



QUALITY ENHANCEMENT PROJECT:

PHASE 1

24 July 2014

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QUALITY ENHANCEMENT PROJECT: PHASE 1

1. INTRODUCTION

(a) Context : Strategic direction

The University of Johannesburg (UJ) is a multi-campus comprehensive university, established through the merger between the Rand Afrikaans University and the Technikon Witwatersrand and the incorporation of two Vista campuses, Soweto and East Rand.¹ The University regards itself as an international university of choice, anchored in Africa and dynamically shaping the future. The University states as its mission the intention to inspire its community and to transform and serve humanity through innovation and the collaborative pursuit of knowledge. Moreover, UJ strives for accessibility and global excellence in tandem. We have a joint responsibility to provide placement for candidates from schools of the lowest quintiles, and to ensure that the degrees they obtain are world class. Our combination of carefully structured curricula, and our considerable investment in teaching, learning, tutoring, and academic and psycho-social support ensures that UJ is simultaneously accessible and successful. The University of Johannesburg has already entered the arena of global excellence, having been ranked in the top 4% of universities globally, and our goal now is to elevate our global ranking and presence. The UJ Strategic Plan 2020/2025 is in pursuit of greater global excellence and stature, and Council has approved this expansive and bold plan, together with an approval of the resources necessary to implement the strategy. Six strategic objectives have been identified, namely:

1. Excellence in research and innovation
2. Excellence in teaching and learning
3. International profile for global excellence and stature
4. Enriching student-friendly learning and living experience
5. National and global reputation management
6. Fitness for global excellence and stature.

The relevant strategic objectives and their key performance areas and indicators, as well as the relevant institutional policies and frameworks, are encapsulated in the next sections. The cornerstone of our teaching and learning approach is captured in the Teaching and Learning Strategy 2014-2020 (addressed in the relevant focus areas below).

(b) Teaching and learning

The University of Johannesburg is a comprehensive university, which means that academic programmes are offered from undergraduate diplomas and degrees to doctoral qualifications. The academic programmes are offered across four campuses, i.e. the Auckland Park Kingsway Campus (APK), the Auckland Park Bunting Road Campus (APB), the Doornfontein Campus (DFC) and the Soweto Campus (SWC).

The University currently employs 1069 permanent instructional/research professionals. In addition, the University employs a total of 5109 additional temporary academic staff. This

¹ The University is awaiting the Department of Higher Education and Training's response regarding the utilisation of the East Rand Campus (ERC) by the Vaal University of Technology (VUT) and the University of South Africa (UNISA).

group includes short term academic employees and external assessors, but the majority of the appointments are academic employees who teach, mentor, mark and provide consultation. This additional investment represents an additional 885 FTEs. Of the 49 244 students (June 2014), 42 515 are undergraduate students.

The strategic goal of the University is to achieve global stature. In terms of teaching and learning, this will involve attaining and maintaining:

- Intellectually rigorous curricula that respond innovatively to the challenges and opportunities of the 21st century;
- Pre-eminence as a teaching-focused institution, leading by means of effective innovation, including the appropriate and widespread use of technology in the learning process;
- Outstanding achievements across our diverse student body.

The Deputy Vice-Chancellor (DVC): Academic is responsible for the core business related to teaching and learning. The Executive Deans of the nine Faculties, the Executive Director: Academic Development and Support; and the Senior Director of Institutional Planning, Monitoring and Evaluation all report to the DVC: Academic. At faculty level, teaching and learning committees address quality and operational matters concerning teaching, learning and assessment. The 'First Year Experience' Committee and the 'Senior Student Experience' Committee are crucial in identifying best practices, common challenges, new approaches and risks. These committees comprise professionals from Academic Development and Support, pertinent senior academic experts from each of the faculties, and representatives from all support divisions, to enable focused attention on teaching and learning issues and opportunities from all role-players.

Senate and Senate Committees are responsible for the governance related to the academic programme delivery. The Senate Teaching and Learning Committee provides strategic direction with reference to teaching and learning, ensures effective implementation of the Teaching and Learning Strategy, monitors the progress of such implementation, and provides advice on the resources required for the full implementation of the strategy.

The Registrar is responsible for the governance and quality of academic administration relating to the academic lifecycle of the student, from application to graduation.

In pursuit of the twin goals of accessibility and excellence, the University of Johannesburg recognises that substantial and sustained success within teaching, learning, curriculum design and implementation and student support requires significant resources. The division of Academic Development and Support is the hub of the university's commitment to accessibility and excellence, and currently has 112 members of staff, most of whom are professional support staff. The division consists of three centres: the Academic Development Centre, the Centre for Academic Technologies, and the Centre for Psychological and Career Services. The positive effect of this large cohort of professional staff is multiplied as their skills and expertise are inculcated in academic staff. Effecting a successful transition from school to university, and creating all the right conditions for academic success, are difficult, resource-intensive operations, and our approach is that these tasks simply have to be done, and done properly. We are mindful of the enormity of our task, and at the same time we are grateful for our successes. The trend line of the module pass rate over five years indicates that the task of providing access and excellence is not insuperable:

2009	2010	2011	2012	2013
74,9%	78,3%	79,4%	82,1%	83,2%

The graduation rates within the university sector as a whole need attention. At UJ, we have made some progress, as indicated below, and our efforts with regard to cohort analysis, success rates and interventions with modules and students at risk, are aimed at improving the graduation rates:

2011	2012	2013
22,22%	23,40%	23,97%

1.1 DEVELOPMENT OF THE UJ SUBMISSION

(a) QEP Task Team

The University of Johannesburg established a QEP Task Team (QEPTT) to steer, facilitate and coordinate QEP-related activities in the University. This includes:

- (i) the development of the UJ submissions to the CHE;
- (ii) participation in national working groups, spin-off projects, etc. (to be identified by the CHE as part of the national QEP).

The QEPTT reports to the Senate Teaching and Learning Committee (STLC) and Senate, and consults with the Management Executive Committee: Academic (MECA) and the Management Executive Committee (MEC).

The composition of the QEPTT is as follows:

- (i) Chairperson: DVC Academic – Prof A Parekh
- (ii) Executive Director: Academic Development and Support – Prof R Ryan
- (iii) Two executive deans: Prof S Gravett and Prof S Sinha
- (iv) Four focus area writers:
 - University Teachers: Ms. K Naidoo (Head: Professional Academic Staff Development, Academic Development Centre)
 - Student Support and Development: Dr A van Zyl (Director: Academic Development Centre)
 - Learning Environment: Prof A Amory (Director: Centre for Academic Technologies)
 - Enrolment Management: Ms T Gibbon (Senior Director: Division for Institutional Planning, Evaluation and Monitoring)
- (v) Institutional writer/compiler: Prof H Geyser (Head: Unit for Quality Promotion)
- (vi) Secretarial support: Ms I Pretorius (Coordinator: Unit for Quality Promotion)

The four focus area writers developed their contributions by consulting the relevant role players in the University. The different sections were compiled into one document and then submitted to a number of critical readers. The QEPTT met again to discuss the comments and finalise a submission to the Senate Teaching and Learning Committee, MECA and the MEC for comments. The Senate delegated authority to SENEX to approve the document before submitting it to the CHE, as the next scheduled Senate meeting is after the CHE's due date for submission of the document.

(b) Scope of this document

This report includes annual data up to the end of 2013. Where further updated data is provided, it is indicated as such.

2. ENHANCING ACADEMICS AS TEACHERS

2.1 INTRODUCTION

This section of the report examines the University of Johannesburg's (UJ) approach to the development of academic staff. While the focus here is on developing academics as teachers, it is important to note that academic staff development at UJ is approached from multiple perspectives and is premised on the understanding that academics require development as disciplinary experts, teachers of disciplines as well as expertise in the field of practice (in vocational and professional qualification). Thus professional development of academics includes:

- supporting and providing development opportunities for academics to improve their academic qualifications which contributes to enhanced teaching by developing disciplinary expertise,
- offering a range of development opportunities aimed at providing a better learning experience for students at undergraduate and postgraduate levels, and
- facilitating on-going engagement with industry and professional bodies to ensure that programmes offered are relevant and aligned.

The commitment to enhancing academics as teachers is conveyed in the broad strategic objective of *Excellence in Teaching and Learning*. In order to achieve this, the following specific objectives are deemed important:

- Intellectually rigorous curricula that respond to the challenges of the 21st century
 - Curricula that speak to cutting-edge developments in disciplines and reflect latest trends in undergraduate education
 - Curricula that prepare students for active global citizenship
 - Constant and dynamic use of learning with technology
 - Lecturer engagement with technology
- Outstanding achievements across our diverse student body
 - A diverse set of academic development and support strategies at all levels.

The focus on curriculum, aimed at interrogating what is taught and why, as well as how to facilitate student access to disciplinary discourses, has been the focus of departmental and faculty teaching and learning workshops, particularly in the curriculum project. The curriculum project is a collaborative initiative with Academic Development and Support, the Unit for Quality Promotion and the Division for Institutional Planning, Evaluation and Monitoring. It consists of four interrelated aspects of curriculum development: the first pertains to the development of new programmes, the second to re-curriculation carried out within departments, the third involves the continuation of the teaching and learning philosophy roll-out and the fourth area of activity is the development of project-driven pedagogical interventions which range from university-wide seminars and conferences through to departmental workshops and individual consultations. It is envisaged that this collaborative project will contribute to achieving the following goal articulated in the teaching and learning strategy for 2013-2020: 'By 2020, the UJ undergraduate learning experience should be acknowledged in terms of the quality of its curricula, pedagogies and assessment practices – as well as through the notable success rates achieved by all our students'.

Work undertaken in this project is integrated into the professional staff development workshops offered by Professional Academic Staff Development.

- Pre-eminence and stature as a teaching-focused institution which involves
 - Teaching developed as a scholarly activity
 - Public acknowledgement of teaching commitment and expertise at Faculty and at university level

- Enhanced staff capacity
- Regular teaching evaluations by students and peers

This UJ strategic objective highlights the University's commitment to, support for and recognition of teaching as a scholarly activity. The discussion that follows provides an overview of and reflection on significant initiatives that have been introduced to achieve the abovementioned goals. The section concludes with suggestions on areas for further development.

2.2 PROFESSIONAL DEVELOPMENT AT UJ

Over the last five years UJ has introduced a number of initiatives and projects aimed at enhancing academics as teachers. These are offered by various role players, including Academic Development and Support (ADS), Human Resources, the Postgraduate Centre (PGC) and faculties, and these have contributed substantially to improvements in the quality of academic practice and an enhanced student experience.

