



Faculty of Health Sciences

contents

		Page Numbers
01	Mission Statement	74
02	Overview	74
03	Departments	74
04	Enrolments	75
05	Teaching and Learning	77
06	Staff Profile	78
07	Research	79
08	Community Engagement	82
09	Income Generating Activities	84
10	Administration and Management	85
11	Finances	85



Mission Statement

The Faculty is committed to develop within a values driven ethos, quality health professionals that are practice oriented; receptive and responsive to health care needs of the people of South Africa and Africa as a whole by providing the highest standards of teaching, learning and community engagement underpinned by a commitment to empowering staff and students to succeed.

Overview

As in 2005 the Faculty of Health Sciences had a number of successes and challenges during the 2006 academic year.

Successes included the following:

- Efforts to improve student access to computing facilities - 50 computers in anticipation of a new Faculty computer laboratory were purchased and await the completion of the renovations of the new facilities. The new lab should be up and running by the beginning of the 2nd term in 2007. A community engagement expo involving nine out of 12 departments in the faculty was held late in 2006. The faculty seems to be on track with regard to fulfilling the promise espoused in the faculty mission statement.
- Student success has improved. Although the Faculty’s graduation rate increased by 2.25% between 2004 and 2005, throughput for the 2003 cohort (2003 intake) of students was down compared to that of the 2002 intake. Nevertheless, the improvement in graduation rates means that the Faculty is beginning to clear the ‘backlog’ and thus create access for new entrants within the capped enrolment environment.
- A mentorship awards ceremony was held to celebrate the success of the Faculty’s mentorship programme with both mentees and mentors sharing their experiences with the programme. Departments’ mentorship co-ordinators were also recognised for their hard work and willingness to go an extra mile in their efforts to help students succeed.

As noted earlier, a number of challenges continue:

- Improving student access, success and throughput
- Improving research participation and output
- Staff capacity building
 - Postgraduate qualifications
 - Active teaching/learning approaches in health sciences education
- Consolidating and strengthening community engagement activities
- Achieving staff equity and redress.

Department

- Biomedical Technology
- Child and Youth Development
- Chiropractic
- Clinical Technology
- Dental Services
- Emergency Medical Care and Rescue
- Environmental Health
- Homoeopathy
- Human Biology
- Post Graduate Nursing Studies
- Radiography
- Somatology



Professor Nomthandazo Gwele
Executive Dean: Faculty of Health Sciences

Enrolments

A total of 1575 and 1643 students were registered in the Health Sciences in 2004 and 2005 respectively. This constitutes a 4% increase in student enrolment in the Faculty, which is in line with the DoE’s instruction that DUT should cap its growth. Of the 1643 students registered in the Faculty in 2005, 45 (2.7%) were registered for National Certificates, 1077(66.6%) for National Diplomas, 22 (1.3%) for a National Higher Diploma, 353 (21.5%) for B Tech programmes, 119 (7.2%) for M Tech (course work), 24 (1.5%) for M Tech (full research), and 3 (0.2%) for Doctoral degrees.

Data on student enrolment by gender and race appear in Tables 1-3. The Faculty student population remains predominantly female, with female students constituting more than 70% of the student population in both 2004 and 2005 academic years. The 2005 overall student participation by race was as follows: Africans 737(45%); Coloureds 45 (3%), Indians 519 (31%) and Whites 342 (21%).

There was no increase in student enrolment in the faculty in 2006. This must be read in the context of the DoE’s instruction that DUT should cap enrolment. Similarly, there were no discernible major shifts in the shape of the Faculty by qualifications and student enrolment. With regard to gender, the Faculty student population remains predominantly female, with female students constituting more than 70% of the student population in the three years under review. The 2006 overall student participation by race follows: Africans 763 (46%), Coloureds 49 (3%), Indians 523 (32%) and Whites 306 (19%). Postgraduate enrolment was down from 9% of the total student population 2005, to 8% for the year 2006.

