CHE

Content Analysis of the Baseline Institutional Submissions for Phase 1 of the Quality Enhancement Project

Institutional Audits Directorate

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Quality Enhancement Project

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ABBREVIATIONS

ANC	African National Congress
APS	Admissions Points Score
CAO	Central Applications Office
CESM	Classification of Educational Subject Matter
CETL	Centre of Excellence in Teaching and Learning
CHE	Council on Higher Education
CHEC	Cape Higher Education Consortium
CO	Curriculum Officer
CPD	Continuous Professional Development
DHET	Department of Higher Education and Training
DVC	Deputy Vice-Chancellor
ECP	Extended Curriculum Programmes
EDP	Extended Degree Programme
FET	Further Education and Training
FTE	Full-time Equivalent
FYE	First Year Experience
HE	Higher Education
HEDA	Higher Education Data Analyser
HEI	Higher Education Institution
HELTASA	Higher Education Teaching and Learning Association of Southern Africa
HEMIS	Higher Education Management Information System
HEQC	Higher Education Quality Committee
HEQSF	Higher Education Qualifications Sub-Framework
HESA	Higher Education South Africa
HOD	Head of Department
HR	Human Resources
ICT	Information and Communications Technology
IT	Information Technology
ITS	Information Technology Systems
KPA	Key Performance Area

LMS	Learning Management System
MIS	Management Information System
NBT	National Benchmark Tests
NCHE	National Commission on Higher Education
NGO	Non-governmental Organisation
NSC	National Senior Certificate
NSFAS	National Student Financial Aid Scheme
ODL	Open And Distance Learning
PGDip	Post-Graduate Diploma
PQM	Programme Qualifications Mix
QEP	Quality Enhancement Project
RFID	Radio Frequency Identification
RSA	Republic of South Africa
SASSE	South African Survey of Student Engagement
SES	Socio-economic Status
SoTL	Scholarship of Teaching and Learning
TDG	Teaching Development Grant
UoT	University of Technology
WIL	Work-Integrated Learning

FOREWORD

The Quality Enhancement Project (QEP) is a five-year project of the CHE, focused on the improvement of teaching and learning in both public and private higher education institutions carried out in parallel processes. This publication is a synthesis of the public universities' current achievements, activities and challenges in four particular focus areas related to teaching and learning, based on information that they have submitted. Given that the project is still in its early phases, this publication is a snapshot of the current situation in these areas, a starting point in a process that is still evolving, rather than an evaluation or summative assessment. In this first phase of the QEP, institutions have reported on what they currently have in place, what they have achieved and what challenges they face with respect to: enhancing academics as teachers, student support and development, the learning environment and course and programme enrolment management. These are prerequisites for good teaching and learning. In their next submissions, having considered these areas and undertaken some action towards improvement where necessary, universities will report on progress made in these particular areas and receive feedback at an individual institutional level. In the second phase of the project, the focus is likely to shift to teaching and learning itself rather than the conditions that enable it – curriculum, pedagogy, delivery – though in an inductive process this will be informed by the input of the institutions themselves.

The QEP is a bold initiative. It follows on from the comprehensive decade-long programme of institutional audits by the Higher Education Quality Committee (HEQC) of the CHE in which universities', and a number of private higher education institutions', capacities to assure their quality in three core areas, research, teaching and learning and community engagement, were assessed. That process followed methodology commonly used by quality assurance agencies, that is, self-evaluation followed by peer assessment, with reports that included recommendations for improvement, and the monitoring of progress towards their implementation. The process was rigorous, evidence-based and informed by a common set of criteria applied across all institutions. Given that institutions were audited sequentially, the process allowed for intense engagement with each institution and an examination of its policies, processes and procedures in relation to managing the quality of its core functions across a wide-ranging canvas. As in other audit processes elsewhere, the audits helped to initiate the development of quality assurance systems within institutions, put the improvement of teaching and learning on institutional agendas, reinforced institutional leaders in their efforts to develop institution-wide quality cultures, and offered visible confirmation to the public that attention is being paid to academic quality assurance (Dill, 2000). Furthermore, as many quality agencies have found, the self-evaluation report required as part of the audit process was seen by many institutions as the main benefit of the external quality procedures. This was

reiterated in an external evaluation of the HEQC in 2008 in which institutions had reported that a very valuable aspect of the process was the self-evaluation exercise which had spurred on change and improvements (INQAAHE, 2006; HEQC, 2009).

