A profile of the geographies of students in the Department of Information Science at the University of South Africa (UNISA)

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Abstract

In order for universities to ensure not only access through massification but also retention and success through high throughput rates, it is pertinent that institutions have a basic understanding of students' contextual realities. Due to emerging political, economic, technological and social developments the nature of the current and prospective university student has changed. This transformation of the university student's disposition has brought about new demands, anticipations and opportunities. Consequently, these new developments have challenged universities to develop responsive, up-to-date and seamless learning strategies and experiences that will attract and retain students. The purpose of the study is to profile the geographies of students in the Department of Information Science at the University of South Africa (UNISA).The study adopted a quantitative approach and more specifically the informetric technique of data mining to map the characteristics of LIS students in the Department of Information

Science. Overall, the study found that there is a scarcity of knowledge about the contextual realities of students registered in the Department of Information Science at UNISA. It recommends that critical information should be collected beforehand to enable the department to align the realities of students with the courseware, the communication technologies and strategies, the pedagogy, and the resources as well as other considerations.

Keywords: Geography students, Student profile, UNISA

Introduction

Although the agenda of widening access or participation by admitting groups of disadvantaged students as compared to the 'traditional' university student is a key policy imperative in South Africa, it has brought its own challenges such as low throughput rates and alarming drop-out rates (Barlow n.d.; Larsen, Sommersel and Larsen 2013; McKenzie and Schweitzer 2010). It has repeatedly emerged in the literature that in South Africa, the university dropout rate has escalated alarmingly in recent years, and is hitting highs of up to 40% at some universities (Gernetzky 2012; Letseka and Maile 2008; McGregor 2007; Neves 2008). The statistics show that whilst dropout rates are higher at first year level and lower at higher levels, graduation rates are as low as 15% (Letseka and Maile 2008; Murdoch 2013).

The term 'university dropout' is commonly used to describe situations where a student withdraws voluntarily or involuntarily from his/her studies before completing the qualification (Larsen, Sommersel and Larsen 2013). The terms used to describe university dropout from a student perspective are many: dropout, departure, withdrawal, academic failure, non-continuance, non-completion, whereas their positive counterparts are: persistence, continuance, completion (Larsen, Sommersel and Larsen 2013). Generally, dropouts are caused by lack of finances, a history of learning difficulties in school, conditions at home such as lack of a quiet area to study, unexpected or unavoidable pressures from work, sickness in the family, and a failure to understand the necessary time commitment before enrolling (Bates 2008).

Dropouts are costly in terms of time, resources and tuition for students, institutions, society and government (Ascending Learning 2012). The Department of Higher Education lamented that the drop-out rate was costing the National Treasury R4.5 billion in grants and subsidies to higher education institutions without a corresponding return on investment (Letseka and Maile 2008). Likewise, Jansen (2010) confirms that the consequences of failure and dropout are devastating as universities lose funding resources, parents lose out on hard-earned savings invested in their children, students lose confidence in their ability to gain a university education, and the country fails to gain another skilled graduate from university.

Given that the Department of Higher Education (DoHE) in South Africa funds higher education institutions (HEIs) based on two key outputs, student throughput and research productivity, it is important for universities to deliver success in terms of student retention and subsequent high completion rates (Mnyanyi and Mbwette 2009; Perraton 2000; Sawyerr 2004; Sultana and Kamal n.d.; Tinto 2006-2007; UNESCO 2002). Interestingly, Quinn et al (2005) argue that the retention or the uninterrupted completion of degrees by students is a moral imperative for universities, when students withdraw early institutions are deemed to have failed. That is why it is important that universities have students' critical information in order to understand, appreciate and empathise with students' dispositions. In particular, information about students could be factored into institutional planning, policies and strategies. It could enable the university to position students as clients and to know them better. Onyancha (2010) believes that knowing one's clients can lead to customer satisfaction and retention. This assertion is also affirmed by Hosey (2008) in Onyancha (2010) when he states that organisations need to understand who their customers are, what are their behaviours, what issues or challenges do they face, what is the best medium to reach them, and, what are their profiles? To design good academic offerings, and provide good quality personal support that matches the needs, expectations and experiences of students (Ascending Learning 2012; Bates 2008), it is critical for universities to know their clients and lessen the dropout phenomena.

UNISA: context and caveats

The University of South Africa (UNISA) is a dedicated Open Distance Learning (ODL) institution with a niche to provide education to virtual students without the

constraints of time and location (UNISA 2007). UNISA is the largest ODL institution in South Africa and on the African continent (approximately 250 000 students), and one of the world's mega- institutions (UNISA Annual Report 2012). Originally ODL intended to provide an attractive option for students who could not afford to attend university immediately after completing their schooling, because of personal circumstances such as family obligations, having to work full-time and unable to attend university, and lacking appropriate entrance requirements or qualifications to gain entrance to face-to-face, or contact, universities (Vergidis and Panagiotakopoulos 2002). However, the orientation of ODL has shifted from catering particularly for the working patrons, to the latest trend of opening up learning opportunities to a young generation of students who have just completed high school education.