Further analysis of the data on student participation by race reveals that although the Faculty’s student demographics are reasonable, when compared to regional demographics, gross under-representation of coloured and African students at postgraduate level continues. See Figure 3. In 2006, African and Coloured students respectively comprised only 6% and 5% of the 133 students registered for masters’ and doctoral degrees, Whites 55% and Indians 34%. The under-representation of Coloured and African students in higher degrees might be attributed to the fact a large number of these students are on government financial aid which does not extend beyond the first qualification. Nevertheless, this problem needs urgent attention if the Institution is going to make any significant contribution to the nation’s agenda for transformation and redress. See Tables 2 & 3

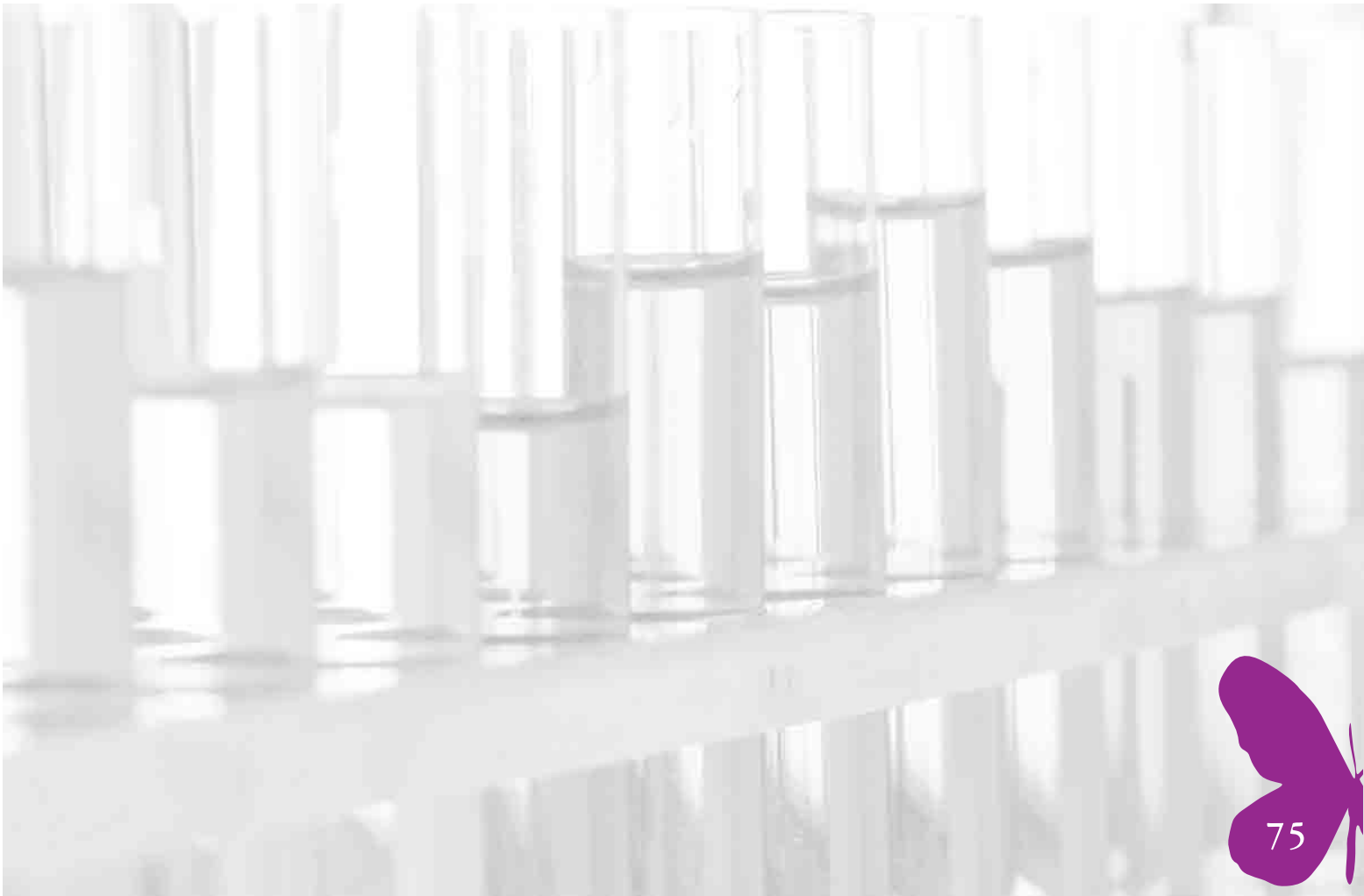


Table 1

Gender Participation (2004 - 2006)

Qualifications	2004			2005			2006		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Certificates	6	66	72	2	43	45	7	53	60
National Diplomas	273	728	1001	313	764	1077	319	780	1099
National Higher Diplomas	1	18	19	0	22	22	0	15	15
Bachelor of Technology	97	255	352	90	263	353	83	254	337
M. Tech	47	82	129	51	92	143	51	80	131
D.Tech	0	2	2	1	2	3	1	1	2
Total	424	1151	1575	457	1186	1643	461	1183	1644
Percentages	27%	73%	100%	28%	72%	100%	28%	72%	100%

Table 2

Race Participation (2004 - 2006)