The audits did indeed put teaching and learning on the agenda, but they also revealed that much work towards improving quality in teaching and learning was needed, given the context of a predominantly undergraduate higher education system with consistently poor throughput rates. In addition, an external evaluation of the HEQC in 2008 had recommended that more emphasis needed to be placed on the enhancement aspect of external quality assurance in the suite of programmes it offered. The time was thus ripe for a concerted focus on the improvement of teaching and learning in the work of the CHE.

In an extensive process of rethinking and consultation towards the conclusion of the first cycle of audits, the CHE thus decided not to pursue a second cycle of quality audits immediately, but to suspend them for a period. This was partly because a number of institutions were still responding to the recommendations of the first cycle of audits and would have had little capacity to engage in a second. It was also to mitigate the risk of institutions having learnt to "play the game" and to lean towards compliance rather than to embrace the opportunity for self-reflection afforded by audits as intensely as they had in the first round. It was also because the CHE's intensive engagements with individual institutions through audits took place infrequently, particularly where recommendations had been implemented relatively speedily.

These are also, however, pragmatic reasons. Underlying the shift to a more directly enhancement-led approach was a fundamental commitment to the promise of external quality assurance in South Africa to enhance or improve quality, rather than to steer too far towards the accountability end of the spectrum of quality assurance activities. A recurrent theme in much writing on quality assurance over the last twenty years has been the tension between improvement and accountability, and a finding from many articles as summarised in a special edition of *Quality in Higher Education* that "quality evaluations of whatever type were not particularly good at encouraging improvement, especially when they had a strong accountability brief" (Harvey 2010b, p7). The CHE is unique as a quality agency in that it combines functions that elsewhere are often carried out by separate bodies, such as programme accreditation and national reviews of programmes, which can tend towards the harder end of the spectrum, as well as institutional audits and quality promotion. The balance is hard to achieve.

In the Founding Document of the HEQC, the promise of balance was expressed thus:

> In a context where quality assurance in many countries has grown more accountabilityorientated through the shift to 'accreditation-like' requirements and where 'value for money'demands on higher education have become sharper, the HEQC has sought to straddlethe ambivalent divide between accountability and development and between quality andequity. This has been done so as not to lose sight of the way in which historical legaciesstill shape educational provision in South Africa but also to ensure that new developmentsin higher education do not create new fault lines of inequality. In terms of HEQC systems,this has meant great attention to capacity development issues at the same time as the formalrequirements of audit and accreditation were being put in place (HEQC, 2004).

The formal requirements of audit and accreditation undertaken by the CHE have become well-established; the emphasis on direct improvement perhaps less so. A shift towards more effective improvement-based processes was required, particularly in a context in which the inequalities in educational provision still shape student access and success. In the HEQC's Founding Document in 2001, it outlined its understanding of quality, drawing on the theoretical typology advanced by the work of Harvey and Green in the early 1990s which was seminal in influencing understandings of quality and quality assurance, not only in other contexts, but in the South African higher education sector as well. The aspects of quality informing the HEQC's understanding of quality were: fitness for purpose – is the programme or institution effectively carrying out its mission and vision and achieving its goals?; fitness of purpose – is the mission, vision, or rationale for that institution or programme appropriate to its context and to achieving broader national goals?; value for money – are students receiving the education needed in the most efficient and effective way possible; and transformation, inthe sense of *developing the capabilities of individual learners for personal enrichment, as well as the requirements of social development andeconomic and employment growth* (HEQC, 2004). The last-mentioned aspect is perhaps the most relevant; it recognises that quality is not necessarily related to set standards, but is relative to context and purpose. To improve quality, we need to go deeper. Having learnt of the challenges in teaching and learning through audits, we need to get beyond the quality management systems to engage with the improvement of actual quality in teaching and learning and to have more sustained engagements with institutions in focused areas that are pertinent to such improvement. Drawing on the suggestion of Dill (1995) that quality assurance policies are more effective in contributing to improvement when they foster the development of 'social capital', both within and between academic institutions, the QEP was developed as a considered response to this challenge.

This publication is intended for use by institutions as they go about taking action to improve in particular focus areas and to inform their next submissions. The initial submissions of institutions are available on the CHE website for reference purposes. By the end of the second phase of the QEP, a number of areas related to teaching and learning will have been considered in a holistic way in an effort to improve our students' chances of

access with success. The work herein represents a start in the QEP journey towards a more equitable, effective, transformative and successful undergraduate experience for our students.

Dr Denyse Webbstock

Acting CEO

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1. OVERVIEW

As part of Phase 1 of the Quality Enhancement Project (QEP), which runs from 2014 to 2015, all public higher education institutions (HEIs) were asked to submit a document that provided baseline information on how they were engaging with the four selected focus areas. These are: enhancing academics as teachers, enhancing student support and development, enhancing the learning environment and enhancing course and programme enrolment management. In the submissions, institutions identified practices that they considered to be successful and those that they thought were not as successful as they had hoped. A content analysis of practices reported as successful and unsuccessful was carried out across all institutional submissions. In this chapter an overview is presented of the main issues that emerged from the content analysis. Key issues for further consideration are highlighted, and referenceis made to the international context, where appropriate. A discussion of how the content analysis was undertaken is provided in the next chapter.

1.1 FOCUS AREA 1: ENHANCING ACADEMICS AS TEACHERS

Professional development

One of the characteristics of the 21st century world is the ever-increasing demand for access to higher education, which has led to a shift from higher education as the domain of a privileged few to massification. A consequence of massification globally has been that students now enter higher education with a far greater diversity of characteristics – demographic, economic, social and academic – than in the past. As a result of this diversity, together with the increased accountability required of HEIs for output in the form of graduates with valuable attributes, the quality of university teaching is becoming more and more important. While academics have always been expected to take on the dual roles of university teacher and university researcher, the voracious demands of the research component, with the perceived status accorded to universities by large numbers of publications, have often consumed an inordinate amount of the time and resources needed to develop and sustain quality university teaching. There is a growing recognition internationally that this has to change if a significant number of students are to succeed in higher education. Increasingly higher education teaching, like any other teaching, is being recognised as an activity that demands specific skills and therefore training. In a recent report from the European Commission (High Level Group on Modernisation of Higher Education, 2013)[1], one of the recommendations stated,

[1] More information on the European Commission's work on improving higher education can be found at http://ec.europa.eu/education/policy/higher-education/quality-relevance_en.htm

> Recommendation 4: All staff teaching in higher education institutions in 2020 should have received certified pedagogical training. Continuous professional education as teachers should become a requirement for teachers in the higher education sector.

From the submissions it is clear that there are numerous activities taking place at institutions aimed at enhancing academics as teachers. These include induction programmes, seminars and workshops, training of various kinds, including formal qualifications and short courses, peer learning, mentoring and conferences. Various initiatives include, encourage or support the engagement of academics in the scholarship of teaching and learning (SoTL).

However, the conceptualisation of university teaching as a profession is not evident in most of the submissions. Section 4.1 on global trends and issues illustrates how recognition of the need for professionalization of university teaching is gaining ground internationally. A similar recognition is needed if South Africa is to address the learning needs of our diverse student population effectively. Pedagogical approaches that are not rooted in the scholarship of teaching and learning – research combined with reflective practice – are unlikely to be effective in promoting learning for many of our students. Curriculum developed without reference to sound design principles is unlikely to lead to the development of desired graduate attributes.