In response to the new mandate of changing access into success, Makhanya (2010) called on UNISA to extend the frontiers of pedagogy by embedding them in student-centredness. UNISA has made many changes over the years. Specifically, it has restructured and re-engineered tuition through the constant review of the curriculum and other academic activities based on embedded flexibility and innovativeness of institutional student support systems, processes, technologies and procedures. As suggested by Jayatilleke, Lekamge and Weerasinghe (1997) and Quinn et al (2005) any institutional reforms have to be done with empathy with student characteristics.

Purpose of the study

This study profiles the demographic information of undergraduate and postgraduate students in the Department of Information Science at UNISA. Ascending Learning (2012) categorises students' characteristics as stable (race, ethnicity, gender, age, education level, ability to pay, and domestic partner status, academic performance, commitments to and responsibilities to work, family, and community), or malleable (motivation, self-efficacy, locus of control, coping skills, resilience, and study skills, educational and employment goals and intentions). In particular this study investigated both stable and malleable variables including age, gender, nationality, language, employment status, disability status, Internet access and literacy. A similar study was conducted by Onyancha in 2010 wherein he profiled students in an undergraduate programme in the Department of Information Science at UNISA. Onyancha's study focused on the demographic and geographic

diversity of students, the rate and type of cancellations of modules in the qualification as well as the trends of student registration and graduation. The point of convergence for these studies is that they both include demographic information of students. However this study includes more of the demographic elements that were excluded in Onyancha's study, thereby providing in-depth information on a wide scope of related issues. It is envisaged that this study may be of institutional and national benefit as it may not only influence institutional planning and national discourses, it may also contribute to a body of knowledge on the retention of students in the higher education milieu. This could assist the Department of Information Science at UNISA to achieve enhanced throughput rates, pass rates and lower dropout rates. Enhanced throughput will have spin-offs such as improving the financial and professional standing of the department.

Statement of the problem

Massification in the higher education sector has challenged universities to devise strategies that would enable them to achieve a reasonable chance of success with massive numbers of students with different experiences, backgrounds, strengths and weaknesses, interests, ambitions, senses of responsibility, levels of motivation, approaches to studying and academic potential (Felder and Brent 2005). With emphasis being put on "access for success" it is pertinent for the university and in particular, academic departments to understand the biographical information and the characteristics of students. The virtual nature of an ODL institution embodies offering tuition to faceless clients. By implication if students are unknown it will be tricky to match their needs to academic offerings. As it has emerged in the literature the mismatch or lack of precision between students and academic offerings might be a contributing factor to high dropout and failure rates. Profiling students is a tool that creates a picture of students' disposition which in a way gives them a "face" or a representation. The profiling of students could assist universities in giving a new meaning to student centredness. Moreover, it could be one of the strategies that could address the dropout phenomena. There is a scarcity of information about the geographies of students registered in the Department of Information Science at UNISA. Not having this critical information is a lacuna that not only violates the principles of effective pedagogy but also incapacitates the Department, depriving it of the opportunity to provide responsive programmes.

Research methodology

The study adopted a quantitative approach and more specifically the informetric technique of data mining to map the characteristics of LIS students in the Department of Information Science. The study employed informetric techniques as outlined in Onyancha (2010) to extract data from UNISA's Institutional Information and Analysis Portal maintained by the Department of Information and Strategic Analysis (DISA). DISA uses Higher Education Data Analyzer (HEDA) software to provide automated, accurate and up-to-date web based information. The portal provides provisional as well as the HEMIS (Higher Education Management Information System) reports. The provisional reports include the student registrations (course registration, qualification registration, pivot tables and tutorial registration reports) and the examination reports, consisting of formal examination results. This study focused on the provisional reports and more particularly the trends of student registration. The choice of the provisional reports was premised on the fact that provisional reports may indicate the diversity exhibited by students registering in the Department of Information Science as the reports have not been audited. A study on the trend of registration was also deemed necessary as the profile could reveal patterns that may assist in not only enrolment planning but also the delivery of tuition to students.

In order to fulfill the objectives of the study, the following data was extracted from the Portal:

- Number of students registered in each of the qualifications offered in the Department;
- Number of registered students from various continents across the world;
- The country of residence of students;
- Age groupings of students;
- Employment and occupation statuses;
- Physical/disability status of students;
- Home language of registered students;
- Students' gender; and;
- Students' access to the internet.

The distributions mentioned above were meant to gauge the diversity of students who are registered in the Department of Information Science so that informed decisions can be made in regard to teaching and learning. A detailed discussion of

the importance of each of the variables is provided in the results and discussions section.

Limitations of the study

The data extracted from the UNISA's Institutional Information and Analysis Portal spans from 2004 to 2011. The study was conducted in 2012 but due to unforeseen technical delays, the paper was submitted for publication in 2013.

Results and discussion

The results and discussions are presented in terms of dominant themes.