Qualifications	2004					2005					2006					
	African	Coloured	Indian	White	Total	African	Coloured	Indian	White	Total	African	Coloured	Indian	White	Other	Total
Certificates	61	0	11	0	72	37	0	8	0	45	56	0	3	1		60
National Diplomas	408	34	374	185	1001	492	32	366	187	1077	516	30	388	163	2	1099
National Higher Diplomas	17	0	1	1	19	15	2	5	0	22	9	1	5	0		15
Bachelor of Technology	167	11	123	51	352	183	5	99	66	353	174	11	82	69	1	337
M. Tech	11	4	33	81	129	10	6	40	87	143	7	7	45	72		131
D. Tech	0	0	1	1	2	0	0	1	2	3	1	0	0	1		2
Total	664	49	543	319	1575	737	45	519	342	1643	763	49	523	306	3	1644
	42%	3%	35%	20%	100%	45%	3%	31%	21%	100%	46%	3%	32%	19%	0.1	100%

Table 3

Student Participation in Higher Degrees and Undergraduate Programmes by Race (2004-2005)

Qualifications	2004					2005					2006					
	African	Coloured	Indian	White	Total	African	Coloured	Indian	White	Total	Afric	Col.	Ind	White	Other	Total
Certificates & Diplomas	486 45%	34 3%	386 35%	186 17%	1092 100%	544 47.6%	34 3%	379 33%	187 16.4%	1144 100%	581	31	396	164	2	1174
Bachelor of Technology	167 47.4%	11 3.1%	123 35%	51 14.5%	352 100%	183 52%	5 1%	99 28%	66 19%	353 100%	174	11	82	69	1	337
M. Tech	11 8.5%	4 3%	33 25.5%	81 63	129 100%	10 7%	6 4%	40 28%	87 61%	143 100%	7	7	45	72		131
D. Tech	0	0	1	1	2	0	0	1	2	3	1	0	0	1		2
Total	664	49	543	319	1575	737	45	519	342	1643	763	49	523	306	3	1644
	42%	3%	35%	20%	100%	45%	3%	31%	21%	100%	46%	3%	32%	19%	0.1	100%

Teaching and Learning

Student Performance

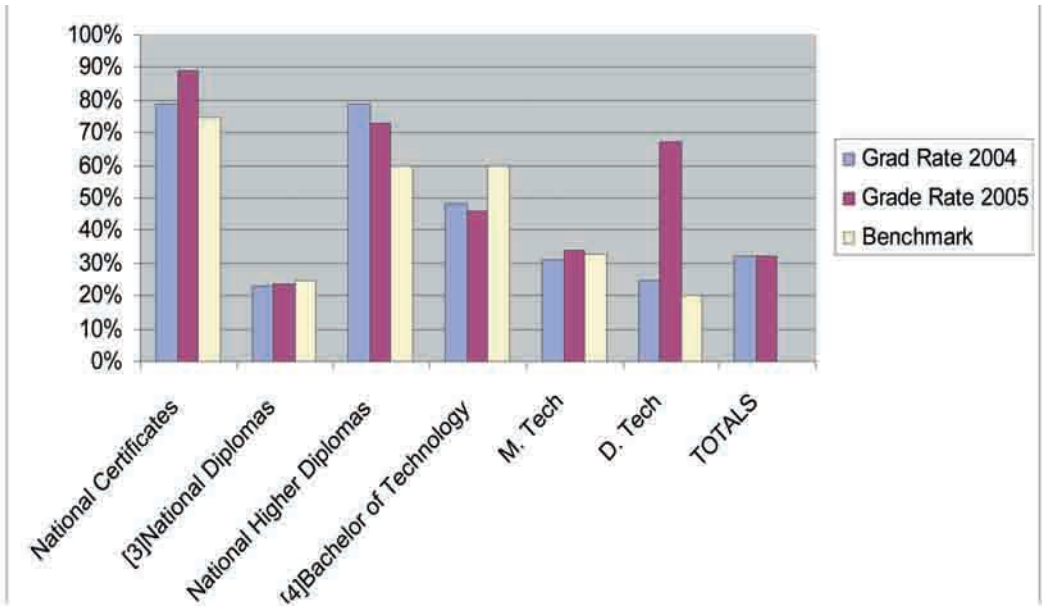
Table 4 below presents data on graduation rates. Both of our core business programmes are not doing very well with regard to efficiency. Overall Faculty performance with regard to national diplomas and B.Tech graduation rates is well below the national benchmarks for similar programmes. Perusal of individual programme data reveals dropout rates of between 25% and 57% percent for the national diplomas. The Faculty seems to be performing relatively well with regard to M. Tech graduation rates, although still below the national benchmark. Similarly, the graduation rate for doctoral programmes could improve, more so that three of the four students still in the system have been in the system for three or more years.

Overall Faculty Student Graduation Rate by Programme Level (2004-5)

	2004			2005			DoE Bench-mark
	Total No. of Students	Completed end 2004	¹ Graduation Rate	Total No. of Students	Completed end 2004	² Grad Rate	
National Certificates	72	57	79%	45	40	89%	75%
³ National Diplomas	1001	225	22.5%	1077	252	23.4%	25%
National Higher Diplomas	19	15	79%	22	16	73%	60%
⁴ Bachelor of Technology	352	171	48.5%	353	163	46.2%	60%
M. Tech	129	40	31%	143	49	34%	33%
D. Tech	4	1	25%	3	2	67%	20%
TOTALS	1577	509	32%	1643	522	32%	

A graphic representation of graduation rates for the period 2004-2005 appears in Figure 3.

Graduation Rates by Academic Programme (2004-2005)



DoE formula for Graduation Rate = No. Graduate/Total Head Count X 100.

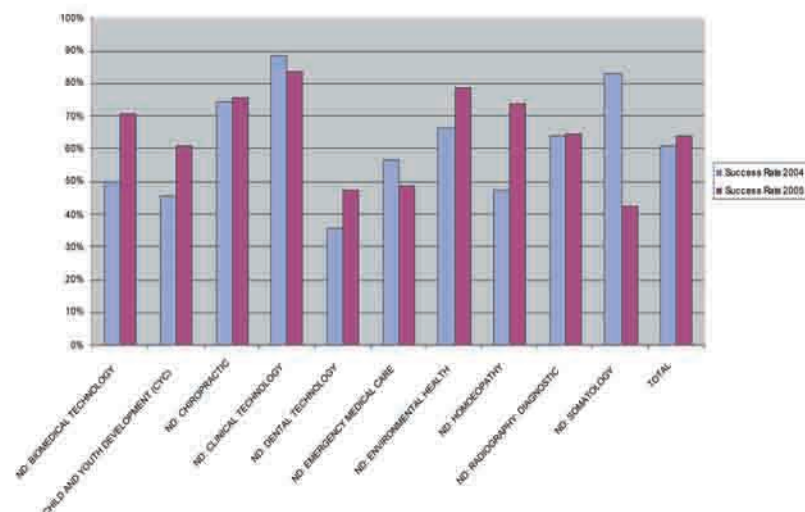
DoE formula for Graduation Rate = No. Graduate/Total Head Count X 100.

These figures include students who completed the requirements for ND: Chiropractic & ND: Homeopathy

These figures include students who completed the requirements for B. Tech: Chiropractic & B. Tech: Homeopathy

Perusal of student success data in the first year of registration reveals that positive outcomes are possible in this regard. For instance first year students' success rate improved from slightly from 61% for the 2004 first year intake to 64% for the 2005 first year intake. Environmental Health, Dental Technology, Child and Youth Care and Homeopathy in particular evidence remarkable improvement in First Year student success.

First Year Success Rates 2004 & 2005



Staff Profile

An equity report submitted to the Equity Office in July 2004 indicated that a total of 104 staff was employed in the Health Sciences. The Faculty seems to be doing well with regard to staff gender profile. According to a TELP report a 2003 survey of gender profile revealed that more than 50% of the academic staff in the Health Sciences was female. This positive trend continued during the period 2005-2006, with women comprising 62% (n = 65) of the total staff complement in the Faculty. Staff gender profile appears in Figure 5 below.

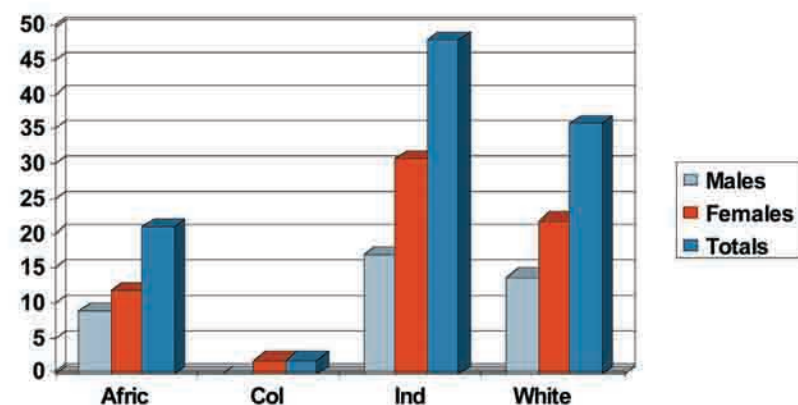


Figure 5: Staff Profile by Gender and Race

The picture, however, is not so good for the race profile of the staff. Of the 105 permanent and contract staff employed in the Faculty in 2006 only 19% (n = 20) were African and only 1% (n = 1) was Coloured, with the remaining 45% (n = 47) and 35% (n = 37) being Indians and Whites respectively. Rank profile by race does not improve the outlook. Only 3 of the 12 African academic staff are at senior lecturer level; the remaining 9 are all lecturers. Of concern, however, is the gross under-representation of the Coloured population in the staff profile. There was only one Coloured academic staff member in the Faculty in 2006. See Figure 2 below. Ten secretaries and five admin staff are employed in the Faculty. Of the 10 secretaries, 8 are Indian and 2 are White. This trend remains the same with the technicians and/or lab assistant categories.

With regard to higher degrees qualifications, in 2004 only 44.2% of the staff had higher degrees; 38% of whom held masters' qualifications and 5.2% held doctoral degrees. Of significance, however, is that a number of staff was registered for postgraduate degrees. Hence, it is not surprising that in 2005 there was a marked increase in the number of staff with higher degrees (50.7%).

