

## 1. INTRODUCTION

This second submission to the HEQC mirrors activities that VUT completed, and activities that are in progress or in planning stages. The coordination of the Quality Enhancement Project (QEP) was assigned by the DVC: Academic and Research and the VUT QEP Steering Committee (see Table 1) to the Director Quality Promotion Unit (QPU). The QPU drafted a QEP framework as a guideline document. Four task teams (see Table 2) were established to respond to the four QEP focus areas.

The four task teams consisted of key stakeholders with knowledge of the respective focus areas. Each task team had a convenor (senior staff member) and a task team coordinator (Executive Dean).

The task team coordinators were responsible for:

- Activating teams
- Conducting task team meetings
- Liaising with the QPU
- Submitting team reports
- Coordinating activities of the teams.

**Table 1: VUT QEP STEERING COMMITTEE:**

<b>Name</b>	<b>Position/ Responsibility</b>
Prof K. Dzvimbo	DVC: Academic and VUT QEP representative
Prof D. Malaza	Executive Director Institutional Planning and Quality
Dr H.J. Brits	Director Quality Promotion/Coordination and report writing
Dr P. Machika	Executive Director CID
Mrs C. Montoeli	Quality Promotion Officer and scribe
Prof R Dhurup	Task Team 1 Coordinator (14 members including 1 student and satellite campus representatives)

Prof R Vd Bank	Task Team 2 Coordinator (18 members including 1 student and satellite campus representatives)
Prof R Mabuza	Task Team 3 Coordinator (15 members including 1 student and satellite campus representatives)
Prof M Ndege	Task Team 4 Coordinator (17 members including 1 student and satellite campus representatives)

## 1.1 VUT QEP Task Teams

The above-mentioned task teams can be regarded as ‘working teams’ and were established by the Steering Committee in consultation with the QPU. The QEP task teams were responsible during the second stage of the QEP for submitting task team reports based on the four focus areas of the HEQC<sup>1</sup>. The QPU developed a QEP Guideline document in order to ensure that the information gathered by the teams will be on par with the HEQC requirements, with reference to the HEQC Framework Document. The task teams furnished the QPU with task team reports, which informed the drafting of an institutional QEP Report. The draft QEP Report was submitted to all stakeholders for feedback and finally approved by the DVC: Academic and Research for submission to the HEQC.

This report will reflect on VUTs efforts to bring about enhancements in the four focus areas of the QEP Phase 1, namely enhancing academics as teachers, enhancing student support and development, enhancing the learning environment and enhancing course and programme enrolment management.

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<sup>1</sup> See the CHE (2015) *Quality Enhancement Project template for Institutional Report: Phase 1*.

**Table 2: QEP Task Teams**

<b>TASK TEAM LEADERS<sup>2</sup></b>	<b>TASK TEAMS</b>
Dr Pierre Joubert	QEP Task Team 1
Prof Jeanette Kearney	QEP Task Team 2
Dr Kenneth Zimba	QEP Task Team 3
Prof Dirk Dicks	QEP Task Team 4

## **2. ENHANCING ACADEMICS AS TEACHERS<sup>3</sup>**

### **2.1 Key Issues in Enhancing Academics as Teachers**

VUT initiated three major projects to enhance academics as teachers, namely a Continuous Professional Development project, Blended Learning, a training programme for academic leadership and research capacity building initiatives. VUTs Centre for Academic Development (CAD) initiated the following activities:

#### **2.1.2 Continuous Professional Development**

VUT has identified faculty- or department-based approaches to Continuous Professional Development (CPD) as the most powerful tool that assists the development of academics as teachers. As a result, the Center for Academic Development (CAD) has initiated a number of initiatives within the faculties and departments to ensure effective development of academics within a community of practice that is more specialised within the discipline. Specialists who are involved in the teaching of specific fields have been sourced to work with academics on programmes related to the improvement of teaching practices in the specific fields.

<sup>2</sup> All Task Team Leaders are Quality Improvement Team chairpersons and members of the Senate Quality Committee of VUT.

<sup>3</sup> Enhancing Academics as Teachers is Focus Area 1 of the QEP

### 2.1.3 Blended Learning

VUT has also strategically adopted a blended learning approach to teaching and learning where technology will be implemented to promote pedagogic practices that will facilitate student learning. A number of academics are undergoing training on the LMS system in order to have their modules available online. All academic staff members should have at least one module available online by June 2016. In the development of technology, enhanced learning as an approach to teaching and learning will be applied strategically to promote student success.

### 2.1.4 Academic Leadership Training

Academic leadership development for VUT is critical in the transformation of the institution to align management practices to achieve strategic objectives of the institution. CAD is also involved in coordinating a training programme for academic leaders with the Wits Business School. This programme was rolled out starting November 2015.

### 2.1.5 NRF Rating

VUTs participation in the National Research Foundation (NRF) rating system is continuously encouraged as part of its research capacity building offerings. The NRF rating system is regarded as an important benchmarking system through which academics who exemplify the highest standards of research, as well as those demonstrating strong potential as researchers, are identified by an extensive network of South African and international peer reviewers. VUT shows stability and an increase in the number of NRF rated scientists at the VUT. The university has a capacity building programme specifically designed to support staff with their NRF rating and to identify staff who are ready and can be developed for their NRF rating.

## **2.2 Changes that have been made or are in progress or in planning stages to Enhance Academics as Teachers**

### **2.2.1 Staff Development Programmes**

The roll out of academic staff development programmes was initially workshop based and the workshop proceedings were evaluated in terms of feedback from delegates on the benefit of the workshops towards their professional development. The discipline-specific approach, which is at the initial stages of implementation, will attempt to measure the impact of such programmes on teaching practices in a scholarly manner. A few of such projects have been rolled out in the second semester of 2015 with some departments and will continue in 2016 as some programmes are still at the planning stages. Part of the future planning related to staff developed programmes is making the programme based on certain teaching and learning themes available to academics who cannot attend the programme on the eLearning platform that VUT implemented in 2015.

### **2.2.2 Leadership Development Programme**

The leadership development programme has also been planned with the Wits Business School and currently, CAD is working on the legal administration and scheduling of the training programmes for the academic heads.

### **2.2.3 Support to Academics not Studying at VUT**

As most academic staff members are not studying at the VUT, the VUT committed to ensuring that staff are able to travel all over the country to meet with their supervisors on an ongoing basis. Ensuring that staff study at other institutions, both nationally and internationally, is critical for the university as it promotes the implementation of new ideas and interests, which contribute to the development and dynamism within VUT. Currently, approximately 150 staff members studying at other universities, nationally and internationally, are receiving support through the VUTs research office.

#### 2.2.4 Support to Academics in Completing Qualifications

Ongoing support is offered to staff for completing their qualifications as it is recognised that a strong foundation must be built to transition qualitatively into a university from the legacy of technikon status. Greater funding is invested into supporting staff with data collection, data analysis and securing sabbatical leave to complete their studies. VUT strives to enhance the quality of future academics and intellect ensure current and future generations of students benefit from growing enhancements in the quality of their education at the VUT.

### 2.3 Successful Changes

VUT regards the following as successful changes made with regard to the enhancement of its academics as teachers:

#### 2.3.1 Improving Teaching

In May 2015, CAD invited Prof June Pym – Director of the Academic Development in the Faculty of Commerce at UCT to a workshop where best practices in teaching first generation commerce students were shared and intervention strategies on improving student performance in the management sciences were discussed. As a follow up to the workshop, some staff members in the management sciences have embarked on structured professional development targeting the improvement of teaching in the discipline. CAD is working with the marketing department to establish the professional development needs and professional path of academics in the field. This process is still at the planning stage. It is envisaged that during these initiatives, CAD will collect evidence from academic staff members on the impact of such changes in approaches to teaching practice in a scholarly manner.

### 2.3.2 Growth of Postdoctoral Fellows

Of critical importance is the continued growth of the number of postdoctoral fellows at the university. The number increased to nine for 2015. This is important in building the research culture within the institution. It is a tremendous stimulus and global experience for staff and students at VUT when postdoctoral fellows are recruited globally. Postdoctoral scholars contribute to the research publication outputs of the institution, encourage staff and students to take up or continue with their research, may offer capacity building to postgraduate students and support BTech students with their laboratory work, which may be research related.

### 2.3.3 Global Legacy Trust

Regarding the university as a partnership with Global Legacy Trust, the University has extended its support for qualification completion to both staff and students at Master's level. It further continues to support doctoral qualification candidates' development in partnership with Global Legacy Trust. During the first half of 2015 close to 100 Master and Doctoral Candidates participated in this programme. The high quality of the programme has resulted in more staff and students approaching the institution for support in this programme.

### 2.3.4 Partnership with Rhodes University: Training

Another exceptional initiative is the partnership being developed with Rhodes University to the quality of supervision at the university. This programme was delivered during the second semester of 2015 and 25 supervisors have benefited from this partnership. Diverse opportunities have been created as this training supplements training provided by Global Legacy Trust during the first half of 2015. Global Legacy Trust's delivery has been excellent. Students are exposed to global scholars who are experts in their fields and scholars across the South African National system. Participants are enthused and excited by the nature and quality of the offerings through these programmes to such an extent that it has stimulated excitement and renewed energy and commitment to do research. This partnership should continue

and VUT could benefit greatly from the collaboration. Ongoing support will be provided through GLT in the form of study groups, which is an exciting model to ensure ongoing support for students during their period of study.

### 2.3.5 Writing for Publication Workshops

In 2015, 50 staff members, who are currently studying their Masters and Doctorates, were sent to Stellenbosch University for research capacity building training. Significant funds were invested to expose staff to capacity building at other institutions and this has created extended interest and a revival of research at the university. Staff and students have come to recognise and appreciate the numerous opportunities available and accessible to them.

### 2.3.6 Full-time Postgraduate Study Opportunities

There is a commitment to the creation of more full-time postgraduate study opportunities for staff. A group of 16 Master and Doctoral Students are being supported through the university to enable them to study full time. The scholarship for a masters student for this full time study is R96 000 and a doctoral student scholarship is R150 000, per annum. The university has delivered this mentoring programme very successfully as 15 students have graduated between 2014 and 2015, some of the graduates with cum laude. This programme enabled students to focus on their research work and provided academic staff with ongoing support in the laboratories, thereby contributing to the increase of research outputs over time.

## **2.4 What Changes have not been Successful?**

### 2.4.1 Workshops Cancelled or Postponed

Four workshops (which are discipline specific and generic) were cancelled during roll out of the changes in September 2015. The approach to these was based on the creation of a series of workshops as a programme for change in academic practices. These cancellations were as a result of student unrest on campus. Rescheduling of these workshops on the programme was not possible. The schedules of academics during the fourth term resulted in academics not being available for the leadership development programme and as a result, the implementation of this initiative has been postponed a few times.

## **2.5. Promising Practices**

### **2.5.1 Teaching Portfolios**

The initiative to encourage newly appointed academic staff to develop and compile a teaching portfolio, based on pedagogical competence principles, is an example of a promising practice in skilling academics as professional teachers. The intention is to provide training for academics while the process also should recognise these academics as established teachers at VUT, thereby culminating in an award ceremony. This is still in the planning stages and will be part of the reviewed policy of the Rectors Award for Teaching Excellence for implementation in 2016.

### **2.5.2 Developing a Culture for Research**

A widely consulted research strategy, supported by a decentralised organisational model to enable the development of a research culture within departments and faculties throughout the institution, has been developed. The research strategy is well aligned to the institutional strategy and will ensure an increase in research productivity throughout the institution. The institutional research strategy is informed and aligned to faculty and departmental research plans. The next step will be to focus on individual academics' research development plans.

The Research and Higher Degrees Office has initiated benchmarking of its policies and operations. Institutions against which benchmarking has been undertaken during the first half of 2015 include: CPUT, DUT, UWC, UKZN and UCT. This enabled the institution to gain insight into current policy development within research offices that enable support to academic staff and postgraduate students and the creation of a research culture within the respective institutions. VUT is the only institution nationally that is currently undertaking such benchmarking. As a consequence, the ED: Research of the VUT has been requested to assist with benchmarking research policies within the South African Technological Network (SATN). Further emerging from this process was the cohosting of a workshop on research policy review and comparison with the Durban University of Technology during June 2015. A further workshop is planned with the University of Cape on capacity building and the Administration of the Research Development Grant (RDG).

Staff research development is recognised and celebrated through the presentation of Research Awards for Achievement and Excellence at Faculty level and across the institution. At research award functions the achievements of staff are recognised and celebrated collectively.

Furthermore, the university's research funding policy recognises staff contributions to research by offering research incentives. This has worked well in ensuring the continued development and interest of staff in developing a research culture at the VUT.

### 2.5.3 Partnerships

New partnerships were developed during the first half of 2015 through supporting increased partnerships, especially in the critical area of water research through supporting collaborative efforts of the Centre for Renewable Energy and Water. Scholars from national and international universities participated in the colloquium. A powerful partnership has been developed with the LGSETA and the Water Research Commission to strengthen the efforts of scientists in this field. The Centre for Renewable Energy Water (CREW) very successfully organised a collaboration building conference at the Emerald Resort and Casino in Vanderbijlpark from 21 to 22 May. The theme of the conference was "Building collaboration in Water and Renewable Energy Research and Innovation: The Trilogy (Past, Present, and Status-quo)". During this conference, experts presented papers in the fields of biotechnology, hydrology, photocatalysis, adsorption, precipitation, computational fluid dynamics, nanotechnology, modelling and simulation, systems integration, biofuels and materials/water characterisation. It was impressive to see that a large proportion of the papers addressed African problems. This was a departure from the traditional approach to research where many researchers in Africa would try to solve problems that had little relevance to the African circumstances. The following concluding recommendations were made:

- CREW should organise another conference aimed at producing proceedings that contain articles that are publishable in a journal.
- Collaborations among regional institutions should be encouraged.

- Each research group in Africa should strive to have as many (if not more) African collaborators as international ones.
- Co-authorship, co-supervision and co-submission of proposals for funding would catalyse the collaboration.

## **2.6 What are the Main Challenges?**

### **2.6.1 Participation in Development Programmes**

There is culture of resistance at individual level where people show reluctance to participate in development-related programmes. The most efficient approach to success in this focus area is to organise the roll out of training programmes through the departments. Staff members continue to relate the challenges they are faced with as heavy workloads and thus not having sufficient time to focus on their development as professionals.

### **2.6.2 Need for a Culture of Transformation**

The institutional culture of transformation needs to be prioritised in order to facilitate the change to be able to meet the strategic targets in terms of VUT operational plan.

## **3 ENHANCING STUDENT SUPPORT AND DEVELOPMENT<sup>4</sup>**

### **3.1 Key issues in enhancing student support and development.**

Effective guidance, support and the necessary development can improve a student's chances of success. Two departments at VUT, namely the Centre for Academic Development (CAD) and Student Support Services (SSS) offer programmes and services intended to support and develop students in order to enhance the quality of total student experience of university life.

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<sup>4</sup> Enhancing student support is Focus Area 2 of the QEP

### **3.2 Changes that been made or are in progress or in planning stages to enhancing student support and development**

First Year Experience Programme (FYE) is a new programme and is in the process of being developed. Best practices were benchmarked in 2014 and 2015, and the current uptake and use of the FYE at the VUT was reviewed in 2014. In 2015, FYE action plan frameworks were developed per faculty. The three sub-projects that were identified are: (1) first year students, (2) first year student lecturers, and (3) referral and support system. The faculty action plan frameworks need (1) to be adopted by the faculties and approved by Senate, (2) actions need to be determined per sub-project (in collaboration with the faculties), and (3) the sub-project action plans should be implemented through the faculties. In parallel, faculty FYE committees are in a process of being established. The aim of the faculty committees is to drive the FYE project implementation. The four faculty committees will constitute the VUT FYE committee. The success of the establishment of faculty FYE committees and the implementation process will depend on deans of Faculties' adoption, commitment and support of the FYE project. The sub-projects outcomes will be evaluated and documented on an annual basis, and sub-projects will be optimised as indicated.

### **3.3 Successful Changes**

#### **3.3.1 The Writing Laboratory**

The lab is part of the function of the CAD and has done considerably well in the past three years since its establishment. Thus far, the writing lab has assisted 1627 students in the first semester of 2015 and aims to serve the needs of 1800 students in the first semester of 2016.

#### **3.3.2 The VUTs Mathematics Centre**

The programme is supporting students with mathematics and statistics. A total of 1828 students visited the mathematic centre during the first semester of 2015 and a pass rate of 78% for Mathematics 1 was achieved. The activities, which are currently in place for 2015, include tutoring, one-on-one consultation, small group consultation, extra classes and examination revision classes. The one-on-one consultation and

tutorial classes are very successful and are evidenced by students' feedback forms and increases in attendance for those services.

### **3.4 What Changes have not been Successful**

#### **3.4.1 The Learning Communities Mentor Programme**

This programme was rolled out in March 2015. Mentors were provided with basic training on their roles and responsibilities and this was followed by continuous support and guidance by the programme coordinators. A timetable was drawn up for class visits for observation, guidance and support. Class visits observations are conducted and feedback is done on a one-to-one basis. Venues for mentor sessions were identified and mentors were able to identify permanent venues for their sessions. Collaboration between lecturers and Learning Development Unit resulted in mentors being allowed to access students in specific lecture classes. Mentors submit reports on their group activities every two weeks. Collaboration with academic departments was not effective due to communication problems such as lecturers not attending the information sessions. This made the establishment of the programme difficult in 2015. A problem identified was that Learning Community (LC) mentors were not allocated time to inform students in allocated classes to explain the LC aims and objectives. A possible solution to this is to allocate time in the 2016 timetables of mentors to explain aims and objectives. Mentor groups will be allocated to mentors during orientation in 2016. The final annual reflection and planning meeting was scheduled for Nov 2015. Comments from the reflection will be incorporated in the strategy for 2016.

### **3.5 Promising Practices**

#### **3.5.1 The Tutor Development Programme**

The tutor programme relates to both supporting lecturers with student learning and supporting students with academic studies to achieve academic excellence. The following activities took place in 2015 ensure the success of the tutor training, namely tutor skills development training workshops and enhancing tutors facilitation skills through practical activities for specific courses and the evaluation of the training workshops. Tutor class visits were conducted on a few of those who attended training in 2014, although these were not enough. Tutor feedback sessions were conducted – one in each semester. The draft tutor policy was drawn up as a working document, however, this has not been approved at this stage. The challenges experienced were

that collaboration with faculties was not done sufficiently, and continuous guidance and support are needed. The tutor programme was evaluated in 2015. The minimum standards for the review of the system were developed in collaboration with the QPU (Quality Promotion Unit). The outcome of the evaluation will inform the remedial action plans.

### 3.5.2 Health and Wellness

The programme, which includes Student Counselling and Support (SCS), Chapel and the Campus Clinic, has undergone some changes and additions to the portfolios, staff numbers and staff structure of the department in 2015 to align with the new intuitional objectives, especially Strategic Objective (SO) 5: Improvement of student access and support; SO7: Enhance research output, innovation and commercialisation; and SO3: Achieve adequate funding levels. New strategic objectives were established for Health and Wellness during a strategic planning workshop held in February 2015. The following strategic objectives were identified:

- to develop a Strategic Framework and Policies for implementation on Student Counselling and Support/Health and Wellness
- the marketing and promotion of Student Counselling and Support Services/Health and Wellness and to create an on-going enabling environment for staff, students support and development.

Increased exposure on the Student Counselling and Support Facebook page – followers have consistently grown during the first part of 2015 and the total number of likes reached 359. The most popular page visits occur during posts advertising job opportunities, motivational messages and pictures with regards to events such as open day. To date, a total of 994 students received individual counselling, 255 attended study skills workshops, 634 underwent psychometric testing, 69 received career counselling and 912 have done NBTs.

Strategic Plan Objectives for Health and Wellness 2015 – 2017 include the following: to create an on-going enabling environment for staff, students support and development; to develop a strategic framework and policies for implementation on Student Counselling and Support/Health and Wellness, as well as the marketing and

promotion of Student Counselling and Support Services/Health and Wellness services.

Strategic Plan Objectives for Student Counselling and Support 2015 – 2017 include:

- the extension of Health and Wellness/SCS services at the satellite campuses and establishment of a Peer Helper Programme
- the improvement of the first-year experience programme and retention rate
- to improve career services; the services offered and employability level of VUT graduates.
- the introduction of an effective student profiling system, namely the Learning Enhancement and Check list (LEC) profiling tool
- establishing and strengthening cross-functional research outputs
- introducing the First-Year Profiling Testing where students will be profiled for institutional use and research purposes.

Other objectives include the alignment and establishing of a disability unit (physical and learning) and poverty support programme, and the establishment and enhancement of Chapel programmes, campaigns and services. The new proposed structure will speak to the new strategic objectives of the department as a whole and will serve to guide the portfolios as they undergo the following developments;

- Campus Clinic – The establishment of paramedic services for the residence and institution, the conversion of staff contracts to permanent positions and finally, increased campaigns and marketing.
- Therapeutic services – The establishment of new policies and procedures to be set in place for topics like exclusions, crises management, community outreach and creating a library of clinical assessment tools
- Learning Enhancement and Checklist (LEC) – Student counselling plan to implement a LEC by creating policies of implementation for the pilot phase and roll out of the programme, assigning a representative for presenting the system to each of the different faculties during the pilot phase. Finally, completing assessments and providing and feedback to the faculties. The LEC is not a

psychometric or psychological instrument or battery. It is a diagnostic tool that focuses on problem identification (identifies barriers to academic success). It also serves as an early warning intervention strategy. The LEC will be used to increase staff capacity (through group assessment), promote student empowerment through self-awareness, offer faculties support for at-risk students in order to increase retention and throughput, and maximise the cooperative referral system within our institution.

- Career services – The three main areas of the new direction of career services was highlighted, namely internal and graduate preparedness (workshops and short courses), external testing and psychometric services and job placements. Objectives and the direction of growth were established along with the role clarification of each team member. The needed training and benchmarking was deliberated upon, and the direction of the research to be done was stipulated for the next three years.
- Disability Services – the re-establishment of the new disability unit under SCS was created, the team member's role clarification done, the needed benchmarking stipulated, the identification of the target groups to be focused on and finally the creation of a new marketing strategy.

### 3.5.3 The Learning Management System (LMS)

LMS similar to Blackboard (Bb) and called Vutela at VUT was developed by the CAD and introduced in 2015. The aim is to provide a single integrated learning environment to support staff and students across the university. Vutela runs concurrently with Sakai and Moodle. The LMS was implemented as a managed-hosting (cloud-based hosting) solution to overcome all obstacles of internal IT infrastructural and support challenges at VUT.

Currently the New User Training is a three-day course. During this time, the focus is on the functional use of the many tools offered in the LMS to support teaching and learning as well as, and in equal measure, the appropriate pedagogic use of the tools so that teaching and learning is enhanced. A lot of discussion takes place in regard to

the potential uses and best practice of each tool. Learning outcomes include the following; appreciate the scope of Bb from a global perspective; understand where a LMS fits into the larger picture of blended learning and finding the personal benefit to the LMS in your classroom; appreciate the experience of doing activities as a student in the course; understand the possibilities a lecturer has with the tools covered in the session; understand navigation in Bb; customisation course structure and help options; understand how to use the calendar, task and announcement tools; understand how collaborate tools work – discussions, journals, collaboration tool, blog, messages, mail; appreciate nuances of communicating online with varied tools; discuss and contribute to the considerations when facilitating discussions online

Day 2 learning outcomes include: create test and question types; add questions to a test and release the test to students; view the test results and statistics; set up the rules for the early warning system; access the Results Center and explore its functionality; create and grade an assignment reviewing the iterative process and view grade reports. Day 3 learning outcomes focus on the building of content using a variety of tools; adding activities within the existing content; appreciation and use of the different options of the course structure; creating adaptive release for a selected item; understanding how to upload files into the File Management area; working through the content and review and instructional design principles and best practice.

However, some faculties were more active, for example it was estimated that about 30% of staff in Engineering and Technology used an LMS or related technologies. Additionally, numerous staff commented that if the infrastructure challenges could be removed many academics would engage with e-learning as there was enthusiasm and a wish to remain current. The total number of 144 modules were implemented since February 2015 on Vutela (Blackboard LMS). There are currently 1539 active student users on Vutela. The number of lecturers trained in Blackboard New User training for 2014 / 2015 is 158, and the number of lecturers trained in instructional design for 2014 / 2015 is 121. In order for Vutela to be successful, academic staff and students should be encouraged to use the LMS optimally. The Blackboard retention centre feature can be used to track and monitor student performance inside it, i.e. grade rules in an online assignment/test, activity rules and deadline rules. This retention centre can be used as part of an early and continual alert and referral system (process) of students who

are at risk. The challenge in this regard is that all faculties should engage in this function.

#### 3.5.4 Research Support

Research support to postgraduate students currently includes the Global Legacy Trust (GLT) with which VUT partnered in 2015. GLT is a non-profit international training body, with the main focus of increasing the number of master and doctorate researchers in its ranks, as it seeks to bolster its research output and number of graduates at the highest level. The GLT master and doctoral programmes focus on academic training, student training, leadership training, supervisory training and research training. The emphasis of the VUT-GLT training programme is on the theory of research, methodology sciences, and research philosophy as per the guidelines and format of VUT. The programme provides writing guidance for staff and students in the beginning stages of their proposal writing. The programme supports both Master's and Doctorate students and is made up of three modules, each taking place over five full days. The first module consists of an overview and introduction on participants' proposal topics and the ethics around research. The second module deals with qualitative and quantitative research methods the participants choose to use regarding their research topics and projects as a whole. The third and final module involves collaboration of all written information and the presentation of the final proposal. The sessions for the GLT programme for staff and students commenced in March 2015 and continued until the end of November 2015. Positive feedback from staff members include the valuable experience of finalising a proposal, research experts from outside VUT critiqued papers in a uplifting way and made valuable suggestions, mention that this should be compulsory for all registered master's and doctorate students.

#### 3.5.5 Co-Curricular Activities

Progress made in the sport academy was the VUT Football that developed from (2013) a lower ranked football league, SAFA SAB Regional League (3<sup>rd</sup> division) to the provincial, SAFA ABC Motsepe League (2<sup>nd</sup> division) in 2015. This is a result of the

appointment of more skilled and experienced coaching staff and a structured training and recruitment approach adopted since 2014. Talented (student) players are identified early within local communities. Evidence of successes is reflected in the improved log-standing as mentioned above.

The successful presentation of the televised Varsity Football matches, where the VUT hosted the eight qualifying university football teams in South Africa, presented at VUT, Isak Steyl Stadium, in July 2015. This project impacted positively on the student-supporter togetherness, enhancing a dynamic VUT-student supportive character. Only the eight best university sides in South Africa qualify for the competition; a unique marketing opportunity for the VUT and VUT Sport.

VUT Basketball has established itself as a major role player and headquarters for local basketball athletes. VUT Sport has recently produced alumni as well as national players that act as feeder players for the broader South African basketball fraternity. The positive outcome is the ever growing and increasing interest in basketball in the broader South Africa and the accompanying media involvement resulting in the televised broadcasting of basketball tournaments on the Super Sport channel. Another recent VUT Sport success was the appointment of a VUT Sport official in 2015 as national coach to the 2015 USSA-national side participating in the 25<sup>th</sup> World Student Games staged in Gwangje, Korea from 3 to 14 July 2015. As a result of this appointment, the South African athletes won two gold and four bronze medals at the occasion. VUT Sport, together with a local High School (Technical High School, Sasolburg), established a hammer throwing academy in 2015. This resulted in an increased improvement in youth and junior results and a growing interest amongst school children. SASCOC recently indicated its possible commitment and support for the project in 2016.

### **3.6 What are the Main Challenges?**

#### **3.6.1 Student support at sites of deliveries**

Due to the uniqueness of sites of delivery in comparison with the Vanderbijlpark campus, there is in general a lack of sufficient student support service, e.g. student counselling and campus clinic services. This problem was addressed in 2015 by conducting weekly/bimonthly visits to Ekurhuleni Campus to offer counselling and

therapeutic support. A total of eight students were seen by the psychologist for the period April to May at Daveyton Campus. Therapeutic support at Secunda continues through collaboration of the Secunda Campus with Life Line. Meetings were held in 2015 at Ekurhuleni Campus to forge networking and support initiatives.

### 3.6.2 VUT Sport

VUT lost its Lotto and ABSA sponsorships due to the lack of a fundraiser facilitator at the institution. Presently, no official channel for specific fundraising activities exists at VUT. This situation impacts negatively on the major sporting codes such as football, rugby, cricket, athletics, basketball and volleyball.

### 3.6.3 Student Orientation

The orientation programme in 2015 was implemented as an integrated programme when classes commenced. The orientation programme consisted of four components, namely (1) a general welcoming programme, (2) faculty specific programmes, (3) an international student programme, and a booklet with general information. The welcoming programme could not be implemented due to student protest actions. The attendance of the faculty programmes was challenged by the extended student registrations and the senior student protest actions. The orientation programme in 2016 will be implemented in faculty context as an integrated programme. The timing and design of the programmes will be determined by the faculties as deemed feasible.

### 3.6.3 The unit for Preparatory Programmes (UPP)

The programme presents the extended programme (foundational), which is currently an unstructured model managed by the faculty. The intervention programmes have proven to be successful from the start in 2002. Annual statistical feedback of the intervention students' performances in the formal programmes proved this. Therefore, in order to stabilise the foundational programme and turn it around into a success story, it is suggested that the intervention programme be scrapped and offered as extended programmes. This ensures participation of all the faculties. The main challenge for the intervention programme students remains the funding issue. The students are not allowed to apply for NSFAS. They need to seek sponsors and other donors towards their studies. Should the intervention programmes be incorporated as

the extended programmes, the funding issue changes and students register for a 4-year formal programme, therefore qualifying to apply for NSFAS. Venues catering for audio, visual and kinaesthetic teaching and learning are limited. Venues for teaching have limited period. Laboratories are also non-existing for the pre-diploma students.

#### 3.6.4 The Writing Laboratory

The lab is faced some challenges that speak directly to the focus area of enhancing academics as teachers. When students come to the writing lab it is clear that they have not been encouraged, assessed and prepared for academic writing. This is something that directly points to a much-needed change in the course and method of teaching and assessing. The way this impacts the writing lab is that they end up having difficulty in implementing activities and projects that can potentially have observable positive outcomes in and for teaching and learning for students and the institution. Secondly, reading development is an area that needs to be addressed. It is related to the point above. Students seem to not have assessments and encouragement for their courses to read critically or even read correctly, this is a discourse or subject area assessment issue. Lastly, structural resources remain a problem. The writing lab is ever expanding in its scope, however, the resources needed to maintain the momentum of activities are unavailable or difficult to access. These resources are: Human resource capacity – writing consultants, facilitators, and admin-support as well as student assistants; Space – the physical environment of the writing lab is small and conducting business and activities for this focus area proves difficult and even impossible at times; Institutional learning culture – the writing lab aligns its activities with academic disciplines; unfortunately the culture of superficial assessment limits the scope and depth of the work and activities that this unit could participate in.

Once resources are available and a writing lab review is conducted, expansion of projects will be made a priority.

### 3.6.5 Mathematics Centre

The mathematics centre, as part of the function of the CAD, experienced the following challenges: Time allocated for tutorial classes was limited, some of the venues for tutorial classes were double booked, for example Friday venues are double booked for church services; the maths centre venue is too small to accommodate many students at once, especially when students prepare for their semester tests – more space is needed. The university needs to expand the maths centre with more cubicles for individualised student support. There are also problems with students seeking help at the last minute, which adds pressure on the available space.

## 4 ENHANCING THE LEARNING ENVIRONMENT<sup>5</sup>

### 4.1 Key Issues in Enhancing the Learning Environment

The following can be regarded as key issues that enhance the learning environment at VUT:

- Single registration was introduced to reduce the amount of registration administration work faced by staff and thereby increase productivity in terms of time usage on lecturing as well as research and staff exchanges and collaborations.
- Online registration implementation is underway, this is meant to assist with streamlining the registration process, although it has not been effectively implemented.
- On-going infrastructure developments: E.g. the Disability Unit building at the main campus is in the process of construction. This unit is envisaged to provide some services to address the majority of access issues. Further, VUT has built a number of ramps around the main campus to enable access between different areas on campus to physically challenged students. The ramps were built in response to the disability audit. The audit documents are available from the office of the Executive Director: Projects and Services. In addition, all new buildings are

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<sup>5</sup> Enhancing the Learning Environment is Focus Area 3 of the QEP.

designed to provide access to the physically challenged. The magnitude of the issue, however, necessitates more interventions.

#### **4.2 Changes that been made, are in Progress or in Planning Stages to Enhancing the Learning Environment**

- The new DVC: Academic and Research and Director at Projects and Services may create increased impetus to enhance the learning environment in the university.
- Building or refurbishment of libraries at the main and Secunda campuses, as part of the Infrastructure development and efficiency funding (2012-2014) projects: Due to a number of internal and external factors the university experienced delays in the projects approved during this round of funding. Some of the factors contributing to the delays include tender processes, approval from the minister to re-allocate funds and disruptions by the community during construction.
- Use of facilities at Educity by main campus should ease the pressure for the learning environment.
- CADs efforts in terms of providing facilities for student academic development including Blackboard implementation
- Increased awareness on the need for improving Wifi and Internet facilities at all campuses

#### **4.3 Successful Changes**

- LMS implementation through Blackboard. Staff training on the LMS system (Blackboard) by CAD has been rolled out in October 2014 and several staff have already been trained. This initiative is on par with the Pre-determined Objectives (PDOs) of the institution of the Blended teaching and learning model. Several departments have already started using Blackboard for teaching, including having loaded materials on the system. The effective use of the system by both staff and students remains to be verified.

- A number of Wifi spots have been created around campus and students are beginning to enjoy free Internet access around Vanderbijlpark campus. Efforts are underway to improve the situation of IT infrastructures at all campuses. The office of the DVC: Academic and Research has been in constant consultation with both the IT Director as well as the CFO to see how IT infrastructures can be improved at all campuses.

#### **4.4 What Changes have not been Successful**

- Single registration was implemented in 2014 but due to high student failure rates, and low FTE ratios, special concessions have been made for extra registrations during the year. The moving to single registration had alleviated the demand for more venues.
- Online registration has not worked well due to poor IT infrastructure, student access and staff capacity.

#### **4.5 Promising Practices**

The technology blended learning through Blackboard usage will result in:

- Remote participation by students who cannot normally attend classes as they may be working
- Recorded learning materials that can be accessed anywhere and anytime by students will result in effective learning
- Effective ways of communicating information to students and other stakeholders:

#### **4.6 What are the Main Challenges?**

The following can be regarded as the main challenges of this focus area:

- No proper planning for infrastructure developments, especially long term ones.
- Slow response to implementation of approved works by the institution.

- Failure to keep to planned students enrolment and staff appointment targets
- As noted in the campus master plan, insufficient financial resources continue to hamper the initiatives of VUT to address the needs for new infrastructure at all campuses, e.g. for the new library building at the main campus, site identification, design, funding and construction are still pending. Further, there are no specific plans at the moment w.r.t. renovating the Uppington campus library as has happened to the Secunda campus library.
- Effective management (including timetabling and usage) of venues and equipment. The venues at all campuses are not very conducive to effective teaching due to insufficient departmental management. The fact that academic departments have no total control and management of teaching facilities aggravates this situation. The use of venues for other activities such as church prayers adds to the problems, in some cases the disruption of scheduled lectures. Some lecturers cannot access certain rooms for several structural reasons including lack of clarity as to who keeps the keys. There is a need for consultation amongst all stakeholders to come up with solutions to deal with these problems, the solution may include restricting the use of venues. In August 2015, training in a new software to facilitate the drafting of timetables for all faculty timetabling staff took place; this should assist with the management of venues. There is also generally a lack of enough teaching equipment (projectors, smart boards, public address systems, desks) at all campuses. These problems need to be discussed between the offices of the DVC: Academic and Research, campus directors and projects and services to determine an effective way to provide and maintain the equipment.

## **5. ENHANCING COURSE AND PROGRAMME ENROLMENT<sup>6</sup>**

### **5.1 Key Issues in Enhancing course and programme enrolment**

The following were identified as key issues that enhance course and programme enrolment at VUT:

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<sup>6</sup> Enhancing course and programme enrolment is Focus Area 4 of the QEP.

### 5.1.1 Student Success in Higher Education (HE)

Student success in higher education (HE) clearly is influenced by a HEIs selection process, the course chosen by a student, the availability of support systems at the HEI, student performance management and intervention, and the time that the student spends completing his qualification.

## **5.2 Changes that been made or are in progress or in planning stages to Enhancing course and programme enrolment**

### 5.2.1 First Year Enrolment Quotas

VUTs first year student enrolment figure has a set quota per year. Faculties are controlling their enrolment figures for first year students. When these enrolment quotas are reached, the system automatically blocks any additional applications via the effective, custom-made Techsys registration and tracing system. The availability of space and laboratories are factors that impact on the setting of enrolment quotas.

### 5.2.2 National Enrolment Targets and Requirements

VUT managed to reach the 60%-40% target (i.e. 60% SET and 40% Management and Humans Sciences enrolment figures) as approved by DHET, as well as the requirements of the National Enrolment Plan. The institution's entry requirements are on par with the national minimum prerequisites. At this stage, VUT is not meeting the 60%-40% national target. SET needs more laboratories, human capital and equipment to admit its full complement.

### 5.2.3 First Year Admission Process

Students apply online and the system automatically directs the qualifying applications to the correct faculty/department for approval. During first semester of 2015, problems were experienced but these were addressed during second semester of 2015. The person responsible for admission into a programme can do bulk approval of applications online and the outcome is automatically communicated to the applicant.

This is a vast improvement on the previous paper system. Details of accepted students' will be made available to the various faculties for departmental follow ups.

#### 5.2.4 Centralised Registration System

VUT has put effective and appropriate management information systems in place. In order to address the student registration and administration issues of the VUT, the institution introduce a centralised student registration and administrative venue for all mainstream and extended programme students. This process makes provision for registrations to take place in a faculty-centralised venue. There is provision for the registration and administrative support with regard to the following: Student finance, application processes for bursaries, subject selections, timetable optimisation, capturing of data on the IT system and so forth. This was mentioned in the 2014 report. This initiative to change from a decentralised registration/enrolment venue seemed to address the deficiencies of the previous system.

#### 5.2.5 Continuous Reviews of Entry Requirements:

Faculties continuously are in processes of reviewing entrance requirements. All entry requirements that are identified to be changed are submitted to the institutional structures for approval (Faculty Boards, Curriculum Committee and Senate). All faculties on the senate meeting of 20 November 2015 changed their entry requirements for 2017. Senate gave permission that Engineering may start implementing these requirements for the 2016 intake.

#### 5.2.6 High Risk Students

The institution has initiatives in place to take the appropriate actions for interventions in identifying high-risk students (refer to student counselling and support, warnings, excluding and so forth). The system interacts with the VUTs Continuation of Studies Policy. All departments use a standardised counselling referral form in terms of

affected learners who are referred to counselling at the university counselling unit. However, it has emerged that the staff at the Counselling Unit seldom gives feedback to the lecturer on the issue, which hampers the lecturer's ability to monitor the student's progress. This matter was discussed at the different Faculty Management Committee meetings and it was decided that the Student Counselling would regularly attend meetings in order to improve feedback on these issues. The main challenge in this focus area is that a large number of students may be referred to counselling but very few counsellors are available. In certain high-risk subjects, extra optional lecturing sessions focusing on theoretical problematic concepts and homework were introduced at the beginning of the 2015 academic year. Tutors formed part of these sessions and individual attention was given to students with problems. The students wrote additional tests focusing on the problems identified by the lecturers and tutors.

### **5.3 Successful Changes**

#### **5.3.1 Gate Way Courses**

The Unit for Preparation Programmes managed by Dr Trudy Sutherland is responsible for gateway courses. Intro was introduced in January 2002 in the Engineering Faculty and due to the success thereof rolled out to some other faculties/departments in the university since January 2014. All Intro students are tracked annually and the success rate is reported to Senate. The feedback figures indicate that these programmes are successful in increasing the pass rate/throughput rate of students throughout the university (See Appendix A). Due to the success of this programme, the senate meeting of 20 November 2015 approved that these gateway programmes should be rolled out to all faculties/departments from the beginning of 2016 in order to increase access to the university. As of 2016, NSFAS will be made available to all Foundation students.

### **5.4 What Changes have not been Successful**

A challenge for academics is the late issuing of exam timetables. Students should have their exam timetables in advance so that they could prepare for the exam and the late issuing thereof hampers proper preparation for the exams. Second opportunity exams

are scheduled directly after first opportunity exams and in the vacation periods, leaving little or no time for proper preparation for the exams. The exam committee addressed this issue on numerous occasions and an improvement should be observed.

## **5.5 Promising Practices**

### **5.5.1 Monitoring of student performance in high impact courses and interventions**

With respect to class assessments, a system was put in place since 2014 where the subject's moderator moderates all assessments. Signed moderation forms are kept in the subject files. Moderated scripts are handed back to students (max 10 scripts). This ensures that all assessments meet the NQF standards and that the quality of the exams is the same in departments. If a learner is at risk, consultations are held with the learner and an 'at risk' form is completed by the lecturer and signed by the learner.

## **5.6 What are the Main Challenges?**

The ITS system is not very user friendly. To overcome this problem during registration, as well as for tracking purposes during the semester, departments make use of VUT's own, very effective, custom-made, Techsys user-friendly registration and tracking system. Techsys relies on information on the main ITS system. VUT is in a process of replacing the Techsys with another system.

## **6. REFLECTION ON PHASE 1 OF THE QEP**

The implementation of the QEP at VUT created an opportunity for the university to use its established quality structures to involve key stakeholders on operational, tactical and strategic levels. A 'whole-team' approach was followed in order to ensure that key stakeholders from all institutional levels were selected and held responsible for the reflection and collection of information regarding the issues related to the different focus areas.

The above-mentioned 'whole-team' approach is not unfamiliar to VUT. As already mentioned in the introduction of this document, VUT established Quality Improvement Teams (QITs), which represent faculties and key support functions that form the structures of the institution's quality management system. Each QIT has a chairperson that acts on operational level as a quality expert. QIT chairpersons report to their respective constituencies on quality matters and liaise with the Quality Promotion Unit (QPU) on a continuous basis. The QIT chairpersons represent their constituencies as members of the Quality Senate Committee (a sub-committee of the VUT Senate).

During QEP, VUT utilised its above-mentioned QIT structures by assigning the QEP focus areas to the faculty QIT chairpersons. The QPU recommended a list of key stakeholders for each focus area and established QEP teams in collaboration with the QIT chairpersons that acted as QEP team leaders.

The difference between the established institutional QITs and the QEP teams is that the QEP teams consist of key stakeholders and experts that can reflect critically on the relevant focus areas while the QITs consist of representatives of faculties or departments, focusing on quality related issues within their functional areas.

The QPU coordinated and facilitated the QEP process by means of establishing the above-mentioned QEP structures, including the QEP teams in collaboration with the Steering Committee (consisting of the four Executive Deans, the Executive Director of the Centre for Academic Development and the DVC: Academic), by developing a guideline document, conducting information workshops, liaising with the QEP Team Leaders, disseminating information to stakeholders on all levels, perusing and reflecting on draft team reports and finally, writing the institutional report.

Although the value of the QEP was not formally evaluated, an assumption can be made that the QEP process revitalised the QIT structures to a great extent as it offered the quality structures with a new focus and purpose (rather than only focusing on the quality of own operational framework issues) and created opportunities for QIT chairpersons and members to interact with key stakeholders from other departments within the institution (as already mentioned, the QIT chairpersons were used to

coordinate the QEP teams). It is believed that the team approach fosters a better understanding of the value of the notion of continuous improvement amongst participants because they had to reflect critically on the success of initiatives that the institution implemented. The team members should, as a result of the team approach, have a better understanding and appreciation of the systems approach, which underpins the institutions quality system – i.e. the value of inter-dependency and the value of inter-relationships with other departments and units as sub-systems.

This approach enhances access to institutional information and fosters a culture of sharing knowledge that might counteract on the consequences of ‘stove-pipe’ management. With regard to what is mentioned, the QEP process, based on a team approach with active participants that represent a range of functions within the institution, contributed largely to the creation of an awareness and culture for quality. Unfortunately, the team approach did not work effectively for all teams due to members that did not attend information sessions; therefore, they were ill-informed on the new focus areas. Teams that understand the second phase as a reflection on the progress made during the first phase of QEP, unfortunately, misunderstandings lead amongst teams to confusion and misinterpretations.

