



HIGHER EDUCATION QUALITY COMMITTEE

**EXECUTIVE
SUMMARY**

**Audit Report
on
Tshwane University of Technology**

**Report of the HEQC to the Tshwane University of
Technology**

July 2008

HEQC Audit Report Number 18

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Acronyms

AP	Audit Portfolio
CCPD	Centre for Continuing Professional Development
CDS	Curriculum Development Support
CE	Cooperative Education
CESM	Classification of Educational Subject Matter
DoE	Department of Education
DQP	Directorate of Quality
DVC	Deputy Vice-Chancellor
ED	Executive Dean
HEDS	Higher Education and Development Support
HoD	Head of Department
ICT	Information and Communication Technology
IF	Institutional Forum
IOP	Institutional Operating Plan
IP	Institutional Profile
ITS	Integrated Tertiary Software
LIS	Library and Information Service
NSSP	Non-State Subsidised Programmes
PQM	Programme and Qualifications Mix
RAM	Resource Allocation Model
R&D	Research and Development
RIP	Research, Innovation and Partnerships
RPL	Recognition of Prior Learning
SDS	Student Development and Support
SLP	Short Learning Programme
SRC	Student Representative Council
TLT	Teaching, Learning and Technology
TNG	Technikon Northern Gauteng

OVERVIEW OF THE AUDIT

INTRODUCTION

The Higher Education Quality Committee (HEQC) of the Council on Higher Education (CHE) has statutory responsibility to conduct institutional audits as indicated in the Higher Education Act of 1997. This responsibility of the HEQC is also recognised by the South African Qualifications Authority (SAQA) in the accreditation of the CHE as the Education and Training Quality Assurer (ETQA) for the higher education band.

The Audit of Tshwane University of Technology, (hereinafter referred to as TUT) was conducted by the HEQC in terms of its mandate. This document reports on the audit process and findings based on the Audit Portfolio with its appendices provided by TUT, supplementary documentation requested from the institution, and interviews and observations made during the audit visit that took place between 15 and 19 April 2007.

This report¹ contains an overview of the audit visit, the findings of the Panel in relation to the audit criteria set by the HEQC, and a list of the commendations and recommendations made by the HEQC.

THE AUDIT PROCESS

In November 2005 the Executive Director of the HEQC secured the consent of the Vice Chancellor and the executive management team of TUT that the University would participate in an institutional audit from 15 to 19 April 2007.

¹ The report includes four appendices: Appendix A lists the objectives of HEQC audits; Appendix B provides the names of the members of the Audit Panel, Appendix C lists the documents submitted by TUT and Appendix D contains the audit visit schedule.

TUT conducted its institutional self-evaluation in the agreed time and produced an Audit Portfolio for review by the Audit Panel. The self-evaluation was carried out by 6 working groups corresponding to each of main audit criteria. The groups consisted of managers, academic and students. Workshops were also held across the institution about the audit process and procedures (AP: v). The Vice Chancellor chaired the central Audit Planning Committee which included Deans, Directors of campuses, academics and students. The Audit Portfolio was approved by Senate on 22 January 2007 and then by Council. Tshwane University of Technology (TUT) submitted to the Institutional Audits Directorate of the HEQC a comprehensive portfolio on 25 January 2007, which included a self-evaluation document, CD, and a file of supporting evidence. The latter contains *inter alia* plans, policies, and reports. An Institutional Profile was provided by the Directorate of Monitoring and Evaluation of the CHE.

The HEQC constituted an Audit Panel consisting of senior academics and academic administrators from the higher education community, all of whom had taken part in auditor preparation workshops run by the HEQC. An Audit Portfolio meeting was convened in Pretoria on 28 February and 1 March 2007 at which the Audit Panel considered the Audit Portfolio in preparation for the audit visit. During this meeting, the Audit Panel identified additional documents to be requested from TUT prior to the audit visit.

A senior member of the HEQC staff undertook a preparatory visit to TUT in March 2007. During that visit, the format and programme for the visit, and other details of the audit were discussed and agreed with the senior management of TUT.

The audit visit took place from 15 to 19 April 2007. The Audit Panel undertook a tour of the campus on 15 April and conducted interviews with senior management and members of different governance structures on 16 and 17 April. On the afternoon of 17th and on 18th April, the Audit Panel split into three groups and interviewed a wide range of TUT's staff members and students. Open sessions were also available for any staff or student member of the institution as well as members of the community to meet the Audit Panel and make submissions. Some staff members and union representatives made use of the opportunity to address the Panel. Interviews were concluded on 19 April and verbal feedback was given to the Vice Chancellor and his executive management team.

In all, the Audit Panel interviewed more than 312 people in 54 interview sessions during the audit visit, including

- Council members
- The Vice Chancellor and members of his executive team
- Academic and academic support staff
- Administrative staff
- Full-time and part-time undergraduate and postgraduate students
- Civic and community representatives
- Alumni.

