fights because you thought you were talking to a friend
- Do not sleep well at night because of late-night chatting

DIGITAL TECHNOLOGY AND EDUCATION
Katz (2006: 87) states that digital technology may be forcing a change in the dominant paradigm of classroom-based education with mobile phones, digital cameras, personal digital assistants (PDAs) and laptops that are enabled with wireless fidelity being seemingly omnipresent. Katz (2006: 89) adds that students of all ages seem to feel pressure from many “social engineering” sources to adopt mobile phones – from ad campaigns, from product placements in TV shows, films and entertainment events and even from parents.

According to Katz (2006: 88) although the Internet generated positive speculation about its effects on education, the mobile phone was identified as a source of irritation, delinquency and even crime. Pager and cell phone usage was initially banned to prevent organised crime and drug trade. Katz states that these early policies did not emerge from thoughtful technology assessments and mobile phones were not integrated into the school curriculum. Parents have insisted schools allow mobile phones for their convenience in co-ordinating school and after-school activities.

UNIVERSITIES TEST IPHONES, IPODS
Whitaker (2008: 8) describes the iphone as being sleek, slim and shiny, proof that consumers care about form and not just function. It is also user-friendly, allowing the user to access
contacts and calendars, send SMS's, watch videos, load and listen to music, make calls, access e-mail, take photo's, and browse the internet. The Business Times (2008: 11) reports that some universities are doling out Apple iPhones and Internet capable iPods to students as devices with novel possibilities, such as tracking where students congregate, sending messages about cancelled classes, delayed buses, campus crises or just the cafeteria menu.

According to the report, a big part of the attraction is that the iPhone is a hit with the students, signalling a movement towards the use of technology in education. As part of the research and mobile learning initiative, Abilene Christian University in Texas has purchased more than 600 iPhones and 300 iPods for incoming students. Both the iPhones and the iPod Touch devices can connect to the internet through campus wireless networks.

MOBILE PHONES AND GENDER

Giddens (1991), states that young people create identities by means of factors such as language, clothes and symbols. According to Tajfel (1978: 63) social identity is that part of an individual’s self-concept which derives from his knowledge of his membership of a social group (or groups) together with the value and emotional significance attached to that membership. The cell phone is used as a personal style concept, with a special colour, design, brand and ringtone giving it an ornament status. Katz and Aakhus (2002: 261) state that although more boys than girls have cell phones, the differences are small (45% vs 41%). Katz and Aakhus (2002: 262) add that to be accessible is regarded as the strongest motive for the use of a mobile phone, stressed by 72% of the teenagers. 75% of girls and 62% of boys stressed that sending text messages (SMS) is another important factor. According to Katz and Aakhus (2002: 263) girls are more oriented towards the social aspects of mobile phone use, whereas boys stress the technical functions. However, both groups strongly emphasise the communicative aspect of the mobile phone. Young people with disabilities like hearing problems or dyslexia are able to communicate with their friends using SMS. Katz and Aakhus call this “digital competence”. Teenagers position themselves to be accessible, communicative and informed. While technology has been designed to match technological skills, with men in mind, girls have increasingly become users of technical artefacts, such as the computer. Katz and Aakhus (2002: 268) add that the mobile phone, like the computer, is not a type of technology associated with muscle, manual skill or all-male environments. The skills and knowledge acquired by girls may convey a change in stereotypic female interests.

SMEAR LIST CAUSES MAYHEM

Subramoney and Govender (2008:1) report that mayhem erupted at a KwaZulu-Natal north coast high school when protesting learners clashed with police and destroyed school property after a probe into a MXit cell phone smear list. MXit lists that categorised individuals as “homos, players, girls for phone sex, and girls who will go all the way” spread throughout the country. Departmental head at Shakaskraal Secondary stated that learners were traumatised; many were afraid that their parents would believe the allegations made in the “slut lists”. The police confiscated a number of cell phones as part of a probe to uncover those behind the defamatory lists. However, learners became violent, forcing learners out of their classrooms and breaking windows. Police used rubber bullets and teargas to disperse learners.

Subramoney and Govender state that according to provincial education department spokesperson, Mbali Thusi, the department does not have a “blanket policy” on cell phones at schools. Thusi added that it was up to the school management, parents, learner representatives and the school governing body to find an amicable solution to the problem.

CONCLUSION

Parents from schools like Durban Girls' High, Queensburgh Girls High and Westville Girls’ High expressed their anger at MXit and declared their intention to take away the high-tech
cell phones. Govender (2008: 2) reports that Kharwastan Secondary has taken a stand by enforcing an existing ban on cell phones. A number of cell phones were confiscated, and the school has adopted a zero-tolerance approach to deviant behaviour, including the use of cell phones and classroom conduct. Other parents have taken a stand against the MXit craze and have substituted hi-tech cell phones with basic, cheaper units which do not have internet access, the MXit instant messaging facility, MMS (picture messages) or cameras.

Shariff (2008: xvii) states that we ought to learn and grow with our children in an age of digital literacies, and empower the future generation to become responsible and contributing citizens, both of the physical and virtual worlds of cyberspace. Govender (2008: 11) writes that Karwastan Secondary principal, Rajen Naidu, has advised parents to check the content of their children’s phones. Khumalo (2008: 20) states that what is missing is some measure of reproach aimed at moulding our children into considerate, thoughtful and disciplined citizens of the future. He adds that we have grandiose human rights ambitions, yet by failing to discipline our children, we are condemning the selfsame children to a future with no hope for salvation, and no hope for a sense of personal responsibility.

Thomas (2006) recommends that parents communicate with their children about their online activities whether cell phone or Internet and try to understand why they enjoy it so much. He adds that parents should get their children to install MXit on their cell phone so they, the parents, could also communicate on MXit with them. Thomas states that before closing themselves off to the benefits of MXit, and exclusively focusing on the dangers, parents should consider using it to communicate with their children and experience it for a while before taking drastic action.

An increase in MXit users means that the possibility of cyber bullying, abuse and addiction grows. Parent’s and teachers need combat this is through setting boundaries at home and at school, stressing good online etiquette and offering guidelines from when children first are given cell phones. Responsible parenting means entrusting children with this technology only when they are capable of using it responsibly.

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UNAUTHORED REFERENCES:

