**Quality Enhancement Project**

# Institutional feedback report

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| **Name of Institution** | Central University of Technology |
| **Date of institutional visit** | 5 April 2016 |
| **Names of peer reviewers** | Prof. J Spowart<br><br>Prof. T. Puckree |
| **Name of CHE person involved in the visit** | Prof. D Grayson |
| **Date draft report submitted to institution** | 10 February 2017 |
| **Date of final report** | 31 May 2017 |

# GENERAL INTRODUCTION TO QEP PEER REVIEWER REPORTS

Four focus areas were selected for Phase 1 of the Quality Enhancement Project (QEP) with which all institutions were asked to engage, namely: (1) enhancing academics as teachers, (2) enhancing student support and development, (3) enhancing the learning environment, and (4) enhancing course and programme enrolment management. In September 2014 each university produced a baseline submission that addressed the following questions for each focus area:

- Which aspects of your institution's Strategic Plan relate to this focus area? (Please be specific by quoting from the Strategic Plan).

- What activities do you currently have in place related to this focus area that are successful? What evidence do you use to conclude that they are successful? (Do not provide detailed evidence, just a description of the type of evidence you collect and a short summary of the results.)

- What activities related to this focus area have you initiated during the past three or four years that have not been as successful as you had hoped? In what ways were they unsuccessful? What do you think might be the reasons for the lack of success?

- What activities have you recently implemented or are you planning to implement in the next 12 to 18 months related to this focus area? Why have you chosen these particular activities?  What is the need or problem they are intended to address?

- What are the challenges or problems related to this focus area that still need to be addressed in your institution?

The submission also included an introductory section on the contextual features of the institution that are salient to student success, a description of how the submission was prepared, and a concluding section on other activities the institution was undertaking to promote student success and challenges being faced.

Universities were asked to submit final reports by 11 December 2015 that indicated improvements that had been made or were being planned since the baseline reports were submitted. The stated aim of the report is shown below.

> The aim of the institutional report is to demonstrate efforts to bring about enhancements in each of the four Quality Enhancement Project (QEP) focus areas since the beginning of Phase 1 of the QEP in February 2014, reflect on the journey towards enhancement and assess the extent to which the efforts have resulted in improvements.

Because of widespread student protests in the last few months of 2015, some reports were submitted early in 2016. In the final report, for each focus area universities responded to the following questions:

- Summarise what the university considers to be the key issues in [this focus area] in one or two paragraphs.

- During Phase 1 of the QEP, what changes at institutional level (a) have been made, (b) are in progress, or (c) are in the planning stages that relate to enhancing academics as teachers?

- Provide one or more (but not more than 5) exemplars to illustrate specific aspects of the changes that are successful. Provide evidence for claims of success. Where an activity is in the planning stages, indicate what evidence will be collected.

- Provide one or more (but not more than 5) exemplars of changes that have not been successful and suggest reasons.

- If possible, identify one or more promising practices related to this focus area. Describe the practice and provide evidence for success. Suggest what the key features might be.

- Identify the main challenges the university still faces in relation to this focus area.

The document also included an introduction that described how the report was prepared and a concluding section on reflections on Phase 1 of the QEP.

During 2016 and early 2017 individual institutional visits were carried out by two peer reviewers and the Director: Institutional Audits. The CHE communicated with the DVC Teaching and Learning or Academic to find a suitable date for the visit, and then a formal letter was sent to the Vice-Chancellor, which included the names of the peer reviewers and a request to indicate whether he or she felt there was a serious conflict of interest. In addition to logistical matters, the letter described the purpose and format of the visit as follows:

> The purpose of the institutional visit is to provide a structured opportunity for institutional leaders to engage with peer reviewers external to the institution about the journey they are taking towards improvement in the QEP focus areas, the milestones achieved, the challenges encountered along the way and the plans for further improvement. It is also an opportunity for institutions to receive feedback on their engagement with the focus areas and suggestions for what else they might consider doing, or doing differently, based on what is being learned in and with the sector. Please note that we are interested in what is being done at your university that relates to the four Phase 1 focus areas, not just designated QEP activities.

> The broad frame for the visit is appreciative inquiry (AI), originally developed by Cooperrider and Srivastva (1987)[1]. AI is a strengths-based approach to change management that uses the "positive core" of an organisation as the starting point for growth and improvement. In contrast to problem-solving – trying to fix what is – it employs a generative method to envision what does not yet exist. While it is impossible for peer reviewers to engage in a full-blown AI process, the institutional visit is intended to focus on the positives as a springboard for thinking about what to enhance and how.

> During the visit we would like to meet with the following groups of people over the course of the day:

> 1. Senior management (60 minutes)

> 2. Key role players involved with Focus Area 1 (80 minutes)

> 3. Key role players involved with Focus Area 2 (80 minutes)

> 4. Key role players involved with Focus Area 3 (80 minutes)

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[1] Cooperrider, D.L. & Srivastva, S. (1987). Appreciative inquiry in organizational life. In Woodman, R. W. & Pasmore, W.A. (Eds), *Research in Organizational Change and Development*, Vol. 1, Stamford, CT: JAI Press, 129-169.

5.  Key role players involved with Focus Area 4 (80 minutes)

6.  Senior management (30 minutes for feedback)

The team will have read the university's QEP baseline report and final report. At the meetings, the team may ask for further information beyond what was in the two documents. The university may also wish to bring additional information to the meetings.

The selection of participants is up to you. However, we hope that you will be able to be part of the first meeting, and if possible, the last. For the meetings with senior management, we would like to speak with people who have the authority and responsibility to implement and drive initiatives at institutional level that relate to the four focus areas of Phase 1 of the QEP[2]. For the meetings on the focus areas, we hope that students will be included.

Several weeks before the institutional visit, the two peer reviewers were sent the institutions' two reports, two articles on Appreciative Inquiry and the peer reviewer manual, which contains, among other things, a list of possible questions and detailed guidelines for the peer reviewer report. Immediately prior to each institutional visit, the peer reviewers and the Director: Institutional Audits spent most of a day preparing for the visit by going through the institution's two submissions in detail. During this preparatory meeting, several specific questions for the senior management were formulated and areas in which the panel wanted more information were identified for each focus area. The meetings that took place during the institutional visit were audio-recorded, and the audio files were sent to the peer reviewers after the visit for reference.

Each peer reviewer report is based on three data sources: the institution's baseline submission, the institution's final report and the content of the meetings during the institutional visit. As stated in the letters to the VCs, institutions could provide additional information during the visit. Some institutions did provide further documentation to elaborate on specific issues during the visit or, by agreement, emailed additional documentation immediately after the visit; in these cases such documentation was also taken into account in writing the report. It was necessary to limit the scope of the work in this way to ensure that the work could be completed within a specified time frame and also to be fair to all institutions.

Following receipt of the peer reviewers' reports, the CHE undertook a process of editing and harmonisation of the reports (to ensure a reasonable level of consistency among them) before sending them to institutions. In the initial letter to each VC it was indicated that the reports would be sent to the institutions for corrections, but that institutions were not expected to add new information at this stage. After the corrections were received from institutions, the final report was produced; new information was not included. It is hoped that the report will be a useful resource for an institution in its own journey to improvement. In addition, the reports will be among the documents that the CHE will use to produce a document synthesising what has been learnt during Phase 1 of the QEP across the sector. The final reports will serve at the Institutional Audits Committee and the Higher Education Quality Committee for information.

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[2] (1) Enhancing academics as teachers, (2) Enhancing student support and development, (3) Enhancing the learning environment, (4) Enhancing course and programme enrolment management.

## 1. INTRODUCTION

Central University of Technology (CUT) was formed in 2004 from the former Technikon Free State. Approximately 80% of its roughly 14 000 students are enrolled at the Bloemfontein campus and 20% at the Welkom campus. CUT comprises four faculties: Engineering and Information Technology, Health and Environmental Sciences, Management Science and Humanities.

In both the first and the second QEP reports, CUT shows a high degree of organization. At the outset in 2014, the University set up structures and processes to support the quality enhancement journey. The need to advance a "holistic and integrated teaching and learning approach" in line with the vision of the University was owned by University management and inculcated across the institution. This is evidenced by the development of policies and structures, such as the CUT Quality Enhancement Committee. Four task teams, each of which was responsible for one focus area, comprised of a representative cross-section of stakeholders at the University and whose work was overseen by the Academic Planning Unit under the direction of the DVC: Academic and Research, were allowed sufficient autonomy to work. Each team consulted with staff, gathered information, identified gaps, met regularly and produced a report that was discussed in a workshop and which resulted in the reports submitted to the CHE. Furthermore, a Quality Enhancement Strategy (QES) was developed and approved as a master plan to secure the highest quality outputs that would encourage and develop a culture of quality enhancement at all levels across the university. This focus on quality enhancement helps to ensure that the outcomes of planned and systematic management of the academic project leads to achievement of a high quality student experience. At the same time, a CUT Quality Enhancement Committee was appointed by the DVC: Academic and Research. The QEP report was compiled under the guidance of the chairpersons for each of the focus areas task teams.

To support the process, a Deputy Director: Quality Enhancement was appointed in August 2013 in the Academic Planning Unit. The policies, structures, processes, and activities described in the reports and during the visit support the statement made in the second report that the University developed a "premeditated and carefully planned institutional enterprise to achieve high levels of quality and integrity in the CUT's academic project", which coincided with the QEP.

There seems to be a high degree of coherence between the direction taken by management and both academic and support staff towards achieving the goals set to enhance quality and promote student success at the institution. The commitment by management was echoed by the staff who were interviewed. Staff seemed motivated, enthusiastic and took ownership of the initiatives. This was supported by the stated intent to develop holistic systems.

Although specific details of improvements were not provided in the reports, the interviews conducted during the visit yielded details on initiatives and improvements. Most of the initiatives are embedded at institutional level.

Sets of interventions with indicators and monitoring were implemented to develop academic staff, improve the learning environment, enhance student support and development and improve enrolment management. An example of this is the efforts to improve the scholarship of teaching and learning (SOTL), which resulted in the establishment of the SOTL Unit and organising a successful Teaching and Learning conference in 2015.

In 2015 the institution split the DVC: Teaching, Learning and Research portfolio into two to allow space for the growth of the teaching and learning ambit, but sees the interrelatedness and critical link between the teaching and learning and the research portfolios. A DVC: Teaching and Learning post has been created and filled.

It should be noted that no students were involved in the interviews, so it was not possible for the panel to get a sense of the students' views.

## 2. FOCUS AREA 1: ENHANCING ACADEMICS AS TEACHERS
*(Including professional development, rewards and recognition, workload, conditions of service and performance appraisal)*

**THE INSTITUTION'S STRENGTHS**

Core strengths of the Central University of Technology (CUT) are the focus on support for and professional development of academics in teaching, and the promotion of in-depth academic discourse related to teaching. The University has a positive approach to the development of academic staff, whether full time, temporary or part-time, and supports on-going participation in national projects for the enhancement of academics as teachers. This work is driven and supported by a very professional Academic Development and Support unit, headed by a dean and comprising the Centre for Curriculum Development, Centre for e-Learning and Educational Technology, Centre for Teaching and Learning and Writing Centre, as well as the new Unit for the Scholarship of Teaching and Learning.

**THE APPROACH TAKEN TO IMPROVEMENT**

In 2015 the portfolio of DVC: Academic and Research was split into DVC Teaching and Learning and DVC Research. This enables the institution to increase its focus on teaching and learning. The institution has taken a high-level approach by reviewing and developing policy documents in the light of its Vision 2020 and Strategic Plan, as well as making some structural changes.

**IMPROVEMENTS UNDERTAKEN AND PROGRESS MADE**

*Mentoring*

An important initiative of the Academic Development Support (ADS) Unit is the Mentorship Programme for staff. This is a developmental project and is trans-disciplinary in nature. Clusters have been created which are both research-based and developmental. The mentors and mentees share ideas and work across faculties and disciplines in a very collegial manner. International and local experts are invited to share best practices. Currently there are 13 mentors and 59 mentees. Every new academic staff member is assigned to a mentor, who typically mentors a group of about 5 mentees.

The empowerment of female academics is further enhanced by the mentorship programme for black female academics established in 2014. Thirty-five women are currently being mentored in this programme.

CUT participates in several national development initiatives. There are four Fellows in the New Generation of Academics project and three participants in the national HELTASA Teaching Advancement at Universities project. Four CUT participants are part of the Stars of the Academy and Research (SOAR) project, which aims to "increase the critical mass of young, outstanding black female academics particularly in scarce and critical skills and thus to create, support, promote and sustain excellence in scientific and technological teaching and research." Grants are available to cover relief from teaching duties for a year.

In order to understand and improve on the Work-Integrated Learning (WIL) offering as well as staying up-to-date with what happens in the "real world of work", teaching grants are available to give lecturers the opportunity to gain updated exposure in industry. This is another positive initiative, although the uptake by staff has been less than expected.

*Workload model*

The *Workload Allocation Model and Working Hours of Academics* was piloted in 2015. It provides flexibility for academics at different career stages, for example, junior lecturers are given three years to complete their master degrees, and a lighter teaching load can be allocated for academics who are completing PhDs. It also aims to set institutional norms and link workload with resource allocation.

The introduction of the workload model has provided for a more even distribution of research, teaching and community engagement activities, as well as opportunities for teaching relief when time is needed for professional development, research and further studies. This still requires refinement as the model is not fully operational. CUT is busy developing institutional norms and working to marry workload to resource allocation.

*Rewards and Promotion*

A noteworthy development is the approval of a policy to enhance teaching and learning and the professional development of teaching staff, the *Policy for the Promotion of Academics,* which has been fully implemented. It specifies, among other things, that applications for

promotion and for tenure following probation for new appointees must include teaching portfolios. The recent introduction of compulsory attendance of workshops on assessment and learning facilitation, as well as the requirement of a teaching portfolio for final approval of the probation period for new staff, are positive developments.

CUT has also introduced recognition for teaching in the form of the VC's awards and faculty awards.

*Professional development and SOTL*

New academic staff members are inducted via the Mentorship Programme, which is done per faculty and is compulsory for new staff to attend. Until 2014, new academic staff attended modules on assessment and learning facilitation at the University of the Free State, but since these were discontinued CUT provides training itself. The Human Resource department has proposed that if a lecturer does not attend the developmental workshops then confirmation of appointment following the probation period will not be approved.

A range of academic workshops are available to assist lecturers with the development of their qualifications and teaching approaches. Workshops on specific, targeted topics, including e-learning and curriculum development, attract academic staff at different levels. A Teaching and Learning Coordinator is assigned to each faculty. Part-time and temporary staff are invited to attend any developmental workshops, and many do, although it is difficult for them to fit these into their work schedules. In addition, several staff are enrolled in the Post Graduate Diploma in Higher Education offered by Rhodes University.

The Unit for Scholarship of Teaching and Learning (SOTL) was formed in 2015, and falls under the ADS. The introduction of a specific unit for the SOTL, as well as the Teaching and Learning Innovation Conference, have been positive developments. To improve the student success rate and enhance classroom practices, this Unit has been instrumental in the sharing of new ideas in Teaching and Learning as well as the use of technology in the classroom. As a result, academics are feeling motivated to research and publish in the area of SOTL. This Unit also provides assistance and encourages submissions to national projects, such as the CHE-HELTASA National Excellence inTeaching and Learning Awards and SOAR.

Benefits flowing from the 2015 SOTL conference include a number of published journal articles and an improvement of teaching skills. During the visit, the panel heard that CUT is reaching out to international partners. Three Memoranda of Understanding (MoUs) have recently been signed with Asian partners. The purpose is to enhance best practices and increase publications. These newly formed partnerships have resulted in an invitation being extended to the partners to participate in this year's CUT conference.

*Staff recruitment and retention*

Being based in Bloemfontein and given the national need for higher education academics, CUT experiences challenges with attracting and retaining new academic staff. Remuneration

is an issue and salary counter-offers often need to be made to retain staff. Regular benchmarking is done to ensure packages and benefits are competitive. Efforts are being made to "grow their own timber" through continuous development and support given to promising young academics, whose workload is reduced to enable them to focus on the development of their qualifications, while being mentored.

*Performance appraisal*

The *Employee Development and Performance Management System* was introduced [when] but then needed to be re-designed to include employee development and training needs and more explicit reporting on professional development. For lecturers the performance appraisal draws on, among other things, a teaching portfolio and recently introduced online student and peer evaluations.

## SUGGESTIONS FOR FURTHER IMPROVEMENT

The low number of academics taking up the opportunity for industry exposure is disappointing, especially given the inclusion of WIL in curricula. It would be useful for the university to identify the reasons for this, which could lead to a re-design of the project.

The limited attendance of professional development and SOTL seminars and the perception of a lack of research opportunities connected to SOTL are also concerns. It is suggested that the workshops offered to all academic staff, both full-time and part-time, be offered outside of teaching periods, such as in the recess or in the time before the commencement and after the conclusion of classes, so that attendance can improve. In addition, CUT could consider developing a Continuous Professional Development framework that would encourage the participation of senior academics in teaching development.

The lack of promotion opportunities and career paths for professionals who are classified as support staff is a national issue and should be given attention.

Subvention from companies to attract staff, particularly in scarce skills such as ICT administrative and technical staff, should be considered.

## FOCUS AREA 2: ENHANCING STUDENT SUPPORT AND DEVELOPMENT

*(Including career and curriculum advising, life and academic skills development, counselling, student performance monitoring and referral)*

### THE INSTITUTION'S STRENGTHS

A number of structures and policies have been developed and implemented, such as the Teaching and Learning Plan, which includes student support and a staff development plan, and the Strategic Transformation of Programmes Plan. A learner-centred approach is the

educational philosophy that is followed, whilst a blended approach aims to integrate co-curricular activities with students' academic life at the institution.

The institution supports its first year students by means of structured assistance in their transition into university life, together with many efforts to reduce first year dropouts and improve success rates and throughput. One of the prime activities in this area is the Student Peer Mentorship Programme, which was initiated in 2013. Faculty-based Teaching and Learning Coordinators train and coordinate the mentors' work, with a dual focus on academic and social aspects of student life. There is a manual for mentors, and they are trained to refer students for support as needed.

The University has run Supplemental Instruction (SI) for many years as the primary vehicle for academic support. Two unusual aspects of CUT's approach are that SI is offered in second and third year courses, not only first year courses, and that all students are encouraged to attend from the beginning of the year, not only those who find themselves struggling during the semester, which helps to remove the stigma for students who attend.

## THE APPROACH TAKEN TO IMPROVEMENT

The management and coordination of student success initiatives are important at CUT. The use of Faculty Teaching and Learning Coordinators, Faculty Student Academic Affairs Committees that meet quarterly and Faculty Administrators all assist in improving different aspects of the life cycle of students and supporting academic staff. The use of social media to engage students has been introduced.

CUT has made improvements in career and curriculum advising, life and academic skills development, counselling, student performance monitoring and referral. Student surveys are undertaken to identify students' needs and experience, including SASSE (South African Survey for Student Engagement).

A partnership has been formed with the Free State Department of Health, which includes having HIV testing kits and counselling that is available to students.

The development of the SOTL Unit, referred to under focus area 1, also contributes to student support and development as, according to the final report, "This is a well-grounded and scholarly motivated attempt to continuously nurture an environment that places learner-centred practices and principles at the core of teaching. We enrich the educative potential by encouraging students and scholars to enhance their learning and teaching through critical and collective reflection on what is and what should be taught."

## IMPROVEMENTS UNDERTAKEN AND PROGRESS MADE

CUT has introduced a number of note-worthy projects to support and enhance student success. A research project to establish which interventions contribute most successfully to first years' success is in the planning stages and is to be undertaken in 2016. The overall purpose is to produce "well-rounded graduates with attributes for self-employment and

employability skills preferred by business and industry". CUT has developed a caring environment for its students. Some of the key initiatives to improve student support and development are:

- The Graduate Attributes Project, which was launched in March 2015. This guides the students and staff to create a distinctive culture of academic involvement and community service and raises awareness of CUT's 10 graduate attributes. These graduate attributes are clearly incorporated into course learning guides.

- The Student Peer Mentorship Programme, which has been adapted to integrate CUT's graduate attributes and the use of social media. It provides support to first year students to cope with the transition to higher education by using senior students as mentors. Every first year student is attached to a senior student mentor, with 6 to 10 mentees per mentor. The mentors receive only a small stipend but other incentives [what are they?] are provided to encourage mentor participation. Student advisors and mentors visit classes to establish the challenges that students face.

- A compulsory orientation programme of five days is provided. In the Faculty of Management Science, all lecturers must also provide an academic induction for new students.

- Supplemental Instruction (SI) is available to students throughout the year. It is currently offered in 126 modules at first, second and third year levels in 167 sessions per week. The SI programme has grown substantially, with a large increase in the number of students who utilise this support. All first years are encouraged to attend from the beginning of the year, which reduces the likelihood of stigma being attached to the programme. Blackboard and social media have been introduced to increase the effectiveness of SI. SI instructors receive three days of compulsory training. For those students who attend 80% of the SI sessions and do not gain the sub-minimum entry to examinations, they may write an additional test to improve their semester mark and improve their chances of gaining entry to exams. The growth of the SI offerings, while positive in terms of offering support to increasing numbers of students, poses challenges with time tabling, venues and capacity to continue to offer this intervention successfully.

- Introduction of a core curriculum, comprising two foundation modules, Academic Language Proficiency (ALP) and digital literacy, which are compulsory in all new HEQSF aligned programmes. These now carry credits, as in the past this was not the case and the students did not attend.

- Each faculty has a Teaching and Learning Coordinator, Faculty Administrators and a Student Academic Affairs Committee. The coordinators assist with interventions that students should attend in order to reduce the number of excluded students. They

also liaise with ADS on student matters. The Student Academic Affairs Committees discuss possible interventions to improve student success.

- CUonTop supports students at risk, defined as those who fail half or more of their courses. These stuents attend a programme of workshops that address, among other things, study methods and attitudes. At the end of the 6-week programme they receive a certificate of completion.

- The use of the NBTs to place students, together with academic advising, is intended to assist first time entering students with career guidance and correct selection of programmes. The idea of the career guidance is to supplement the peer mentorship programme and involve experienced lecturing staff. This initiative was only completed at the end of 2015 and more time is needed to observe the impact. The most difficult aspect of using the NBTs optimally is that the "walk-ins" (students who do not apply in the previous year but try to gain admission during registration) do not necessarily get to do this test. The "walk-ins" also provide a challenge to the attendance of the compulsory orientation programme. This has an effect on their transition into higher education and ultimately their success.

- The Writing Centre was established in 2015 and has added value to students, together with the Reading Laboratory with which it was combined. Students can be directed there by staff or can drop in to obtain academic language support together with writing and study skills. These are available to individuals or by means of attending workshops, as well as using on-line resources.

- Student Counselling has introduced four wellness drives in conjunction with the Department of Health and other external stakeholders. These include blood testing and counselling for HIV positive students.

Challenges experienced are mainly to do with low attendance of students in the interventions and getting lecturers to assist by identifying at-risk students and referring them to Academic Development Support (ADS) and other support units. During the visit, mention was made of the desirability of integrating support programmes with formal courses, but getting the cooperation of lecturers to assist was identified as a major challenge.

**SUGGESTIONS FOR FURTHER IMPROVEMENT**

Students are not monitored on-line. While at-risk students are identified manually, an electronic system is required so that students who are at-risk can be identified more systemically, referred for support and their progress can be monitored.

Although there is an extensive, and, by all accounts, very good mentorship programme for students, the use of tutors for at-risk modules is recommended. It was not clear if the mentors are tutors as well but if not, the introduction of a tutoring programme as a formal part of those modules would be useful as not all faculties make use of tutors.

In order to manage all the support processes that first year students require and to provide contextualised support to students, it is suggested that dedicated student advisors be appointed in the faculties. It may be that Teaching and Learning Coordinators already partly play this role, but it was not clear from the reports or the visit. Also, the conditions of service of these coordinators was not clear. The panel had the impression that they were non-academic, contract appointments.

The SI programme is clearly playing a big role in supporting students at all levels in the institution. In order to address the timetabling and venue challenges, it is suggested that the university institute a real-time, on-line room booking system (see focus area 3).

A formal First Year Experience (FYE) programme for the duration of the first semester would be useful. This would include a planned programme of support offered in conjunction with ADS, the library and other support units. Information for students could also be accessed on the website. In order to achieve this it is recommended that the Wellness Unit and the ADS Unit work more closely together so that any overlaps are minimised. In addition to the support offered to first years, it is suggested that senior students also need to be supported. CUT may wish to consider introducing a Senior Student Experience, as is done at the University of Johannesburg, where there is structured support and provision of information and training in preparation for the workplace (some of this does happen) as well as for post graduate studies, This would be in addition to the academic workshops provided by the Wellness Unit.

In all instances where data are collected it is important to undertake research to establish what the impact of interventions has been, such as which are the best predictors of success, which interventions should be retained and why. Budget constraints limit any institution's ability to offer all interventions, and so it is important to establish which ones are the most effective.

It was not clear what the structural and working relationship between the ADS Unit and the Wellness Unit are. In some cases, it seems that there is some overlap. The panel suggests that the relationship between these units be harmonised so that limited expertise can be utilised as effectively as possible for the benefit of students. One model to look at is the UJ model, where all student and staff development and support activities are part of a single structure.

In the 2014 report the vision and plan made mention of "WIL and the use of e-learning and educational technologies to develop digitally literate and problem solvers with attributes required by the world of work". Not much was mentioned in the follow up report on the WIL aspect and its contribution to improving student employment (but e-learning is enhanced and is discussed under Focus area 3). It would be useful to make more explicit links between student development and WIL. In addition, almost no information was provided on how CUT prepares students for the workplace. The 2014 report indicated that faculties were in the process of integrating WIL into most of the programmes, but no further

information was provided after that. The university could consider a formal workplace readiness course as is offered, for example, at Mangosuthu University of Technology.

Although the policy for Provision for Students with Disabilities has been reviewed, there are still areas that require enhancement of accessibility for students with disabilities.

## 4. FOCUS AREA 3: ENHANCING THE LEARNING ENVIRONMENT (*Including teaching and learning spaces, ICT infrastructure and access, technology-enabled tools and resources, library facilities*)

**THE INSTITUTION'S STRENGTHS**

As mentioned earlier, the activities of the institution are guided by the 2010-2015 Strategic Plan and direction is provided by Vision 2020. Extensive building has been undertaken in line with a well-planned campus master plan. In order to advance the use of e-learning, a Director: e-learning is in place. Personal response devices ("clickers") were purchased for use in large classes.

**THE APPROACH TAKEN TO IMPROVEMENT**

The approach seems to be an inclusive one with representation from a variety of sectors in the team. The reports indicate that input was obtained from several sectors with emphasis on the Education, Engineering and Science fields, and from the library and both campuses. Cognisance was taken of the problems experienced with regard to participation by students and alternative strategies to obtain the student voice are being considered, such as an online area for comments and suggestions.

The project to improve the teaching and learning environment will be guided, as reported in the 2015 report, by the Teaching and Learning Plan, and the e-Learning Strategy. To operationalise its vision, the institution identified two pivotal goals: development of "state of the art facilities" and "learner-centered methodologies and strategies".

**IMPROVEMENTS UNDERTAKEN AND PROGRESS MADE**

In the first report the institution focused on the need to address infrastructural deficiencies in relation to its Strategic Plan and Vision 2020. The institution, in addition to addressing infrastructural issues, also identified and started to address aspects related to structures and policies to improve participation in the core business and to ensure the sustainability of these aspects. These include the Teaching and Learning Plan, the e-Learning Strategy and learner centred methodologies and facilities. Several infrastructural projects commenced in 2014 and were planned for completion in 2015/2016 and actual occupation in 2016. All of these projects that related to laboratories, lecture rooms, computer laboratories, studios and residences seem to be on track. Major infrastructural improvements include the extension to the Teacher Education Building, BHP Billiton Building for Engineering and Information

Technology and a new residence in Bloemfontein. On the Welkom campus, An African Languages Building and a new residence are being completed.

There is a focus at CUT on increasing both formal and informal teaching and learning spaces, computer laboratories, workshops and studios, guided by the campus master plan. Ninety percent of new building space is for teaching and learning, very little for office space. The creativity in optimising space usage while remaining "green" is noteworthy. There has been an increase in Wi-Fi access, which, while not yet ubiquitous, does now cover all open spaces on both campuses. An interesting innovation is the creation of outdoor learning spaces, including the provision of solar charging stations. In some cases, tar roads have been removed and replaced by paving, plants and benches. Indoor spaces, such as the atrium in the Engineering Building, are being conceptualised as learning spaces, and a coffee shop is being set up there. A Student Academic Centre, with 24-hour access, has been built next to the library where students can study individually or in groups and have access to computers. Centralised venue timetabling is about to be introduced, which will help optimise space usage.

Safety issues are being addressed through improved lighting and limited entry points to campus, controlled by security staff, as well as regular maintenance checks.

In addition, several projects related to the equipping of teaching facilities to improve the learning environment have been completed or are in process, e.g., provision of data projectors and screens in classrooms.

There is an institutional effort to increase the use of technology in teaching and learning. In several of the large classes, clickers are being used to increase student participation. Since not all classrooms have computers because of the risk of theft, lecturers are being provided with laptops. The use of Blackboard, the institution's learning management system, has increased significantly in the past few years with over 90% of courses now having a presence on it. Although a number of lecturers only use it as a repository for information, the Director for e-Learning indicated during the visit that his unit evaluates courses on Blackboard and gives accolades for innovative use. There is a high uptake among lecturers in training on the use of Blackboard. Participation in training forms part of performance appraisal and is supported by management. Off-campus use of Blackboard by students is reliant on access to the internet. CUT is negotiating with cellular networks to offer free off-campus access to CUT's websites. However, even though the number of students with their own devices is increasing, there is a need to address the availability of devices for students. For students studying engineering, sponsors are encouraged to supply students with a laptop. The use of online assessment is increasing, but in order to address concerns about the identity of students taking online assessments, the university wants to create large spaces where on-line assessment can be done in a controlled way.

A compulsory (but not credit-bearing) course in information literacy has been developed and is offered by the librarians. This supports the University's move away from print-based materials and towards the use of electronic resources. This has increased students' access to

materials and freed up physical space in the library. An institutional repository of research documents and dissertations has been created. Librarians are increasingly becoming skills providers.

Although additional computer labs have been created, the computer facilities are insufficient to address student needs, both in terms of number and quality, although the existing laboratories are open until midnight.

## SUGGESTIONS FOR FURTHER IMPROVEMENT

While positive steps are being taken to improve the learning environment, additional improvements are possible. One suggestion is to optimise the use of rooms through centralised venue allocation and booking systems (which are planned), and to institute a booking system for the use of computer facilities campus-wide.

In addition to the existing committee that discusses building needs, it would be worthwhile to consider establishing a committee involving teaching and learning specialists, facilities staff and academics to ensure that the future development of physical spaces is aligned with desirable teaching and learning approaches.

The development of information literacy is vital for all students. Since the course is not credit-bearing, it may suffer the same lack of attendance as the academic literacy course did in the past. Therefore, the university could consider incorporating it into the existing core curriculum or into a broader First Year Experience (see focus area 2).

During the visit, interviewees identified the lack of in-house ICT capacity as a problem, which limits, for example, CUT's ability to do in-house ICT development. The salary that the institution can offer makes it very difficult to recruit and retain skilled ICT staff. The institution could consider approaching a company that would be willing to provide salary subvention. Given the University's plan to increase its use of electronic resources and platforms, skilled ICT staff are essential.

## 5. FOCUS AREA 4: ENHANCING COURSE AND PROGRAMME ENROLMENT MANAGEMENT
*(Including admissions, selection, placement, readmission refusal, pass rates in gateway courses[3], throughput rates, management information systems)*

### THE INSTITUTIONS' STRENGTHS

There are service level agreements between Student Administration and Faculty Administrators to ensure that both parties know who is responsible for what. The Registrar

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[3] "Gateway courses" are those courses that have a large impact on students' ability to progress. Typically they are prerequisites for other courses, and often they have large enrolments. At many universities, examples of gateway courses are first year Mathematics and Economics. In some cases, if students fail a gateway course they automatically have to extend their studies by one or two semesters.

meets with Faculty Administrators every quarter. The institution is clear about the processes involved in enrolment management. Its Admissions Policy is regularly revised.

A number of extended curriculum programmes are offered, which have been shown to be successful.

**APPROACH TAKEN TO IMPROVEMENT**

A needs analysis of the congruence between enrolment management practices in programmes and the "strategic trajectory" of the institution is in the process of development. This will be supported by ongoing monitoring and evaluation.

**IMPROVEMENTS UNDERTAKEN AND PROGRESS MADE**

Registration processes have been greatly improved. Registration is now online, and can be done both on and off campus. Extensive collaboration between Student Enrolment Services and faculties over the past two years has resulted in accurate capturing of the academic structure of programmes, including admission requirements and prerequisites.

During registration week there is a "one-stop shop" in a large venue on campus where students can get assistance with curriculum planning from academics, and with financial aid and housing. Senior students who pass their courses are "auto-promoted" and are thus able to register on-line without having to apply for continuation at CUT. Following on-line registration, there is a period of manual checking of each student's curriculum to ensure there are no mistakes or anomalies.

As from 2016, applications are now also done online. Early closing dates for applications have supported timeous registrations, but the university still battles to admit enough students in advance to meet its enrolment targets. Reasons for this include: some students wait until after they have been rejected by other institutions perceived to be more prestigious to apply to CUT or only apply after their matric results are released and they see they have achieved good enough results to apply (final results are often higher than provisional results). Financial constraints also affect student applications and registrations. As a result, the university is still heavily reliant on "walk-ins" to meet its enrolment targets. A proposal to drop the application fee is being considered in an effort to decrease the numbers of walk-ins. There are also a number of students who register late, often for financial reasons, but many of those students are allowed to attend class even before they are officially allowed to register, which prevents them from falling behind.

In terms of recruitment, a study is being undertaken to establish what marketing activities, such as open days, winter and Saturday schools, are actually successful in getting students to register. A suggestion is that the word should be spread about when applications open, for example, by promoting this at evening meetings with parents. The recruitment drive for students is strong for the Welkom campus but needs to be strengthened at the Bloemfontein campus.

In 2015 the university started to use the National Benchmark Tests (NBTs) for placement of students, but research is needed to establish the predictive validity of the tests at CUT.

Students who are academically excluded are allowed to appeal. Attendance of workshops offered by the Wellness Unit for six weeks is required before students are allowed to return after a successful appeal. Focus groups are offered to excluded students whose appeal has not been successful to encourage them to re-appeal in order to reregister for the following semester.

The number of extended curriculum programmes has been consolidated from 11 to five. The reports indicated that these programmes, which have been running for a number of years at CUT, have been shown to increase student success rates, yet only a small percentage of students (8-10%) are involved.

**SUGGESTIONS FOR FURTHER IMPROVEMENT**

An aggressive recruitment strategy for the Bloemfontein campus is necessary to ensure that walk-ins and late registrations are minimized. CUT needs to be bolder about what it has to offer students.

Students are currently being tracked manually. It is suggested that the institution considers an electronic system for monitoring students during the semester, especially first year students, so that early detection of poor performance can be addressed timeously. In addition, it is recommended that the institution consider a tracking system to track students electronically over the course of their whole programme. UKZN has an interesting system, nicknamed the "robot system", in which the status of each student is shown as green, amber or red depending on how well they are progressing. Amber status triggers various support interventions.

The institution should consider strengthening institutional research in order to identify interventions that are successful as well as obstacles to student success. As a start, pass rates in gateway courses should be monitored at institutional level, and, where necessary interventions related to curriculum, staff and/or students should be required. In addition, detailed institutional research into the relative success of students in mainstream and extended curriculum programmes should be carried out. If the research shows that the latter outperform the former or enable students with lower admission scores to success, then the institution is encouraged to increase the proportion of students enrolled for ECPs.

**6. SUMMARY**

CUT is clear on the direction it is taking to improve the quality of its delivery in all areas. This forms part of their Vision 2020 and Strategic Plan 2010-2015. The focus from the beginning of the institutional quality enhancement exercise, as reflected in the 2014 report,

is a student-centered approach to learning, which includes stimulation, collaboration and personalized, inclusive, and flexible approaches to learning.

CUT has a strong institutional focus on sustaining efforts to improve in all of the QEP focus areas through a structured, holistic approach. It has policies that support development in the focus areas, infrastructure developments supported by ongoing maintenance, and management and staff commitment to ensure that initiatives are not hindered. Vision 2020 has emphasized teaching and learning as a vehicle to shape the future of the institution. During the visit, the panel got the impression that, overall, a strong sense of collegiality exists among the staff and that significant efforts have been made to improve teaching and learning in the institution, to the benefit of the students. Regular policy review, development of functional structures and involvement in national projects add to sustainability of initiatives. This is complemented by the commitment, enthusiasm and sense of ownership by staff of the initiatives.

CUT has a number of good initiatives to support and develop staff, under the very capable leadership of the Academic Development and Support Unit. The mentoring programme for all new academic staff, and the special focus on developing female staff, are noteworthy. The establishment of the SOTL unit and the enthusiasm of those involved in running it add to the institution's repertoire of development tools and opportunities, as well as providing opportunities for international collaboration. The development and implementation of policies related to promotion, workload and performance appraisal demonstrate the coordinated approach that CUT is taking to identifying and structurally embedding what it regards as enabling and desirable practices across the institution.

Offering industry placements to staff is a good initiative, but reasons for the low uptake of these opportunities need to be investigated and addressed. Similarly, ways of increasing the participation of academics in professional development activities need to be identified. Two strategies that the panel suggests CUT consider are to offer professional activities outside of teaching times and to set up an institutional Continuous Professional Development system in which all academics are expected to participate.

Through its programmes and structures, CUT demonstrates a high level of care for its students. The Peer Mentorship Programme, in which every first year student is assigned to a mentor, supervised by faculty-based Teaching and Learning Coordinators, is exemplary. The Graduate Attributes project, once implemented across the university, is likely to positively affect students' preparation for their future lives. In addition, it could be highlighted in marketing material as the university tries to recruit potential students. The large-scale Supplemental Instruction programme is unique and noteworthy in its scope (offered to students in all years of study) and scale (offered in over 100 courses). Problems in finding venues might be able to be addressed, at least partially, if the university were to devise a real-time online room booking system.

The ADS staff, Faculty Teaching and Learning Coordinators and the Wellness Unit staff all appear to be highly committed to CUT's students and their success, and are involved in

numerous support and development interventions. However, it was not clear to the panel how they interact at structural and operational levels. It is suggested that the university consider whether the current structural and functional arrangements might be better conceptualised to remove duplication of efforts and capitalise optimally on the limited human and material resources available. A model to consider is the one used at the University of Johannesburg, where all student and staff support and development units are housed under a single structure.

As another approach to bringing together various support activities, the university could consider implementing a First Year Experience (FYE) programme in which students participate in a range of planned activities over the course of the first year, or at least the first semester. It is suggested that the university communicate with the South African National Resource Centre for First-Year Experience and Students in Transition.

In an effort to support first year students at risk, departments go through students' first test results and identify those who did not do well. Those students are referred for support, either academic or psycho-social. It was not clear to the panel what further monitoring of students takes place after that. The current manual approach to identifying students at risk is time-consuming. It is suggested that the university develop or purchase an on-line system for monitoring students and keeping track of referrals and interventions.

The lack of in-house ICT capacity, including the ability to develop computer applications and to integrate different systems, was raised several times in the interviews. Interviewees indicated that CUT cannot offer sufficiently competitive salaries to attract and retain ICT professionals. However, the lack of integration in ICT systems across the institution, a problem raised several times in the interviews, is an obstacle to institutional effectiveness and efficiency. The university may wish to consider approaching an ICT company to see if it would be willing to subvent the salaries of ICT staff.

The introduction of an information literacy course for all first year students, offered by the library, is important. However, given the university's experience with non-attendance of courses that are not credit-bearing, the university may need to consider integrating it into the core curriculum or other credit-bearing courses.

The university has a carefully developed campus master plan that guides its building and space development initiatives, which are well-managed. Maintenance is addressed on a regular basis. A number of new buildings have been built recently, and no problems were raised about quality or delivery times. CUT has recognised the need for increased student learning spaces and has been innovative in its approach to providing these. For example, it has created outdoor learning spaces by putting up solar charging stations and providing benches where students can sit together to learn, in some cases removing sections of tar road and replacing them with paving and plants. New places for students to buy food and beverages are being created near student learning spaces. These developments are in line with modern trends for integrated social and learning spaces.

In the discussions during the interviews it emerged that broader consultation would be valuable in designing new teaching and learning spaces. The university may wish to consider creating a committee or forum in which facilities staff, teaching and learning specialists, academics and students discuss together how best to design spaces in which effective teaching and learning approaches can be utilised and students' needs and preferences are catered for.

There has been a significant increase in the use of Blackboard, supported by the Director: e-learning and the e-Learning strategy and management. Increasing numbers of academics are participating in training on how to effectively use e-learning, and accolades are given to those who do so in interesting ways. However, increasing use of e-learning must be accompanied by increasing access of students to electronic devices and the internet. The availability of Wi-Fi on campus has increased, but it is not yet ubiquitous. The reports indicated that on-campus computer facilities are inadequate to meet student demand. One way to partially alleviate this problem is to create an online system that allows students to identify and book an unused computer on campus, similar to the way parking places are identified in parking garages. There was no discussion about how to increase student access to devices and data off campus. In the 2014 report mention was made of discussions with cellular companies to provide free access to university websites off campus, but progress in these discussions was not mentioned in the later report or during the visit. This idea is worth following up. It is also worth having conversations with the municipality about providing hotspots that students could use, as is being done by Nelson Mandela Metropolitan University.

There has been an enormous improvement in registration procedures, which are now entirely on-line, although first-year students are still expected to register on-campus in order to receive guidance on their curriculum choices. Application is now also done on-line, and response times have been improved. The structured, compulsory and extended support that is offered by the Wellness Unit to students who successfully appeal their exclusion, including workshops and focus groups, is exemplary.

The need for an on-line monitoring system was mentioned earlier. The university should also consider getting an on-line tracking system that will track students' progression during the course of their whole academic programme, as is done, for example, at the University of KwaZulu Natal with their "robot" system. That system enables counsellors and students to see when students' academic status changes from green to amber, which triggers interventions.

The university still relies heavily on "walk-ins", students who do not apply the previous year, to meet its enrolment targets. The panel got the impression that the university could do more to market itself as the institution of first choice in its areas of strength, which are considerable, and is encouraged to do so. In addition, more targeted and extended recruitment strategies could be considered, such as establishing long-term, ongoing relationships with feeder schools.

The university is encouraged to undertake more institutional research to identify what factors and interventions help or hinder student progress and ultimate success in order to allocate resources effectively and focus efforts where they can make a difference. As a start, pass rates in gateway courses should be monitored at institutional level, and interventions required where they are low, with support from ADS.

Students were notably absent from the interviews and it appears that their participation in preparing the reports was very limited. In the interviews, management and other participants acknowledged that getting student participation has been challenging. Nonetheless, eliciting the student voice is essential for an institution to ensure that it is meeting its students' needs and helping them fulfil their aspirations. The panel was informed that the creation of Faculty Councils is underway, but more needs to be done to make them fully functional.

In conclusion, it is clear that CUT is taking a holistic, inclusive, coherent and carefully planned approach to enacting its mission and bringing about enhancements to promote student success. CUT can pride itself on being an institution that demonstrates care for its students and invests in the development of its staff, while focusing on continuous improvement in the quality of what it does and offers.

**APPENDIX**

QUALITY ENHANCEMENT UNIT

## QEP Institutional Visit Meeting Programme
## 6 April 2016

**Venue: Council Chamber, 1st floor, ZR Mahabane Building, Bloemfontein Campus**

| TIME | SESSION | PARTICIPANTS |
|---|---|---|
| 08:30 – 09:30 | Senior management | • **QEP Peer Review Panel**<br>• Prof Mojalefa Ralekhetho (Acting DVC Resource and Operations)<br>• Dr Nothemba Mrwetyana (Registrar)<br>• Prof David Ngidi (DVC: Teaching & Learning)<br>• Prof Henk de Jager (DVC: Research, Innovation & Engagement) & (Acting: Vice-Chancellor)<br>• Dr Daryl Balia (Director: Academic Planning)<br>• Mr Ike Mokhele (Deputy Director: Quality Enhancement). |
| 09:35 – 10:55 | Key role players involved with Focus Area 1 | **Task team 1 members:**<br>• **\*\*Prof Samson Mashele (Dean: Health Sciences & Chair)**,<br>• Prof Tshedi Naong (HOD: Business Management);<br>• Dr L Dzansi (Lecturer: HRM);<br>• Mr Leon Van De Venter (Director: HR);<br>• Ms Helene Kotze (Deputy Director: HR & HR Systems);<br>• Dr Wendy Setlalentoa (HOD: Education);<br>• Dr Motshidisi Lekhu (Lecturer);<br>• Mr Lehlohonolo Sempe (Lecturer);<br>• Dr R Sebolao (Manager: Special Projects);<br>• Ms. Selina. Mphumela (Coordinator: Teaching & Learning) |
| 11:00 – 12:20 | Key role players involved with Focus Area 2 | **Task team 2 members:**<br>• **\*\*Prof M Monnapula-Mapesela (Dean: Academic Development & Support & Chair)**;<br>• Ms Merriam Kenke (Psychologist: Academic Support); |

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|  |  | <ul><li>Mr Jackie Bosch (Senior Coordinator);</li><li>Dr Oupa Makola (Campus Director: Welkom Campus);</li><li>Dr Harry Brink (HOD: Mathematics);</li><li>Dr Paks Tondi (Deputy Registrar: Student Services);</li><li>Dr Clement Moreku (Assistant Director: Student Recruitment);</li><li>Ms Jane Nkhebenyane (Lecturer: Health Sciences)</li></ul> |
| 12:25 – 13:20 | **A light lunch will be served for the CHE panel only** |
| 13:25 – 14:45 | Key role players involved with Focus Area 3 | **Task team 3 members:**<br><ul><li>\*\***Mr Johan Badenhorst (Director: E-Learning & Chair**);</li><li>Prof Alfred Ngowi (Dean: Faculty of Engineering and IT);</li><li>Prof Herman Vermaak (HOD: Electrical Eng.);</li><li>Dr Muthoni Masinde (HOD: IT);</li><li>Dr Marita Oosthuizen (Lecturer: Welkom Campus)</li><li>Mr Juliano Kabamba (University Librarian);</li><li>Mr Rick Pengilly (Director: IT and Logistics)</li></ul> |
| 14:50 – 16:10 | Key role players involved with Focus Area 4 | **Task team 4 members:**<br><ul><li>\*\***Dr Dicks Nkonoane (Deputy Campus Manager: Welkom Campus & Chair**);</li><li>Prof Frances Van Schalkwyk (Acting Dean: Faculty of Humanities);</li><li>Prof Albert Strydom (Dean: Faculty of Management Sciences);</li><li>Prof Hesta Friedrich-Nel (HOD: Health Sciences);</li><li>Mrs Ntokozo Dlamini (Deputy Registrar: Academic Admin);</li><li>Ms Amanda Naidoo (Lecturer: Welkom Campus)</li></ul> |
| 16:15 – 16: 45 | Feedback to senior management | **Feedback Session:**<br><ul><li>Prof Mojalefa Ralekhetho (Acting DVC Resource and Operations)</li><li>Dr Nothemba Mrwetyana (Registrar)</li><li>Prof David Ngidi (DVC: Teaching & Learning)</li><li>Prof Alfred Ngowi (Dean: Faculty of Engineering and IT)</li><li>Prof Albert Strydom (Dean: Faculty of Management Sciences)</li></ul> |

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| | | • Prof Frances Van Schalkwyk (Acting Dean: Faculty of Humanities)<br>• Prof Samson Mashele (Dean: Faculty of Health and Environmental Sciences)<br>• Prof Monnapula-Mapesela (Dean:  Academic Development and Support)<br>• Dr Daryl Balia (Director: Academic Planning)<br>• Mr Ike Mokhele (Deputy Director: Quality Enhancement). |
| **Closure** | | |

**\*\* Indicates Chairs of the Task Teams!!!!!**