CHE

COUNCIL ON HIGHER EDUCATION

HIGHER EDUCATION QUALITY COMMITTEE

Audit Report
on the
Cape Peninsula University of Technology

Report of the Higher Education Quality Committee (HEQC) to the Cape Peninsula University of Technology

Executive Summary

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LIST OF ACRONYMS

ADS	Academic Development of Students
ADRI	Approach, Deployment, Results, Improvement
APF	Academic Planning Framework
CCE	Centre for Continuing Education
CCEWIL	Centre for Community Engagement and Work-integrated Learning
CHE	Council on Higher Education
CHEC	Cape Higher Education Consortium
CHED	Centre for Higher Education Development (aka Fundani CHED)
CPUT	Cape Peninsula University of Technology
CTS	Computer and Telecommunication Services
DHET	Department of Higher Education and Training
DVC	Deputy Vice-Chancellor
ECSA	Engineering Council of South Africa
FET	Further Education and Training
HDHET	Higher Diploma: Higher Education and Training
HEMIS	Higher Education Management Information System
HEQC	Higher Education Quality Committee
HEQF	Higher Education Qualifications Framework
HoD	Head of Department
HR	Human Resources
ICT	Information and Communication Technologies
IF	Institutional Forum
IP	Institutional Profile
IOP	Institutional Operating Plan
IQMS	Institutional Quality Management System
KPA	Key Performance Area
KPIs	Key Performance Indicators
LMS	Learning Management System
MIS	Management Information System
NBT	National Benchmark Test
NRF	National Research Foundation
NSFAS	National Student Financial Aid Scheme
OHS	Occupational Health and Safety
PQM	Programme and Qualification Mix
QA	Quality Assurance
QAC	Quality Assurance Committee
QIP(s)	Quality Improvement Plan(s)
QMD	Quality Management Directorate
SAMSA	South African Maritime Safety Authority
SASSE	South African Survey of Student Engagement
SATN	South African Technology Network
SER	Self-Evaluation Report
SLA	Service Level Agreement
SRC	Student Representative Council
TDP	Teaching Development Programme
UoT	University of Technology
WIL	Work-Integrated Learning
WILRU	Work-Integrated Learning Research Unit
WIRA	Women in Research Association

Overview of the audit

Introduction
The Higher Education Quality Committee (HEQC) of the Council on Higher Education (CHE), which was constituted as the Quality Council for Higher Education in terms of the *Higher Education Amendment Act* of 2008 and the *National Qualifications Act* of 2008, has a statutory responsibility to conduct institutional audits of higher education institutions.

The audit of the Cape Peninsula University of Technology (CPUT) was conducted by the HEQC in terms of itsmandate. This document reports on the audit process and findings based on the Self-Evaluation Report (SER), appendices and other documents provided by CPUT, supplementary documentation requested from the University, and interviews and observations made during the audit visit that took place between 18 and 22 October 2010. The Audit Panel also consulted the Institutional Profile of the Cape Peninsula University of Technology prepared by the Monitoring and Evaluation Directorate of the CHE.

This report comprises 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 commendations and recommendations that are based on the findings of the Audit Panel.

The Audit Process
In June 2007 the Executive Director of the HEQC secured the consent of the Vice-Chancellor at CPUT that the University would participate in an institutional audit in October 2010.

CPUT conducted its institutional self-evaluation in the agreed time and produced an SER for review by the Audit Panel in August 2010. The process commenced in March 2008 and was launched by the Vice-Chancellor in June 2008, under the leadership of the Deputy Vice-Chancellor (DVC) Academic. Twelve working groups were formed, eight to work on the self-reflection and four to provide policy development, reliable management information system (MIS) data, and marketing and organising the audit visit. They were led by members of the Audit Steering Committee convened from the members of the senior management team who constituted the Institutional Strategic Planning Committee. Each focused on a cluster of criteria as well as the four open-ended questions. Approximately 110 people were involved. A further 600 were involved in the different programme and strategic unit review processes. The process of preparing for the self-evaluation report was a participatory one involving all major stakeholders (SER: iii). The self-evaluation was facilitated by the Quality Management Directorate (QMD) through conducting workshops and preparing guidelines. The report was consolidated and underwent a number of drafts in 2009 and 2010 and was considered by the University community, including Senate and Council.

The HEQC constituted an Audit Panel consisting of senior academics and academic administrators from the higher education community, who had participated in auditor training workshops organised by the HEQC. An audit portfolio meeting was convened on 25 and 26 August 2010 at which the Audit Panel discussed the SER and identified additional documents to be requested from the University prior to the audit visit. Senior members of the HEQC then undertook a preparatory visit to the University in September 2010. During that visit the audit schedule was discussed and generally agreed to by the senior management of the University.

Asub-panel of auditors consisting of Professors Oosthuizen (Chairperson), Kilfoil, Buijs, Muller, Dr Laka-Mathebula, Ms Breytenbach, Dr Lalendle (Director: Institutional Audits), Mr Matsebatlela (Audit Officer), Ms Ngxabazi (Audit Administrator) carried out site visits from 20 to 21 September 2010 to the following campuses: Bellville, Cape Town, Wellington, Mowbray and Granger Bay. The

facilities at Groote Schuur and Tygerberg hospitals were visited by Dr Lalendle, Mr Matsebatlela, and Ms Ngxabazion 31 August 2010.

The audit visit took place from 18 to 22 October 2010 at the Bellville campus. The Audit Panel conducted interviews with a wide range of CPUT staff, students and stakeholders (See Appendix D: Audit Visit Schedule). Interviews were completed on 21 October 2010 and oral feedback was given to the Vice-Chancellor and the executive team on 22 October 2010.In all, the Panel interviewed 525 people in 41 audit sessions during the visit, including:

- Council members
- The Vice-Chancellor
- Members of the executive team
- Members of Senate and other Senate committees
- Deans of faculties
- Academics
- Academic support staff
- Administrative staff
- Undergraduate and postgraduate students
- Civic and community representatives
- Alumni.

This report reflects the audit process findings based on the self-evaluation report (SER) provided by CPUT, the institutional profile of CPUT, supplementary information requested from the University, and the interviews and observations made during the audit visit. Every effort was made to understand the quality arrangements at the Universityat the time of the audit visit and to base the Audit Panel's conclusions, commendations and recommendations on evidence presented in the SER and triangulated through onsite documentation, observations and interviews.

It is expected that CPUT will use these findings to strengthen the University's internal quality management and assurance systems and facilitate the improvement of the quality of its core academic activities. Decisions about the manner in which this is done and the priority accorded to the various recommendations is the prerogative of the University. It is expected that within five months of the publication of the Audit Report, CPUT will submit to the HEQC an improvement plan based on the recommendations in the Report.

The HEQC would like to thank the University for the mannerin which it participated in the audit process. The HEQC expresses its appreciation for the openness and confidence demonstrated by the Vice-Chancellor and management in allowing the Audit Panel to conduct its work freely and to have access to key documents. The thorough preparation by CPUT enabled the Audit Panel to focus its attention on the main purpose of the audit. The hospitality and assistance of CPUT personnel is appreciated. Dr Dan Coetzee, Ms Luclaire Airey and their team are thanked for the preparation of the documentation, as well as for their co-operation throughout the process.

ExecutiveSummary

Brief overview of the Cape Peninsula University of Technology

1. The Cape Peninsula University of Technology, hereafter referred to as CPUT, is a predominantly urban-based University of Technology (UoT) situated in the Western Cape. It is the result of a merger between the Cape Technikon and the Peninsula Technikon that took place in January 2005 as part of a government-led restructuring of the higher education system. CPUT is one of four, public, higher education institutions in the Western Cape.

2. CPUT is a contact, residential university. Approximately 20% of the students are in University residences. The majority of its students are drawn from the Western and Eastern Cape. The University operates across a number of campuses, namely: Bellville (the administrative seat), Cape Town, Mowbray, Wellington, Granger Bay, Groote Schuur and Tygerberg.CPUT is currently organised into six faculties. CPUT's programme and qualification mix (PQM) focuses predominantly on offering National Diplomas and Bachelor of Technology programmes, a few national certificates and a limited number of Master'sand doctoral programmes. In 2009, CPUT had a student headcount enrolment of 30 856 and a graduation rate of 24% in 2008.In 2008 the University employed 696 instructional and research staff. The overall staff headcount grew between 2005 and 2008 to 1 682.

Institutional Mission and Identity

3. CPUT's vision to be at the heart of technology education and innovation in Africa contains two important conceptual elements that reflect the University's understanding of its identity as a university of technology: (1) its career oriented programmes and (2) its focus on research with the specific purpose of supporting development at the regional, national and international levels.