Professionals need different kinds of development during their careers. Some of these are illustrated in the institutional submissions. It could be debated whether some initial training is needed prior to induction, or whether induction can serve as initial training. The former reflects the traditional approach to the preparation of other professionals at universities; the latter is more akin to cognitive apprenticeship (Collins et al, 1989). In South Africa, few, if any, university teachers receive training in university teaching prior to being appointed as a lecturer. Unlike the practice in some countries, the Netherlands, for example, where post-graduate students receive formal pedagogical training, South African post-graduates are not expected to undertake pedagogical training, although, in many cases, they are involved in some form of teaching or tutoring. As a result, university induction programmes by default become the vehicles for initial training as a university teacher. Several universities illustrated how their induction programmes embody a cognitive apprenticeship model by combining contact sessions that include theoretical input, opportunities to apply and practice what is learnt, and structured reflection among peers. Such an induction process must necessarily extend over a period of time. The ability of some of the other induction programmes, described in the submissions as once-off or of short duration, to fulfil an initial training function is very limited; another form of initial training would therefore be needed.

After initial induction into the profession, continuous professional development (CPD) is needed. The submissions showed that there are many different activities that are fulfilling this function, even if they are not formally structured as CPD activities with clearly stated outcomes. These include workshops, seminars, symposia and conferences. These activities may be once-off, part of a series or recurrent. It was interesting to note that in the submissions some of the structures and activities were organised by discipline and others were centrally structured and organised. While all, or nearly all, of the universities have a central structure for teaching and learning, there is great diversity in the extent to which there are discipline-specific teaching and learning-related structures. In addition, the roles and resourcing of central teaching and learning divisions differ greatly among institutions.

The structure and resourcing of both central and discipline-based education development reflect an institution's philosophy of the place, function and modus operandi of support for teaching and learning, even if it is not explicitly stated. At some universities the staff of the division of teaching and learning are on academic conditions of service and are expected to teach and do research, while at other universities they are categorised as support staff and work as education development consultants to academics in areas such as curriculum development, assessment, pedagogy and the use of educational technology. Both models have advantages and disadvantages. What is important is that an institution is intentional about the choices it makes, based on alignment between the role of teaching and learning division staff and its broader teaching and learning philosophy.

The existence and location of discipline-specific education development staff also varies. In one model an education consultant from the division of teaching and learning is assigned to work with a particular faculty, while remaining housed in the central division. In another model, faculties have their own education development units and staff. A third model involves releasing discipline-based staff on a part-time basis to work with both the central teaching and learning division and their academic departments. A fourth model involves appointing people to departments who have both discipline and discipline-specific educational expertise and who are also linked to the division of teaching and learning.

Several universities provided examples of peer learning and mentoring through discipline-based education development activities. One of the advantages of this form of professional development is that discipline specialists tend to have a strong sense of identity coupled with a passion for their discipline, making it easier to form

communities of practice – powerful vehicles for learning and development – than with, for example, people from other disciplines who attend centrally organised development activities. According to Wenger-Trayner (2015),

> Communities of practice are groups of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly.

In addition, while some knowledge of teaching and learning is generic, discipline specialists also need pedagogical content knowledge, or subject matter knowledge for teaching, which Shulman (2004, p203) defines as follows:

> Within the category of pedagogical content knowledge I include, for the most regularly taught topics in one's subject area, the most useful forms of representation of those ideas, the most powerful analogies, illustrations, examples, explanations, and demonstrations – in a word, the ways of representing and formulating the subject that make it comprehensible to others.

University-wide teaching and learning symposia and conferences, a feature at many universities, offer opportunities for reflection, sharing of experiences and innovations and cross-fertilization of ideas. In many cases, input from external speakers injects fresh ideas or up-to-date information on particular aspects of teaching and learning, such as ways of integrating social media into learning environments.

A more intensive form of CPD, short courses, is offered at several universities and through the Cape Higher Education Consortium. These courses are not, in most cases, credit-bearing, although in a few instances they may count towards a formal qualification. While participation in these courses is voluntary for the most part, a few universities require new lecturers to take one or more short courses (or modules) before their probation ends and their appointment is confirmed. Recognition of the need for more extensive and theoretically grounded training in higher education is evident in the provision of post-graduate qualifications – certificates, diplomas, masters and doctoral degrees – at several universities. However, the submissions suggest that, with the exception of a few universities, the number of academics that register for post-graduate qualifications in higher education is small. One university is using the national impetus for academics to have PhDs as a way of increasing uptake of the PhD in higher education among academics who have a greater interest in the SoTL than in discipline-based research.