In 2006, five African Junior Lecturers were appointed as part of the Institution's strategy to address racial demographics. Hence, gains made in 2005 were reversed. Currently, only 47% of the academic staff hold higher degree qualifications.

Research

The year 2006 was a very active year with regard to research capacity building in the Faculty of Health Sciences. The Faculty established a Research Development Working Group led by Prof Lachman, HoD: Human Biology. Research participation has increased markedly in comparison to previous years. A number of staff was engaged in postgraduate studies and some completed at the end of 2006. Of the 68 academic staff (excludes junior lecturers) in the Faculty, 34 participated in research related activities in 2006, including conference attendance, studying and/or participating at research capacity building workshops.

Postgraduate enrolment in the Faculty continues to improve. We are very proud of the quality of work that the students and their supervisors continue to produce. The examiners' comments from most of our students' postgraduate research bear testimony to this observation. The faculty has graduated three doctoral degree students between 2005 and 2006.

Outputs for 2006 include:

- 11 journal articles; 19 submitted articles
- 2 international conference presentations; 12 national conference presentations
- 49 Masters Degrees were awarded in the faculty in 2006
- 1 staff member was awarded a Masters degree
- 2 Staff members obtained Doctorates in 2005/6
- Total research funding amounted to more than R593 689.00.

Staff that are obtaining Doctoral Degrees 2006/Early 2007

- A le Roux (DUT)
- P Reddy (UKZN)

Staff that are obtaining Masters

- S Reid (UKZN)
- B Mkhize (DUT)
- R Sunder (DUT)
- R Naidoo (UK)
- J Mohapi (UKZN)

Awards and Funding

- C Myburgh (Postdoctoral Studies - Netherlands for six months)
- A Razak - (NRF: Continuation)
- N Sibiya - Seed Grant NRF.

Faculty Research Strategy For 2006

- Existing staff to work toward doctoral qualifications
- All new appointments to have postgraduate qualifications
- Drive a culture of dissemination (publication, conference presentation, workshop co-ordination)
- Facilitation of research development (Research Fellows/Professors, Research Coordinator, Visiting Professor)
- Seed Funding and Research Development Grants
- Awareness of research awards available to staff (conference funding, monetary awards for manuscript submissions)
- External Research Funding
- Capacity Development in Research
- Comprehensive set of Faculty research policies and Guidelines
- Niche Area Development and support - Secure outside Funding.

Identified Research Focus Areas can be summarised as follows:

- Clinical Trials and Intervention (led by Dr A Ross)
- Applied Basic Science (led by Professor N Lachman)
- Health Professional Education (led by Professor N Gwele)
- Health Promotions and Health Systems (led by Ms J Makhanya)
- Medical Imaging and Treatment (led by Ms S Naidoo)
- Human Performance Studies (led by Dr C Myburgh).



Research Output - 2006

RESEARCH OUTPUT – 2006	No of Academic Staff			Staff regist. For HD			Research funding							Post Grad Award		Post Grad Reg	
	D	M	O	D	M	O	DUT	External	Publications			Conference Presentations		M	D		
									Acc	Sub.	Other	Nat'l	Int.				
Health Sciences																	
Faculty: Dean's Office: Research Development Workshops/Conferences etc							330 312										
Human Biology	1	4	3	2	1		138 300	12 000	4	7		8	1				
Homoeopathy		6		1													
Chiropractic	1	5					18 077		1								
Postgraduate Nursing	1	4	1	1	1		40 000		1	2			1				
Environmental Health		5	1				45 000				1						
Radiography		4	3				10 000		1	3		2					
Clinical Technology	1		3		1					1		1					
Biomedical Technology		2	4		4					1							
Child and Youth Care	1		3		2					3							
Emergency Medical Care and Rescue				7	4				3								
Dental Services		3	5	2	1		10 000		1	2							
Somatology				4	4												
Dean	1											1					
	6	33	35	6	15		561 689	12 000								0	0
Overall Total		74			21			593 689									