4. Although CPUT is fundamentally an undergraduate institution offering largely diploma programmes, the University is reviewing its PQM with a view of offering professional and vocationally-oriented under- and postgraduate degrees and expanding its research function. To achieve the latter, the University must make important changes to its staff qualifications profile and expandthe educational and research infrastructure for staff and students. In many respects, becoming a university of technology is a work in progress. There are features that already support this institutional type, as the Universityhas close to 50% enrolments in the SET disciplines, and has 15 NRF rated researchers and seven NRF-approved niche research areas.

5. Available evidence suggests that the Institution's identity as a UoT is based on four elements: a) career-oriented degrees that rely on direct engagement with industry, characterised by the systematic inclusion of work-integrated learning into curricula; b) the use of appropriate educational technology in the delivery of programmes; c) the expansion of enrolments at Master's and doctoral levels; and d) the development of niche areas for research that are aligned to regional priorities and play to the current strength and potential of the University.

6. In relation to the African focus of CPUT's vision and mission, the relationship with the rest of the African continent goes beyond attracting students and staff to CPUT and includes the development of international cooperation agreements and internationalising the undergraduate curriculum. There are active partnerships in African countries such as Gabon, Kenya, Malawi, Mauritius, Namibia, Nigeria, Sudan, Tanzania, Uganda and Zimbabwe that promote the development of technology.

Transformation, equity and institutional culture

7. CPUT understands transformation as wider than just equity and access; it encompasses success at all academic levels, including student life (residences, sports), the inclusion of people with disabilities, curriculum transformation, the inclusion of indigenous knowledge systems and gender equity. The Transformation Charter (2009) and the recently developed Transformation Strategy provide a sound framework for a systematic approach to transformation. However, the University acknowledges the need for a deeper engagement with the principles that are elaborated in the Transformation Charter to create an inclusive institutional culture within which critical challenges relating to curriculum transformation, student governance, the student experience, residences and staff demographics can be addressed. A Transformation and Diversity Office has been created in the Vice-Chancellor's portfolio to take care of these issues.

8. Between 2004 and 2008 the merged Universityretained a similar enrolment profile of African, Coloured and Indian students, with a marginal decrease forWhite students. In 2008, 48% of the students were black African, 33% coloured, 1% Indian and 18% white.As in most higher education institutions in South Africa, success and graduation rates are racially skewed with White students showing the highest success and graduation.Female students have higher success rates than male students across all fields of study. The lowest success rate is found in SET, which has the highest enrolments, and is also a strategic growth area for the University. More effective strategies will have to be developed to support SET students to succeed in their academic programmes. While CPUT's overall success rate is higher than that of most universities, it has one of the lowest success rates for African students among the universities in the Western Cape. This poses a fundamental challenge for student success in the area of teaching and learning.

9. There has been a steady increase in the overall graduation rate since the merger. The University ascribes this increase to the introduction of National Higher Certificates in Accountancy and Financial Information Systems, but notes that there are also increasing numbers of students completing theirdiplomas.The highest graduation rates are found in Business, Commerce and Management, on the one hand, and in Humanities and Social Sciences, on the other. The graduation rates amongst African, Coloured and White students all improved in the 2005–2008 period, while the graduation rate for Indian students fluctuated (to be expected with such small numbers).

10. In relation to student performance, the strategy of the Universityis to identify the entry-level competencies of students making use of the National Benchmark Test (NBT). The University has a large number of disadvantaged or underprepared students entering the institutionwhich impacts on the Universityin that it has to provide extended programmes, tutors, assistance with English andMathematics literacy, and academic mentoring in residences. Theresponsibility for the academic development of students lies with Fundani CHED. Participation is voluntary: students often do not make use of available services such as academic development, disability assistance or poverty relief to avoid the perception of stigma attached to them.

11. Students were not always satisfied with the preparedness, or professional training,of new lecturers to teach and facilitate student learning competently. The Panel heard comments about the perceived decline in the time devoted to students by lecturers. The University is urged to investigate the perception and concerns of students in this regard.

12. CPUT has attempted to broaden its staff profile and appoint staff members from the designated groups but made slow progress in achievinggreater staff equity between 2005 and 2008. Most staff members are Coloured, which reflects the demographic profile of the Western Cape. There are proportionately more White staff and fewer African staff than the demographic profile of the Province, particularly in senior positions. White staff predominates in academic positions. CPUT employs more males than females at almost all levels, but there are relatively few females in senior academic or management positions. The University should continue its efforts to improve its gender equity profile by ensuring that there are sufficient female academic and professional staffmembers across the University. CPUT employs significant numbers of academic staff on temporary contracts (56%). HEMIS data show that junior lecturer positions are mainly occupied by Coloured females,followed by White and African females. Academic positions, particularly at senior level, are usually occupied by White males.In order to change this, the University will have to consider a number of interventions from recruitment to mentoring of female staff particularly in under-represented groups.

13. Employment equity planning, however, is not only about recruitment. The University is encouraged to focus attention on the further development of specific strategies and plans for advocacy and the communication of employment equity objectives. Furthermore, the University is advised to continue to pursue equity objectives with regard to gender, race and disability and to further promote cohesion between skills development and employment equity planning and reporting as is required by the *Employment Equity Act*.

14. The development of a new academic identity and its concomitant institutional culture requires further reflection on issues such as student access and success and the necessary elements of anappropriate student experience at CPUT. The University continues to offer affordable education with the largest numbers of students coming from the Western and Eastern Cape. The multi-campus and demographically diverse nature of the University pose challenges in the areas of student accommodation, suitable educational facilities, and teaching and learning approaches to support student success. The provision of an encompassing student experience that involves residential and day students, and that extends from the lecture halls and laboratories to other social spaces at each campus, is a fundamental challenge for the University. It not only involves substantial funding but a different conceptualisation of the educational process. The fact that the student population of CPUT is also slowly internationalising creates a new challenge in terms of the nature and kinds of support and interventions international students require to succeed in their academic programmes. The Paneldid not find an integrated conceptualisation of the relationship between the studentcurricular experience and the socio-cultural environment of campus life offered at CPUT, but it was evident from the interviewsthat the University is aware of some of the challenges that arise in this regard at the different campuses.

15. The relationship between the Institutional Forum, as a statutory body, the Transformation Forum and other committees and offices is blurred. The University's arrangements make it difficult for CPUT to meet its obligations in relation to section 9 of the *Constitution*, the *Equality Act*, and the *Employment Equity Act*. The Panel encourages the University to clarify the relationships between statutory committees and other structures in order to ensure CPUT's compliance with its own statute and the general prescriptions of the *Higher Education Act*. The monitoring and evaluation of institutional culture falls under the jurisdiction of Institutional Forums (IF) in the *Higher Education Act* (1998). A review of the minutes of the IF suggests that the Forum's role in advising Council on institutional culture and on race and gender equity has not been adequate. While the University has drafted a

Transformation Charter, little attention has been given to its implementation and monitoring.In order to create the empowering environment that the University is committed to in its mission statement, a sufficiently broad understanding of transformation and the conditions that will allow the University progressively to transform itself is needed. The Panel agrees with the Vice-Chancellor that democratisation and participation constitute important aspects of the transformation of South African society. In this sense, it seems important that the University make a concerted effort to develop these values among CPUT staff and students.

Recommendation 1
The HEQC recommends that the Cape Peninsula University of Technology develop a comprehensive framework and systematic approach to transformation and develop an inclusive institutional culture and shared understanding of transformation. **This should result inreorganising the resourcing of the equity function and the streamlining of committees, structures and offices dealing with transformation.**

16. The Panel had the opportunity to hear from students and staff that service to and communication with students constitutes an area of concern at CPUT. Specifically in regard to the transformation of student life, the Panel is concerned to hear about some student reports of feelings of mistrust, anger, insecurity and vulnerability in relation to both administrative and academic service provision in some departments. The Panel is of the view that many of these issues might be managed more easily if the University instituted enhanced and regular communication with students, over and above communication with political formations, as well as reviewing the quality of service provided by all departments to students.

Recommendation 2
The HEQC recommends that the Cape Peninsula University of Technology improveits communication with students, and explore ways to enhance the quality of service provided by all administrative and academic departments to students.

Institutional Planning, Resource Allocation and Quality Management

17. The Council appears to take its governance role seriously and has been engaged in all the areas where its oversight was required including risk management and themaintenance and monitoring of a risk register. The register places financial sustainability as the number one risk. Members of Council indicated the need for the University to identify strategic as well as operational risks as part of its risk management processes. The Panel also heard of the need to provide appropriate capacity development opportunities for new members of Council so that they are able to understand the full extent of their roles and responsibilities. The University should consider providing ongoing capacity development for members of Council.