Executive Summary

Institutional Mission

1. Tshwane University of Technology (TUT) is a large, residential, multi-campus university. It is mainly a contact learning institution, but has a distance learning component. It has six campuses in four provinces and nine teaching and learning delivery sites. The largest campus is *Pretoria West*, which also houses the University's management. The other campuses are *Arcadia* and the *Arts* in central Pretoria; *Soshanguve North* and *Soshanguve South* in Pretoria North; *Ga-Rankuwa* in North West Province; and three distant campuses: *Polokwane* in Limpopo, and *Witbank* and *Nelspruit* in Mpumalanga.
2. TUT was established at the beginning of 2004 as a result of a merger between Technikon Northern Gauteng (TNG), Technikon Pretoria (TPTA) and Technikon North West (TNW) as part of the restructuring of the higher education system. TNG and TNW were historically disadvantaged institutions with mainly African student enrolments. TPTA was a historically advantaged institution with a predominantly white student population and the medium of instruction was Afrikaans. Between 1995 and 2003, each of the three institutions underwent a period of rapid expansion in headcount enrolments.
3. TUT offers 429 national diploma and degree qualifications, including doctoral degrees (AP: 34). It has 70 departments, organised into seven Faculties: Science, the Art, Humanities, Economics and Finance, Engineering and the Built Environment, Information and Communication Technology, and Management Sciences. The institution has a number of Centres and Institutes. In 2005, student registration was approximately 60,000, making TUT South Africa's largest university of technology and the second largest university in South Africa after UNISA. Ninety-three percent of its students were undergraduates. Almost 10,000 of its students live in 20 residences across its campuses (AP: 16).
4. TUT's vision and mission were developed in September 2003 during the pre-merger phase, with the merger coming into effect in January 2004 (AP: 19). They were informed by the fact that TUT would soon be awarded the status of a university of technology. The Panel heard during interviews with executive management that, as it was now three years since the institutional name change, the vision and mission needed revision and therefore also the strategic plan. Such revision, however, would not be substantial but would be in line with the

Institutional Operational Plan (IOP) which was submitted to, and accepted by, the Department of Education (DoE) during the last quarter of 2006.

5. TUT has been involved in a number of discussions with bodies such as SA Technology Network and the Australian Universities of Technology Association in an attempt to gain an understanding of what it means to be a university of technology. However, the Panel found during interviews that there was no common understanding amongst management and staff of what needs to be changed for this new status to be achieved substantively. Given the lack of a shared understanding across the institution of what it means for TUT to be a university of technology, the Panel encourages the institution to use the experience of international universities of technology to help formulate for itself what it means to be a university of technology in substance and to develop appropriate terms of comparison and indicators, particularly in relation to performance in the core functions, that would allow the institution to chart its progress towards the attainment of this goal.

Recommendation 1

The HEQC recommends that Tshwane University of Technology select appropriate international universities of technology as models that would help the institution to understand what it means to be a university of technology in substance, and to develop its own indicators so that it can measure its progress towards achieving this goal.

6. Although the student demographic profile of TUT is reflective of the population, issues of equity and redress have not been resolved when it comes to success and graduation rates. Given that at the undergraduate level White, Indian and Coloured students have a higher success rate than African students in all categories, the Panel was of the view that this points to the need to address the consequences of poor schooling for students who come from historically disadvantaged backgrounds with academic support and the professionalisation of teaching and learning.
7. In terms of its academic staff demographic profile, TUT has not made progress comparable to that of the student profile. By 2005, academic staff members in the newly merged institution were predominantly white, at 61.48 percent (IP: 53). In terms of gender, female academics are clustered in the lower echelons of academic staff. The traditional stereotypical patterns remain, with males outweighing females in management, academic and professional categories and females dominating in the non-professional and service categories. Changes in the demographic composition of management have addressed representation in terms of race but have left gender almost untouched. The Panel encourages the institution to give attention to issues of gender equity in senior positions at TUT.

8. The Panel is of the view that efforts are needed to support the equity agenda through staff development. It heard during interviews with management of the importance that the institution places on developing its academic staff both as a means to achieve equity and redress and to help TUT give substance to its goal of becoming a university of technology (AP vol.1: 76). The Panel was informed by senior management that a workplace skills plan has been developed from its Teaching and Learning Strategy. This plan is aligned with skills development policies and the IOP and takes into account the new status of university of technology. However, this plan needs to be consistently applied across all levels of academic staff on all campuses. The Panel encourages TUT to continue with its strategy to address staff equity and redress, particularly at senior levels in the institution.

Recommendation 2

The HEQC recommends that Tshwane University of Technology strengthen its plans to attain its employment equity targets at all levels within the institution and ensure that these plans have clear time frames and allocation of responsibilities.

9. Staff indicated during interviews that it has been a difficult process to develop a new institutional identity. It has been characterised by an overload of new policy development and, in some cases, overhasty policy adoption and changes in the practical situations of staff, all of which created confusion and uncertainty. Nevertheless, the Panel found that staff generally felt part of the change process and were supportive of the emerging new institutional culture, especially that of the research culture. The Panel acknowledges the progress made by TUT in relation to the operationalisation of the merger and is pleased to hear from the broader university community that there is some consensus about the direction and purpose of the new university.
10. The Panel noted with concern that issues of ideology, race, language and work ethic generally constitute a source of tension among and between staff. While these are being addressed through various policies the Panel is of the view that they are not being sufficiently systematically considered and discussed as part of the development of a new institutional culture. The Panel urges the institution to give due consideration and attention to the disparate cultures, particularly in terms of race, language and work ethic, that exist at TUT and to provide appropriate conditions that allow all stakeholders to participate in creating a new and inclusive identity. In this regard the Panel is of the view that the Faculty based campus model provides the institution with the opportunity to identify the values which will underpin the forming of a new institutional culture, develop a new work ethic and consider the type of experience that the institution as university of technology wishes to provide for its students.

Governance, Management, Planning and Resource Allocation

11. At the time of writing the Audit Portfolio, the governance structures of TUT were still in the process of being finalised and the Institutional Statute as provided for by the DoE for merging institutions was used instead. (AP vol.1: 24). The Panel learned during interviews with members of the Institutional Forum (IF) felt that it has not been given the opportunity to discharge its statutory responsibility in advising Council, which has made difficult for the IF to fulfil its role in the life of the institution. The Panel urges the institution to ensure that the IF is empowered to carry out its mandate.

12. TUT has a central SRC located in Pretoria West and local SRCs on the various campuses. The Panel heard during interviews with SRC members across the campuses of tensions between local SRCs and the central SRC and of inadequate communication between them. Furthermore, the Arts and Arcadia campuses do not have a full SRC as these campuses are seen as part of the Pretoria West campus. Noting that the SRC is still an interim committee based on old structures and statutes, the Panel encourages the institution, when considering the new SRC constitution, to ensure that all the campuses have functional SRCs. When these deliberations are complete, the Panel urges the institution to finalise the statutes and put in place the new constitution.
13. The Panel confirmed in interviews with management and academics that academic departments have not yet been consolidated and that the process of appointing staff, particularly heads of departments, is not yet complete. It is clear to the Panel that the delay in finalising this process could negatively affect the quality of teaching and learning and therefore constitutes a potential risk for the academic reputation of the institution. The Panel urges senior management to finalise the appointment of staff, particularly at the HoD level, as the uncertainty at middle management level is having a negative impact on the quality of provision and contributing to the already low staff morale throughout the institution. The Panel is of the view that, once this is finalised, attention needs to be given to the negative impact that the concern with the more operational aspects of the merger has had on the quality of the institution's degrees and the effect that this may have had on its reputation.
14. The Panel suggests that the institution might want to develop a way of ensuring that there is constructive communication with the unions in order to create a bridging space during this transitional period. The Panel understands that senior management has tried to communicate with the various constituencies within the institution. However, interviews with students and staff who do not necessarily belong to unions suggest that targeted and more frequent information from senior management might help to achieve a better understanding of the strategic goals the institution is trying to achieve. While the Panel realised that there might be difficulties in the way that different constituencies are interpreting some of changes that the institution is implementing, management may like to identify what the issues are and find ways to address these.

Recommendation 3

The HEQC recommends that Tshwane University of Technology develop and implement a strategy to ensure that there is open and inclusive communication across the institution and with all stakeholders.

15. The Panel noted that in order to deal with the challenges of merger which involves nine campuses and seven faculties the institution has chosen a single Faculty location model, which is currently in the process of implementation (AP vol.1: 25). The Panel is of the impression that senior leadership has thought carefully about the implications of this decision and weighed its transformative potential against its possible drawbacks. It seems to the Panel that, once all the environmental, logistic, resourcing and project management aspects and implications of the relocation of Faculties are addressed, TUT may well have created a solid and innovative base from which to grow the university. The Panel is of the view that the use of this model is a strong indication that the institution is seeking to provide equivalence of provision in the long term and to develop into a unified university which integrates the three constituent institutions. This model also enables the institution to develop a new and inclusive institutional culture that provides equivalence of experience for students at a university of technology.

Commendation 1

The HEQC commends Tshwane University of Technology for developing and implementing a new organisational structure that provides a foundational structure for the institution to build upon.

16. On the matter of the relocation of Faculties, the Panel would like to point out that the development of the urban campuses might present larger developmental challenges than TUT can deal with on its own. During its visits, the Panel observed the poor infrastructure and facilities at the Soshanguve and Ga-Rankuwa campuses. The Panel heard during interviews with the Executive Deans that this unevenness has the potential to damage the viability of the single Faculty location model. It may be that upgrading the infrastructure and support services available at, for example, Ga-Rankuwa and Soshanguve, will have to be accompanied by an integrated development plan in which TUT can partner with provincial and municipal governments, and local communities. The Panel is aware that integrated development moves at a much slower pace than the institution would hope. It would like to encourage TUT to continue with the operationalisation of its plans for finalising the single Faculty location model while it engages with national and local role players about the socio-economic development of these areas.

Recommendation 4

The HEQC recommends that Tshwane University of Technology engages the local and provincial authorities in relation to the development of the Soshanguve and Ga-Rankuwa campuses in order to ensure that the relocation of faculties is done in the context of a social compact which supports the institution's efforts to attract staff, students and suitable industrial partners.

17. During a range of interviews with academics and students the Panel heard concerns about issues of access. The move to a Faculty based model may compromise poor and rural students' ability to access higher education; for example, potential students would no longer be able to enrol for their preferred course at the nearest campus to their home but might have to travel from Nelspruit to Witbank. This places another cost burden on already poor students. It also has implications for the institution in terms of its future student profile with respect to South Africa's demographic profile. The Panel therefore urges the institution to give attention to this issue and to develop mechanisms to ensure that access is not compromised.

Recommendation 5

The HEQC recommends that Tshwane University of Technology give due consideration to the impact that the additional costs of the Faculty based campus model will have on the access to higher education of financially disadvantaged students.

20. The Panel understands that the complexity of the merger makes heavy demands on the time and attention of senior managers. In the case of Executive Deans, especially where the Dean is also a campus head, the current level of administrative demands is unlikely to be sustainable and could undermine the Dean's capacity to focus on strategic issues at Faculty level. The Executive Deans, moreover, have been singled out as key players in the system of academic accountability at the institution. The Panel heard during interviews with some Executive Deans that supporting mechanisms need to be put in place to ease their administrative burden so that they are able to engage effectively with this system and give expression to the strategic objectives of the institution at Faculty level. Furthermore, in the context of the implementation of the single Faculty location model, the Panel suggests that senior management explore the idea of including the Executive Deans in the Executive Management Committee as a way to (i) prevent Deans from managing their Faculties as separate disconnected entities within the institution, and (ii) give expression to the search for a new academic identity for TUT; firstly as a university and secondly as a university of technology.

21. The Panel noted the difference between the reporting lines for those managing the urban campuses and those for managing the distant campuses and is concerned that this may have a negative impact on the quality and the equivalence of the teaching and learning provision across the institution. The Panel would like the institution to consider whether these reporting lines should be revised. The Panel heard during interviews with the Executive Management Committee and observed during the site visit that Polokwane has a particularly poor infrastructure and facilities in terms of safety, staffing and student support. The Panel heard that this severe lack of equitable provision in terms of the learning environment is a matter of concern for the executive management but the institution does not have the funds to improve the campus. The Panel found from its site visit and interviews that Polokwane generally has an enthusiastic and committed management and staff. It also heard from external and industry partners that the campus is contributing to Polokwane's human resource needs. The Panel urges the institution to engage in constructive discussion with the relevant role players to find ways to develop this campus so that it will be able to offer its students a safe and proper learning environment.

22. The Panel learned that the two Mpumalanga campuses are being aligned with the National Institute for Higher Education (NIHE) and the Mpumalanga Province Growth and Development Strategy. The Panel noted that for these campuses have strategic focus areas have been identified partly to avoid duplicating programmes in the province and partly to meet the human resource needs of the two areas. To this end, industry-type programmes will be offered at Witbank and services-type programmes at Nelspruit (AP vol.1: 15). This change will also serve to position the campuses when the NIHE comes into operation during 2007. The Panel noted with appreciation the enthusiasm of staff members who were interviewed at these campuses for the academic project but it was concerned about equity of provision.

23. The Panel heard during interviews with management that the Resource Allocation Model goes some way towards ensuring that all the learning sites are adequately catered for. The Panel was of the

view, however, that this model would not address the historical imbalances, in particular at the Soshanguve and Ga-Rankuwa campuses, which have serious infrastructural problems that need to be addressed. During interviews with the Executive Deans, the Panel heard that this model also does not address infrastructural differences across Faculties and as a result there is no equivalence of provision across sites, even when students are in the same Faculty. The Panel heard of the hope, as noted earlier, that this would be addressed by funding from the DoE. The Panel would like to encourage the institution to take into account as far as possible, when allocating resources, the inequitable infrastructure that TUT has inherited.

Recommendation 6

The HEQC recommends that Tshwane University of Technology develop strategies that have clear time frames and allocation of responsibilities to ensure that there is an equivalent learning experience across campuses for all of its students. This includes giving attention to infrastructure, quality of staff, student and academic support.

24. The Panel is concerned about the lack of a strategic and conceptually informed approach to quality management at the institution. The Panel urges senior management to take a more active role in steering the institution's quality agenda and to play an integral part in this endeavour. Furthermore, the institution should consider a conceptualisation of quality appropriate to a university of technology that goes beyond compliance and embeds quality in the core functions. The Panel encourages TUT to develop strategies to ensure that the quality management system is implemented consistently and that review mechanisms are put in place that include the implementation of the identified enhancements, thus completing the quality cycle.

Recommendation 7

The HEQC recommends that Tshwane University of Technology conceptualise its quality management system in such a way that it moves beyond compliance and focuses on provision of good quality teaching and learning, research and community engagement. For this to be possible senior management needs to take a more active role in providing intellectual and strategic direction in terms of the formalisation, implementation and monitoring of a quality management system across all campuses which suits the profile of a university of technology.

25. The institution does not engage in formal benchmarking activities although it does benchmark itself against some national targets. The Panel urges the institution to develop and implement a benchmarking system. This is particularly important as the institution will be able to use its benchmarking activities to help chart its path to becoming a substantive university of technology. The Panel did not find evidence of an institutional approach to user surveys and impact studies. It did find, however, that some surveys take place; for example on library services (AP vol.1: 97). No evidence was found of employer satisfaction surveys being conducted. During interviews with employers the Panel heard that there is considerable unhappiness with the quality of degrees that the institution awards. The Panel urges the institution to develop and implement employer surveys, which would allow TUT to assess the relevance and value of its qualifications in the labour market.

Recommendation 8

The HEQC recommends that Tshwane University of Technology give attention to the development of appropriate institutional systems for benchmarking, student and

employer surveys, and impact studies which will include implementation plans with time frames and the allocation of responsibilities.

General Arrangements for Teaching and Learning Quality

26. TUT has a number of strategies and of policies, albeit at different stages of development, approval and implementation, to guide and monitor its academic provision (AP vol.1: 37). The Panel concurs with the institution that the main issue in terms of policy is implementation (AP vol.1: xii). It urges the institution to finalise, consolidate, implement and monitor the many policies that affect the quality of teaching and learning and consider their resource implications for the institution. The Panel also encourages the institution to consider during this process the curriculum implications (and resource implications) of driving strategic issues such as ‘cooperative learning’ and ‘blended learning’. It suggests that the institution decide whether these modes of learning are to be engaged with across all offerings or only in certain programme niche areas. It was of the view that the lack of an academic plan consistently applied and resourced across the institution has a negative impact on the quality of teaching and learning at the institution.

Recommendation 9

The HEQC recommends that Tshwane University of Technology develop and implement a comprehensive academic plan based on its new identity as a university of technology. This would also provide a framework for making decisions about the rationalisation of its existing programme and qualifications mix.

27. The Panel learned in interviews with HoDs, academics and students of differences in the management of experiential learning across departments, including placements. It also heard that quality mechanisms for evaluating and monitoring experiential learning are not standardised or equally implemented across programmes at all campuses. The Panel moreover heard that work-placements are not managed by the institution and that often students need to find placements by themselves. In its Teaching and Learning Strategy, there is no indication of how TUT as a university of technology will prepare students for experiential learning in a way that will fully equip them with technical and non-technical skills and enable them to access the job market. The Panel strongly urges that specific student interventions be put in place to ensure the preparedness of students for the workplace. It learned from interviews with a range of staff that the process for recording, monitoring and assessing the experiential learning component is uneven across campuses.

Recommendation 10

The HEQC recommends that Tshwane University of Technology ensure that every student in a programme with an experiential learning component is placed appropriately, that there is a functioning system to record, monitor and assess the content and progress of the student’s learning experience in the workplace, and that the system is implemented consistently and monitored across all campuses.

28. In terms of blended learning, programmes are delivered using an updated infrastructure and instructional modes. The Panel found during visits to the campuses, and received confirmation in interviews with staff, that the infrastructure and instructional modes are not fully accessible to all

students across campuses and that staff training has not occurred across all campuses. This has negative implications for success and throughput rates. The Panel urges the institution to determine the extent to which the use of technology in teaching and learning is to be an institutional strategy and allocate resources accordingly. Furthermore, the Panel suggests that the institution consider the implementation issues of strategic curriculum thrusts such as cooperative education and blended learning. As the institution defines a new mission and vision in the context of its search for a new identity as a university of technology, it needs to engage in debate on these issues.

29. The Panel heard during interviews with the Executive Deans that the work of the Academic Committee has been focused mainly on operational issues related to the merger, and that it needs to shift its attention to implementing policies and achieving strategic targets for teaching and learning. While the Panel understands that so far the operational demands of the merger have been such, that concerns about the quality of the teaching and learning core function were not prioritised, it is important that the institution prioritises the improvement of teaching and learning as a matter of urgency.

Recommendation 11

The HEQC recommends that Tshwane University of Technology make the improvement of the quality of teaching and learning an institutional priority and that strategies and resources are put in place for this purpose. In doing this, the institution might want to consider the development of appropriate mechanisms of support to professionalise teaching as a way of responding to the pedagogic challenges posed by TUT students.

30. The Panel noted from the TUT prospectuses that the institution offers what it calls ‘foundation studies’ in many of the Faculties, but it found during interviews with a wide range of managers and academics that most of these are in fact short courses. The Panel learned with concern during interviews with staff and students across the campuses that short courses are being offered in two ways. Firstly, they are offered to students who are unsuccessful in their applications for admission to diploma programmes. Secondly, they are offered to applicants for the formal academic programmes once these are ‘fully subscribed’. In both instances, short courses are being used as foundation programmes. The Panel heard during interviews with a range of academics that these short programmes are often very similar in content to the formal programmes. It heard with grave concern during interviews with academic staff that, contrary to students’ expectations, successful completion of the short course does not guarantee a place in the formal learning programmes. The Panel urges TUT to discontinue the use of short courses for the purpose of admission and access. It should instead consider the wider use of foundation provision.

Recommendation 12

The HEQC recommends that Tshwane University of Technology discontinue the practice of admitting unsuccessful diploma applicants to short courses and instead develop and implement appropriate foundation provision to meet the needs of these students.

31. The Panel noted from the Portfolio and heard during interviews of the confusion between the role played by bridging courses, on the one hand, and the DoE funded foundation provision, on the other, as a student development throughput and success strategy (AP vol.3: 52). The Panel suggests that

TUT consider the broader use of extended curriculum foundation provision as an institutional student development initiative.

Recommendation 13

The HEQC recommends that Tshwane University of Technology reconceptualise its access and academic development programmes to ensure that students are optimally prepared and supported throughout the duration of their studies and that such programmes are implemented across all sites of delivery.

32. The Panel received confirmation during interviews with Executive Deans, HoDs and academics that the quality of programme management is currently uneven across the campuses. This constitutes a major academic risk for the institution in terms of student experience, quality of graduates and reputation. The Panel urges the institution to ensure that there are substantive HoDs in all areas of the institution. Furthermore, it is important that academic leadership at HoD level is properly prepared, through some form of induction or training, so these staff will be able to manage the quality of programmes.

33. The Panel was concerned to learn about the large percentages of part-time academic staff across the campuses. One of the concerns about the large numbers of part-time staff is the inaccessibility of part-time staff to students. While many academic section heads have put in place various mechanisms to manage part-time staff and student expectations, it was generally acknowledged that the problem is being contained rather than resolved. The Panel understands that this problem has been aggravated by the merger. However, the Panel urges the institution to ensure that the number of full-time academic staff is sufficient to create an enabling teaching and learning environment for students across all campuses. This should be done by balancing the need for permanent staff with the need to provide industry experience for the students.

Recommendation 14

The HEQC recommends that Tshwane University of Technology ensure that the number of full-time academic staff is sufficient to create an enabling teaching and learning environment for students across all campuses.

34. All problems notwithstanding, the Panel noted with appreciation the dedication and commitment of many lecturers at all campuses and was pleased to note students' enthusiasm about the quality of education offered at TUT. The Panel also heard positive remarks from external partners about the new status of TUT as a university of technology and expectations that this would enhance graduate capabilities. Some representatives from the employer sector, however, were concerned that the quality of TUT's graduates may have declined as a result of the merger. The Panel would like to impress upon the institution the importance of improving the quality of its graduates and of building and sustaining stakeholder and employer confidence in its graduates and of assuring external stakeholders and partners that the institution is taking the necessary steps to minimise the impact the merger may be having on the quality of provision.

35. **Academic Support Services.** In interviews with students, staff and the Director of SDS, the Panel heard that student development programmes are only fully implemented in the Pretoria West campus and unevenly across the other campuses. The Panel heard during a range of interviews with staff and students across all campuses of a number of issues pertaining to student development and support. The Panel concurs with the institution that the challenge is to ensure equity and equivalence

of these services across all campuses (AP vol.1: 69–74). Student development needs to be more equitably offered across campuses and integrated into programmes, and it needs to take into account national student development research.

36. During site visits and in interviews with staff and students at the campuses, the Panel found that residence facilities and their services are unequal across campuses. The residences at Soshanguve are particularly poor in comparison with those at Pretoria West. There are also issues of safety and security, in particular for female students. The Panel urges the institution to take steps to improve the quality of its residences so that students have a comparable residence experience across the institution. The Panel also noted that the residence admission policy is largely determined by academic performance. This poses a financial challenge for financially disadvantaged and rural students who upon failing a course may continue to study at the institution but have to look for private accommodation. The Panel would like TUT to give consideration to reviewing those aspects of its Residence Policy which might not be supportive of disadvantaged students.

37. TUT recognises the importance of financial aid as a means of ensuring access to higher education study for the financially disadvantaged (AP vol.1: 101). Efforts are also made by the institution to raise funds from the private sector as there are insufficient funds available to assist the large number of students in need of financial support. The Panel was pleased to learn in interviews with some students that they were aware of financial opportunities and the process to be followed to obtain financial aid and that there was support from staff at all campuses.

38. **Library** User Satisfaction Surveys show that the library services do not adequately meet the needs of postgraduate students and research staff. Problems with space, access for the disabled and outdated equipment were also identified. During visits to the campuses, the Panel found that there is a lack of seating space for students to study, insufficient access to computers and insufficient copies of prescribed and recommended books. Pretoria West has good library facilities, but these are not matched by the other campuses. The Panel found that there was no equivalence of library provision across the campuses in terms of infrastructure and provision. The Panel learned that TUT has not taken steps to attend to these issues owing to a lack of financial and human resources (AP vol.1: 97). The Panel urges the institution to try to develop and implement a plan to address these concerns.

39. Each campus has an Electronic Resource Centre, which is linked to the library but functions as a separate unit (AP vol.1: 95). The Panel found during interviews with staff and students that these centres are well used but that the space and facilities are inadequate for the number of students enrolled at the campuses. It found that there are two of these centres at the Pretoria West campus, and that these are open longer than the usual library hours. The Panel again noted the inequitable provision of facilities across campuses.

Recommendation 15

The HEQC recommends that Tshwane University of Technology find innovative ways to develop and resource a five-year growth plan for its libraries that will ensure sustainability and equivalence of provision across campuses.

40. **Information and Communication Technology** The Panel found that the computer laboratories in the various departments are effectively supported by the Computer Support Services. However, the Panel found during campus visits and confirmed during interviews with staff and students that the student-to-computer ratios across departments and campuses are too high and uneven to support the

institutional core functions of teaching and learning and research adequately. At all the campuses other than Pretoria West the Panel heard about the short period during which students could access computers, and the length of time each student was allowed computer access. The Panel urges TUT to develop a system that will ensure delivery and monitoring of equitable student access to computers across all campuses.

41. The Panel heard during interviews with staff and students that IT support across the campuses is inadequate and uneven. The support at some of the campuses typically consists of one person who is responsible for servicing all the academic and administrative units, as well as attending to student needs. Given the critical importance of IT in teaching and learning, the Panel urges the institution to strengthen its capacity to provide IT support across all the campuses. It suggests that the institution develop a system to address the issue of equitable access to IT and that student access to ICT be monitored across all campuses.

Recommendation 16

The HEQC recommends that Tshwane University of Technology develop an ICT policy that addresses the use of IT facilities, including adequate Internet access for students and equitable access to IT facilities for all students across campuses, and ensure that such provision is monitored and evaluated.

42. **Certification.** The Panel noted that a number of quality risks have been identified in the certification process, one of which is the failure of staff to adhere to approved policies and procedures. This constitutes a risk for the institution with regard to the integrity of its qualifications. The Panel urges TUT to put in place a monitoring system to ensure the consistent implementation of its certification policies and procedures.

43. **Short Courses** The Panel was not clear about the impact that the full suite of short courses would have in furthering the aims and objectives of the institution or about the responsive of short courses to industry, regional or national needs. The Panel heard during interviews with managers and students across the campuses that some academic staff members are not available for their mainstream teaching responsibilities as a result of their involvement in teaching short courses. The Panel is concerned that the short courses could have a detrimental effect on the provision of mainstream academic programmes. The Panel urges the institution to give attention to the impact of the provision of short courses on formal qualifications offered by the institution.

Recommendation 17

The HEQC recommends that Tshwane University of Technology investigate the quality of the considerable number of short courses currently being offered and their impact on the mainstream activities of departments and Faculties.

44. **Programme Development and Review** The Panel found during interviews with academics that not all programmes have advisory boards and heard of instances that where they do exist, meetings do not take place. The Panel urges the institution to put mechanisms in place to ensure that all programme advisory boards are functioning and that monitoring and review procedures are implemented. The Panel noted with appreciation the efforts made by DQP to strengthen the review process.

45. The Panel learned in interviews with academics that student academic performance data and programme evaluation surveys are used as well as advisory boards with industry and subject specialists were used by DQP to triangulate programme performance in the Faculty of the Arts. The Panel concurs with TUT that this is an example of good practice and should be extended to all Faculties (AP vol.1: 52).

Commendation 2

The HEQC commends Tshwane University of Technology for the good practice established by DQP in the 2006 Faculty of the Arts Programme Reviews.

46. **Staffing and Development** The Centre for Continuing Professional Development (CCPD) oversees the Workplace Skills Plan for TUT and to offer generic skills development for all staff at the institution. According to the Portfolio, while the DQP, CCPD and HEDS 'report to a different senior manager, greater cooperation and coordination is achieved through Academic and Administrative committees' (AP vol.1: 67). During interviews with a range of staff, the Panel confirmed the institution's concerns about a lack of synergy between the various units responsible for the training and development of academic staff and confusion about the roles, relationships and functions of the various units/sections. The Panel encourages the institution to clarify the roles and responsibilities of the CCPD, HEDS and DQP and ensure that their efforts are coordinated.

47. **Assessment.** The Panel concurs with the institution that mechanisms should be developed and implemented across all Faculties and campuses to ensure consistency in TUT's assessment practices. The Panel found that the moderation administration process is problematic across the campuses. It heard that (i) moderators are not always appointed, (ii) if moderators are appointed, they do not get the examination papers timeously, and (iii) academic coordinators do not always receive the moderators' feedback. The Panel heard during interviews with academics and staff that supplementary examinations follow immediately after the regular examinations and that this does not allow sufficient time for the papers to be moderated, results to be published, and students to study for the subjects in which they are being re-examined. The Panel urges the institution to reconsider its scheduling of supplementary examinations as the limited time for marking, moderating and publication of results between the examinations seem to be having a negative effect on the quality of the academic process.

Management of Research Quality

48. The Panel heard during interviews with management and a number of academics of the drive to establish a research culture across all TUT campuses. Professors of Research and Innovation have been appointed at various Faculties and report directly to Deans. Their role is to develop a research culture through capacity development workshops and by providing advice to academic staff on publications and conferences. In addition, the institution has instituted a number of mechanisms to give substance to TUT's status as a university of technology. These include annual junior and senior researcher awards and the allocation of research funds to researchers who have contributed to subsidised journals (AP vol.1: 132). The Panel acknowledges these initiatives with appreciation. Funding, both in terms of study leave and research leave, is available for staff wishing to pursue higher degrees. The Panel congratulates the institution for its commitment to the further development of the research and innovation function and the improvement of staff qualifications.

Commendation 3

The HEQC commends Tshwane University of Technology for its investment in staff development to enable academics to acquire higher degree qualifications, which has the potential to yield significant returns for TUT's research capacity and research culture in the future.

49. TUT has established an Innovation Office to drive the commercialisation of research. Understandably, its work remains in its infancy and appears to be done on an *ad hoc* basis. There is a broad understanding among researchers that innovation and partnerships are integral to becoming a university of technology in substance. However, the Panel found during interviews with management that there appears to be some misconception about the role that needs to be played by the institution in pursuing its commercialisation objectives. In this regard, the Panel suggests that TUT consider defining its place in the commercialisation continuum through the facilitation of partnerships with relevant industry groups.

50. TUT has developed and is in the process of implementing a number of strategies for increasing its research output in line with being a university of technology. The Panel is of the view that the various initiatives that TUT has embarked on will contribute to an increase in research output, including publications, in the Science, Engineering and Technology disciplines, and thus support the institution's objective of becoming a substantive university of technology.

51. TUT is committed to growing its enrolments in, and procedures on, postgraduate studies in keeping with its new status as a university of technology. The Panel concurs with the institution that the absence of clear criteria for the evaluation of proposals could lead to uneven standards in their acceptance (AP: 125) and agrees that the establishment of a Higher Degrees Committee could help eradicate inconsistencies across departments and Faculties. This could also help TUT in its drive to expand postgraduate provision.

Recommendation 18

The HEQC recommends that Tshwane University of Technology establish a Higher Degrees Committee to lead the further development of a research culture at the institution that will embrace responsibility for postgraduate student supervision and student completion, the need for consistency in the application of research student policies and procedures, and student publication requirements.

52. The Panel noted in documentation provided and heard during interviews with postgraduate students and staff that the policies and procedures are not rigorously adhered to across departments and campuses. The uneven assessment of these constitutes an academic risk for the institution in terms of the quality of its graduates. The Panel encourages the institution to develop mechanisms which will ensure the consistent application of policies and procedures across all Faculties and campuses.

Management of the Quality of Community Engagement

53. The institution is fully aware that despite the existence of a number of community engagement projects, there is no conceptualisation or strategy that would give direction to existing and future activities in this area. The Panel agrees with the institution that defining TUT's communities might be a first and necessary step in the development of community engagement as an important core function of the new university. The Panel encourages the institution to use the process of reviewing TUT's mission and vision to engage with this issue and to take as its point of departure the range of already existing activities in its Faculties and campuses. This exercise will also have to engage with the development of appropriate mechanisms for managing the quality of community engagement.

Recommendation 19

The HEQC recommends that Tshwane University of Technology engage in an institution-wide debate on who constitutes its community for purposes of engagement, develop a framework, policies and implementation plans by means of which community engagement can be quality managed and integrated into the curriculum, establish an institutional structure to direct its activities, and allocate responsibilities.

Conclusion

TUT is entering a new phase in the consolidation of the merger which created the institution in 2004. With its approximately 60,000 students, its nine campuses spread across four provinces, its designation as a university of technology, and its growing research and technological innovation profile, TUT could make a valuable contribution to the goals of South African higher education and particularly to the socio-economic development of its immediate region. It could do this through providing access with success to previously disadvantaged students, by giving effect to a differentiated mission (that of a university of technology), by forging research and training partnerships with the world of work, and by contributing to social development through its community related initiatives.