Community Engagement

In 2006, as part of the HEQC Audit preparation activities, the Faculty Community Engagement Working Group conducted an audit of the meaning and nature of Community Engagement in the Faculty of Health Sciences. Eleven (11) departments within the Faculty were involved in the audit with interviews taking place with heads of department, members of staff and registered learners. The Working Group noted that, many departments who started the interview feeling they had little to contribute were able to recognise aspects of community engagement work in which they were involved, or to identify potential opportunities for community engagement work either as a department or in collaborations with other departments.

Understanding of “Community Engagement”

Within the Faculty of Health Sciences, the term Community Engagement means a variety of things and/or activities. Many departments incorporate ideas related to free or subsidised services to others, both within the DUT community and outside in the wider community, locally, nationally and even, internationally. Staff and learners implement services and activities either on a voluntary or compulsory basis, and such involvement is perceived to have benefits for learners, departments, staff, DUT and the wider community.

Activities

Activities undertaken include community service whereby learners are introduced to the work environment as an opportunity to implement theory, practise skills and provide a service, especially to people for whom such a service would be unavailable otherwise (e.g. disadvantaged and marginalised groups such as the aged, young people at risk, indigent people). In some departments, this was known as “work-integrated learning” or “experiential learning” or “practical training”.

Other Community Engagement activities include free or subsidised clinical services provided at DUT clinics or other premises, sharing of professional expertise through involvement in professional boards and associations, standards generating bodies, and discipline-related organisations, sharing of facilities, equipment and time and collaborative community projects and research. Examples include the following:

Professional Leadership

- Professional Board/Council Membership
 - HoD: EMC & R
 - HoD: Homoeopathy (President)
 - HoD: Dental Services
 - Ass. Director: Clinical Technology
 - HoD: Nursing (President)
- SGB Membership
 - HoD: Somatology
 - HoD: Child and Youth Care
- Professional Association
 - HoD: Human Biology
 - HoD: Child & Youth Care
 - Senior Lecturer: Chiropractic

Department of Child & Youth Care and the Homoeopathy Department

- The two departments are involved in complimentary health care activities at the Ukubanesibindi Clinic situated in the Warwick Avenue. The Clinic caters for some of the most vulnerable groups in South Africa including children and the poor.

Department of Dental Services

- Free and/or subsidized Maxillo-Facial Prostheses.

Department of Chiropractic

- Voluntary services at various sporting events, including the Comrades Marathon, in and around Durban.
- Free services at a community clinic in the South Coast.

Department of Somatology

- Complimentary Health Care focusing on wellness - Geriatric Homes.

Department of Environmental Health in Collaboration with Graphic Design Department in the Arts Faculty at DUT

- Health Promotion at Osindisweni Hospital – design health education materials.
- Health promotion in industries around the country designing and developing digital materials (DVDs) in occupational health for use by learners and industry.

Departments of Biomedical Technology, Emergency Medical Care & Rescue, Human Biology and Postgraduate Nursing

- Responding to provincial demands for skills development in health human resources.
 - Part-time programme to upgrade health care workers qualifications from mid-level to professional diplomas (Biomedical Technology, EMC & R).
 - Development and delivery of a short course programme for mortuary workers – essential as part of HIV/AIDS prevention.
 - Increasing production of PHC nurses (high demand nationally).

Departments of Somatology, Chiropractic, Homoeopathy and Dental Services

- Free and/or subsidized on campus clinical services.

Department of Radiography

- Ultrasound services at Wentworth Hospital.

Departments of Biomedical Technology and Postgraduate Nursing Studies

- Postgraduate research studies in HIV/AIDS.

Benefits For Learners

- Opportunities to relate theory to practice, and practise skills.
- Exposure to real work environments and the complexity of implementing knowledge and skill in such environments.
- Development of social awareness and the responsibility to contribute to society.
- Development of a work ethic and understanding of professional cultures.
- Recognition and affirmation from service-recipients and other professionals.