Registrations by qualification

Due to the historical reforms which took place in the higher education sector that resulted in the merger of academic institutions in 2004, UNISA merged with Technikon South Africa (TSA) to become a comprehensive university operating under by the name University of South Africa. Table 1 shows the number of students registered in different programmes offered by the Department of Information Science from 2004 to 2011. Generally, the data reveals a continued increase in the number of students registering for qualifications in the Department. For instance, the National Certificate (Archival Studies) recorded an accelerated growth in the number of registered students from 59 in 2004 to 293 in 2010. The Diploma in Information Science, which has since been discontinued, saw the number of registered students increase from 51 in 2004 to 136 in 2010. The following qualifications have witnessed a higher number of students registering: Bachelor of Information Science, Honours Bachelor of Information Science, and Bachelor of Arts Honours in Information Science. The growth in number of registrants that embodies diversity among the student population may be attributed mainly to the massification of higher education discussed earlier in this paper. Admittedly, there could be other professional, national, regional and global factors that have led to the escalation. Based on the notion of "changing access into success" the number of both undergraduate and postgraduate students has to be considered in relation to the staff complement, competencies and specialisation. With the Department currently having 2 professors, 2 senior lecturers, 9 lecturers

(permanent), 2 lecturers (contract), 4 junior lecturers (Dube 2012), the issue of talent/ skills management needs to be considered seriously to ensure sustainability and growth.

Table1: Registration by qualification 2004-2011

	2004	2005	2006	2007	2008	2009	2010	2011
National Certificate (Archival Studies)	59	57	90	85	145	165	293	162
Diploma in Information Science	51	57	61	94	123	215	136	109
National Diploma (Archival Studies)	7	11	17	14	14	19	17	
National Diploma (Library and Information Studies)	423	388	379	242	190	116	77	3
Bachelor of Information Science	354	340	283	296	355	396	556	732
Honours Bachelor of Information Science (Archival Science)			2	6	14	20	22	37
Honours Bachelor of Information Science	20	10	25	40	48	69	104	95
Bachelor of Arts Honours in Information Science	65	2	68	59	70	90	124	158
Masters in Information Science	47	122	29	31	38	23	32	53
Masters in Information Science (Archival Science)								2
MTECH: (Library and Information Studies)	19	9	1					
DLITT et Phil (Information Science)	12	12	8	11	10	23	27	39

Registration by continent

Figure 1 illustrates the distribution of students according to continents of residence. The majority of the students reside in Africa (99%) while the rest of the continents shared the remaining 1%. Being the largest ODL institution in Africa, it is not surprising that most students come from this continent. The results reveal that 1% of the student population come from Asia, Europe, the Americas and Oceania. The implications of these results for the Department of Information Science are two-fold. First, the Department has to balance its academic offerings in terms of local relevance and responsiveness against having an international appeal. Whilst it might not be possible for the Department to offer programmes according to individual needs of students, it is worth noting that "a one size fits

all" approach is likely to compromise issues of responsiveness and relevance (Larsen, Sommersel and Larsen 2013).