In response to the challenge of providing high quality teaching and learning, most universities introduce teaching and learning strategies. The first UJ Teaching and Learning Strategy was approved by Senate at the end of 2008 and implemented from 2009. The Strategy was developed in a national higher education context where increasing weight was being placed on teaching and learning as core business of any university, and where institutions were being mandated to address the challenges raised by the unsatisfactory completion rates of students in post-school education. In this context UJ's Teaching and Learning Strategy was closely aligned with the Mission, Vision and Values of the University and signalled UJ's commitment to addressing, in a systematic and coherent manner, a range of matters associated with enhanced teaching and learning and the student experience. In addition, the Teaching and Learning Strategy introduced to the institution the conceptualisation of learning as becoming a practitioner of a knowledge and professional domain, which was encapsulated in the core notion of 'learning to be'. The 'learning to be' philosophy emphasised the need to provide opportunities for students to

learn the practices of the knowledge domain which includes the principles, dispositions, attributes, competencies, activities, skills, procedures and values of the knowledge domain. This type of learning also requires how best to utilize the conceptual frameworks to identify and solve problems (Amory et al, 2008:4)².

The value of continuous learning to meet the needs of a rapidly changing world is stressed. This applies to academic staff members, who have to address the challenge of meeting the needs of great complexity in the teaching-learning environment. The past few years have indeed seen considerable energy invested in improving the student learning experience and student performance, through careful attention to student-focused pedagogies, close monitoring of success rates, and considered interventions where risks had been identified. This work, carried out by many dedicated staff members, is undoubtedly valuable and must continue. In 2014 UJ revised its teaching and learning strategy to facilitate a renewal and a conscious focus on the quality of its academic programme offerings, the competency level of its staff, and teaching pedagogy.

(a) Disciplinary expertise and staff qualifications

In 2009, the MEC implemented a strategy to support academic staff to obtain a master's and/or doctoral qualification. At UJ this was particularly important in the context of the

² Amory, A., Gravett, S., & Van der Westhuizen, D. (2008). Teaching and learning at the University of Johannesburg: a position paper. Retrieved from <https://152.106.6.200/handle/10210/4270>.

merger of different institutions, and for those who came from the technikon tradition. Qualifications of academic staff at technikons were generally lower than those of academic staff at universities, often substantially lower, and thus, UJ has given much attention and resources to improve academic staff qualifications. The Master's Staff Qualification Programme (SQP) was initially located within the Centre for Professional Academic Staff Development to monitor and provide support for the 110 academic staff members who were part of the programme. This function moved to the postgraduate centre (PGC) in late 2012. To date, 58 master's studies have been completed with 42 in progress. In 2011, the SQP was extended to include a doctoral programme. A major thrust of this was the SANTRUST pre-doctoral programme, which assisted with the development of proposals. The PGC also developed a series of ongoing research development workshops to assist staff once they had their proposal approved by Faculty Research Committees. The SQP provides valuable support for staff members who are registered for master's and doctoral studies in the form of an initial research grant, funding for teaching relief and an extensive workshop programme. The table below indicates the progress that has been made in the last five years pertaining to staff with Master's degrees and staff with Doctoral degrees:

Qualification	2010	2011	2012	2013	31.07.14
Master's	349	345	393	441	455
Doctorate	377	352	386	441	459
Total	726	697	779	882	914

Research Capacity Development, a division within the PGC, is tasked with research capacity development for both postgraduate students and for academic staff members. Although the PGC is located in institutional structures that focus on research and innovation rather than teaching and learning, it is acknowledged that the research capacity development opportunities made available to lecturers plays a substantial role in their development as teachers as well and contributes to a more scholarly approach to teaching. These are in the form of workshop series, and writing retreats that centre on the development of knowledge about research design and methodology, or on research writing skills. In addition, since 2011, three cohorts of 66 lecturers who do not yet have doctoral degrees have benefited from the SANTRUST pre-doctoral programme, with the fourth cohort currently running. A fifth and final cohort is planned for 2015 to achieve the PGC's original vision of supporting 100 staff members to develop their doctoral proposals through SANTRUST. Arguably, achievement of the learning outcomes of the six modules contributes not only to their development as researchers, but also to their teaching skills, as this enables staff to relate teaching and research and ensure that their teaching is informed by recent research in their disciplines.

(b) *Enhancing teaching and learning*

The approach to professional development at UJ is collaborative, flexible, creative and needs-driven, and encompasses a wide variety of activities (both formal and non-formal). It allows academic staff to identify professional development needs that enable them to progress along the variety of career pathways that have opened up at UJ (see change in promotion criteria below). It is important to note that professional development involves more than generic training and 'tips for teachers': it aims to explicitly address issues of institutional and disciplinary context and provide staff with access to discourses and theories related to teaching and learning in higher education.

The introduction to the institution and teaching and learning context and discourse begins when academic staff members first start their careers at UJ. An academic preparation programme is offered to all new staff involved in teaching and learning. The workshop, which runs over three days, covers a range of topics relating to teaching, learning and research

such as curriculum alignment, an introduction to the UJ's teaching philosophy, assessment for learning and developing research capacity. The Academic Preparation Programme is offered twice a year (January and July).

In 2011, follow-up workshops on specific topics were introduced to enable staff to intensely and practically engage with their own modules during more focused and tailored follow-up sessions. They also have the option of working on a one-on-one basis with professional development staff should they wish to make use of this opportunity. These workshops provide added benefit, as participants are able to draw on their experience of teaching and assessing in the UJ context. In addition, the follow-up workshops were designed to provide new and inexperienced staff with support on an ongoing basis with the following goals:

- enhance academics' understanding of the discourses and practices associated with teaching in higher education on an on-going basis;
- provide opportunities for them to become part of a community of practice and learn from each other;
- share insights on ways of addressing challenges in teaching and learning in HE.

Given the generic nature of these workshops the Faculty of Science augments this with a seminar series for new staff in Science disciplines. This is an interesting development which has the potential to address concerns that generic workshops need to be reinforced in disciplinary contexts. This could serve as a useful model for other faculties, and discussion is underway between the faculties and the unit for Professional Academic Staff Development. Within many departments, ongoing disciplinary professional development for new staff occurs through mentoring relationships between senior and less experienced staff within departments. This model is currently being implemented with great success in the Faculty of Law and is in place to varying degrees in all faculties and departments. In some instances mentoring of staff is also facilitated by staff in ADS. One example of this is the collaborative mentorship programme between staff in tutor development and academics who co-ordinate departmental tutorial programmes. The aim of this was initially to manage and support staff, but increasingly there was the recognition of the need to develop staff pedagogically. Disciplines that participated included Business Management, Historical Studies, Information and Knowledge Management and Commercial Law.

Similar mentoring exchanges occur between staff in ADS and academics in order to

- facilitate the integration of academic literacy skills into the curriculum, and
- assist staff who wish to enhance their teaching after receiving feedback from peer and teaching evaluations.

Deep engagement in teaching and learning is offered through discipline-based curriculum development workshops facilitated by staff in ADS. These workshops began in 2010 to assist academic staff with exploring how the learning-to-be philosophy could inform their teaching. The workshops were initially conceptualised as a two-hour session, where staff worked through various aspects of the Teaching and Learning philosophy. However, it soon became apparent that more time was required for staff, especially for those unfamiliar with educational discourses, to explore how the philosophy could inform their practice. As a result of this, the workshops were reconceptualised as a five-hour, two-part workshop. This provided space for staff within specific disciplines to consider the nature and purpose of their knowledge domains and related curricula, the extent to which students 'learn about' or 'learn to be', and the implications of this for academic and student identities as well as for pedagogical practice. The revised workshops, despite being intensive and time-consuming, allowed discipline specialists to engage critically with theories relating to higher education, and provided them with a lens through which they could interrogate their curricula. In many

instances the curriculum development workshops have been an impetus for further curriculum development work at departmental and faculty levels. For example, in some disciplines in the Faculties of Humanities and Management departmental workshops continued and have resulted in the complete overhaul of the curriculum from 1st year to master's, and a review of assessment and introduction of a collective system of assessment setting to ensure consistency in programmes with progression through the years.

In addition, many faculties have introduced teaching and learning forums to facilitate critical engagement with teaching and learning in particular knowledge domains. The Faculty of Art, Design and Architecture has an active teaching and learning forum that meets regularly to address issues relating to teaching in design disciplines. In Humanities such discussion also occurs in an online discussion group.

The advantage of discipline-based staff development initiatives is that they facilitate more coherent and connected curriculum planning. This is also applicable to the integration of tutorial programmes. A national project called the Large Class Project (2008-2014) showcased the UJ collaborative model of tutor programme implementation and lecturer/tutor development in tutor practice. The central finding of this project, based in the Faculty of Management, was that tutors, tutor development and the tutorial curriculum need to form an integral part of staff development. The University of Johannesburg is committed to enhancing student learning through the tutorials and has made substantial funding available for the employment of tutors and senior tutors. Given this, academic development initiatives aimed at developing well thought through tutorial programmes that are integrated into the curriculum are essential across all faculties. This is certainly an area for further development.

In order to support teaching with technology, the Centre for Academic Technology (CAT) developed and implemented a number of new staff development workshops. The introduction of the CAT framework (discussed in Focus Area 3) to academic staff members included the distribution, via paper and online documents, of an easy-to-read z-folder that was summarised in a single-page hand-out. In addition, a number of workshops were developed to explore the CAT framework, authentic learning, use of social media in teaching and learning, and the pedagogical use of mobile devices in the classroom. The intentions of the workshops are to model the CAT framework approach to support contemporary pedagogical approaches that are aligned with the institutional teaching and learning philosophy.

Enhancing academics as teachers also occurs through collaboration between ADS and Faculties. This is most in evidence in the collaboration between the Faculty of Engineering and the Built Environment (FEBE) and the Access Programmes. In Access, academics from FEBE, Management and Humanities lecture in the extended diploma programmes. Since there is extended time and substantial foundational provision interwoven into the mainstream curriculum, these lecturers work closely with Senior Coordinators to understand and apply the Access methodology and pedagogy to their discipline. These lecturers are evaluated by students on an annual basis and most often the results indicate that the lecturers are successful in viewing their subject material through a different lens. In group interviews, many of the lecturers reported that they have taken their new view of teaching and learning and applied it in their mainstream classes with great success. A challenge reported by these lecturers is that when they speak of an alternative way of teaching they are looked down on by their colleagues, who believe that they are spoon-feeding the students and diluting the content.

In addition, faculty lecturers are also involved in the materials development process. This process involves actually integrating foundational provision and academic development into the mainstream content. During this process, the lecturer is introduced to the concept of teaching towards outcomes and assessing against outcomes, and the curriculum is re-

examined and often restructured in a way that scaffolds and promotes understanding rather than rote learning. After attending a materials development workshop, where they are partnered with an ADC staff member with the same specialisation, the lecturer starts developing the materials, which focus on the application of theory, lots of examples, case studies and real-life examples from the students' own frame of reference. Once the lecturers finish developing the materials they claim to have re-examined their teaching philosophy, understood the concept of 'learning to be' and embraced the ADC methodology in all their classes. Materials are also evaluated by students as well as by the other lecturers, who provide feedback as they lecture each of the units. The teaching of one of the lecturers in the Chemical Technology Department who lectured for ADC is recognised as having improved substantially not only by the lecturer but by her line manager and peers. It is a very time-consuming but rewarding process.