During the QEP, the institution participated on national level with other institutions by means of benchmarking exercises and collaborations with other institutions of higher learning, e.g. benchmarking on the development of minimum standards for the evaluation of the institution’s tutor system (NWU), training programmes for academic leaders (WITS), benchmarking regarding best practices in teaching first generation students (UCT), partnership in the Global Legacy Trust (GLT) and a supervision capacity building programme (Rhodes University). VUTs Research and Higher Degrees office initiated benchmarking of its policies and operations during 2015 with CPUT, DUT, UWC, UKZN and UCT. New partnership were developed during the first half of 2015 through supporting collaborative efforts of the Centre for Renewable Energy and Water. A partnership has been developed with LGSETA and the Water Research Commission.

The following initiatives, some of which were mentioned in this report, reflect on the university's improvements related to the QEP areas over the past two years:

1. A major improvement is made with regard to the fourth focus area on course and programme enrolment. The institution's application and registration processes changed drastically from a manual system to an online system. NSC approvals are conducted by means of online processes. A pilot for the online registration of students (Student Admission System) will commence in July 2016.
2. A number of staff received training on the LMS system in order to have their modules available online. All staff will have at least one module available online by June 2016.
3. There is a continued growth in the number of postgraduate fellows at the university. 50 Staff members who are studying their Masters and Doctorates were sent to Stellenbosch University for research capacity building. Based on best practices, the First Year Experience Programme is in the process of being developed.
4. The VUT Writing Laboratory assisted 1627 students in the first semester of 2015 and aims to serve 1800 students in the first semester of 2016.
5. VUTs initiative to encourage newly appointed academic staff to develop their teaching portfolios based on pedagogical competence principles is a promising practice in skilling academics as professional teachers.
6. In collaboration with the Quality Promotion Unit (QPU), minimum standards were developed for the evaluation of the institution's tutor system. The system conducted a self-evaluation exercise in 2015 and external review will be completed in 2016. The information gathered during this review will inform remedial action processes and enhance the quality of the tutor system.

7. The LMS, similar to Blackboard (called VUTELA), was developed and introduced in 2015. This provides a single integrated learning environment to support staff and students across the university.
8. A number of Wi-Fi spots have been created around the Vanderbijlpark campus. Students, therefore, have free Internet access around the campus. Plans are also in place to improve the IT infrastructure at all sites of delivery.
9. The QPU completed a pilot study on the implementation of a biometric fingerprint system for the monitoring of students' class and examination attendance. This pilot study emanates from the Student Dropout Study that the QPU conducted in 2010. Senate established a task team in 2015 in order to roll the proposed implementation plan out.

VUT appreciates the CHE/HEQC for implementing the Quality Enhancement Project as an alternative quality assurance approach to the traditional institutional audits. Information in the CHEs publication entitled "Content Analysis of the Baseline Institutional Submissions for Phase 1 of the Quality Enhancement Project" will be used by VUT as a valuable resource for benchmarking purposes and will inform its institutional remedial processes. VUT is positive that the information collected during the first phase, the impact of QEP on institutional level and the HEQCs planned individual feedback sessions from peer reviewers in 2016, will enhance the quality of VUTs core business.

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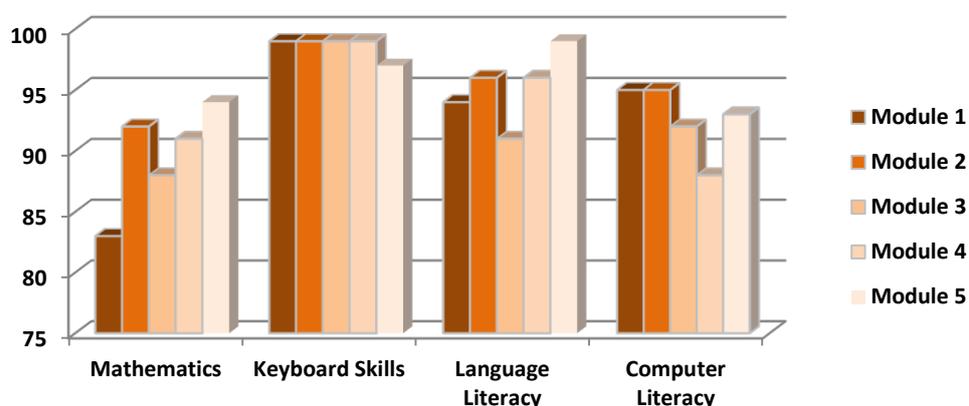
**DVC: ACADEMIC AND RESEARCH**

## Annexure A

### Intermediary performance 2014

Prospective students that are registered for these programmes have to annually complete a specific curriculum. The curriculum is divided into five modules and the following graphs illustrate the pass rate per subject.

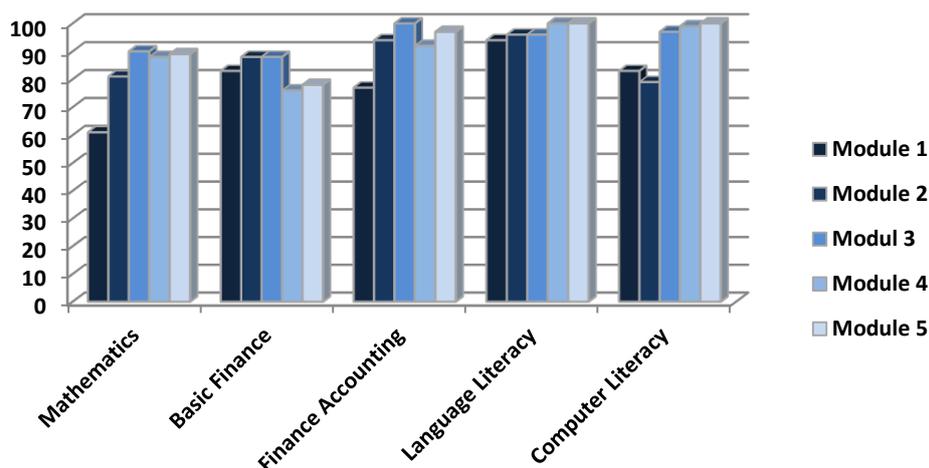
Figure 1 depicts the performance of the intermediary Information Technology students.



**Figure 1:** The pass rate of the Information Technology students per subject per module

As depicted in Figure 1, the students performed well in the individual subjects (all above 85%). The lowest performance was during module 1 for the subject Mathematics (83%).

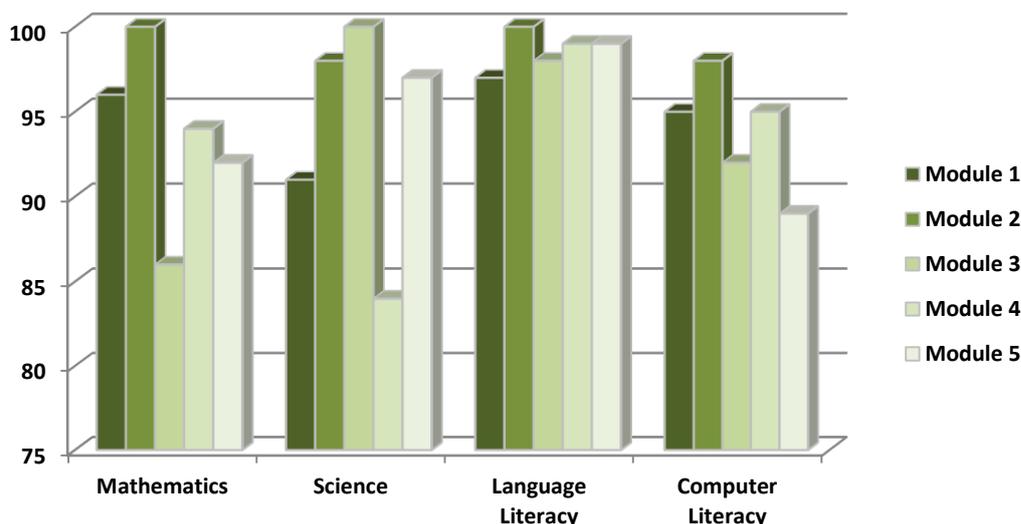
Figure 2 depicts the intermediary performance of the Management Sciences students.