The university has taken some of the initial steps towards achieving its potential, for example in improving staff qualifications, in foregrounding its research activities, and putting policies and initiatives in place for quality improvement. The institution knows that its main challenges have to do with developing a new identity for the merged institution, resourcing all its campuses equitably, improving the quality of teaching and learning, and ensuring its financial sustainability. The institution has identified the processes and structures to help it to respond to these challenges; one of them is the Faculty based campus model. The next few years will be crucial not only for consolidating and implementing policies that will give effect to the institution's identity and mission but also for building the necessary internal consensus to reposition TUT in the higher education system. Firm and visionary leadership and commitment on the part of staff and students will be necessary for the realisation of a project that by its very nature requires individuals to leave behind their own personal affiliations and preferences. The risks that the stalling of academic processes through individualistic behaviour or through the concentration of institutional energies only on the operational aspects of the merger poses to the reputation and future of the institution are serious. TUT's senior management needs to be aware of this and put in place mechanisms to mitigate these risks.

Summary of Findings

Commendations

1. The HEQC commends Tshwane University of Technology for developing and implementing a new organisational structure that provides a foundational structure for the institution to build upon.
2. HEQC commends Tshwane University of Technology for the good practice established by DQP in the 2006 Faculty of the Arts Programme Reviews.
3. The HEQC commends Tshwane University of Technology for its investment in staff development to enable academics to acquire higher degree qualifications, which has the potential to yield significant returns for TUT's research capacity and research culture in the future.

Recommendations

1. The HEQC recommends that Tshwane University of Technology select appropriate international universities of technology as models that would help the institution to understand what it means to be a university of technology in substance, and to develop its own indicators so that it can measure its progress towards achieving this goal.
2. The HEQC recommends that Tshwane University of Technology strengthen its plans to attain its employment equity targets at all levels within the institution and ensure that these plans have clear time frames and allocation of responsibilities.
3. The HEQC recommends that Tshwane University of Technology develop and implement a strategy to ensure that there is open and inclusive communication across the institution and with all stakeholders.

4. The HEQC recommends that Tshwane University of Technology engages the local and provincial authorities in relation to the development of the Soshanguve and Ga-Rankuwa campuses in order to ensure that the relocation of faculties is done in the context of a social compact which supports the institution's efforts to attract staff, students and suitable industrial partners.
5. The HEQC recommends that Tshwane University of Technology give due consideration to the impact that the additional costs of the Faculty based campus model will have on the access to higher education of financially disadvantaged students.
6. The HEQC recommends that Tshwane University of Technology develop strategies that have clear time frames and allocation of responsibilities to ensure that there is an equivalent learning experience across campuses for all of its students. This includes giving attention to infrastructure, quality of staff, student and academic support.
7. The HEQC recommends that Tshwane University of Technology conceptualise its quality management system in such a way that it moves beyond compliance and focuses on provision of good quality teaching and learning, research and community engagement. For this to be possible senior management needs to take a more active role in providing intellectual and strategic direction in terms of the formalisation, implementation and monitoring of a quality management system across all campuses which suits the profile of a university of technology.
8. The HEQC recommends that Tshwane University of Technology give attention to the development of appropriate institutional systems for benchmarking, student and employer surveys, and impact studies which will include implementation plans with time frames and the allocation of responsibilities.
9. The HEQC recommends that Tshwane University of Technology develop and implement a comprehensive academic plan based on its new identity as a university of technology. This would also provide a framework for making decisions about the rationalisation of its existing programme and qualifications mix.
10. The HEQC recommends that Tshwane University of Technology ensure that every student in a programme with an experiential learning component is placed appropriately, that there is a functioning system to record, monitor and assess the content and progress of the student's learning experience in the workplace, and that the system is implemented consistently and monitored across all campuses.
11. The HEQC recommends that Tshwane University of Technology make the improvement of the quality of teaching and learning an institutional priority and that strategies and resources are put in place for this purpose. In doing this, the institution might want to consider the development of appropriate mechanisms of support to professionalise teaching as a way of responding to the pedagogic challenges posed by TUT students.

12. The HEQC recommends that Tshwane University of Technology discontinue the practice of admitting unsuccessful diploma applicants to short courses and instead develop and implement appropriate foundation provision to meet the needs of these students.
13. The HEQC recommends that Tshwane University of Technology reconceptualise its access and academic development programmes to ensure that students are optimally prepared and supported throughout the duration of their studies and that such programmes are implemented across all sites of delivery.
14. The HEQC recommends that Tshwane University of Technology ensure that the number of full-time academic staff is sufficient to create an enabling teaching and learning environment for students across all campuses.
15. The HEQC recommends that Tshwane University of Technology find innovative ways to develop and resource a five-year growth plan for its libraries that will ensure sustainability and equivalence of provision across campuses.
16. The HEQC recommends that Tshwane University of Technology develop an ICT policy that addresses the use of IT facilities, including adequate Internet access for students and equitable access to IT facilities for all students across campuses, and ensure that such provision is monitored and evaluated.
17. The HEQC recommends that Tshwane University of Technology investigate the quality of the considerable number of short courses currently being offered and their impact on the mainstream activities of departments and Faculties.
18. The HEQC recommends that Tshwane University of Technology establish a Higher Degrees Committee to lead the further development of a research culture at the institution that will embrace responsibility for postgraduate student supervision and student completion, the need for consistency in the application of research student policies and procedures, and student publication requirements.
19. The HEQC recommends that Tshwane University of Technology engage in an institution-wide debate on who constitutes its community for purposes of engagement, develop a framework, policies and implementation plans by means of which community engagement can be quality managed and integrated into the curriculum, establish an institutional structure to direct its activities, and allocate responsibilities.