(c) Seminar series and conferences

The enhancement of academics as teachers also occurs through regular seminars on specific topics, for example, large-class teaching, assessment and learning with technology. In addition to university-wide seminars, faculty teaching and learning committees also host themed seminars. These provide opportunities for academic staff to engage with professional bodies and key role players in industry. This is particularly important for vocational and professional qualifications.

In addition, ADS hosts an annual teaching and learning conference, which is well attended by staff within UJ as well as staff from other South African Higher Education institutions. This provides a useful platform for staff to engage in scholarly debate and discussion on various issues relating to teaching and learning as well as familiarise themselves with current developments in higher education both nationally and internationally.

(d) Development of academics as supervisors

Worldwide, there is a growing understanding that the effective supervision of research requires a specialised form of teaching. For this reason, since 2013 the PGC has organised interfaculty workshops aimed at developing the knowledge, attitudes, values and skills that academic staff members require in order to be good supervisors of their postgraduate students. Some of the workshops that ran in 2013 are: working with postgraduates who use English as an additional language, developing constructive supervisor–student relationships, models and styles of supervision, the provision of effective feedback on postgraduate writing and resource-efficient supervision at honours level. Meetings of the interfaculty postgraduate supervision forum are aimed at generating discussion that facilitates supervisors learning from each other. An example of the topic explored is 'Ethics, research and supervision: Matters of truth and justice'.

In addition, since 2013, faculties have been invited to request the Postgraduate Centre to collaborate with them to offer workshops that address more specific needs identified in the faculties. Examples of this tailored approach were the 'Postgraduate supervision essentials' half-day workshop for the Faculty of Art, Design and Architecture (FADA) in January 2013, and a two-day workshop on the assessment of honours, M and D research projects that was run for the Faculty of Economic and Financial Sciences (FEFS) in January 2014. In 2013, the NUFFIC-funded short course 'Strengthening Doctoral Supervision' was also offered to 25 participants selected by faculty management. In order to facilitate wide dissemination of the learning from the course, doctoral supervision was the focus of the postgraduate supervision forum meeting in May 2014.

(e) Teaching as a scholarly activity

The development of teaching as a scholarly activity is one of the institution's strategic goals. In order to achieve this, Professional Academic Staff Development (PASD) in collaboration with the Postgraduate Centre began a forum in 2011 for academic staff who are interested in research and publication in the area of scholarship of teaching and learning. The workshops offered provided insights into how staff could combine practical examples of innovative teaching practice in higher education with insight into educational theory and research design. Workshops were offered on an *ad hoc* basis and were not sustainable. However, this is likely to change with the creation of a chair in teaching and learning and with the allocation of funding to support research in teaching innovation. UJ is the first university in SA to create a Chair in Teaching and Learning. This signals its commitment to the scholarship of teaching and learning (SoTL). The post, initially for three years, is located in the Education Faculty, and has widespread scholarly connections with the faculties and with ADS. The incumbent, Professor Brenda Leibowitz, will play an institutional role, as well as supervise PhD and post-doctoral fellows, and conduct research. In 2014, the Chair in Teaching and learning initiated a SoTL @ UJ project, with a specific focus on social justice, and she is the recipient of a substantial Teaching Development Collaborative Programme Grant from DHET in 2014.

In 2013, the University launched the Teaching Innovation Fund, with an annual allocation of R500 000, to be made available on a competitive basis to encourage and enable excellence in teaching. The aim of the grant is to support the actual development, implementation and evaluation of innovative curricula and teaching and assessment practices and of initiatives designed to enhance the quality of modules and programmes. Within the available budget of R500 000, grants for smaller projects to the value of R25 000 and larger projects to the value of R50 000 were awarded to academic staff for a period of 12 months. It is anticipated that this support would encourage more staff to engage in innovative teaching, which will result in research and publication, thus contributing to scholarship in teaching and learning in their disciplines.

(f) Recognition and reward for excellence in teaching

UJ recognises excellence in teaching and learning through the Vice-Chancellor's (VC's) award. Three awards for excellence in teaching are awarded annually, each to the value of R150,000. In order to encourage staff to pursue excellence, in 2014 an additional category for Promising Young Teachers has been included in the call for submissions. In addition to the VC award, many faculties recognise and honour staff for excellence in teaching and learning annually.

2.3 REFLECTION AND AREAS FOR FURTHER DEVELOPMENT

Participants in all workshops and courses are requested to complete anonymous evaluations that provide qualitative and quantitative feedback, which is used to refine and guide future activities. While feedback is generally very positive, with over 90% of respondents indicating that they found the development opportunities either very useful or useful, there is always the need to adapt workshops to the changing pedagogical landscape. As the university embarks on the rollout of tablets, Wi-Fi and online platforms to enhance teaching and learning, the fundamental components and practices of how teaching and learning occurs is subject to scrutiny, experiment and enrichment. Faculties and disciplines often require tailored workshops to meet their needs. Academic members of staff are sometimes reluctant to venture far from their comfort zones. Finally, ADS and faculty managers need to work together to foster a culture in which the attendance of teaching development workshops (and the consequent innovation and enrichment in teaching practice) is regarded as paramount to what it means to be an academic. In some instances, academic staff perception of such workshops needs to be changed, from being perceived as 'in addition to one's daily academic work' to being fundamental to academic work. Mechanisms and practices of reward and recognition for the development of scholarly, innovative and thoughtful teaching

need constant renewal and reinforcement. The lasting transformation of practice can be enhanced through the development of communities of practice after focused workshops. These communities of practice will provide valuable support for staff as they grapple with and try to integrate what they have learnt in workshops into their practice. The potential value of these communities of practice is that they become groups of champions for promoting teaching excellence.

There have been a number of additional developments aimed at elevating the importance of teaching in the university. These include:

- Change in the promotion criteria, which enable academic staff to weight teaching more heavily. All staff members are now required to submit a teaching portfolio in which they provide a teaching philosophy, details on their approaches to teaching and learning, the professional development workshops they attended and how this informed their practice, evaluations by students and peers, and all other information pertinent to their teaching practice. Support for this is provided by departmental or faculty mentors, who are more senior academic colleagues, and staff in ADS. Strategic initiatives to enhance staff capacity include the development of a policy framework for academic staff development with ongoing monitoring and evaluation of progress. Incorporating both attendance of staff development programmes but more importantly evidence of transformation in practice as a result of attending professional development initiatives should be key requirements for promotion.
- UJ has submitted an application to the HEQC for the accreditation of a postgraduate diploma in higher education. Introduction of the postgraduate diploma in higher education will offer the opportunity for staff to acquire the requisite knowledge and skills in higher education as well as a formal qualification in higher education.
- The university is in the process of redeveloping its professional development framework to ensure that greater emphasis is placed on the contribution that professional development initiatives make in meeting the University's strategic objectives and that these form part of the personal development goals of academic staff at various stages in their career. In its implementation professional development needs to be integrated with performance appraisal and promotion, which will result in recognition and reward for professional development to improve teaching and learning.

3. ENHANCING STUDENT SUPPORT AND DEVELOPMENT

3.1 INTRODUCTION

The enhancing student support and development focus area is linked to the UJ Teaching and Learning philosophy (Learning to be) as well as the following strategic objectives taken from the UJ Strategic Plan:

(a) Strategic Objective Two: Excellence in Teaching and Learning Enrolment Profile

Its goal is to enrol outstanding students from diverse backgrounds, including a significant proportion of international students, a significant number of students from illustrious schools in Africa, from South African schools in the lowest two quintiles and from illustrious South African schools, communities and families.

Outstanding achievements by the full range of our highly diverse student body

The University aims to achieve excellent student success rates, improved retention and increased graduate output. The diverse set of academic development and support strategies

at first-year level will be extended to subsequent levels, including tutoring and mentoring systems. An awards system will recognise top student achievement.

The diversity of student population is important to consider when implementing academic development (AD) activities and is reflected in the institutional responses discussed below. The high level of diversity at UJ is, however, also a complicating factor for student support and development activities, as different types of students have different needs. Nevertheless, the university is committed to accessibility, and thus diversity of academic background is taken as a given in the preparation of our interventions within teaching, learning and student support.

(b) Strategic Objective Four: Enriching Student-Friendly Learning and Living Experience

***Support through the student lifecycle
Learning and Living Communities***

Student support and development is seen as an integral part of the learning and living experience at UJ. As a result the planning for the support and development activities actively strives not only to focus on problem resolution, but also to provide opportunities for students to grow and gain experience. Our approach is not simply reactive, but developmental, assuming that with the appropriate mechanisms and practices of support in place, students will thrive academically.

(c) Strategic Objective Six: Fitness for Global Excellence and Stature

Environment and ethos: The University aims to provide a welcoming and caring environment with a strong service orientation.

Student support and development play a crucial role in the experience students have of the institution. Many of the activities discussed below aim, in the long term, to help shape the institutional environment and ethos. The substantial investment made by UJ into student development and support -- comprising the entire division of ADS plus all of the resources made available to faculties for tutors and additional academic staff -- is focused on delivering world class graduates.

3.2 CURRENT SUCCESSFUL ACTIVITIES

UJ has a very active Division for Academic Development and Support (ADS), which is aimed at supporting students in their academic endeavours. ADS consists of three centres, namely the Academic Development Centre (ADC), the Centre for Academic Technologies (CAT) and the Centre for Psychological Services and Career Development (PsyCaD). Both ADC and PsyCaD are represented on all four campuses, and the division as a whole employs 112 full-time and more than 100 part-time staff members. A lot of the activities described in the rest of this document are managed and/or supported by ADS staff.

The **Academic Development Centre** is aimed at assisting undergraduate students succeed academically. This includes the highly successful Access diplomas, four vibrant Writing Centres, a Literacies Development unit, a Learning Development unit and a Tutor Development unit. ADC works well with Faculties, and the integrated and highly successful Language for Science module is currently being used to model other literacies development modules. Support and development opportunities take various forms, including individual consultations, generic group interventions, integrated group interventions and online developmental tools.

UJ more broadly, and ADS in particular, has started to develop and is encouraging the institution to develop a scholarly approach to teaching and learning. This includes various research projects as well as a variety of activities initiated by the Professional Academic Staff Development Unit located in ADC. This is discussed in more detail in the focus area on developing academics as teachers.

Psycho-social support: Psycho-social issues represent an important set of contributors to student academic performance and persistence. UJ has a well-established and effective Centre for Psychological assistance and Career Development (PsyCaD) represented on all four UJ campuses. The success of PsyCaD efforts to improve persistence is dependent upon an enhanced understanding of the various contributory factors to student attrition and failure. In this respect PsyCaD psychologists use their experience and understanding of these psychological pressures, demands and a multitude of other barriers to support and develop students through a variety of methods and services, including:

- Individual and group psychotherapy and counselling to enhance psychological wellbeing
- Facilitation of support groups developed around identified needs (e.g. debriefing, bereavement, interpersonal relations, HIV/ Aids groups)
- Delivery of workshops and training on a range of issues relevant to student development
- Interventions for students on academic probation (F5) and exclusion (F7)
- Disability support services
- 24-hour crisis-line support available to students on a free-call (0800) basis
- Student peer-support mechanisms such as the Peer Buddy programme and facilitating training within the RAA mentoring programme
- Psycho-diagnostic and psychometric assessments to deepen therapeutic understanding and inform practice/treatment
- Implementation of preventative and developmental initiatives and awareness campaigns such as the anti-violence campaign, anti-rape, drug and alcohol abuse, responsible sexual behaviour, etc.
- Reaching and engaging with students through social media and other online platforms with the aim of promoting mental health and wellness
- Collaboration with Faculty members and other UJ stakeholders(e.g. Campus Health, IOHA, Judicial Services, Protection Services) to enable the delivery of holistic and integrated support
- Psychiatric referrals where deemed necessary and appropriate.

The following institutional initiatives have been introduced since the establishment of the University of Johannesburg:

The highly successful **UJ First-Year Experience (FYE) initiative** was launched during 2010 and has become part of the UJ culture and its strategic direction. The UJ FYE is an institutional initiative aimed at enhancing the institutional teaching and learning environment in order to improve student success. During the launch phase, the UJ FYE consisted of seven initiatives (placement testing, orientation, extended orientation, senior-student involvement, extra-curricular activities, improving the academic ethos in the residences and student tracking). It has since continued to develop over time and has approximately 15 discrete interventions aimed at improving the institutional environment in process. The UJ FYE is seen as the leading example of FYE programmes in South Africa, and is currently used as a best practice model for many other universities. UJ has been successful in receiving a substantial grant from the Collaborative Programme Fund of the DHET, for the establishment of a First Year Experience National Resource Centre. The NRC will function

as a locus for research, collaboration, conferences, international partnerships and best practice models for FYE in South Africa.

During 2014, the next phase – the **Senior-Student Experience** – has been implemented, a diverse and intense set of interventions for undergraduate senior students. The overarching SSE policy document is discussed in more detail in the last section of this document. These two strong initiatives – FYE and SSE – combine to focus on effectively addressing the transition from school to university, to achieving a better graduation rate, to preparing students for the world of work, and to connecting graduands with potential employers.

The **First-Year Seminar (FYS) (Orientation)** is seen as the institutional entry point of the First-Year Experience (FYE) and Senior-Student Experience processes. The UJ FYS focuses on both the academic and social aspects of student entry into the university and aims to help students complete the initial transition more successfully. It does so by endeavouring to make students feel welcome, but also to inform them about the UJ, their selected faculty and programme, as well as promoting the transition into higher education. During the past five years the FYS has become a truly institutional initiative that involves the Faculties and support services and is directed more strongly at the needs of newly arriving students.

A central UJ First-Year Seminar committee is chaired by the Executive Director Academic Development and Support and has strong faculty and support involvement. Strategic FYS planning meetings are held from July to ensure that planning for the following year has an element of uniformity across campuses and Faculties, involves continuous improvement and also considers totally new approaches. The implementation plans and details are left to the Faculties to decide. The impact of the FYS is seen in the improving student participation levels over the past five years, increases in student satisfaction of the FYS and informal feedback from academic staff.

National Benchmark Test (NBTs) investigations: The NBTs have been investigated as a placement mechanism at UJ since 2010. The purposes of the investigation include determining the extent to which the NBTs can be used to place students within UJ's variety of programme levels as well as using NBT results as a mechanism (in addition to the NSC results) to identify students' academic needs early on. Moreover, research results indicate that there is a close correlation between NBT and NSC results. For the 2015 enrolment, the compulsory nature of writing the NBT will be enforced for all applicants, and the results will be used as early-warning indicators, and will contribute to the data set for the purposes of further research. At some point in the medium term, UJ will need to consider using the NBT for admission purposes.

Work-Integrated (WIL) and Service Learning (SL): The UJ Work-Integrated and Service Learning Policy review was undertaken in 2013. **The increasing institutional focus** on SL (10% of UJ programmes to have a SL component by 2020) has resulted in the extension of the existing UJ WIL Forum, to become a UJ WIL and SL Forum as of 2014. This Forum is chaired by the Executive Director: Academic Development and Support. The purpose of the WIL and SL Forum is to broadly oversee WIL and SL at UJ.

UJ has a formal WIL component in 36 of its programme offerings. Faculty **WIL Coordinators** are supported by Departmental WIL Coordinators, who secure and approve relevant industry placement opportunities, monitor the students in industry and assess the WIL component. The Career Services unit in the centre of Psychological Services and Career Development (PsyCaD) offers workplace readiness workshops such as Job Search Skills, CV Writing and also Interview Skills to help students prepare for their work placements.

UJ is an active member of the Southern African Society of Cooperative Education, and keeps up to date with national skills and human resource developments. Research into WIL-related aspects is currently being undertaken by several staff members, in many cases as part of their master's and doctoral studies. UJ also works closely with the Sector Education and Training Authorities (SETAs) to support WIL. Re-curriculation to align with the HEQSF has resulted in a change in the way WIL is being offered, with a growing focus on forms of WIL other than the six-month in-industry placements, thus contributing to an enhanced throughput rate.

Service Learning (SL): At UJ, SL is viewed as an academic activity, which has grown out of Community Engagement initiatives. SL is managed by the Faculties and is supported by the newly established UJ WIL and SL Forum. The UJ Enactus programme (an international community service organisation) grew to 2000 members in 2013. ENACTUS and similar community engagement initiatives are used as a springboard to develop formal and sustainable SL programmes. UJ currently offers a SL component in 16 programmes. These are all well managed and effectively co-ordinated.

Undergraduate research: In order to assist students with developing appropriate skills for the world of work and/or postgraduate studies, undergraduate research at UJ has developed as a focus area over the past three years. The first UJ undergraduate research conference was held in 2012, and final-year students from the Faculties of Science and Engineering and the Built Environment presented their findings to a panel of judges. The students were also assisted in terms of preparing their presentations and were given feedback by the judges after presenting. This has been followed up by a variety of other undergraduate research conferences at UJ since then.

Research into the student profile and student needs: Effective teaching and learning enhancement is dependent on accurate student data to ensure that student needs are accurately identified and then addressed with the limited available resources. To this end UJ has effectively initiated a number of student profiling initiatives. The Student Profile Questionnaire (SPQ) is completed by a large proportion of newly arriving first-year students upon their arrival at the institution, and has been in use since 2006. This has allowed UJ to develop a more nuanced understanding of newly arriving first-year students, with a nine-year trend analysis to investigate changes in the student profile.

After the first six weeks of class, first-year students are requested to complete the Initial Student Experience Survey (since 2010) that gives a snap-shot picture of student experiences up to that point. UJ also participated in the first two years of the national roll-out of the South African Survey of Student Engagement (2010 and 2011) and used the data from the SASSE to evaluate its practices. In addition, the institution conducts an internal undergraduate student experience survey every second year. The above data sources in combination with the available institutional data have enabled UJ to identify student needs and barriers to success more accurately.

UJ has been shortlisted by an external donor organisation to receive funding for the development of a sophisticated student tracking system, one that will integrate all data from the current suite of UJ information technology programmes, to provide an easy-to-access portal for academic staff and students, and to provide the information necessary for 'big data' analysis with regard to risk and performance. In the event that the funding proposal is not successful, the Centre for Academic Technologies will nevertheless work on developing such an integrated platform.

Students who are worried about food: One of the important findings from the ISES research was that approximately 25% of first-year students reported being "worried about food". In the South African context this implies that many of these students probably go

hungry on a regular basis. UJ Student Affairs, in collaboration with Academic Development and Support, intervened in the following ways. One initiative, in collaboration with The Gift of the Givers organisation, provides food to approximately 2500 students (two hot meals per day) and the other provides dehydrated meal-packs to any students who require food. Both initiatives are free of charge to the students. UJ also appointed a social worker and five senior social work students to assess and assist students who report food problems. They do a holistic assessment of the student and perform the required means-test to ensure the food is provided to students who are in real need.

Access programmes: UJ offers both extended diplomas and extended degrees. In the extended-degree offerings students are mainly supported during their first year of study. The extended diplomas are more specialised and are managed on behalf of three faculties by the Access wing of the Academic Development Centre. ADCA offers the first year of 15 extended-diploma programmes on behalf of the Faculties of Management, Humanities and Engineering and the Built Environment to students who do not meet the minimum entrance requirements. Access staff members collaborate with faculty staff to ensure that foundational provision and academic development are integrated into the teaching strategies and learner materials of relevant mainstream modules. Lecturers benefit from this collaboration, as they become aware of the value of pedagogic knowledge as they begin to integrate it into their discipline, and the students benefit from the support provided by teaching and a curriculum that is scaffolded in such a way as to encourage the understanding of theory rather than learning it by rote. Results in these specialised Extended Diploma modules are excellent. For example, the combined group of Extended Diploma students in the Faculty of Engineering and the Built Environment had a success rate of 93,4%, compared to the mainstream success rate of 82,9%.

Senior student involvement: Senior students play an increasingly important role in terms of student success at UJ. The following roles have evolved over the past years:

- (a) As part of the initiative to enhance UJ residences as places of academic excellence, senior students have been trained and used as **Residence Academic Advisors (RAAs)** within the residences. They are trained from a basic psychological and an academic development perspective and a number of first-year students are assigned to each RAA to guide and assist them academically. The RAA programme has expanded to include most UJ residences over the past three years. At present, we have 202 RAAs, at a cost of more than R1,000,000 annually. This may rise to R1,500,000 in 2015.
- (b) To widen its reach, PsyCaD started training and employing **Peer Buddies** to assist UJ students. Peer buddies are selected students (about 50 per year) who are trained to help identify students who are in need of assistance and how to refer them to the appropriate support service. Peer buddies are also trained in basic coping techniques and about the available services and procedures at UJ.
- (c) Since its creation, UJ has used senior students to assist first-year students with their academic work in their academic department. These **Tutors** are trained in basic tutoring skills and employed by the Faculties in a variety of ways, including one-on-one and group tutorials. UJ has also supported the tutor programmes in a variety of ways, which include providing substantial funding to Faculties (R12.5 million in 2013), providing for compulsory tutorials on the timetable and by providing more tutorial venues. There is also a dedicated tutor development unit located in the ADS to train and support tutors and academic staff for their various roles. During 2013 the approximately 1500 tutors were appointed across all nine UJ faculties and in most first-year modules.

- (d) During 2012 funding was approved for the role of a **Senior Tutor** at UJ, and resultantly 106 senior tutors were appointed across UJ during 2013 and approximately the same number during 2014. Senior Tutors are students busy with postgraduate study and would be required to take on a more senior role, as well as some of the lecturer's responsibilities. They are also mentored and trained for their function, and a secondary stated purpose is to develop them into possible future academics. During 2014, funds have been made available from the strategic Global Excellence and Stature budget for the appointment of an additional 85 Senior Tutors. In total, UJ has appointed 2562 Tutors and Senior Tutors in 2014, representing an investment of more than R34,000,000.
- (e) After the effective roll-out of the Senior Tutors, funds were approved during 2013 to employ a further category of senior students during 2014 named **Assistant Lecturers (ALs)**. The assistant lecturers are employed in the role of "junior lecturers" and are offered three-year contracts. A total of 50 ALs have been appointed across UJ for 2014 to assist with a variety of teaching and learning duties in flagship programmes, and in departments with high staff/student ratios. The ALs are used to create a pipeline of young talented academics who will in many cases become the new generation of academics that will take UJ forward. The Assistant Lecturers receive generic training in teaching, from within the division of Academic Development and Support, and they receive mentoring within their academic departments. This represents a current investment of R12,5 million, and the cohort of Assistant Lecturers will be increased from 50 to 75 in the next two years.
- (f) **High-achieving students:** Each Faculty has its own system of recognising its top students. Institutionally, the UJenius club, to which the top-performing students are invited, was formed. These students are given a variety of opportunities to develop their knowledge and skills. Faculty initiatives and the UJenius club have been running for a number of years.
- (g) Another element aimed at developing and supporting students is located in the **Internationalisation office**. An important part of being a 21st-century graduate is understanding the local and international environments. As a result UJ has established a number of international partnerships as well as a study-abroad programme for its students.

Technological development and support: Because of the growth of the use of technology (computers and mobile devices) at UJ, students need support in this regard. The Centre for Academic Technologies (CAT) is responsible for this support and development required to support the use of technology. First-year students' computer literacy is tested, and focused basic computer skills courses are made available to them. Students are also trained in the use of the institutional Learning Management System (Blackboard). Mobile technology is supported by technical staff, and apps designed for the mobile platform are very easy to use. In 2014, first-year students were required to have either a laptop or a tablet for use in the classroom, and for their total learning experience. A low-cost tablet, meeting all the required specifications, was available for students to purchase, and numerous tablets were provided free to the most needy students.

3.3 SUMMARY AND REFLECTION

UJ has four campuses and a large student population, in excess of 49,000 students. An ongoing priority, in the faculties, in ADS, and in all support divisions, is to ensure equity in the provision of services across all campuses and to every student. The success of this goal requires constant attention to detail. For example, we enrol approximately 11,000 first-time

entering students each year, and from the moment they enrol, our collective attention must be on every aspect of the academic and psycho-social well-being of each of them, to prevent drop-out, to maximize success, and to create a bond between each student and his/her university home. A caring university is one that does not deal in numbers and statistics, but with individuals. Our ongoing task is to ensure that we reach all individuals effectively, and in precisely the ways they require. Dropout remains a serious problem throughout the university system in SA, and our UJ approach is to try to prevent each one by means of early identification of risk and intervention.

The UJ FYE programme has had demonstrable success, evidenced in the trend line of the first year success rate:

2009	2010	2011	2012	2013
66,7%	75,1%	76,5%	80,0	81,4%

Nevertheless, the creation of a highly effective FYE programme is a moving target, in that new student needs with regard to school/university transition, and new high impact practices, are constantly being identified. With regard to FYE, one is only as good as one's previous year's success rates. Moreover, dropouts during the first year of study continue to concern us. The root causes of dropouts are frequently not poor academic performance, but are grounded in poverty, unstable or disrupted living conditions, transport and food issues, and a myriad of other psycho-social problems that in turn lead to poor academic performance. The Divisions of ADS and Student Affairs collaborate to identify the root causes of failure and to address them.

The use of NBTs for admission and placement, as a tool in addition to the NSC results, should be implemented within the next 2-3 years, as the pool of data is now sufficiently robust and reliable to use for prediction. Moreover, the use of NBTs for risk identification will be in place in all faculties in 2015.

3.4 RECENT AND PLANNED ACTIVITIES

During 2014, UJ launched its Senior-Student Experience (SSE) initiative to follow on from the existing FYE initiative. The SSE is defined as a holistic initiative aimed at facilitating higher levels of student success and wellbeing at UJ, throughout the undergraduate (excluding the first-year) student lifecycle, as well as the transition into the world of work and/or postgraduate studies.

Academic literacies development is an ongoing and significant task. Although development work has taken place at UJ, a wider roll-out of literacies interventions across the institution is planned for 2015 and beyond. It is envisioned that all first-year students will be exposed to a literacies development initiative.

The concept of 'high-impact practices' is aimed at identifying practices that have an extraordinarily positive impact on student success and retention. These practices will continue to be identified and investigated at UJ

Plans are in place for the formalisation of partnership agreements for WIL. The absence of DHET funding for Work-Integrated Learning is a national matter. Despite this, WIL Coordinators at UJ make every effort to ensure that they discharge their responsibilities for monitoring and the necessary partnership management. The establishment of the UJ WIL & Service Learning Forum, already operating in 2014, will serve to co-ordinate the development and effective implementation of WIL and Service Learning opportunities.

The intention is for 10% of all UJ programmes to include a Service Learning component by 2020. This will require formal curricularisation of SL into programmes, staff development and also the identification of sustainable and suitable partnering organisations for placement of students.

4. ENHANCING THE LEARNING ENVIRONMENT

4.1 INTRODUCTION

The institutional strategic objectives that relate to this focus area include Strategic Objective Two: *Excellence in Teaching and Learning*, and Strategic Objective Four: *An Enriching, Student-Friendly Learning and Living Experience*. The specific issues of Strategic Objective Two related to this focus area include:

- Intellectually rigorous curricula that respond to the challenges of the 21st century
 - o Constant and dynamic use of learning and teaching with technology
 - o Use of e-books and open-source material
 - o Lecturer engagement with technology
 - o Library collections in e-format
- Outstanding achievements across our diverse student body
 - o A diverse set of academic development and support strategies at all levels

Strategic Objective Four includes a number of objectives related to the learning environment, and include:

- Excellent teaching and learning facilities
 - o Well-equipped teaching and learning spaces of adequate size to serve a variety of purposes
 - o Excellent and accessible library resources and facilities on all campuses
 - o Student access to technology

Therefore, this section first explores the use of technologies and, thereafter, developments of the physical environment to support teaching and learning. With respect to the cyber environment, this section explores how the University of Johannesburg developed and implemented strategies and artifacts to support learning, using mobile devices both inside and outside the classroom that are based on our teaching and learning institutional policy and an associated framework. In addition, such an approach fosters the ubiquitous access to and use of e-resources. However, well-resourced classrooms to support large classes, modern laboratories and other contemporary learning spaces, including a dynamic library, are of primary importance to a residential university. The major projects associated with the development of the physical learning environments are highlighted.

4.2 ENHANCING THE CYBER LEARNING ENVIRONMENT

Amory, Gravett and Van der Westhuizen (2008)³ wrote a concept document for the University of Johannesburg to support 21st-century teaching and learning. They argued that the institution needed to conceptualise students as becoming practitioners of a knowledge and professional domain, and suggested that a recitation of information approach (an information-oriented position) limited learning, and that Information and Communication

³ Amory, A., Gravett, S., & Van der Westhuizen, D. (2008). Teaching and learning at the University of Johannesburg: a position paper. Retrieved from <https://152.106.6.200/handle/10210/4270>.

Technologies (ICT) should be used in innovative ways to enrich student experiences. These concepts formed the basis for the institutional teaching and learning philosophy policy, which included the following:

“UJ recognizes the complexity and rapidly changing nature of the social, economic and intellectual environment for which its students are being prepared. It is imperative, therefore, that teaching and learning at UJ should transform a primary concern with the transmission of knowledge (learning about) to a primary concern with the practices of a knowledge domain (learning to be). Therefore, in its teaching and learning activities and in the design of its modules and programmes, and within the parameters of reasonably practicable implementation, it recognizes the need:

- *For teaching to be concerned with the enabling of learning that supports social and individual knowledge constructions;*
- *For learning to be concerned with the transformation of information into knowledge, and for such knowledge to encompass more than mere learning about the facts, concept systems and processes of a particular knowledge domain, but to equip students with an enquiring mind;*
- *For students to engage meaningfully and willingly with learning content that is part of a learning task within a learning environment that supports collaboration, and for its students to act purposefully in such an environment;*
- *For teaching and learning to nurture the traits of thinking and the various practices of a particular knowledge domain; and*
- *For students to experience knowledge not as a mere static product of information production and consumption, but as a process and instrument of inquiry to solve problems.”*

(University of Johannesburg Senate document SEN 252/2008, p. 5)

At the start of 2012, three events influenced the use of technology to support teaching and learning in the institution:

- The leadership of the Information and Communication Systems, Library and Information Services, and learning technology components of Academic Development and Support – the Centre for Academic Technologies – divisions changed.
- The Vice-Chancellor appointed a consultant to support the use of ICT more broadly in the institution.
- A new committee was established to oversee the closer integration of ICT into institutional practices (IT Advisory Committee).

The core objectives that arose from these developments were to support the development of a 21st-century skilled academia, alignment of the use of technology in teaching and learning to institutional policies, development of “finger-ready” applications to support the widespread use of mobile devices by staff and students, and providing ubiquitous access to information to the university community. However, to realise these aims, the institution needed to address a number of problem areas:

- Professional development in the use of ICT in teaching, learning and assessment was limited to training academic members of staff in the use of Blackboard, the institutional Learning Management System. This could be viewed as a *learning from technology* position, contrary to the institutional teaching and learning philosophy that posited a *learning with technology* approach. Therefore, a new framework was developed to align teaching and learning practices with the institutional *learning with technology* teaching and learning philosophy. In addition, the training sessions for staff and students were redesigned and aligned with this new framework (as described in Focus Area 2) to empower staff and students with technical ICT skills, and to provide

professional academic development in the pedagogical use of technology in the classroom.

- The institutional Internet provided resources to the wider community, to potential students who wished to be part of the UJ community, and to staff and registered students (multiple audiences both inside and outside the institution).
- Student notices, resources and management tools were part of a Student Portal, and online teaching tools were available through the Edulink Portal. The look-and-feel of these two portals reflected interface designs prevalent before the advent of mobile devices. However, the prevalence of mobile devices used by students and staff to support teaching and learning required a re-engineering of these systems for use by mobile devices and provided an opportunity to redesign the information architecture.
- A number of issues related to ubiquitous access to information, including the institutional network, and e-books required attention.

Developments over the past three years are discussed to address the identified problematic areas, and include a new framework to support the appropriate pedagogical use of technology in teaching and learning; provision of ICT skill development and technical support to the UJ community; learning with technology professional development; development and deployment of systems usable by a wide variety of devices, including smartphones and tablets; redesign of library services to support electronic resources; and a Wi-Fi infrastructure to support such developments.

(a) Learning with technology framework

It is well understood that collaboration is an important component of learning. Today, social media is an integral part of social dialogue and collaboration. In addition, authentic learning tasks promote effective learning, and, when allied to educational technologies, support knowledge construction, thus supporting a *learning with technology* position. Therefore, the learning with technology framework integrates collaboration (C), authentic learning (A) and tool/technology (T) into a framework (Table 1). This CAT framework makes use of the authentic task definition drawn from the work of Reeves et al. (2004):⁴

Table 1. The Collaboration-Authentic Learning-Tool/technology framework

Collaboration	Authentic learning		Tool/Technology
We learn from each other Social media connects us Together we create new ideas, connections and products Course facilitators create environments for social change	Have real-world relevance Are ill-defined Are complex Provide opportunities to examine from different perspectives Provide opportunity for collaboration	Provide opportunity for reflection Are integrated across different subject areas Are integrated with assessment Yield polished products Allow for competing solutions and outcomes	Information stream Enabler of communication Empowering collaboration Information transformation tool Professional tool

⁴ Reeves, T. C., Herrington, J., & Oliver, R. (2004). A development research agenda for online collaborative learning. *Educational Technology Research & Development*, 52(4), 53–65.

The tool/technology part of the framework includes ways in which technology can be used in the classroom and embraces the concept of explicit and implicit tool mediation. Explicit mediation involves the intentional introduction of a tool into an existing activity that is obvious to develop deeper insights. Implicit mediation involves language and higher-order cognitive actions to foster collaborative engagements. The CAT framework proposes that the unit of analysis is learning, and not the use of technology. Thus, notions of e-learning and m-learning, which explore electronic text and mobile devices respectively, to support learning are re-imagined as tools that mediate learning outcomes.

(b) Provision of ICT skill development and technical support to the UJ community

Prior to 2012 two routes were available to aid the academic community: student and staff technical support, and training workshops. To support ICT literacy skills, including the technical use of tablets, a number of interventions were developed. During the First-Year Seminar (orientation), first-year students complete an ICT literacy instrument that is used to guide students to ICT literacy and use of tablet workshops that are presented every day during the first term. These workshops are also available to all members of the UJ community.

In addition, a new approach to provide staff and student technical skill support is centred on a single help desk, supported by a modern “ticketing” software system to monitor, manage and track queries. This approach includes self-service and online resources to support the development of technical skills. The first is a mobile application for smartphones that includes solutions to the problems most often experienced by staff and students (uHelp – Mobile). Additional support from this application can be obtained by sending an SMS, by sending an email to the help desk, or by making a phone call. Other self-development services available are comprehensive websites to help the community involved in the development of Blackboard modules (uHelp and Blackboard on-demand). Therefore, support is provided via a mobile app, websites, and multiple routes to an integrated help desk, where, when necessary, problems might be solved through one-on-one interactions.

(c) Learning with technology professional development

The introduction of the CAT framework to academic staff members included the distribution, via paper and online documents, of an easy-to-read z-folder that was summarised in a single-page handout. In addition, a number of workshops were developed to explore the CAT framework, authentic learning, use of social media in teaching and learning, and the pedagogical use of mobile devices in the classroom. The intention of the workshops is to model the CAT framework approach to support contemporary pedagogical approaches that are aligned with the institutional teaching and learning philosophy (for additional information see Focus Area 3).

(d) Resources for mobile devices

To realise the vision of a totally connected UJ community, it was necessary to re-imagine ways in which the community interacted with institutional resources when connected via desktop and laptop computers, as well as smartphones and tablets. Therefore, over the past two years the Centre for Academic Technologies created new “finger-ready” tools to support the use of mobile devices. These tools include a phone application uGo (ugo.uj.ac.za) and the staff and student portal uLink (ulink.uj.ac.za).

The production and release of these tools support the reconceptualisation of the institutional Internet and intranet resources. First, the Internet faces outwards to provide information and a rich user experience to all external visitors. Second, it provides streamlined access to institutional resources for information and supports the route for potential students to

become part of the UJ community as they move through the institutional application, admission and registration processes. Third, uLink provides an integrated environment to support all members of the UJ community in their interactions with all its digital assets. Lastly, graduates move back to uConnect as they graduate and become part of our alumni. Therefore, the Internet faces outward and uLink faces inward. uGo supports transitions into and out of the UJ community. The development of uGo and uLink are briefly described.

Part of the strategy was to provide just-in-time support to staff and students via mobile devices. In addition, it became necessary to give staff and students mobile access to Blackboard, and to provide mobile access to important institutional data. A number of different avenues were explored to rapidly create an institutional mobile application that allowed the integration of such components. After a presentation of Blackboard Central to the IT Advisory Committee and a successful application to the Members of the Executive Committee to divert funds to this project, the development of uGo was initiated. Within six months the University of Johannesburg released a mobile application for iOS, Android and Blackberry smartphones and an Internet site designed for mobile devices, which provided access to Blackboard Mobile application, study programmes offered by the nine faculties, library information, staff directory, news, emergency contact numbers and uHelp – the just-in-time support tool. To provide a mechanism to better manage processes associated with student application, admission and registration a number of resources were specifically designed for the second version of uGo. These components were conceptualised to support the lifecycle of students entering and leaving the institution. In addition to the application, admission status and registration process, other components, which are part of the processes of entry into the university, were included. These are institutional social media handles collected into a single component, an easy-to-use component to calculate the Admission Point Score required for entry into the university, access to surveys and tests required to be completed prior to registration and activities associated with the First-Year Seminar. These components guide potential students during the process of becoming part of the university community and also as they move to the world of work (graduation and alumni).

Apart from the uGo mobile application, it was necessary to design, develop and deploy a portal for staff and students accessible by mobile devices and desktop computers. uLink was created to give staff and students access to their particular resources. uLink includes a Notification Centre, the Banners, Modules and Communities, Administrative Utilities, and Services. The Notification Centre provides important messages to the community and a summary of events for the day. Staff members who access uLink from their desktop or laptop computers can post new notifications and/or events.

(e) *Library services to support electronic resources*

The UJ Library and Information Services consist of five libraries situated on four campuses. They are responsible for academic information support for all students, lecturing staff and researchers. The UJ Library has adopted an E First Strategy in terms of which:

- The electronic version of an information source is bought rather than the print version
- Electronic textbooks are preferred
- The electronic course reserves module of the Integrated Library Management System is aggressively promoted
- Provision of electronic textbooks (e-books) for the library and to students
- Open-source textbooks are identified and promoted to students and staff
- An e-solution for training students in the use of library resources with mobile devices is in the planning stages.

Currently about 80% of the journal collection is available in electronic format, while only 16% of the books in the library is available in electronic format. The development of the electronic book collection will be the focus of collection development from 2014-2017.

(f) Wi-Fi infrastructure

In order to enable and support UJ's strategy of learning with technology and the associated CAT framework, the Information Communication Services department (ICS), UJ's central IT division adopted a five-pillar IT strategy which seeks to drive the adoption of IT as an enabler in the areas of Teaching, Learning, Research and the Support environment. One of the key pillars of the IT strategy is the provisioning of ubiquitous connectivity for all of UJ communities through an integrated Wi-Fi infrastructure, including:

- A Wi-Fi rollout plan, including agreement on areas of priority;
- Management of bandwidth to ensure equitable distribution;
- Exceptions regarding areas where heavy bandwidth usage was expected;
- Addressing of concerns regarding the impact of Wi-Fi on student attention in class; and
- Agreement on a protocol for handling Wi-Fi coverage during examinations.

The Wi-Fi rollout was broken into three phases, namely:

- Phase one included all social areas, namely outside hot spots, student residences, student centres. These were done first to encourage students to start using Wi-Fi services so that usage patterns could be established.
- Phase Two extended coverage to all campus libraries as well as all first-year lecture venues.
- Phase Three, which is currently in progress, covers the rest of the lecture venues.

To encourage the use of electronic resources the institution took a principled decision not to charge students for the use of Wi-Fi but instead opted to manage peak-hour usage by decreasing access speeds for those students who go beyond a certain threshold. In order to guarantee availability thereafter, access is again provided at full speeds after-hours to everybody. This has ensured that usage remains high without crippling the service.

(g) Summary and reflection

In January 2014 the University of Johannesburg became the first South African institution to fully embrace the use of mobile devices for teaching and learning. The development of the CAT framework, provision of skill development to staff and students and professional development to academic staff members, a just-in-time help system, an institutional portal designed for use by mobile devices, infrastructure development to support ubiquitous access, and the development of policies to support the use of e-books, have created a coherent ecosystem for *learning with technology*.

The introduction of mobile devices into the classroom is a disruptive event (Christensen, 2008⁵), as a disconnection now exists between learning and students' expectations, and between the academic teaching paradigm (mostly instruction) and the presence of a device in the classroom. Furthermore, this disruption is not low-level (engaging existing clients), but the development, exploration and use of a different teaching paradigm (authentic learning tool-mediated knowledge construction).

⁵ Christensen, C. (2008). Disruptive innovation and catalytic change in higher education. In *Forum for the Future of Higher Education* (pp. 43–46). Harvard Business School.

Crossan and Apaydin (2010)⁶ proposed that innovation is a critical component of any organization, and is part of gaining a competitive advantage. These authors present a multidimensional framework to explore organisational innovation that includes three components: determinants of innovation, innovation as a process and innovation as an outcome. With respect to leadership, top UJ management was instrumental in driving institutional policies and processes, and provided appropriate funding to support both infrastructure and resource development. However, the UJ leaders of the Information and Communication Systems, Library and Information Services, and Centre for Academic Technologies, with the Vice-Chancellor appointed consultant and chairperson of IT Advisory Committee, played important roles in these innovations.

While the environment and appropriate resources now support learning with mobile devices, the pedagogical use of technology in a classroom is not fully understood. Therefore, while the technological environment and support systems are in place to encourage a *learning with technology* position, not all members of academic staff are taking up the challenge of reconsidering best practice with regard to teaching and learning in the context of recent technologies. A framework where professional development is allied to promotions and other incentives has been developed, and will now be implemented. Wi-Fi access is currently being provided for all teaching and learning venues at UJ. While this is a very resource-intensive task, the majority of the rollout has already occurred. .

4.3 DEVELOPMENT OF THE PHYSICAL LEARNING ENVIRONMENT

Development of new, and upgrading and enhancement of existing physical spaces are summarised, and include examples of a number of projects that required large capital investment: student accommodation, UJ libraries, and contemporary learning environments (Funda UJabule School and the nursing simulation laboratory).

(a) Capital investment

Over the past number of years UJ has made substantial capital investment to upgrade and improve the learning environments on each of its four campuses. While there is continuous upgrading of teaching, research and accommodation spaces, over the past number of years the University of Johannesburg has made substantial investments in infrastructure developments to supports its vision and objectives. A number of these developments are highlighted:

- Student residences underwent major maintenance and upgrades to support and provide accommodation for the 2010 World Cup event.
- The Soweto Campus renewal project, as part of the Campus Programme Profile, was completed on time and within budget, and resulted in state-of-the-art academic, student residential, sport facilities and other spaces which enhance community engagement.
- The Doornfontein Consolidation Project (which includes additional facilities on the Auckland Park Kingsway Campus), and part of the final phase of the Campus Programme Profile, were undertaken with a budget of R160 million, with an additional R30 million to overcome the maintenance backlog on the Doornfontein Campus.

⁶ Crossan, M. M., & Apaydin, M. (2010). A multi-dimensional framework of organizational innovation: A systematic review of the literature. *Journal of Management Studies*, 47(6), 1154–1191.

- To support the developing technological solutions for the country and the world, the University embarked on an engagement with industry and the broader community, supported by a R100 million investment, to build workshops and entrepreneurial spaces close to the Auckland Park Kingsway Campus.
- To support large classroom sizes two projects were undertaken. D Lab Kelder was converted into a number of lecture venues (K01 – 282 seats; K02 – 288 seats; K03 – 594 seats) and an assessment venue (216 seats) (R12.7 million). Planning for a new lecture complex with two 750-seat venues was approved at a cost of R68 million.

(b) Student Residences

One of the major infrastructural developments during the past years was the development of a new student residence, Sophiatown, situated close to the APK Campus. All residences are conducive to both learning and living, i.e. they are learning and living communities. All the residences are connected with Wi-Fi in order to enable students to have Internet access for their research-related studies. In addition, study centres fitted with study tables, chairs and Internet access were developed in a number of residences associated with the Doornfontein, Auckland Park Kingsway and Soweto residences. Senior students are appointed as Residence Academic Advisors to support first-year students to adjust to and cope with university life and studies.

(c) The UJ Libraries

The library as physical space was globally reconceptualised as both a dynamic social space and a stimulating learning environment. To align to this concept, existing space was redesigned to provide the following in each campus library:

- Learning commons for undergraduates that is well serviced, technically equipped for research and studying and unrestricted access to the Internet for a limited period of 45 minutes.
- Research commons that provides postgraduate students and researchers with access to the latest technology, research software, research tools and skilled supportive librarians and information specialists.
- A sizable auditorium space for meetings and events equipped with relevant technology (PC, data projector, sound system, Wi-Fi) and furnished with modern yet durable furniture.
- Social commons – a “*home from home*” for many students who spend long hours on campus – to support discussion and working in groups, interaction with peers via cell phones or through Wi-Fi-connected laptops and iPads, and engage in relaxing activities (such as reading newspapers and books or watching TV).
- Study space (as many seats as possible without turning it into a study hall or computer laboratory) open for 15 hours a day (07:00-22:00) and providing a safe space for students to study and work on assignments. The study desks are placed in the stack areas in such a way that students can work in relative privacy in a peaceful and quiet environment. Being close to the book collections also facilitate access to the print collection.
- After-hours study spaces (22:00-07:00), supervised by security staff, which are inside the libraries but with only external access and therefore no access to library collections and other facilities.
- Training venues provide for training groups of students in how to make the best possible use of all the library collections and facilities. The rooms are equipped with computers for hands-on training as well as data projectors and smart boards.
- Other venues – a total of 31 venues varying in size from 8 to 170 seats – were created in the campus libraries. The venues are available to tutors, lecturers and other staff in

need of space for a meeting or seminar. They are not available for regularly scheduled lectures.

These diverse spaces make provision for students who want to study quietly as well as for those who would benefit from engaging with one another in a more social space. The renovation and redesign of the interior spaces of all the campuses' libraries started in 2012 and will be completed by the end of 2014.

(d) *Alternative Learning Spaces*

The ways in which a space is designed shape the learning that happens in that space (Monahan, 2002).⁷ WIL practices related to teaching (Funda UJabule School), nursing (simulation laboratory) and engineering (Resolution Circle) are briefly described to illustrate how students can learn in spaces other than the classroom.

The Funda UJabule School (FUJS)

Universities are widely criticised for “not preparing student teachers adequately” for the demands of teaching. One of the criticisms that is often levelled is that teacher education is “too theoretical” and that teacher education programmes do not integrate theory and practice sufficiently. Bridging this perceived *theory-practice* divide remains an elusive ideal for most teacher educators. One of the reasons for establishing the FUJS at the Soweto Campus was to address this perceived problem. Literature on successful teacher education highlights the importance of student teachers learning knowledge *for* teaching and knowledge *of* teaching. Programmes that accomplish these aims successfully intertwine coursework and practice learning work.

The curriculum integrates coursework and practice learning at FUJS. First-year student teachers study a curriculum that is geared for Grade R children, and their practice learning takes place in the Grade R classes, while in their second year they focus on Grade 1 learners. In the third year students study the learning and the development of Grade 3 and 4 children. In their fourth year they integrate all the various dimensions of their studies in their practice work at the school.

Simulation laboratory for nursing students

Clinical WIL features in many programmes within the Faculty, in different years of study. It exposes students to real patients in both the pre- and in-hospital environments. Registered practitioners supervise students in the simulation environment during their clinical placement. Most medical schools in South Africa now have some form of simulation facility focusing on clinical skills training, and in this regard the UJ's Faculty of Health Sciences has not been left behind.

The Faculty has invested and committed significant resources to grow and expand the use of clinical training aids and simulators in a number of disciplines – for example, Emergency Medical Care and Nursing. The result is an investment of R15 million, over a period of four years, to launch the first multi-disciplinary skills or simulation laboratory in the country. This state-of-the-art facility allows students to “practise” a clinical skill or procedure on a “real patient” (in this case, a mannequin) after been taught theoretically, and to demonstrate proficiency within a simulated environment. The Sim Lab houses a number of advanced training aids and simulators, some of which are the only ones of their kind in the country,

⁷ Monahan, T. (2002). Flexible Space and Built Pedagogy: Emerging IT Embodiments. *Inventio*, 4(1), 1-9. Retrieved from <http://www.torinmonahan.com/papers/Inventio.html>

which will focus not only on the teaching of clinical skills but also assessment and research. The mannequins used in this Sim Lab, for example, can speak, breathe and even generate heart, lung and bowel sounds, as well as record and respond to clinical interventions. This makes it possible for students to practise, and perfect, the psychomotor skills associated with the performance of a range of clinical procedures and skills in a low-risk, controlled environment. Direct advantages associated with this type of technology include the ability to produce an accurate event log of actions and interventions that can be used not only for marking, but also for teaching and learning feedback and self-reflection.

Engineering students

For the engineering diploma programmes, WIL consists of workshops, hand skills and work experience (semester P1) and experiential learning (semester P2). For non-engineering programmes the WIL portion may last from a few months to a full two semesters. To resolve the challenging issues related to the placement of students in working environments, UJ in 2012 established Resolution Circle (Pty) Ltd (RC), a “university-owned” company that has the capacity to absorb many P1 students at their WIL Centre in the Perskor Building. Students also have more opportunities to participate in projects for P2 through the RC. In addition, several of the SETAs assist with student stipends as well as reimbursements for companies. Currently there are agreements with the ChiETA, CETA and MERSETA. One of the critical issues is related to the quality assurance of the WIL experience. There is a shortage of registered persons to mentor WIL students in industry and also in terms of oversight required by the departments.

(e) Summary and reflection

Capital investment, allied with institutional strategic objectives, appropriate financial management and visionary individuals, provides the University with insights into how to improve the teaching, learning, research and community spaces to support 21st-century goals of a well-informed and -educated community. Just as in the cyber environment, where innovation is driven both top-down and bottom-up, the enrichment of the living and working environments is due to both institutional leadership and insightful individuals.

The university has made large investments in upgrading campuses and development of new traditional lecture venues. As a result of the recently expanded tutor system, there is always a need to increase the number of venues to support tutorials, group work and spaces within which individual students may sit comfortably, have power and Wi-Fi access, and do their own work. A project is underway to identify the numerous small unused spaces on all the campuses – the ‘Nooks & Crannies Project’ – to create individual and small group study areas.

5. ENHANCING COURSE AND PROGRAMME ENROLMENT MANAGEMENT

5.1 ENROLMENT MANAGEMENT AND THE UJ STRATEGIC PLAN 2025

The Strategic Plan 2025 of the University does not address the issue of enrolment *management* directly, but instead speaks of goals for the overall enrolment profile. The objective expressed in this respect is to show increasing growth in SET fields while maintaining significant proportions of enrolments across all the other primary disciplinary areas. While aiming to enrol outstanding students from all backgrounds, including a proportion of international students, a significant number of students will be drawn from South African schools in the lowest two quintiles.

In order to track progress in relation to this objective, HEMIS data are made available through a sophisticated dashboard constructed on the Higher Education Data Analyser (HEDA) portal.

(a) *Enrolment planning for effective enrolment management*

The management of enrolment is enabled primarily by very careful enrolment planning, a process embarked upon relatively early in each year in preparation for the following year. The planning process can be seen as both top-down and bottom-up. From a top-down perspective, the annual enrolment planning workshop held in May involves all the faculties, represented by Deans and faculty planners, and members of the executive leadership. In other words, it is taken very seriously at the highest levels of authority in the institution. Generally, the workshop takes the form of a review of the current year's enrolment against planned figures and a preliminary proposal for the following year for the institution as a whole, and for each faculty, at the broad level of programme types (i.e. UG diplomas and degrees, PG below master's, master's and doctorates). This initial proposal is constructed within the parameters of the enrolment trajectory agreement with the Department of Higher Education and Training (DHET).

The bottom-up process then begins with faculties responding to proposed targets from the context of their own environment, drawing attention to possible constraints, such as staff capacity, laboratory space, limitations placed on them by professional bodies, and restricted clinical practice platforms in the Health Sciences. In consultation with each faculty, the enrolment plan is then finalised for submission to Senate.

2009 saw the introduction and use of a number of innovations in this area, which enable more accurate enrolment planning and very careful monitoring of actual registrations against planned intakes. The planning model that was devised for this purpose is based on the student cohort histories of each programme, and enables faculty planners to reflect on the past eight years to see the patterns of enrolment, drop-out and graduation for each cohort of students. The model then 'predicts', on the basis of this history, the likely number of returning students for the following year. This enables the calculation of the number of new students that need to be admitted to meet the enrolment target for the next year. While this is not fool-proof and other factors may intervene, it does at least provide a more rational basis for predicting and planning enrolments in future years. It can be used not only at the level of individual programmes, but also at the level of the faculty and the whole University.

At the end of 2009, faculties used the cohort planning model for the first time as a tool to produce enrolment plans for 2010. Complementing this development was the construction of an Enrolment Monitoring Dashboard on HEDA, which shows actual enrolments during the registration period against planned enrolments, at a number of different levels. The information is displayed as student registrations – for the entire University, for each Faculty, for each campus, for undergraduates and postgraduates, and per programme. Updated every ten minutes from the real-time ITS operating system, it provides an invaluable means for tracking enrolments more or less as they happen. Over the years, the system has been refined with additional functionalities.