18. The SER (15) stated that there is an 'underdeveloped appreciation of the role of the Senate in a university'. This attitude was evident in the absence of references to the Senate in the SER and its omission from the list of roles and responsibilities in the Institutional Quality Management System. This perception seems to stem from a range of sources. First among these is the proliferation of non-Senate committees that have responsibilities in relation to core functions of the University. Secondly, interviews with relevant members of staff and Senate members indicated that the work done at Senate committee level is not translated into institutional knowledge that is used to modify practices or to address areas of concern. This is further compounded by poor attendance at meetings by Senate members,compromising its overall effectiveness. This notwithstanding, the Panel found

examples of appropriate engagement in the minutes of full Senate meetings. The University is encouraged to investigate the possible obstacles to consistent attendance by senators and their participation in Senate debates.

Recommendation 3
The HEQC recommends that the Cape Peninsula University of Technology review the number and terms of reference of the committees of Senate and of committees outside Senate to avoid unnecessary duplication and ensure that knowledge generated by these committees is sufficiently aggregated,shared and used across the University.

19. The Institutional Forum (IF) is a statutory governance structure with clearly defined terms of reference. Despite this, and as already noted earlier in this Report, there appears to be significant overlaps between the role of the IF and the roles of the Transformation Forum and the Transformation and Diversity Office.In the light of the comprehensive responsibility that the Transformation Forum has played in overseeing and coordinating the transformation process, including the development of a Transformation Charter and Transformation Strategy, it is not clear how the current dispensation allows the IF adequatespace to fulfil its statutory function in terms of the *Higher Education Act* and the University's approved Institutional Statute in advising Council with respect to transformation issues.

20. The SER is largely silent about the effectiveness and efficiency of the SRC. There are low participation rates in student elections. It is important for management and the SRC to interrogate the causes of student apathy and the implications that this has for the SRC that participates in University governance structures.Other issues needing attention are the reported lack of effective communication between the SRC and the student body,the lack of diversity in the race and gender profile within the SRC,the SRC's effective participation in governance structures and the impact of the multi-campus context on local SRC participation in the main SRC. The Panel encourages the University to address these issues.

Recommendation 4
The HEQC recommends that the Cape Peninsula University of Technology consider putting in place a systematic programme for the training of SRC office bearers as part of a broader leadership training programme to support students to meet their obligations in governance structures.

21. The University has adopted a unitary management structure since the merger, with all management decisions being taken by the Vice-Chancellor and the executive management team. This model of governance has so far notbeen able to provide equivalence of provision across campusesand the effective devolution of decision-making responsibilities.The University is aware of the lack of consistency in provision across the campuses and the inconsistent application of operational processes. Slow progress in this regard constitutes an obstacle to the University's ability to move beyond the merger and foster a unique CPUT culture.

22. For CPUT to progress in its evolution to a university, deans and HoDs need to be provided with space to lead and make decisions in the best interest of the academic enterprise at CPUT.Faculty deans have a role as strategic and academic leaders. This implies that they should set the strategic direction in relation to teaching, student support, research and community engagement. Consideration needs to be given to the way in which deans take the lead in increasing the research direction within their faculties and the extent to which

institutional policies and operational procedures provide the deans with sufficient discretion and space to make decisions that are necessary for the effective management of their faculties.The Deans' Forum, which is also attended by directors of strategic units, seems to be one of the pivotal committees in the University in respect of academic matters. The Panel noted the positive integrative role that structures such as the Deans' Forum and the Institutional Planning Forum have in the process of deliberation and decision making at institutional level. HoDs have mainly administrative rather than leadership and management roles. The role of HoDs cannot be circumscribed to that of management only; HoDs are also expected to be academic leaders when it comes to increasing the research direction of the University and improving the quality and impact of teaching.

Recommendation 5
The HEQC recommends that the Cape Peninsula University of Technology consider broadening the roles of heads of departments beyond administrative duties and facilitate their further development of management and leadership skills in the areas of teaching and learning, research and community engagement.

23. In 2006 a decision was made to implement a consolidation strategy that included the planned relocation of academic programmes so that they are centralised on one site rather that duplicated across sites. This consolidation has major financial and facilities implications in addition to the relocation of staff and the harmonisation of the academic programmes that make up the PQM. Several strategies have been put in place for change management but it appears that they have had varying degrees of success. According to the SER there is a good flow of information at the executive and senior management levels but communication to operational levels is problematic and should be addressed through a multi-facetted communication plan. In many cases there are pre-merger practices, systems and processes still in place, resulting in a lack of a unified culture across the campuses and a lack of adequate understanding of the University's strategy related to transformation and the academic consolidation process.

Recommendation6
The HEQC recommends that the Cape Peninsula University of Technology investigate and removethe obstacles to communication between offices, structures and campuses.

24. The Panel had the opportunity to examine the University's Institutional Operating Plan (IOP), its Strategic Plan and a range of documents that suggest a clear link between the institution's mission and vision, its strategic objectives, their implementation across academic and support functions, and the allocation of financial resources. The University has translated its vision, mission and values into a Strategic Plan consisting of six strategic directions, with associated objectives, that have set the direction for the first five years following the merger (2006-2010).The faculties and strategic units develop their plans within the framework of the Strategic Plan. Within the overall context of the Strategic Plan,the University uses a well-designed annual budget and planning cycle that provides sufficient opportunity to engage in a systematic process of planning, implementation, monitoring and review, and re-planning. Good progress has been made in the development of management information to support institutional planning requirements. Various challenges still need to be addressed. These include the specification of clearer timeframes and goals against which progress may be determined, stronger alignment between planning activities at various institutional levels, and the determination of an appropriate set of performance indicators. One issue in the current Strategic Plan that the Panel wishes to emphasise is that it lacks specification in terms of measures, time-frames and responsible persons and structures. The

Panel urges the University to include these elements in the new Strategic Plan that is being developed.

Commendation 1
The HEQC commends the Cape Peninsula University of Technology for its alignment of planning and funding,and the effective use of management information to monitor the achievement of strategic objectives.

25. The Panelnoted the University's concern related to financial sustainability in the light of the pressures that have been placed on the institutional budget during the past few years. However, the Panel was persuaded, after interviews with the Vice-Chancellor, the DVC Academic and the DVC responsible for financial management that the University has contingency plans in place to address these significant funding requirements, and to implement a successful turnaround and cost-containment strategy, and that Council is monitoring finance closely. The Panel encourages the University to monitor financial sustainability as it constitutes a major risk. The Vice-Chancellor indicated that the University has not had a qualified audit of its financial statements in the past five years. However, student debt remains problematic as reflected in both the 2008 and 2009 Audited Financial Statements and the risk response register.

26. The consolidation plan appears to have had a negative impact on some infrastructural development and maintenance. Staff at the smaller campuses, such as Wellington, Mowbray and Granger Bay, felt that they did not always receive the resources they required and indicated that theirinfrastructure was not improved to be at levels that were congruent with required support for programmesoffered at those campuses and to cater for the numbers of enrolled students. Owing to the phased-in approach to consolidation plans,*ad hoc* improvements were delayed.The Panel urges the University to attend to such inadequacies as part of the consolidation plan and infrastructure developmentas planned for both Wellington and Mowbray during 2011.In the area of facilities maintenance, the Panel was made aware of the backlog in relation to residences, sports facilities and teaching and learning spaces.

27. During the campus visits, the Panel saw evidence that conditions in some of the residences in terms of space, infrastructure and recreational facilities were not conducive to providing an enabling and positive student experience although others were spacious and adequately equipped. Executive Management admitted that the costs of the merger and new buildings meant that there was a maintenance backlog but said that the CPUT maintenance plan was intended to address it.

28. Students with disabilities who were interviewed indicated that wheelchair access was limited. Interviewees also indicated that the University was making an effort by having a disability unit that had available computers with specialised software provided for the visually and hearing impaired.

Recommendation 7
The HEQC recommends that the Cape Peninsula University of Technology (i) improve living conditions in some of the residences in terms of space, infrastructure and recreational facilities and(ii)develop a sustainable maintenance plan that include programmes focused on instilling in students a sense of civic responsibility for the University campuses and their infrastructure.

29. Security is a real issue of concern on the campuses, in private residences off campus and in residences. Personal security is a particular issue in the female residences.A review of the residences also identified security issues around the working of the CCTV and the bribing of security guards. The University might want to undertake a full audit of security on campuses and in residences to improve overall safety for students and staff.

30. A legal compliance issue relates to occupational health and safety and the inconsistent application of regulations. Members of the Panel noted during the campus visits that the principles of occupational health and safety (OHS) were prominently displayed but not upheld in some academic laboratories, particularly by assistants preparing for experiments. Although a full-time, permanent employee is responsible for OHS, the legal requirements related to the appointment of occupational safety officers could not be confirmed across all campuses during the campus visits. Breaches of OHS were also observed in the Bellville student centre and residences on more than one campus. During the interviews, the Panel was unable to find any evidence that anyOHS audits have been conducted at the University.Relevant structures should take responsibility for the monitoring of this risk and the execution of the audit plan to ensure legal compliance.