An alternative to a generic higher education qualification is a discipline-linked education qualification. One university indicated that it has a postgraduate diploma in health sciences education. A similar choice can be made in relation to teaching-related research. While all academics should have some engagement with the scholarship of teaching and learning, not everyone needs to be actively involved in higher education research. However, there are some disciplines in which research carried out on the learning and teaching of the discipline

by discipline specialists is recognised and accepted. For example, physics education research has become so widely accepted as part of physics that the prestigious journal series, Physical Review, has a journal specifically for physics education research.[2]

The issue of whether formal training in higher education, whether generic or discipline-based, and/or a demonstration of university teaching competence, should be required of academics in South Africa is important for the higher education sector to debate.

The work environment of an academic

The extent to which academics are willing and able to focus on their role as university teachers is affected by the environment within which they work. From the submissions it is clear that there are several, inter-related elements at institutional level that may conspire to limit, or even undermine, the development of academics as teachers, which, in turn, affects the quality of university teaching that they are able to undertake. These elements include workload frameworks, performance management systems and reward structures. Figure 1.1 shows the inter-relationships among these implicit drivers of academics' time, energy and attention, as well as the three explicit drivers related to universities' core functions. Professional development is situated near the centre of the diagram because it critically affects and is affected by the other elements: it is (or should be) part of an academic's workload, it is a dimension of performance management in the specification and appraisal of key performance areas, and it affects rewards, such as promotion.

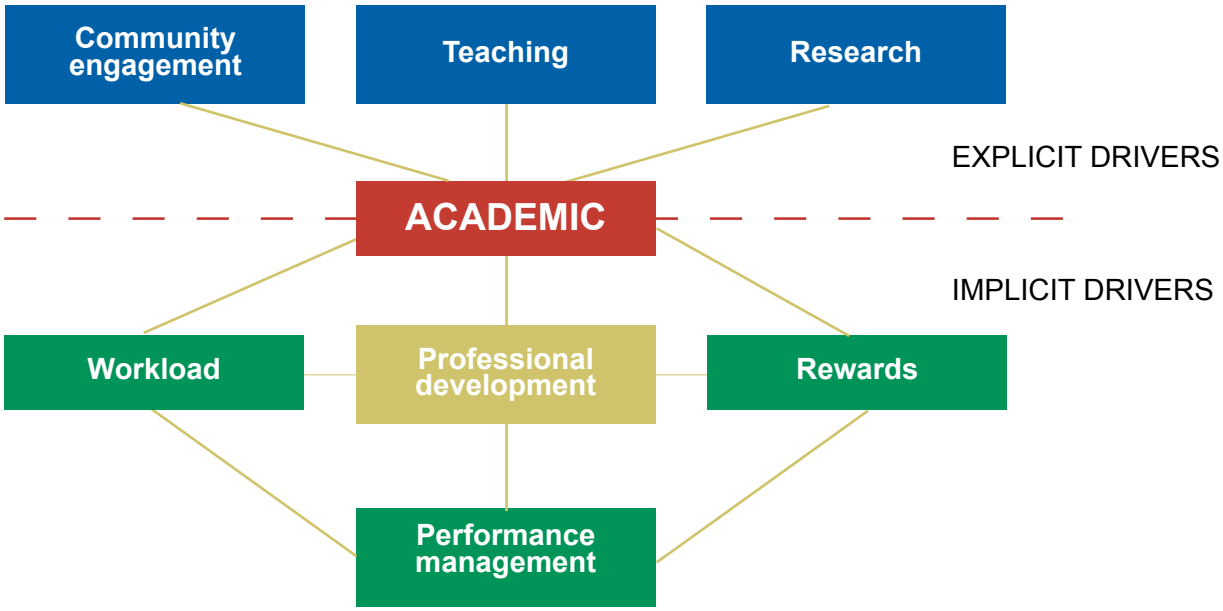

Figure 1.1: Inter-related structural elements that drive how academics allocate their time, energy and attention.