The tracking of registrations continues throughout the year taking account of the fact that many postgraduate students register outside the official registration period, and even undergraduate students are known to register in the second semester in circumstances where they require only one or two modules to complete their qualifications. Students who cancel their studies before the June census date are excluded from the final count, and it is only towards the end of the year that a complete picture of actual enrolments against planned targets can be seen.

The sharpened consciousness of the importance of enrolment planning and monitoring that has been instilled in the faculties since 2009 has made for a much smoother enrolment pattern in the University than was evident in previous years. There are still challenges, however, because this form of planning goes down to programme level but not to the level of individual modules. It is extremely difficult to plan for modules, although it is here, and not at the programme level, that the potential for over-crowding exists. Departments offering modules that are perennially oversubscribed set a cap on enrolment numbers in relation to established capacity (seats in lecture theatres, for example), but, even so, the limits are often exceeded. The reasons for this are numerous:

- Calculating how many students may need to repeat a module as a consequence of previous failure is extremely difficult;
- Some modules are offered as core components of programmes in the home faculty and as service modules to programmes in other faculties, and numbers are therefore subject to planning across faculties; and,
- While the numbers to be admitted to a programme may be known, student choice as to when a particular module is taken only becomes known at the point of registration. If a module is 'full', students still wishing to register are advised to take the module at some other stage, but their programmes may not allow for much flexibility in this respect.

This is a very difficult nut to crack and requires further consideration.

(b) *Recent developments: cohort studies*

The processes described above focus on the quantitative dimensions of enrolment planning and monitoring, but the planning model used is based on cohorts of students, and this dimension has been developed to enable very detailed analyses of the performance of cohorts of students. Cohort reports are available per programme, but they can also be filtered to show performance for first-time entering students, for example, or for students registered for the extended form of a programme. This has proven to be a very powerful diagnostic tool for faculties, allowing them to identify areas of high drop-out or very slow time-to-completion that require intervention.

Success rates at module level are used to identify modules with high failure rates, again for faculty intervention. Some faculties prepare annual reports on these modules, but the practice is not uniform. More often, heads of department are required to be vigilant about at-risk modules and to put in place measures to address root causes.

(c) *Faculty admission and selection procedures*

In most faculties, admission to programmes is based on applicants meeting the minimum admission requirements of the programme as set out in the faculty handbook or calendar. These requirements/criteria may be reviewed from time to time, and are publicised the year before registration takes place. Applicants who already have NSC results may be given *firm* admission, whereas Grade 12 learners would be given admission on the basis of their Grade 11 results, *conditional* upon a comparable level of performance in the final NSC. When the number of admissions is deemed to signify that the programme is full (assessed on the basis of historical yield), faculties construct a waiting list in order of academic merit and offer *provisional* admission to applicants on this list, subject to space being available.

In some faculties, and for particular programmes, this process may be supplemented by interviews and the assessment of a portfolio of work (in the Art, Design and Architecture programmes, for example). In the Faculty of Science, NBT results are used in conjunction

with NSC scores to assess student risk, and on this basis many are advised to enrol for the four-year (extended) degree or diploma programme, where students with similar profiles have had better success. Other students who are seen as being in need of supplemental work are provided with special counselling and tutor programmes from the start of the year.

(d) *Student placement*

The University enrolls upwards of 10 500 first-time entering students every year, and the sheer volume of new students poses a major logistical problem. Information packs are sent out to applicants on admission, to provide information about programme options and the kinds of careers to which they lead. The First-Year Seminar also contributes to providing information on programmes and careers: faculties use their orientation sessions to assist students to choose among different available programme or subject options. The Faculty of Humanities hosts a Mini Open Day for applicants at the beginning of each year where additional information about the programmes and advice on subject choices is provided. The Faculty of Science uses its Academic Orientation Programme to introduce prospective students to laboratory skills (3 x 2 hours), English (5 x 2h) and problem solving skills (5 x 2h). In some faculties, a designated programme advisor is available in the Faculty Office, and faculty officers and departmental staff members are also available to provide guidance. Students are given a short period of grace at the beginning of the year to make changes to their enrolment, but they are able to do only this if there is space available in the programmes or modules to which they wish to move.

There is no doubt, however, that this is an area still in need of attention.

5.2 REFLECTION

(a) *Barriers to progression and student exclusion*

The University has made a concerted effort over the past couple of years to re-examine the designation of modules as pre-requisites or co-requisites within programme curricula, as these have been seen as potentially unnecessary barriers to progression. Where there is no compelling reason for this designation, it has been removed. In the Faculty of Science, high failure in Mathematics modules has been addressed by establishing a Mathematics Learning Centre (open almost six days a week). For students who are struggling more generally, the faculty interviews students, requires strict class attendance and monitors students' ULink activity. They may also be required to attend compulsory workshops on themes such as Study Skills, and Time and Financial Management.

All faculties reported that exclusion is only ever on the basis of an F7 result code. This result is given when a student has failed all modules for which she has registered for a semester or in a particular year. If a module has been failed repeatedly, a student is issued with a warning (F5 code) and remedial steps are advised. Students are permitted to appeal against an F7 result if they have proof of mitigating circumstances, and many appeals are successful.

6. OTHER AREAS THAT AFFECT STUDENT SUCCESS

6.1 ADDITIONAL ACTIVITIES TO PROMOTE STUDENT SUCCESS

6.1.1 Senior-Student Experience

A project focusing on the **Senior-Student Experience** has been initiated in 2014, and includes the following initiatives:

(a) Working with careers

This focus area includes all aspects of the student career lifecycle as well as interaction with employers and work placement. UJ students should be well prepared for, and assisted to, enter the world of work after completing their studies. This includes the development of the appropriate graduate attributes.

(b) Literacies development

Students are exposed to and must become proficient in a variety of literacies during their time at university. This process starts at first-year level, but should be planned and coordinated throughout the undergraduate experience. Students should be sufficiently prepared for the literacy challenges they will face during their entry to postgraduate studies and/or the world of work.

(c) Senior-student involvement (tutors, senior tutors, residence academic advisors, community engagement, etc.)

Senior students should be encouraged to be involved in more than their studies in order to become active and responsible students and citizens. This could involve a very wide range of activities that would hold benefits for the senior students themselves and for the institution.

(d) Barriers to persistence (money, food, time, psycho-social etc.)

Specific barriers faced by senior students should be identified, investigated and addressed. Barriers can be sub-divided into internal (mostly psychological) and external (environmental such as money, food etc.) barriers. This initiative will involve a wide range of differing activities developed according to the student needs. A longitudinal research project that aims to identify the most prevalent barriers to persistence will be initiated to guide this focus area.

(e) Academic structuring

The focus area of academic structuring deals with time management, scheduling of tasks, attendance and preparation for tutorials and class, and the logistics of academic life. Many students arrive with under-developed academic and life skills and the aim of this focus area would be to create an environment that encourages the development of these skills. This focus area is important during the first year, but each of the subsequent years has its own challenges that have to be made more explicit and must be navigated by the students.

(f) Academic/professional staff development and support (SoTL)

Academic staff will be offered developmental opportunities to develop their teaching, and to become more reflexive regarding teaching practice. This includes seminars, a postgraduate diploma in higher education, workshops and individual consultations. These activities should assist academic staff to develop into scholarly teachers through active participation in the scholarship of teaching and learning.

(g) Alumni advocacy / raise awareness of being an alumnus

All UJ students should be developed into being proud, active and supportive UJ Alumni. A cooperative effort between the UJ Alumni office, faculties and support divisions will be required to ensure an effective roll-out in this focus area.

(h) Developing graduate attributes

The development of UJ graduate attributes should be an intentional and planned part of a student's educational experience. The University of Johannesburg has a Student Charter, with a clear set of graduate attributes, but students require incessant reminders of the need to strive for, and attain these attributes. This will be achieved through a series of workshops for students. The development of the appropriate UJ graduate attributes should be facilitated through the various interactions the student has with all the different aspects of the institution.

6.1.2 Regular and Systematic Programme Reviews

The UJ Strategic Plan states that all programmes are regularly quality assured and enhanced. All subsidised programmes must be reviewed every five years and non-subsidised whole programmes every three years. Programme review criteria are based on the HEQC programme criteria and include a section on teaching and learning and staff development. The peer review panel reports serve at the Senate Teaching and Learning Committee, as well as the improvement plans and subsequent progress reports.

Service and support divisions are also reviewed. These reviews were introduced by reviewing the academic development and support units first.

6.2 CHALLENGES IN PROMOTING STUDENT SUCCESS

(a) Student matters: Complex challenges

The profile of the UJ student intake is in many ways a reflection of South African society and its challenges and inequalities. This is for example reflected in the fact that for the past seven years the proportion of students who identified themselves as part of the first generation in their respective families to attend university was always above 50% (with a high point of 64% in 2012), except during 2010 when it dropped to 48.5%. During 2012, the "first in family" students, as component of the first-generation group, represented 49.2% of the sample and 44.3% in 2013. From data collected via various means, it emerges that the principal impediments to success are often not within the academic realm. A lack of funds (exacerbated by the inability of the NSFAS to meet demand) is a major reason for drop-out. Psycho-social problems, largely a consequence of hostile or dysfunctional living conditions, account for a high percentage of failures. The profile of the students UJ accepts inherently implies that many students have personal, social, logistical and academic challenges that negatively impact their academic performance. Many of these factors emanate externally and are in their nature extraordinarily difficult for the University to address.

While the institution provides student academic and social support (FYS; FYE; SSE; Writing Centre; Access Programme; Psycho-Educational-, Psycho-Legal-, Career-, School Readiness- and Subject Choice Assessment; Psychotherapy; Career Development; Feeding Scheme; Campus Health Services; and computer literacy development), none of these programmes provides data to paint an integrated picture of the academic and socio-cultural life of an individual student. This problem can be solved through the development of an integrated approach to student analytics.

(b) Staff matters: Research in teaching and learning

Providing quality teaching, aimed at facilitating student access to disciplines and their success, is a priority at UJ. This is evident in the strategic goals. Recognition and reward for teaching excellence are key to achieving this. As indicated in section 2, one of the significant shifts in the institution has been the recognition of teaching in promotion. Such recognition in combination with incentives to encourage research on disciplinary teaching and learning through the UJ teaching innovation fund does contribute to enhancing the quality of teaching. More importantly, it increases the status of teaching vis-à-vis research in universities. Despite this, many academics do not regard research in teaching and learning as 'real' research and are discouraged from pursuing it.

The provision of developmental opportunities for academic staff in teaching and learning is essential. Section 2 provided an overview of some of the development opportunities provided to enhance teaching. While the opportunities exist, many staff members cite the pressure of time as being the major obstacle to their participation. This remains a challenge for many academic staff members.

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