Benefits For Community Members

- Access to a free or more affordable service, which might otherwise be unavailable or inaccessible.
- Support for organisations, which are under-resourced.

Benefits For Academic Departments And Staff

- Opportunities to provide learners with essential developmental and professional experiences.
- Networking with others.
- Marketing of the department and respective professions.
- Enhanced relevance of learning programme through community relationships.
- Opportunities for staff to maintain and enhance their own knowledge and practical skills.

Benefits For DUT

- Recognition of DUT as a socially-responsible and responsive entity.
- Marketing, especially when community engagement activities are given positive media coverage or other public attention.

INCOME GENERATING ACTIVITIES AND/OR INITIATIVES

Department of Biomedical Technology

Project: Part-time ND for upgrading KZN Health Department workers (1st intake in 2005).

Department of Environmental Health

Project: Short Course for the KZN Health Department.

Department of Human Biology

Projects: Short Course in Mortuary Certificate (KZN: Department of Health)
Editorial services for the Southern Africa Clinical Anatomy Journal
Anatomical instructional materials for a number of health sciences anatomy laboratories in HE nationally.

Department of Chiropractic

Project: Campus Clinic Services (medical aid patients).

Department of Homoeopathy

Project: Campus Clinic Services (medical aid patients).

Department of Somatology

Projects: Campus Clinic Services, a range of cosmetics and other instructional materials from a number of product houses, DoE Grant for Foundation Program (own initiative to apply, developed own proposal).

Department of Radiography

Project: Learnerships from the HWSETA.

Department of Child & Youth Care

Project: Bursaries for B. Tech Students from a US donor.

Department of Dental Services

Projects: Dental Clinic, Donor Funds for Foundation Lab, DoE grant for Foundation Programme (own initiative to apply, developed own proposal).

Department of Postgraduate Nursing Studies

Project: Short courses for industry and DoH specialized programmes.

Department of Emergency Medical Care

Projects: Consultation - Department of Health's Midlevel Worker Programme Development, Short courses in advanced life support.

Administration and Management

The Faculty, through its 2006 operational plan had committed itself to efficient and effective student administration. In general, this has been achieved with the last audit carried out by the Registrar's office indicating that nothing had to be corrected in this regard. Efficiency with regard to the administration of short courses however, remains a challenge. This could be attributed to the policies and rules that guide this process, which continue to be fashioned around the notion that learners are on campus, five days a week from 0800 to 1630. Most of the students registering for short courses in the health sciences are adult students with full-time jobs. Often they are from as far as northern KZN and the Eastern Cape and therefore find it impossible to travel to Durban just to complete administration details well ahead of the scheduled day of the course. Nevertheless, we continue to try to seek ways to deal with this particular challenge.

Over the years, beginning with the initial 2004 strategy development workshop, Faculty strategy working groups built around the identified faculty strategic imperatives have been established. These groups are led by individuals with particular strengths and have potential to strengthen faculty performance, rather than the performance of individual departments. Hence, strategy working groups, each with clearly defined terms of reference have now been established: (a) Teaching and learning working group – led by Prof N Gwele, (b) Research development working group - led by Prof N Lachman (c) Community engagement working group - led by Ms J Winfield (d) Infrastructure and infrastructural support working group - led by Mr G Bass and the (e) Governmental linkages group - led by Ms J Makhanya. Each working group is led by an individual with strategic and tactical knowledge of the tasks involved in the terms of reference of the particular working group. The Dean continues to be responsible for monitoring and supporting interventions aimed at transformation and equity.

Finances 2006

The Faculty raised a fair amount of third stream income in 2006. This, however, could have been better. All our clinics are experiencing problems with declining patient numbers due to the negative publicity DUT has received in the media, especially with regard to crime and intimidation during student protests.

Professor Nomthandazo Gwele

Executive Dean: Health Sciences