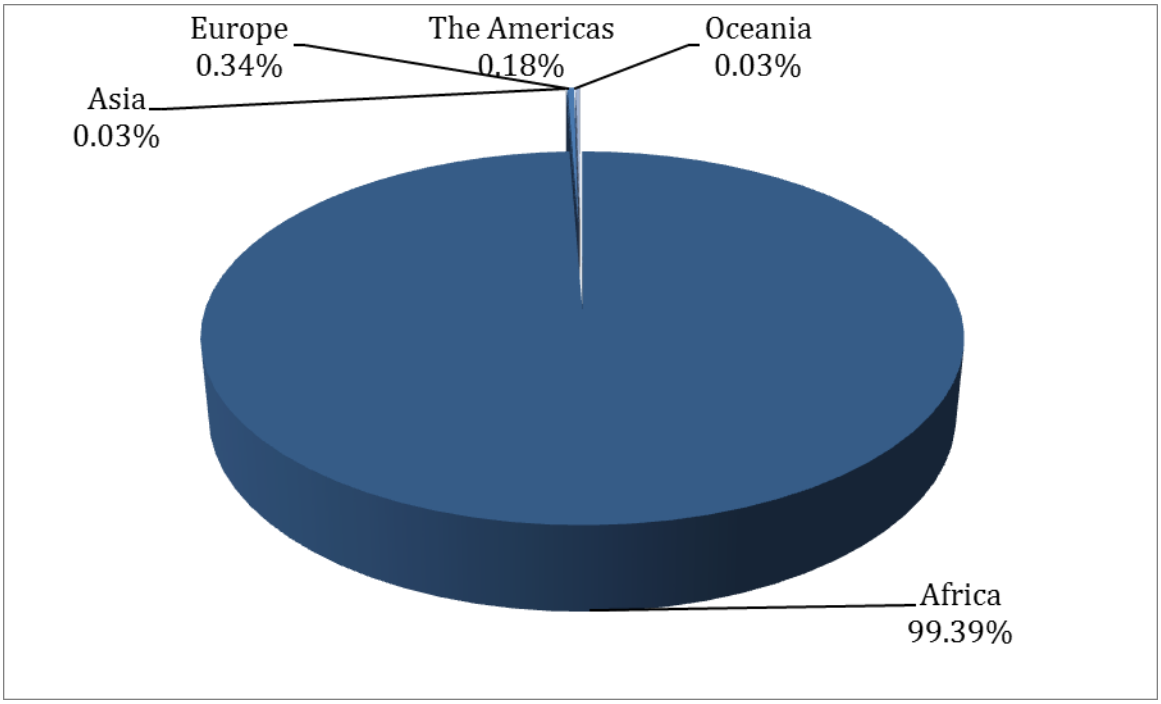

Figure 1: Registrations by continent of residence

Since the Department has a diverse student base, it is important that it offers a curriculum that is not only relevant to local realities and concerns but that will not prejudice international student groups. This is in line with the ethos of Africanisation, which is embodied in its mission statement "to be the African university in service of humanity". Africanising the curriculum is acclaimed for being constructivist in nature as opposed to being reductionist because it upholds inclusivity, based on the adoption of African theoretical underpinnings with an international appeal (Dube 2012). This is critical because although it is important to acknowledge and appreciate local realities, it is similarly pertinent to be aware of latest trends and orientations in the global village. Given the versatile nature of the discipline of Information Science there are reasonable opportunities to have subject content that appeals to local and international contexts.

Registration by country of residence

A synopsis of the students' country of residence is provided. This is intended to bring a clearer picture of the number of students from each country. Considering that UNISA is an ODL institution, this information could help when considerations are made for student support initiatives such as satellite centres, discussion classes, partnerships with libraries or other information centres, issues related to Internet connectivity, curricula and pedagogy alignment and other issues of an academic and scholastic nature. Such issues as the delivery of study materials, examinations and even graduations are likely to be handled much better if clear information about the students' countries of residence is available and taken into consideration. As indicated above information about the country of residence can enable the institution to provide customised student support and develop appropriate marketing strategies. Given the volatility in the political and economic frame of some African countries, the university can show empathy by providing students in affected areas with appropriate support programmes. This kind of innovativeness can actually give a new meaning to student-centredness.

Table 2: Registration by country of residence

Country	2004	2005	2006	2007	2008	2009	2010	2011
Angola								1
Australia	1	2	2	2	3	4	2	2
Belgium			1	1				
Botswana	3	7	6	7	5	5	7	15
Canada	2	4	1		1	1	1	1
Ethiopia	2	2			3	5	5	6
France		1						
Germany	1						1	1
Ghana				1		2	2	5
Ireland	1							
Kenya	7	12	12	10	28	39	35	35
Lesotho		1						1
Malawi	1	1	2	1	3	2	2	2
Mauritius	4	8	8	13	18	21	22	17
Mozambique	2	2			1		1	
Namibia		18	20	23	14	20	25	21
Nigeria		1		1	1	1	1	4
New Zealand				1			1	
Oman	1		1					
Other African countries	4	4						
Qatar							1	1
Rwanda	2							
South Africa	981	908	886	802	893	1015	1256	1256
Sri Lanka					1	1		
Swaziland	2	3	4	4	2	5	7	6
Switzerland			1	1				
Tanzania				1	1	2	1	2
Uganda	2	2	1				1	
United Arab Emirates					1		1	
United Kingdom	4	3	1	1	1			2
United States of America	3	5	2	3	2	3	3	2
Zambia	2	4	2	1	2	1	1	1
Zimbabwe	13	18	10	14	21	4	7	5

Table 2 reveals that majority of students reside in South Africa. For instance, reflections on 2011 registrations indicate that South Africa registered the highest number of students (1256), followed by Kenya (35), Namibia (21), Mauritius (17), Botswana (15) and other African as well as international countries with student numbers ranging between 0-6. Observably, the number of students from the

different countries fluctuates. Of particular concern in this study was the continued decline in the number of students registering from South Africa's neighboring countries such as Zimbabwe and Zambia. An investigation into the reasons behind such poor performance of some of the African countries is highly recommended if UNISA is to become an African University in service of humanity. In particular, the Department of Information Science needs to conduct students' surveys and tracer studies to determine the causes of the decline.

Registrations by age

Generally, the age bracket for students registered for Information Science qualifications ranged from 17 to 74. Table 3 provides the different ranges of the students according to age. Obviously, only students registered in undergraduate programmes are in the age bracket of 19 years. In particular, these are students registered in the Certificate in Archival Science. The reason for having young students could be the fact that this is a certificate programme at NQF level 5, which is a bridging programme for those who for certain reasons cannot directly access other university degree or diploma programmes. With regards to the second age bracket 20-29, it is interesting to note that whilst the number of registrants are lower than the 30-39 bracket they are comparatively similar to the 40-49 age group. In the 50-59 age groups, student numbers are fairly lower compared to the groups 20-49. This could be attributed to the changing dynamics of the ODL institution student. As indicated earlier, ODL institutions have extended learning opportunities to high school leavers who for one reason or another cannot go to contact universities.