Recommendation 8
The HEQC recommends that the Cape Peninsula University of Technology review the safety of students and staff across campuses, and develop and implement an Occupational Health and Safety audit plan to mitigate risks in laboratories and residences.

31. In the area of quality assurance, the Panel acknowledges the work done by the Quality Management Directorate to institutionalise quality assurance at the University through the use of a system of policies, reviews and committees.The University approaches quality as an integral aspect of all its plans and activities so that quality management supports the attainment of the vision, mission and Strategic Plan. However, within this integrated approach, the University is encouraged to consider whether the current formulation of its quality policy as '[providing] a footprint of excellence in higher education teaching and learning, research, technological insight and development, and community engagement' (SER: 62) provides an understanding of quality that sufficiently expresses its academic identity and institutional culture.

32. The Institutional Quality Management System (IQMS) provides a systematic framework and process for monitoring the achievement of priorities and objectives through the review of academic qualifications and strategic units, and user surveys. There arefive key performance areas for the IQMS. The University is encouraged to assess the extent to which the IQMS operates as a self-sustaining system alongside the core academic activities. The routines and procedures that are required by the IQMS may not be adequately embedded within academic staff members' understanding of their professional responsibilities for teaching and learning, research and community engagement. TheIQMS might become a managerial super-structure.

33. The Quality Management Directorate (QMD), located within the portfolio of the DVC Academic, coordinates and facilitates the implementation of the IQMS and has a sufficient staffing component and budget to perform its responsibilities effectively. The institutional location of the Directorate should allow it to liaise effectively with the faculties and strategic units. The work of the QMD in the systematic development and implementation of a comprehensive quality management system, and in promoting awareness and

understanding of the requirements and conditions for the provision of consistent quality in higher education, is acknowledged.

34. The rigour of the quality management process at CPUT is testified to by the scale of the programme and unit reviews undertaken prior to the audit which informed much of the SER and the scorecards, in particular. The QMD staff members are to be congratulated on their ability to conduct reviews on such a large scale within a recently merged institution and in the context of the process of consolidation. However, the Panel found two difficulties with the quality of the reviews. First, the rigour of the evaluation varies considerably between and within faculties. Second, the quality of self-evaluation in the reviews was sometimes not indicative of deep critical reflection. Besides issues of consistency, the Panel is concerned that these problems might be indicative of a system of quality assurance that is not sufficiently rooted in the core functions. The consequence is an overlay of regulation that does not help improve the quality of the student experience or curriculum development substantially. Revisiting the IQMS might create the space to further share the information elicited during programme reviews systematically across the University so that data are used optimally to improve teaching and learning and quality is owned by academics.

Recommendation 9
The HEQC recommends that the Cape Peninsula University of Technology review its quality management approach, including systems, policies and processes, and terms of reference of committees that could reinforce a compliance-drivennotion of quality assurance and encourages the University to continue to integratequality assuranceinto its academic practices.

35. A critical element of the IQMS is the development of Quality Improvement Plans (QIPs) that support a continuous cycle of quality improvement through the monitoring and validation of improvement plans by the QMD. Signing off on the plans seems to be swift. The *Addendum to the Self-Evaluation Report and Comment on the Institutional Profile,* which was made available to the Panel during the site visit, provides evidence of the quality priorities that have been identified on the basis of the first cycle of programme reviews between 2008 and 2010. The Panel was concerned about where the review reports and QIPs serve institutionally and what the role of the Senate is in the process. The Panel observed during campus visits and interviews with staff that the QMD Strategic Plan to implement harmonised QA systems and to maintain consistency of standards across all campuses has not yet been fully implemented, resulting in campus-based legacy practices and 'business as usual'. This is an area that requires attention.

Benchmarking and surveys
36. The Institutional scorecard flags benchmarking as an area for development. Benchmarking is not something new to CPUT as evidenced by its participation in the South African Technology Network (SATN) benchmarking project. A great deal of surveying is being done (which is desirable) but there was little in the way of critical analysis of the results. The results are presented to committees for their consideration and that seems to be as far as the process goes.

Recommendation 10
The HEQC recommends that the Cape Peninsula University of Technology decide on benchmarking activities it will conduct and on the manner in which the survey and benchmarking results will be disseminated and used to inform appropriate interventions.

Teaching and Learning

37. CPUT aspires to be an excellent provider of career-focused education, producing graduates who are ready to enter the world of work and able to apply knowledge to new situations. In view of these goals, the conceptualisation of teaching and learning at CPUT faces three fundamental challenges.

38. The first challenge is to ensure consistent and proactive relationships with industry that will allow programmes to be current and provide placements for work-integrated learning (WIL) in the relevant programmes. The curriculum and the institution's pedagogical approach are informed by the philosophies that underpin co-operative education, WIL, experiential learning and service learning. The importance of this feature for the University is demonstrated in the existence of the Work-Integrated Learning Research Unit (WILRU), and the identification of WIL as a research niche area. However, the scorecard for teaching and learning shows that many programmes reviewed received criticism for their implementation and monitoring of WIL and their lack of effective Advisory Boards. Not all courses have compulsory, credit-bearing WIL, although most courses seem to have an experiential component of some kind. In some cases, a lack of placement for credit-bearing WIL results in a student not being able to complete a qualification. The Panel encourages the University to review the minimum requirements for WIL to enable students to complete their programmes. A suggestion was made during an interview that SETAs could be more active in assisting institutions in this regard and the University is encouragedto explore such opportunities. The Panel is of the view that, should the University want to make relationships with industry and WIL the hallmark that distinguishes CPUT in the higher education landscape, particularly as a UoT,there must be a better conceptualisation, implementation and monitoring of these elements at faculty and departmental level.

Recommendation11
The HEQC recommends that the Cape Peninsula University of Technology revise the quality management process for work-integrated learning and also ensure that students are appropriately placed and supervised.

39. The second challenge relates to the use of educational and industrial technology that characterises teaching and learning at CPUT. In line with its mission as a UoT and its Enrolment Plan, the University has almost 50% of its students registered in SET, which places a great demand on the provision of technology, equipmentand laboratories. To ensure the employability of its graduates, the University has to ensure that all technology used takes account of the requirements that equipment and software are up to date and meet industry standards. While the equipment in some laboratories is of a high standard, there are cases where laboratory and other equipment do not conform to industry standards.

40. The third challenge faced by theUniversityrelates to the expansion of undergraduate enrolments and the degree of academic preparedness of the students. Most student support interventions are voluntary so their impact does not extend to all students. In some cases, insufficient human and physical resources make the provision of quality education difficult. The Panel understands that this situation has been aggravated by both the Department of Higher Education and Training's requests for the University to increase its enrolments in strategic areas, as well as unresolved University consolidation issues.

41. The University has developed an Academic Planning Framework (APF)that sets key quality imperatives. The APF identifies that the University will serve the 'skills needs of the region and of the country' and be 'the leading UoT in SA' 'rooted in the Western Cape' as well

asfocus on the development and teaching of applied knowledge. Faculties are required to report on the APF to monitor progress. The APF is complemented by the Teaching and Learning Plan, which focuses on the systemic implementation, monitoring and evaluation of teaching and learning and on the appropriate resourcing of these activities. However, the Panelis unable to comment on the effectiveness of these policies as they are relatively new. The Panel encourages the University to resource the implementation of the Teaching and Learning Plan appropriately so that it is given expression in institutional practices. In particular, the Panel supports the intent of this policy framework to guide the development of curriculum commensurate with higher education across all departments. Curriculum Officers and their regular forum should be a significant resource tosupport the Plan.

42. The Panelnoted the high levels of frustration around the implications of the current Higher Education Qualifications Framework (HEQF) in relation to the programme and qualification mix (PQM) of a UoT as well as that caused by the continuing lack of certainty about whether the current HEQF review will resolve curriculum challenges.

43. Teaching and learning at CPUT is currently facilitated through six faculties, each comprising a number of departments and research entities:Applied Science, Business, Informatics and Design, Education, Engineering and Health and Wellness Sciences.Faculties are headed by deans and assistant deans. In addition to HoDs with line management functions, there are also heads of programmes who report to HoDs. There are four portfolio coordinators per faculty: Teaching and Learning, Language, IT and Research. Such coordinators have to teach and be active in research.

44. Governance around teaching and learning resides with Senate itself, some statutory Senate sub-committees, such as the Senate Teaching and Learning Committee, the Academic Planning Committee, to some extent the Quality Assurance Committee, and some non-statutory but very effective committees, such as the Deans' Forum. The Panel has already noted the urgent need to review the composition and terms of reference of these committees in order to avoid duplication. It was the Panel's experience with most committees that generally members did not talk from a committee perspective but from a narrower own-faculty perspective and had little knowledge of the composition and functioning of other Senate committees affecting teaching and learning. This, combined with the problems found by the Panel in implementing the quality assurance system, poses a serious challenge for the University's Senate to develop a systematic understanding and oversight of the state of teaching and learning within the Institution.

45. The University has a range of teaching spaces, such as lecture halls, laboratories and practicum facilities. Some lecturing venues appear to be under-utilised while others appearto too small. The problem varies across the different campuses, with the Granger Bay Campus appearing to have the best-utilised facilities.The Panel observed inconsistent provisioning of lecture halls with educational technology. The situation was remarked upon by internal review panels and was confirmed during interviews with full-time and part-time lecturers.In relation to laboratories, external accreditation panels mentioned laboratory shortcomings that would impact on delivery.However, the Panel also observed some excellent laboratories available for undergraduate, postgraduate and research purposes that are well-equipped, use industry-standard equipment, make provision for storage that complies with OHS and are supported by lecturers, student demonstrators, laboratory assistants and technicians.

46. **Academic Development**: Fundani CHED performs a pivotal role in the quality of teaching and learning at CPUT. The Department has a wide scope of services, includingteaching (offering a Higher Diploma: Higher Education and Training), student learning, staff development (Teaching Development Programme), curriculum development, extended programmes, education technology, RPL, research in teaching and learning, and the writing centre. They achieve their mission with limited staff by devolving some of the work to faculties or working with Student Affairs and residences. Provision of these services across all campusesremains a serious challenge faced by this unit.The need for more capacity to work with curriculum development has been approached innovatively through the use of curriculum officers from the faculties. Teaching and Learning Coordinators are considered to provide a valuable link between the Academic Planning Committee and the faculty executive. The Panelaffirms the positive contribution of Fundani CHED in a range of areas in relation to teaching, research and academic development of staff and students. The Panel examined the internal review report on Fundani CHED, concurs with its recommendations and encourages the University to support Fundani CHED in order to address the recommendations appropriately. The Panel encourages the University to ensure that Fundani CHED has adequate capacity and resources to fulfil its wide range of responsibilities. Fundani CHED needs to receive all review reports as part of the normal flow of information at the University.

Commendation 2
The HEQC commends the Cape Peninsula University of Technology on the Fundani Centre for Higher Education Development's systematic, innovative and effective approach and use of scarce central resources for the development of curricula, teaching, assessment and learning in support of the University's strategic priorities.

47. The e-learning system at CPUT is based on Blackboard and the University is in the process of upgrading to version 9.1. The SER shows a drop in usage which was attributed to the instability of the system and to the clean-up of modules.However, it was indicated during interviews that there is now quite rapid uptake of the system. The internalreview of the Centre for E-Learning was overwhelmingly positive across all the criteria. The Panelconcurs with the recommendations made by the reviewers, particularly in relation to the need to address the IT infrastructure problems and strengthen the relationship with Fundani CHED.The relationship between the Centre for E-Learning and the Computer and Telecommunication Services (CTS) is essential given the mission-critical nature of the Learning Management System (LMS)but there is no evidence of a service level agreement (SLA) between the two departments. The internal review panel's recommendation related to IT infrastructure is relevant here as it identified issues such as clearer lines of communication with CTS, dedicating a CTS staff member to LMS support, improving the workflow around mission-critical errors, monitoring the system with regard to capacity and bandwidth and availability of connectivity on satellite campuses.The guideline for the percentage of use of the learning management system (LMS) seems to be that 10% of all programmes are expected to make use of the LMS (SER: 127) although the DVC Academic indicated that he had requested that all programmes have a minimum presence in 2010. Currently the LMS is used for communication and as a repository rather than as a learning environment and platform. Theseare issues that the Universityis encouraged to address.The Panel examined the Strategic Plan in this regard and encourages the Centre to ensure that its academic interests do not detract from its support service functions.

Recommendation12
The HEQC recommends that the Cape Peninsula University of Technology use the learning management system to support academics to adapt to a changed pedagogical approach to

teaching and learning and members are encourage academic staff to take advantage of the new system.

48. CPUT libraries are in need of improvement with regard to information resources, infrastructure and process management. Bandwidth problems occur at various sites and resourcing for postgraduate students is also an area of concern for students and supervisors. The way in which the consolidation of faculties is taking place also has put a strain on the library resources as students on the same programme could well be on two different campuses. As a result, holdings are either split or isolated at a particular campus and have to be requested. The movement of staff across campuses as a result of the consolidation project has affected the library's relationships with faculties and academic staff.The Panel is concerned at the adequacy of the library provision, particularly in the face of the detailed recommendations made in the internal review report of the Library. The Panelconcurs with the areas singled out for improvement. The Panel agrees in particular with the issues raised in relation to library space and the inadequacy of the book collections, but acknowledges the additional provision made by subscribing to the Calico programme. The Panel urges the University to undertake a benchmarking exercise with universities nationally to support library allocation decisions. The development ofelectronic collections is being prioritised. While the Panel understands the reasons behind this, it may be problematic as a strategy where computer access is possibly inadequate, bandwidth is limited, most students do not have adequate access to the internet, and textbooks are not likely to be widely available as e-books. In terms of quality measures, LibQual was run in 2008 and the library hopes to repeat the survey regularly. The student survey shows some dissatisfaction with library services. The library is therefore aware that some students would like facilities to be open 24/7 but there are practical issues related to security and costs for services.

Recommendation 13
The HEQC recommends that the Cape Peninsula University of Technology review its library collection development strategy and budget,and develop and implement strategies to improve user access to printand electronic media.

49. The CTS internal review was held in 2008. Several problems arising from the review in 2008 are picked up in the progress report: service desk staff shortages, service level agreements, availability, staffing, service-based costing exercises roles and responsibilities, backup and other policies, performance evaluation of staff and user surveys. System instability in particular was reported in interviews with academics. Wireless and bandwidth remain problems. Although both pre-merger institutions used the same software for student data, human resource and financial data, the progress towards a unified system across all campuses is slow and must be accelerated. The institution has 5 000 computers available for student use in open laboratories that fall under CTS control. Assistance is not provided 24/7, so it is a constraint for users if the system goes down after hours. It was estimated that it might take another two to three years to get services consistent across campuses to the standards CTS would like to deliver.While the Panel understands the systemic-level problems in CTS and the efforts made to address existing problems, access to technology is a particularly important dimension of higher education, particularly for a UoT, and therefore quality provision in this area should be prioritised.

50. Progress in standardising systems, processes and practices to ensure good institutional governance, integrity of learner records, compliance and campus equivalence related to service delivery is not adequate. Pre-merger practices continue. No evidence was foundduring the campus visits of an integrated academic administration management

system that ensures(1) compliance with the Institution's approved Enrolment Plan or (2) legal compliance regarding the endorsement requirements for enrolling undergraduate first-year students. Business process re-engineering is needed with policies in place and mentoring for the largely junior staff, with clear job descriptions provided. The internal review of Admissions and Registrations has very clear recommendations that would improve its efficiency.Limited progress has been made towards standardising the governance framework, systems and processes to ensure integrity of student records. There appears to be no consistent CPUT process in the administration of student records and marks. The governance and integrity of assessment is in danger of being compromised by the inconsistent interpretation and implementation of the assessment policy. The Panel did not find evidence to confirm that internal or external audits were conducted to assure the integrity of the certification process. The certification process is not consistently implemented across faculties, either. Some faculties seem not to have faculty officers and academics keep student records. These are extremely serious issues that must be urgentlyresolved.

51. The process of examinations is campus-based. An audit of assessment document management, storage, retrieval and disposal showed that the processes are inconsistently implemented. The security of assessment papers and scripts was not up to the expected standard for higher education institutions, resulting in high risk in this regard. Linked to assessment, learning records and certification, assessment security is therefore problematic. The report of the Assessment and Graduation internal review indicated that policies and procedures need improvement. The department's QIP indicates its response to security issues with strategies for improved security in duplication and storage of assessment by the end of September 2010, so that some measures are being put in place, but the implementation of the QIP must be monitored to ensure its effective implementation. Examination security is addressed in the *Assessment Procedures and Rules* but section E 4 in Appendix 13 needs to be made more robust to include typing, printing, administrative signing of confidentiality agreements, declaration of interests, secure areas for printing and safekeeping, secure areas for delivery of papers and collection of scripts, and signing off procedures.

Recommendation 14
The HEQC recommends that the Cape Peninsula University of Technology develop an effective and unified academic administration process (from application to graduation), including assessment records and procedures, for implementation across all campuses and to facilitategood governance, campus equivalence and ownership by all staff.

52. **Student support**: The campus healthcare services are functioning well on all campuses with adequate facilities but are available on appointment during office hours on weekdaysonly. The *HIV and AIDs Policy* was approved in May 2010. While it deals with many essential aspects, the important omissionsshould be considered when it is updated. The student career guidance and counselling services function well although they have a wide scope of responsibilities and small staff numbers: the range of activities of this department makes staffing a real issue – therapy and counselling, career development, skills development, advocacy and support, peer helpers, self-help materials, marketing and promotion, community outreach, wellness programme. CPUT operates on a model where there is one counsellor for 1700 students. The human and physical infrastructure available to deal with students varies from campus to campus.

53. The Disability Unit has only recently been established. The manager is located on the Bellville campus and travels between campuses. The University, at the time of the audit site

visit, had a total of 445 registered students who had declared disabilities but some did not require any assistance. The Panel understands that the Disability Unit is very new and some of the buildings are very old so the University might take time to become compliant but, on the whole, the unit has made progress with the many initiatives in the short period.

54. There is a draft policy on the allocation of residence space. Administrative procedures for implementing the policy are not in place. However, the residence allocation guidelines seem fair if applied consistently and if adherence is monitored. Approximately 20% of CPUT's students live in residences and the University is aiming for 25% through new building projects and the purchase of facilities. The student residences on all the campuses are fairly spacious and generally in good infrastructural condition. However, the general maintenance is not up to standard on certain campusesand there is even variation between the state of residences on the same campus. The Panel concurs with the Vice-Chancellor that there is a need for education of students around the treatment of property in residences. The University's aspiration to turn residences into 'Centres of Learning' requires not only changes in terms of space and availability of IT, but also a fundamental cultural change.International students are well-integrated into the residences. A separate postgraduate residence is available on the Bellville campus and many international students are housed there.

55. The Panel heard in interviews about students who find it difficult to obtain a platform to air grievances. Many students indicated that they found class representatives and the SRC unhelpful. Student experiences of powerlessness can have multiple sources but,on the face of it, it might be useful if the University provided relevant orientation for new students, as well as review the effectiveness of the existing processes to deal with studentgrievances and concerns.

Recommendation 15
The HEQC recommends that Cape Peninsula University of Technology investigate relevant mechanisms to induct students into university life and assist them to identify and use available structures and processesto positivelyenhance student experience.

56. The recently established Centre for Continuing Education (CCE) facilitates short learning programmes and coordinates quality. There is a *Short Course Policy*and a*Policy on Continuing Education*. CPUT wants to promote uniform management, be flexible in order to remain responsive to industry, ensure that short course provision is beneficialto CPUT rather than to individuals or divisions, and use the same procedures as formal programmes in terms of study guides, student feedback and the validation of assessment methods. The fact that short courses are located within CCE, the Graduate Centre for Management in the Faculty of Business, and both the Survival Centre and Clothing and Textile Unit in the Faculty of Engineering, suggests a need to clarify roles and responsibilities regarding the management of quality.Pre-merger practices still in place. There is no central MIS for short courses but an estimate of 80 short courses on offer was provided. There was no evidence on how many short courses are moderated. A database of is being developed in line with the HEQC criteria for delegated functions but departments are being given time to comply. Three types of short courses were identified during the interviews: those aligned to the curriculum, those responding to an industry need and stand-alone courses not aligned to the curriculum and possibly not even at university-level (although the courses do contribute to strategic thrusts of the University by providing third-stream income and meeting industry and community needs). It was not clear whether or not all short courses were credit-bearing and whether students were informed. The Panel urges the University to ensure that there is

a directed and systematic communication about the status of the courses offered. The short course review results from 2009 show that all aspects pertaining to curriculum development, alignment of outcomes, assessments or moderation and evaluation of the lecturers by the students were inadequate and constituted an academic risk for the University. Two other issues that impact on quality management are pertinent: staffing and resources. The internal review of CCE reveals a number of concernsin relation to articulation (courses that do not give credit towards formal programmes), standardising, late feedback, the quality of certificates and security around examinations. The control and security of the certification process needs attention as each unit issues its own certificates and there is no involvement of the Registrar, which is a concern.

Recommendation 16
The HEQC recommends that the Cape Peninsula University of Technology initiate a unified management system and database to improve governance and management of short learning programmes, their academic quality, their records and certification and to ensure that they are aligned with the University's strategic goals.

57. The current PQM indicates that CPUT offers few national certificates with the bulk of qualifications being National Diplomas and B Tech degrees,with someMaster's and doctoral programmes. Few new programmes had been designed and implemented in recent years as there is still uncertainty about the HEQF. However, the focus on training curriculum officers shows that the University intends to undertake programme development in line with the HEQF in the near future

58. There was a general sense both on the part of CPUT staff and external stakeholders that the Advisory Boards, which should meet twice a year for all programmes, play an important role in maintaining the quality management of programmes. However, many of the programme reviews listed the functioning of these boards as problematic and the analysis also states that internal reviews show that 21% of the programmes had no boards, 27% of boards were not functioning, 29% were functioning, while 18% were functioning well. As this is one area that distinguishes a UoT from other universities, it is essential that the University ensures that boards function as intended.

Recommendation 17
The HEQC recommends that the Cape Peninsula University of Technology strengthen its formal relations with industry and ensure that advisory boards continue to fulfil their quality management functions in programmes and meet as expected.

59. Internal reviews had been completed for all undergraduate programmes prior to the audit. During interviews it was evident that credible and consistent methods and processes for programme reviews were used and they were conducted by internal and external peer reviewers. The first peer review cycle was described as a success and the next cycle has already been planned. The interviews revealed that the majority of academics were satisfied with the first programme review and that they would not hesitate to repeat the review cycle. The findings of external programme accreditation bodies such as the Health Professions Council of South Africa and the Engineering Council of South Africa were seen as validating the professional status of the programmes concerned.

60. In relation to CPUT's offering of extended programmes25% of students on these programmes complete their diplomas in minimum time; however, less than 50% of all

students eventually graduate. There are three extended programmes: in the Faculties of Engineering, Informatics and Design, and Health and Wellness Sciences.

61. The SER states that there is no alignment between subject guides and templates submitted to Senate. Furthermore, in some cases, guides do not exist or are out-dated. Internal reviews expressed concerns about subject guides as did external accreditation panels. An institutional template for study guides had been developed and approved by Senate and all programmes are in the process of aligning their guides.

62. ThePanel found examples of good practice in two areas. The first area was the resourcing of Engineering training through international collaboration and industry research partnerships was observed during the campus visits. Engineering has one of the highest numbers of enrolled students in the country, throughput is very high, it has established strong foundational programmes, it has a ratio of 1 to10 of tutors to students, and there is visible good practice. Students appear to be highly employable. Thesecond area of teaching excellence was the programmes run at Granger Bay, with its specialised infrastructure. The facility is small but well run. The reputation of the maritime programmes makes it all the more important for the University to ensure appropriately qualified staff for the Maritime Studies programme and permanent staff for the Survival Centre.The Hotel School has its own commercial restaurant and state of the art culinary laboratories, which ensure that students enjoy an integrated learning experience. Second and third-year students are placed nationally and internationally for experiential learning. Service learning is also part of the experience. The School also runs credit-bearing short courses related to the hospitality industry. The restaurant and short courses provide a third-stream income.

Commendation 3
The HEQC commends the Cape Peninsula University of Technology on the responsiveness of its programmes in Engineering, Hospitality and Maritime Studies including the innovative resource models used for the programmes and the strategic partnerships they have forged with local, regional and international industries for placement of students.

63. Staffing is flagged on the Institutional scorecard as an area for improvement. The internal review report on Human Resources (HR) made a number of recommendations with which the Panel concurs.There is also a need to reduce the turnaround time in the appointment of new staff.In the merger and consolidation processes there had been no staff retrenchments, some staff had been redeployed and new staff had been appointed. There had been no staff unrest at the University since the merger. The Panel noted that, although significant progress with consolidating the merger had been made, there are differences of opinion about whether the HR harmonisation had been finalised. It is therefore important that the status of HR harmonisation be clarified by the relevant DVC. The target for staff costs was 59% but during the last two years actual expenditure had been about 62%. Staff turnover for 2006 was 7.9% (higher than it should be) with 4.6% for designated groups, 3.1% for females, 3.7% for academics and 4.2% for administrative. The HR strategy contains the 2008 staff profiles. The practice noted in one internal review as being a governance issue – long term contracts – comes up in the 2008 profiles with large numbers (710) of contract professionals. The quality assurance system for HR is based on a range of policies including induction and staff development.The impact of staff on the quality of programmes needs to be taken into account in making decisions about staffing, including the balance between permanent and contract staff, and strategies for staff induction and development (including contract and international staff and those coming from industry).Deans need to check that everyone in their faculties is aware of the workload models now in operation.Aperformance

management system was introduced in 2007, but there has been uneven implementation with more variance in non-academic departments. Council indicated to the Panel that it expects the roll out to take about five years.The Workplace Skills Plan shows that there has been good attendance of training by designated groups, except by African staff members. Some training such as Blackboard is free. There is also evidence of investment in training in research; e.g. on postgraduate supervision. The Panel urges the University to encourage managers to release their staff to attend staff development opportunities as it is a central element in enhancing quality.The bulk of the money received back from the skills levy is used to encourage staff to undertake higher degrees, with 100% funding for doctorates and 60% for Master's degrees.