**Figure 2:** The pass rate of the Management Sciences students per subject per module

As depicted in Figure 2, the students performed well in the individual subjects (all above 75%). The lowest performance was during module 1 for the subject Mathematics (61%).

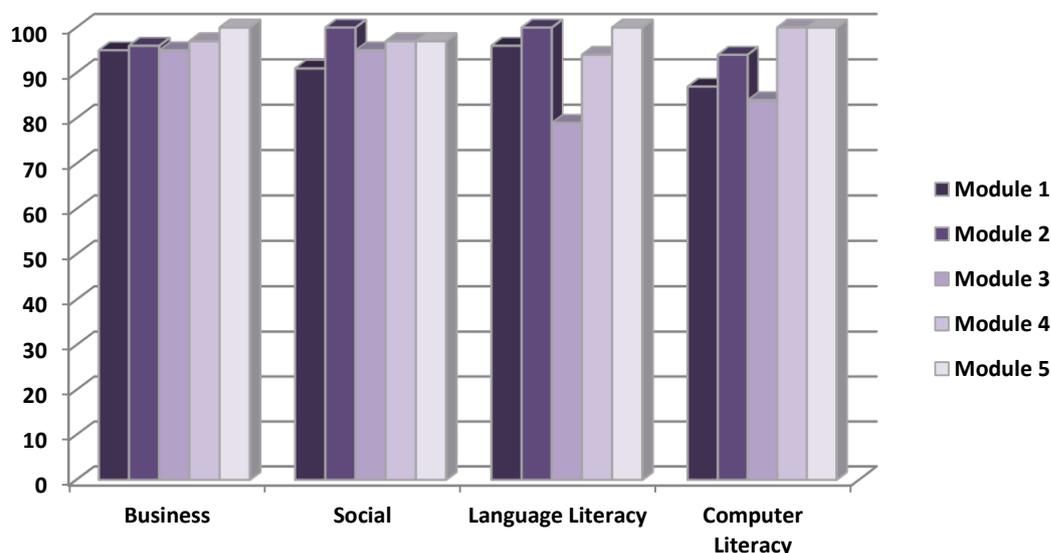
Figure 3 depicts the intermediary performance of the Science, Engineering & Technology students.



**Figure 3:** The pass rate of the Science, Engineering & Technology students per subject per module

As depicted in Figure 3, the students performed well in the individual subjects (all above 85%). The lowest performance was during module 4 for the subject Science (84%).

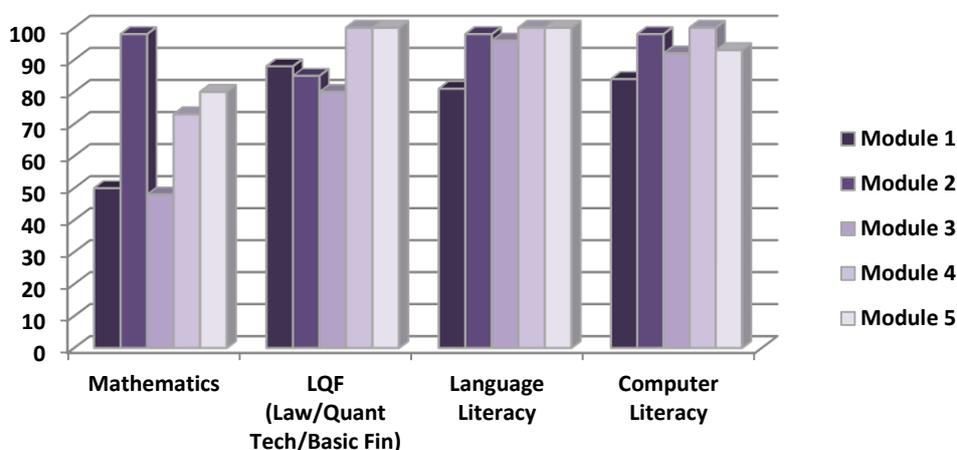
Figure 4 depicts the intermediary performance of the Human Sciences students registered for Fashion, Fine Art, Graphic Design and Public Relations.



**Figure 4:** The pass rate of the Human Sciences (Fashion, Fine Art, Graphic Design and Public Relations) students per subject per module

As depicted in Figure 4, the students performed well in the individual subjects (all above 80%). The lowest performance was during module 3 for the subject Language Literacy (79%).

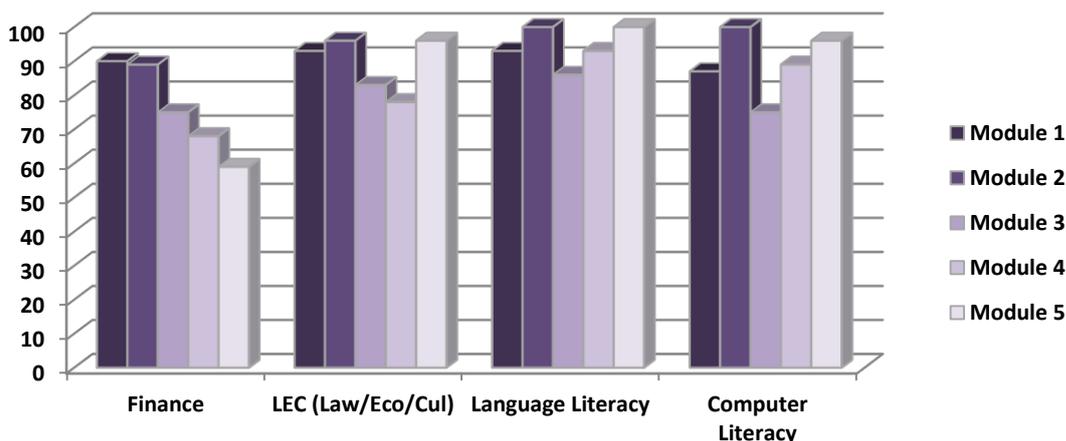
Figure 5 depicts the intermediary performance of the Human Sciences students registered for Labour, Law, Legal Assistance, Policing and Safety Management.



**Figure 5:** The pass rate of the Human Sciences (Labour, Legal Assistance, Policing and Safety) students per subject per module

As depicted in Figure 5, the students performed well in the individual subjects (all above 70%). The lowest performance was during modules 1 and 3 for the subject Mathematics (50% and 48%). Extra classes are offered on Saturdays for those students struggling with Mathematics. The majority of these students had Mathematics Literacy and not pure Mathematics in Grade 12. The students are also referred for counselling.

Figure 6 depicts the intermediary performance of the Human Sciences students registered for Eco-Tourism, Hospitality, and Tourism Management.



**Figure 6:** The pass rate of the Human Sciences (Eco-Tourism, Hospitality, and Tourism) students per subject per module

As depicted in Figure 6, the students performed well in the individual subjects (all above 70%). The lowest performance was during modules 4 and 5 for the subject Mathematics (67% and 59%). Extra classes are offered on Saturdays for those students struggling with Mathematics. The majority of these students had Mathematics Literacy and not pure Mathematics in Grade 12. The students are also referred for counselling.