Notably, the highest number of registrants in the National Certificate in Archival Science is between 20-29 years. The assumption is that younger people will be more eager to change career paths than the older generation. In the Diploma in Information Science the highest number of registrants is in the age bracket 30-39. In the National Diploma in Information Science it is between 40-49 years. In the Bachelor of Information Science more students between ages of 30-39 are registered for the degree. Interestingly, in all the three Honours programmes the majority of registered candidates is within 30-39 years. For the Diploma in Information Science, the National Diploma in Information Science and all three Honours programmes it is likely that due to their age people who choose these programmes are working already. Most probably some work in a library setting

without a qualification hence the desire to seek a qualification in information science. It has emerged in the literature that due to unemployment and lack of career focus a lot of people have been absorbed in the library and information sector, in the public library sector in particular without proper qualifications. These are people who, although the library and information profession was not their first choice, find that they have no choice but to embrace it.

For Masters in Information Science as well as Archival Science, the highest number of registrants is between 30-39 years of age. These are individuals who are likely to be working or purposively pursuing a career in the profession. On the other hand, for doctoral studies most students are 40-49 years age bracket. However, there is one candidate who is between 20-29 years. Although it said that doctoral studies need maturity and experience, the fact that there is a candidate in his/ her twenties who might not fit the description is a clear indication that such stereotypes might be challenged.

In the age bracket 60-70 plus the largest number of students (9) are registered for the undergraduate Bachelor of Information Science, followed by the DLitt et Phil with 8, Honours in Information Science with 6 and the other qualifications having low numbers ranging from 1 to 3. It can be assumed that these are candidates who are or have worked in the library and information science field and, even in their late career, would like to obtain a basic or an advanced qualification in the field.

The age disposition of students registered in the department may influence the content, teaching methods, choice of communication tools and student support programmes. It may also enable the department to determine trends and gaps that could be used to make projections for future developments and growth. Additionally, given that UNISA is geared towards electronic (e-learning) or virtual learning, information and communication technologies generally will influence the teaching and learning processes. As indicated in the literature, the adoption and use of technologies is generally likely to be influenced by factors such as age, socialisation, aptitude, attitude, and the availability of resources pertinent to connectivity and lack thereof.

Table 3: Age per qualification

Age	National Certificate (Archival Science)	Diploma in Information Science	National Diploma (Information Science)	National Diploma (Archival) Science	Bachelor of Information Science	Honours Bachelor of Information Science (Archival Science)	Honours Bachelor of Information Science	Bachelor of Information Science Honours	Masters Information Science	DLITT et Phil (Information Science)
≥ 19	71	13	9		17					
20-29	353	269	296	12	900	2	111	93	37	1
30-39	347	325	88	39	1422	53	197	335	147	42
40-49	225	190	516	33	793	45	92	157	125	49
60-69	3	3	3		9			6	5	8
70≤	1								3	

Employment status

As indicated earlier, UNISA as an ODL institution has mostly serviced working patrons although trends have shifted to include high school leavers. This dimension could influence the orientation of the curriculum because the needs, expectations and experiences of non-working patrons maybe different from their working counterparts. What can be deduced from Figure 2 is that in 2007, the number of students who were employed was at its lowest but thereafter it grew at a steady pace until 2011. The trend line predicts a linear growth of the number of the unemployed students. The growth in the number of unemployed students confirm the assertion that UNISA as an ODL institution continues to attract school leavers in addition to the traditional student. Likewise, it might happen that unemployment reflects the saturation of the market or a mismatch between the competencies of the UNISA graduate and the market needs.