64. Although an assessment policy and procedures are in place, rigorous and implementation is not evident. Discrepancies need to be addressed to ensure a fair and equitable process for all students. The University is aware of the problem and it is addressed through the QIPs after the reviews. Some concerns were identified in the following areas: the lack of (detailed) feedback to students;limited constructive feedback presented to students in projects; assessment rubrics that are included but ignored by not presenting a breakdown in marks; and repetition of questions in assessment papers across consecutive years. Some modules use 'continuous assessment' but there is no consistent understanding of the concept. Other issues raised by the on-site analysis of subject guides were that learning outcomes were sometimes poorly formulated and did not do justice to the work being done; in some cases lower order thinking skills received too much focus; and the section on assessment criteria in guides often contained mention of tasks but not criteria or rubrics. It was noted that a template for subject guides had been approved by Senate to address these issues. Faculties should also take into consideration in drafting subject guides that what makes sense to the lecturer does not necessarily mean much to a student so the target audience must be kept in mind. The policy around re-assessment opportunities (supplementary examinations and those afforded to students who produce medical evidence of illness) needs to be applied consistently to the advantage of the student. For instance, lecturers and student administration should accept valid medical certificates as stipulated in the policy. Provision is made for the upgrading of staff skills in assessment.The University is urged to ensure that all forms of assessment are of standards commensurate with higher education.

65. The SER also flagged moderation as inconsistently implemented, with 65% of programmes having sound moderation practices and 35% of programmes or modules were considered to require improvement. At a postgraduate level, at least two external examiners are appointed and the results are collated by Faculty Research Committees and communicated to the CPUT Higher Degrees Committee. Moderation procedures are clearly defined and communicated to moderators. External examiners received clear guidelines and their recommendations were taken seriously. In relation to the quality of external examiners and moderators reports, the Panel noted that a standard template is presented to internal and external moderators to monitor the process and provide feedback. However, despite templates requiring substantive comments, some moderator reports were not qualitative and formative for lecturers, as they ignored the section for formative comments, thus reducing the value of the report for the lecturer(s) concerned. Another challenge relating to moderation is that some external moderators are re-appointed, year-after-year, for the same module. A regular review of external moderators and examiners should be in place to ensure objective and fair moderation practices.

Recommendation 18
The HEQC recommends that the Cape Peninsula University of Technology to effectively monitor the quality of moderation at the Universityfrom the point of view of both the renewal of the moderators and the purpose of the reports.

Recommendation19
The HEQC recommends that the Cape Peninsula University of Technology put in place appropriate mechanisms to ensure that all forms of assessment are appropriate and commensurate with higher education standards and practice.

66. The Panel found that the mechanism of subject reviews of the assessment results of at-risk modules within faculties and the design and implementation of appropriate interventions is a sound, reflective practice. The system was introduced as a result of criticisms of assessment practices in programme reviews. There was evidence in Faculty Board minutes that the reviews were discussed there and would be referred to the Senate. It appears that Fundani CHED is also present at the review sessions and so is able to plan timely interventions in collaboration with faculties. This practice is evidence of a concrete result of the review process and quality improvement plans (QIPs) that has yielded improvements in the quality systems.The Panel noted that in some faculties there is a disproportionately large number of students considered at risk of failing. The Panel encourages the University to use the implementation of its Teaching and Learning Policy as an opportunity to assess the use of the knowledge gathered through profiling students to review existing approaches to teaching and learning.

Commendation 4
The HEQC commends the Cape Peninsula University of Technology for instituting rigoroussubject reviews in response to feedback from programme reviews.

67. Issues relating to security and transportation of assessment papers need to be addressed. The site visits, and interaction with academic staff, revealed that examination papers are considered to be safe when they are locked in cupboards and areas within departments. Fireproof safes should be considered to prevent a range of incidents that could impact on the safe keeping of examination papers. The security and printing of examination papers need urgent attention.

68. Institutional policies are in place for the assessment of RPL and Fundani CHED supports access through RPL. According to the SER, there was in 2008 an increase in RPL applications, mostly in the Business Faculty. Fundani CHED's2010 Annual Report states that RPL applications doubled between 2007 and 2009 while approvals trebled. Students can view the information that is required for the completion of RPL submissions online and assistance is available within faculties for the development of a portfolio of evidence. Interviews on site indicated that applicants' experiences of the system differ greatly. The University is urged to ensure that there is regular communication with all RPL applicants.

Research
69. The University conceptualises research as applied and related to the advancement of technology, in line with its mission as a UoT. The University has adopted the seat of knowledge model. Strategic research and innovation focus areas have been decided.In some fields there seems to be a long history of applied research and collaboration with industry or with international partners or research aimed at benefiting the community. There appears to be good buy-in from staff on the need to do research that has impact. The site visit

revealed that there are a number of research facilities of high quality. The University is encouraged to continue with the good practice of establishing small, dedicated research laboratories across the campuses that could become NRF niche areas for centres of excellence within the University's mission to increase research, develop a distinct research identity and achieve research excellence.

Commendation 5
The HEQC commends the Cape Peninsula University of Technolgy for establishing NFR niche areas concentrating on applied and community research in collaboration with local, regional and international partners and for the infrastructure and facilities it has provided for the promotion of research excellence.

70. Research is managed and promoted through structures from the level of DVC to that of deans and HoDs as well as through documented policies and allocation of resources. Faculties also have research coordinators. The Panel acknowledges that the University has advanced in realising its vision of research as a UoT and that staff is supportive and enthusiastic about the research strategy. However, it is clear that staff members at CPUT have heavy contact teaching workloads that impact on their ability to do research and publish. The CPUT Research Development Strategy includes reference to the Research Action Plan that has yet to be articulated. The Strategy includes a number of research development goals with associated objectives, strategies and activities.

71. Besides the support provided by Fundani CHED, there is a staff development forum chaired by the head of the Research Directorate. Another support and development initiative is the Women in Research Association (WIRA) programme. Its impact is shown in that 35% of the NRF-rated researchers are now female. However, it appeared in interviews that, while researchers had heard of WIRA, they had not had time to link up or they saw themselves as researchers without needing to identify their contribution by gender. Some female academics indicated that Thuthuka funding had really helped to advance their research. This perception of female researchers' access to WIRA could be explored by CPUT.

72. The research goals seem ambitious but achievable over time. The Panel noted the progress made already. The envisaged Research Action Plan needs to address the timeframes particularly, as well as the priorities, role-players and benchmarks. The institutional imperatives highlighted in the strategy relate to developing an institutional research culture that cuts across departmental boundaries, looking at workload distribution and providing resources for research administration and development.The Panel heard in interviews that academics seemed to experience the support and infrastructure provided by the University as good.There is an institutional Research Ethics Review Board and quarterly faculty ethics reports; however, policies still need to be developed and formalised to strengthen the system.

73. The University has put in place a research improvement plan with resources, targets and timeframes, including hiring rated research scholars, and a research development unit to assist staff with publishing as well as special measures to promote postgraduate studies such as assistance with research proposals for postgraduate students. Despite the relatively low number of staff with doctorates, impressive strides have been made with increasing the number of SAPSE accredited publications in recent years. Most research publications are in international journals, which might reflect CPUT's international partnerships. There has also been an increase in NRF-rated researchers. The Erasmus Mundus project has enabled staff to acquire higher degrees. The influence of other nearby well-established and even 'world-

class' universities has had a positive effect on CPUT staff to partner with colleagues. In interviews, external research partners intimated that they were extremely satisfiedin their collaborations with CPUT. However, weighted publications per staff member stand at 0.14 publication units per permanently appointed teaching/ research staff member, which is a long way from the benchmark of 0.5 for universities of technology. It is acknowledged that the increase in research output from a low base has been marked and that the University has put in place strategies to promote research including resources for conference attendance, opportunities to improve qualifications and the appointment of new staff with strong research profiles.The single research KPI is the publication count. In interviews the number of staff members obtaining higher degrees was also mentioned as a possible KPI. CPUT needs to consider an expanded range of KPIs (for all core areas, not just research) to enable it to track progress, and also to monitor the progress of individual departments. The research plan needs further development as it is appears to be a work in progress.

Recommendation 20
The HEQC recommends that the Cape Peninsula University of Technology develop an implementation plan torealise the University'sresearch strategies and identify realistic key performance indicators for monitoring the implementation of research objectives.

74. A further dimension of research is innovation and the commercialisation of intellectual property as a result of research. The DVC Research, Technology, Innovation and Partnerships indicated that the University is making progress in this area and has two spin-off companies registered. An individual has been employed to focus on this dimension. The appointment is evidence of the intended research agenda and the funding of the research growth strategy. The Panel understands that this strategy can enhance the third-stream income of the University as well as its reputation but the University still has to overcome the identified barriers, not the least of which is improving staff qualifications, which takes time.