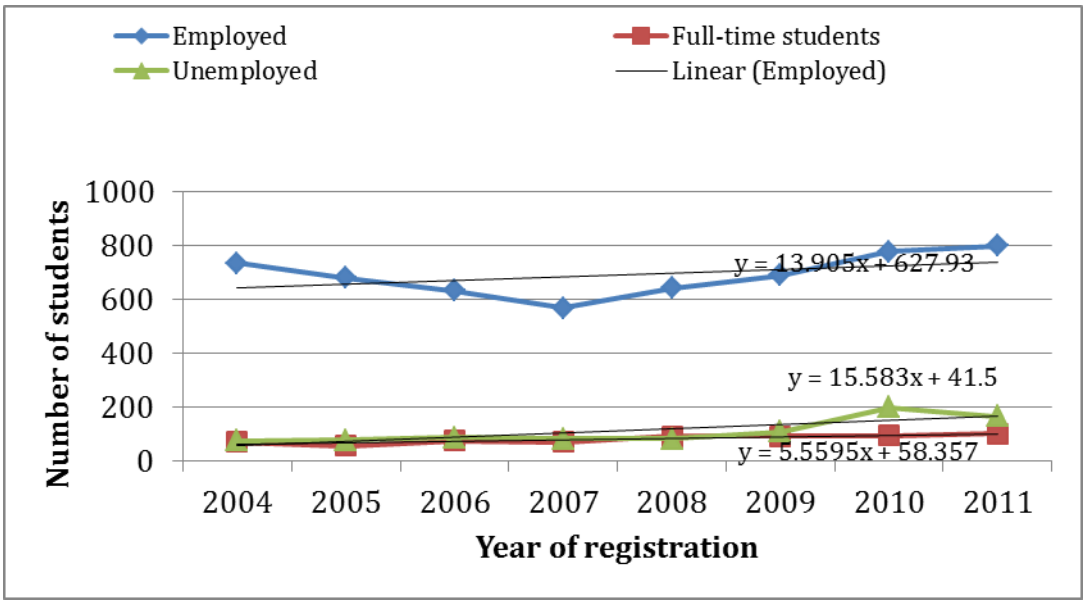

Figure 2: Employment status of students registered in the Department of Information Science, 2004-2011

Occupation

It is critical for the Department of Information Science like any other academic department to be aware of the type of occupation or employment prospects available. Knowing prospective markets will help to customise and align academic offerings according to the demands of the market. An analysis and knowledge of the past or current occupations of the students may assist the Department to make

informed decisions in relation to the curriculum orientation, delivery of tuition, and marketing of programmes, among others.

Table 4: Occupation of registered students in the Department of Information Science, 2004-2011

Occupation	2004	2005	2006	2007	2008	2009	2010	2011
Librarian, archivist, knowledge manager and records manager	542	404	448	402	440	463	530	555
Full-time student at Unisa	71	59	77	71	92	91	92	97
Secondary education teacher	67	58	56	45	33	36	37	37
Clerical worker	40	47	65	46	89	90	112	110
Lecturer/ Professor	34	22	15	10	8	11	12	17
Housewife	11	12	12	10	8	10	12	9
Prison service worker	9	2	4	4	3	5	5	3
Computer specialist	8	2	2	4	5	5	9	5
Service worker	6	4	6	5	9	10	15	16
Manager/ administrator	5	7	9	12	20	19	30	26
Health practitioners (nurses, dieticians)	3	3	5	3	3	3	3	3
Personnel officer	1	2	3	4	5	3	5	5

Overall, Table 4 reflects a wide array of occupations with traditional and contemporary orientations. The spread of types of occupations might be based on the shift from librarianship to information science which has resulted in major reconfiguration of the library and information education and training sector in South Africa (Bothma and Ocholla 2010). The reconfiguration was largely brought about by survival and sustainability issues which had significant impact on academic offerings and orientations. What might be a challenge for the Department of Information Science at UNISA is the ability to strike a balance between market demands on the one hand, and institutional and government pronouncements on the other. The professional association, the Library and Information Association of South Africa (LIASA) needs to provide a strategic directive on this matter.

The growing number of full-time (non-working) students confirms the assertions that UNISA seems to be an attractive option for high school leavers. The inclusion of full-time students might challenge the Department to revisit the curriculum. In particular there might be a need to carefully consider the issue of the practical component or work experience learning. Currently, the undergraduate curriculum

offered in the Department of Information Science does not include practicum. Most probably, over the years, most students were working and therefore were familiar with library and information practice. It is also possible that, with UNISA being an ODL, the modalities of managing the exercise were a nightmare. However, with the fabric of the student body changing such decisions have to be revisited to ensure that all students get the practical experience of working in an information service point.

Physical challenges/disability status

There are different types of disabilities as indicated in table 5 below. According to Barlow (n.d.) academic institutions have an obligation to provide specialised support to enable physically challenged/ disabled students to perform more effectively in the learning environment. It is, therefore, critical that information about the extent and nature of disabilities is recognised and taken cognisance of by academics as well as other student support entities. In particular, the disability outlook of students is likely to affect the mode of tuition, the pedagogy, assessment methods, the delivery and accessibility of library services and other student support services. Similarly, the institutional physical and space provisions and resources should cater for the different physical challenges. In this regard Barlow (n.d.) advocates for ergonomic furniture, as well as assistive technologies which could be both hardware and software, including specialist multi-sensory tutors, note-takers, communication support workers and library support workers. If this outlook is disregarded by either the lecturers or the institution, it would mean that there is a cohort of students that is prejudiced. The issue of providing adequate resources for the physically challenges does not only apply to the ODL mode it is also applicable to the contact mode of delivery.

Table 5: Disability status of students

Disability	2004	2005	2006	2007	2008	2009	2010	2011
Mental disorders/phobia	1	1	1	1	1	1	1	1
Muscular/skeletal/joint/limb	1	1	1				1	2
Serious chronic diseases	2	1				1	1	1
Visually impaired/ blind	1		1	2	1			1
Deaf		2	1			1		1
Paraplegic	0	0	0	1	0	1	2	1
Diabetes	1	1		1	1			
Hearing impaired						1	1	1
Neurological diseases	1	1	1					
Visually impaired (no audio sm)							2	1
Visually impaired (reading difficulties)				1			1	
Cardio-vascular diseases					1			
Communication (speech problems)								1
Kidney (blood deficiencies)					1			
Quadriplegic				1				
Total	7	7	5	7	5	5	9	10

Table 5 reveals varied physical challenges. The question that could be raised is to what extent current methods and tools of communication and information delivery do cater for the different physical challenges? In the same vein, to what extent do lecturers know about and purposely make provision for the physically challenged students? Further studies could be conducted to find answers to these questions. These are critical questions that the department needs to consider because they can affect students' uptake of LIS programmes as well as student retention.

Since the information about disabilities is gathered during registration, lecturers need to be aware of this critical information so that they should be able to provide the necessary support. As an ODL institution UNISA offers limited human or physical contact. Communication between lecturer and student takes place mainly via email, by telephone, through myUnisa (virtual campus of UNISA), through discussion classes for a few modules, through tutorials and walk-ins to staff offices (Dube 2012). The study materials are printed although they are also available online. This state of affairs does not cater for visually challenged students. Ideally, the study material should also be produced in braille for the visually challenged.

Likewise, audio technologies should be used to produce the study matter in audio form. In addition, sign language competency could be used when conducting discussion classes or video conferencing.

Obviously the issue of catering for the needs of physically challenged students is not without challenges. Concerns have been raised in the literature regarding the support provided to physically challenged patrons. It might be seen as patronising and creating a dependency culture that compromises independent learning. Nonetheless, it is enshrined in the Constitution of the Republic of South Africa and the Bill of Rights that physical disability should not prejudice anyone. Therefore, physically challenged students just like other university students need to be supported as much as possible within the institutional and national sanctions.

Home language

The UNISA Language Policy notes that in the past, English and Afrikaans were regarded as official languages for tuition, thus given preference over the other nine official languages. But after 2008 the policy changed, declaring English as the only language to be used for teaching and learning. Furthermore, from 2010 more changes have seen the development of language glossaries to ensure that students are given an opportunity to understand important concepts in their own languages (Dube 2012).

Table 6: Student's home language

Home language	2004	2005	2006	2007	2008	2009	2010	2011
Zulu	176	172	175	136	138	179	245	220
English	200	193	182	173	168	162	173	168
Northern Sotho	139	142	136	134	139	164	238	244
Afrikaans	147	137	121	91	106	110	123	143
Tswana	122	107	103	99	118	128	126	144
Xhosa	86	77	77	81	110	114	143	143
Southern Sotho	61	51	44	41	40	44	67	51
Tsonga	30	32	39	29	42	65	72	68
Other African languages	28	37	29	26	50	60	57	62
Venda	28	29	32	35	35	39	49	54
Swati	19	14	14	13	17	23	36	37
Ndebele	8	8	9	7	15	24	33	36
Afrikaans/ English	7	11	13	9	7	10	11	22
Shona	9	8	4	8	14	5	11	14
French	0	1	1	5	12	17	16	12
Other foreign languages	5	4	4	3	5	4	4	4
Ndonga	0	1	5	3	2	5	2	7

From Table 6 it can be seen that the following languages represent the majority of registrants over the years. These are: Afrikaans, English, Northern Sotho, Tswana, Xhosa and Zulu. The data reveals that, although the trend of language popularity is not constant in all languages, a majority of the students have Zulu as their home language followed by English, Northern Sotho, Afrikaans and Tswana, to name but a few. The less popular languages in terms of the students' home languages are German, Portuguese, Italian and Spanish.

Realistically, language as a vehicle of communication plays a crucial part in the teaching and learning process. The fact that English is the official language for tuition could be seen as prejudicing the majority of students to whom it is a second or third language. However, the development of language glossaries could be seen as a strategy by the university to address such concerns. Nevertheless, the development of glossaries is likely to have its own challenges, such as the unequal development of languages as well as translation competencies. Although the process of developing glossaries has been initiated, the university has not made

clear the specific strategies, considerations or criteria for the inclusion or exclusion of a language in the glossary. Thus, the technicalities and modalities of developing the language glossaries have to be well defined.

Gender dynamics

It has emerged in the literature that the library and information science profession is generally a female-dominated profession. The numbers in Figure 3 below attest to this conviction. The trend graph shows that, throughout the period of investigation (i.e. 2004 to 2011), the number of female students enrolled in information science qualifications at the Department far outstrips the number of male students. It was also noted that although the number of female registrants declined between 2004 and 2007, it still remained higher than that of male students.