75. The Centre for Postgraduate Studies has an administrative function and plays a positive role in the development of a caring culture for postgraduate research students. However, more needs to be done; for example with respect to ensuring that library hours and facilities are sufficiently supportive of postgraduate studies and that laboratories are adequate. Funding is provided for Master'sand doctoral students. Two policies were approved by the Senate in 2010: the *Policy for Postgraduate Education and Research* and the *Policy for CPUT Postgraduate Bursaries*. The need for improved registration procedures for postgraduate students is being addressed by the Registrar. The new policy states that no student may be accepted without a supervisor. Deans are encouraged to monitor practices around implementation of the policy related to the appointment of supervisors. The function of the directorate is to provide financial support, research capacity development and mentoring and coaching for emerging researchers in collaboration with faculties (which have research coordinators). The support offered to researchers to become rated, or improve their rating, seems appropriate. Assistance is also given to NRF-rated researchers to enable them to retain or improve their rating. The internal review of the directorate recommended a strategy to promote services in a multi-campus environment and address systemic problems with ITS and the MIS.

76. The quality of postgraduate education depends on the quality of supervision by academic staff holding relevant postgraduate qualifications themselves, the entry competencies of students, support given to students in the course of their studies (e.g. training, contact with supervisor, formative feedback) and resources available (library, computers, laboratories, bursaries). The Vice-Chancellor highlighted to the Panel the desire of CPUT's to have 8% of

the student enrolment in postgraduate research degrees. With the current student headcount enrolments being 32,000 students, 8% would be 2,560 students,an ambitious target that is a long way from the 880 students enrolled in 2009. There was considerable evidence from the staff qualifications' profile, as well as from interviewees, that CPUT has supervisory capacity difficulties when it comes to increasing the number of postgraduate research students. The Panel considers CPUT's intent to become a research-led University with a significant postgraduate enrolment that is not yet matched by sufficient internal capacity for supervision at the appropriate level. The Panel urges CPUT to implement a developmental programme that increases internal capacity and supports the sustainable expansion of the postgraduate project, creating a strong culture of research and depth of postgraduate supervision at CPUT. Yet there have been increasing enrolments, particularly in Master's degrees and to a lesser extent doctorates (the latter mostly in SET programmes), with increasing numbers of graduates. Some faculties reportedly had to stop enrolling new postgraduate research students owing to a lack of supervisory capacity. Some researchers indicated in interviews that academics who were qualified to supervise were allocated unrealistic student loads. The obvious but difficult solutionthat confronts all universities is to recruit more staff with doctorates as well as encouraging existing staff to complete doctorates. The DVC Research, Technology, Innovation and Partnerships indicated that there was a plan to use adjunct professors and external supervisors as a short-term solution to supervise research students. In the Panel's view, external supervision is not a satisfactory and sustainable replacement for internal capacity. The University might want to consider a slower growth trajectory in this area but one that might guarantee better results in creating a culture of research and depth of postgraduate supervision at CPUT. Senate had approved a new supervisory workload policy in May 2010. The policy covers the use of co-supervision, time to be spent with students and lecturers not being allowed to supervise doctorates without holding such a degree themselves.

77. The precise need for separate Research, Postgraduate and Higher Degrees committees of Senate (SER: 211) was not clear. The Postgraduate Committee is not yet operational. Evidence suggests that role of the Higher Degrees Committee in the approval of candidates for a postgraduate degree is neither effective nor efficient. Many aspects of candidature have to be approved (typically after having gone through a Faculty Research Committee) by the Higher Degrees Committee that met four times per year only. Delays had reportedly had negative impacts on prospective students. The size of the agenda would suggest that many committee members would not have read it and therefore failed to add value when decisions were made. Decisions about students' research candidature need to be made and communicated to the students in a timely manner. This matter requires urgent attention. One measure to address the situation was mentioned by the DVC Research, Technology Innovation and Partnerships interview: they are going to increase the frequency of committee meetings.The University must ensure that the research and postgraduate committees operate effectively and efficiently, particularly when they have to make timely decisions on matters that affect the work of students and researchers. CPUT is urged to review the composition and terms of reference of the Higher Degrees, Postgraduate Education and Research Committees of Senate with a view to the consolidation of their functions for the time being.

Recommendation21
The HEQC recommends that the Cape Peninsula University of Technology to (i) review the number of structures and their functions and dealing with research to ensure that the organisation of this core function reflects the current size of the research enterprise (ii)

take urgent steps to improve the effectiveness and efficiency of the Higher Degrees Committee.

78. The university needs sufficient mechanisms for feedback from research students on issues and problems. The Panel encourages the University to establish minimum resource requirements for postgraduate research students in order to support their access to appropriate levels of support.

Recommendation 22
The HEQC recommends that the Cape Peninsula University of Technology develop a mechanism for feedback from its postgraduate research students, and develop corresponding internal capacity for supervision at all levels.

Community Engagement

79. The University has a Centre for Community Engagement and Work-integrated Learning (CCEWIL). The *Community Engagement Policy* includes volunteerism, work-integrated learning (WIL), service learning, cooperative education, and community outreach. Community engagement also includes specific interactions and partnerships with the identified communities of the University through its teaching and learning, and research, in mutually beneficial ways by both staff and students, and for both the University and its communities. The policy has a number of overlaps with the stand-alone policies for WIL and cooperative education and service learning. The Panel concurs with the internal review report on CCEWIL, which highlighted the following for attention: policy revision; OHS for students during placements; monitoring of students on placements; consistent application of policies and procedures across campuses; transport provision; more structured and formal MoUs to define roles and responsibilities; feedback from partners; research agendas; student workplace orientation; and guidelines on what constitutes a good learning site. A key dimension is how community engagement will be quality managed to provide quality engagement and to minimise risk to staff, students, partners and communities, including the management of possible reputational risk to the University in the event of poor community engagement implementation and monitoring. The institutional scorecard flags community engagement as a problem and states that there is a lack of a standardised institutional approach to the integration of community engagement in teaching and learning. Yet, community engagement appears to have strong foundations in the University.

80. WIL is decentralised to the faculties and the central administration plays a peripheral, mainly bureaucratic role. While the Panel agrees with the view of some academics that WIL can help create synergies between the three core functions if thoroughly implemented, it is clear that often there is a great deal of confusion between WIL and community engagement. WIL opportunities are not always available, especially during economic downturns. While this is understood and supported, in practice there seems to be a slippage between WIL and more specific and purposeful forms of community engagement which are not only concerned with development of technical skills but of other graduate attributes, such as citizenship. While there are some issues with work integrated learning (WIL) – curriculum planning, outcomes, assessment, feedback from mentors and employers and coordination – overall it is a very positive programme. A suggested solution is good practice guides, training and pressure from professional bodies. The University is aware that the HEQF stipulates that, where WIL is mandatory in a programme, the responsibility for placing students rests with the University. In order to meet this requirement, each faculty now has a WIL officer, although some responsibility lies with CCEWIL, where staff members seem to have more of a monitoring role rather than responsibility for placing students.

81. Service learning is seen as an important component of Cooperative Education but is less well-resourced than WIL. The quality of service learning programmes appears variable and to some extent is dependent on the willingness of the staff members concerned to put in the extra hours of work necessary if the programmes are to be successful. Community engagement in the form of civic responsibility programmes is also encouraged and appreciated by the stakeholder communities who benefit from such programmes. The Panel acknowledges the emphasis which CPUT has laid on its service learning and community engagement projects.

Recommendation23
The HEQC recommends that the Cape Peninsula University of Technology developan appropriate quality assurance framework and monitoring mechanisms for community engagement activities.

Conclusion

82. With its 32 000 students, its 50% enrolments in science, engineering and technology, its 15 NRF-rated researchers, its NRF niche approved research facilities, WILRU and its various partnerships with the municipal and provincial government in strategic areas of skills development, CPUT is well poised to deliver on its vision of being at the heart of technology education and innovation in Africa.For the University to be able to make these promises real, it will have to conclude its physical consolidation project and its curriculum harmonisation and renewal to ensure that the identity of CPUT as a UoT is recognisable across all its campuses and among internal and external stakeholders by

- educating graduates who are responsive to the current demands of the economy and at the same time able to adapt to and innovate in a variety of economic, social and cultural contexts;
- producing research and research graduates in acknowledged areas of expertise that respond to the Western Cape and broader regional development challenges and needs;
- integrating service learning and work-integrated learning across its academic offerings and research projects so as to educate rounded graduates and bring the University closer to the needs of the local industry and communities.

Necessary conditions to achieve this are the development of institutional capacity for deep critical reflection in the three core functions, the consolidation of the academic project around academic departments and faculties, the continued improvement of staff academic qualifications, the enhancement of the University's deliberative mechanisms and internal communications, and the simplification of academic governance and management structures and processes.