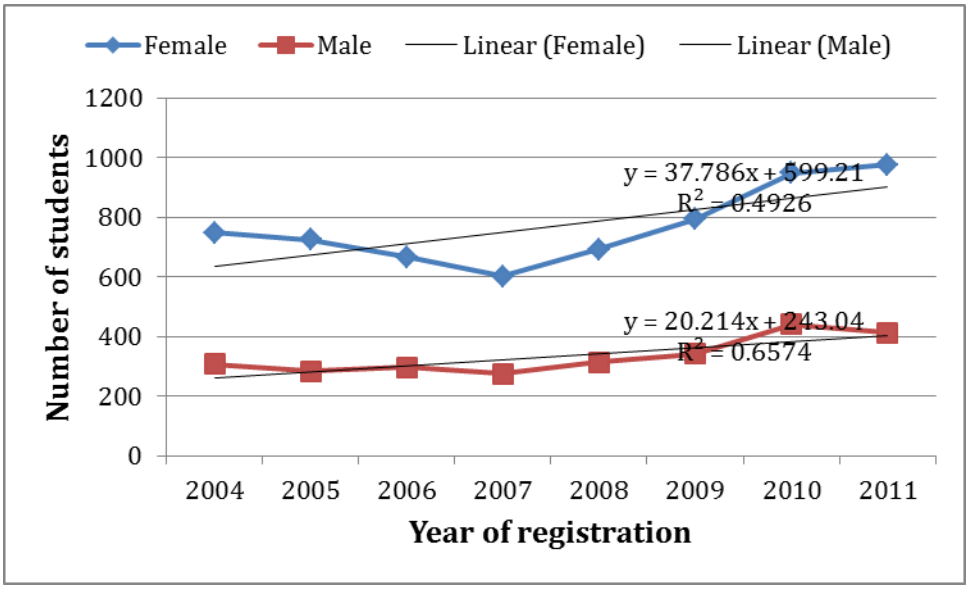

Figure 3: Gender status of registrants

Student access to the Internet

As an ODL institution which implies virtual learning, UNISA relies heavily on connectivity through information and communication technologies. Over the years a blended mode of teaching was adopted, whereby study material was sent through postal services and it was also available online. The latest drive is to minimise blended learning by adopting fully fledged e-learning. By implication this means

that students need internet connectivity to access study material, to participate in tuition, to connect with lecturers and other students and to access library resources and other university services.

Table 7: Internet access

Acess	2004	2005	2006	2007	2008	2009	2010	2011
Internet	10	102	164	180	241	458	485	450
No Internet	1047	906	799	698	766	678	903	939
TOTAL	1057	1008	963	878	1007	1136	1388	1389

Table 7 shows that the the number of students with no internet access by far exceeds those with access. The number of students with no internet access has continued to escalate significantly between 2009 and 2011. It is documented that most African rural areas generally do not have the infrastructure (electricity, computers, or network points) necessary for networking and connectivity, thus for students in these areas it might be a challenge to access computer-mediated and online products and services.

The subject orientation in the Department of Information Science requires that students' have access to online services and resources, it should be a concern that most students do not have access to internet. The inability to access the internet should be a serious cause for concern as the University is driving towards adopting e-learning as a prefered mode for teaching and learning. This not only shows incongruence between university directives and students' realities but also threatens to negate the "access for success" agenda. Although UNISA has regional centres in each of the nine provinces including countries such as Ethiopia, the lack of connectivity might still prove to be a challenge for most students. Given that internet connectivity has fincancial implications that will aggravate the challenges of connectivity. UNISA has put some measures in place to ensure that as many students as possible access the internet. For example, UNISA has introduced a computer scheme to assist students with buying laptops and iPads at reasonable prices. However, it remains to be seen whether the scheme will bring reprieve for economically challenged students.

Conclusions and recommendations

This paper started by outlining the nature, extent, causes, effects and the implications of the drop-out phenomena in the South African higher education sector. Generally, the data reveals an increase in the number of students registering in the Department of Information Science at UNISA. The majority of the students reside in Africa (99%) while the remaining 1% comes from Asia, Europe, the Americas and Oceania. The paper further provided a synopsis of the students' country of residence as this information could be used to determine student support initiatives such as satellite centres, discussion classes, partnerships with libraries or other information centres, issues related to internet connectivity, curricula and pedagogy alignment and other issues of an academic and scholastic nature. Generally, the age bracket for students registered for Information Science qualifications ranges between 17 to 74. The age disposition of students may enable the department to determine trends and gaps that could be used to make projections for future developments and growth. The paper further provided information about the disability status of students. This is likely to affect the mode of tuition, the pedagogy, assessment methods, the delivery and accessibility of library services and other student support services. The revelation that the number of students with no internet acecess has continued to escalate significantly between 2009 and 2011 is remarkable.

The thesis of the paper is that a profile of students' demographic information and characteristics (stable and malleable) is critical information that could assist both the institution and the department. It can enable the institution to implement academic reforms with empathy with students' characteristics. Likewise, it can enable the Department of Information Science to provide responsive academic programmes.

Overall, this study offers an opportunity to give a human component to the virtual student. It can conscientise the institution and educators in particular about the human needs, expectations and experiences of learners. This vital information could be factored into planning priorities of the department to ensure improved levels of precision between academic courseware, teaching and learning methods and technologies as well as the students' contextual realities. In conclusion, it is hoped that this study will provide fundamental information that will prompt

information further research, perhaps tracer studies that will seek to extend, deepen and update information on the profile of the UNISA student.

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