[2] http://journals.aps.org/prstper/about

In most of the submissions the lack of a clearly articulated, institutionally mandated and consensual view of what constitutes quality university teaching and teachers is evident. This has an influence on what is included in a workload framework, if one even exists, how performance is appraised and how and whether good teaching is recognised and rewarded.

Few universities indicated that they have effective workload frameworks; most universities did not indicate that they had workload frameworks at all. It appears that in most cases the allocation of work is done according to whatever method a head of department or dean may choose, and that not all components of academics' work are taken into account. A serious workload-related problem that emerged was that often young academics are given the time-consuming and difficult job of teaching large first-year classes. This problem is related to two conceptual issues already mentioned: the lack of a shared understanding and clear articulation of what constitutes quality teaching and lack of recognition of university teaching as a profession. To teach a large group of students effectively who need to go through a difficult transition from high school to university, involving differences in volume and level of content and demand for far greater autonomy, requires a very high level of skill and knowledge about learning and how to facilitate it. In other professions, while new staff may be expected to assist with tasks requiring a high level of skill and experience or undertake such tasks under supervision, it is unthinkable for them to be given full responsibility for such tasks at the beginning of their careers. Furthermore, new staff need more time to execute a complex task that is new to them than seasoned professionals; this means that their teaching loads need to be lighter if they are to be able to balance the dual demands of becoming good university teachers and researchers. While there are many reasons why students do not succeed, allocating inexperienced staff who are, for the most part, pedagogical novices, to large first-year classes must have an influence on the fact that a third of South African students leave university by the end of their first year (CHE 2013).

University environments are, and should be, different from business environments. Nonetheless, universities need a broad workload framework that takes account of all aspects of an academic's work in order to ensure fairness and productivity among academics. The framework needs to accommodate the differing demands on academics in different faculties, such as health sciences, where staff may have dual appointments in universities and hospitals. Furthermore, workload frameworks need to explicitly include time for activities that are essential for quality teaching but that may be "hidden", including professional development and developing new curricula. The growing use of blended learning – combining contact and online learning – is adding other

dimensions to academics' workload that need to be recognised, such as developing online resources and communicating electronically with students.

Rewards are an implicit driver of academics' behaviour. The main reward for an academic is promotion. There is wide variation among institutions in the extent to which teaching quality is considered in applications for promotion, with only a few universities allowing for progression up the academic ranks on the strength primarily of teaching. Even fewer allow progression all the way up to full professor level. One reason given is that higher status and value are attributed to achievements in research than in teaching. A second reason given is that it is difficult to devise reliable methods of assessing the quality of a university teacher. However, it is not necessary to reinvent the wheel, as a great of deal of work has been done in this area internationally that can form the starting point for South African universities' approaches to assessment. For example, in the United Kingdom the Higher Education Academy (https://www.heacademy.ac.uk) has a well-developed system for evaluating university teachers at various stages of their career. Moreover, these evaluations are recognised across the country and are therefore portable if an academic moves from one university to another. This is an area that requires serious consideration by the higher education sector. The profession of university teacher and the quality of university teaching cannot be advanced in South Africa in the absence of appropriate reward structures.

Recognition is also an important driver of behaviour. Most universities have some form of teaching excellence award. While these are worthwhile, they only affect a small number of award winners, and possibly applicants. Mechanisms are needed to give recognition to any excellent university teacher, in the way that the National Research Foundation (www.nrf.ac.za) recognizes excellent researchers, with no limit to the number that may be recognized. The HELTASA (www.heltasa.org.za) Teaching Advancement at University (TAU) Fellowship Programme is a pilot project aimed at producing a nationally recognised group of excellent teachers from all universities in the country, although the programme only has a limited number of places available. Individual universities, and even faculties, also need to consider ways of recognising larger numbers of excellent university teachers. As an example, the Faculty of Engineering at Lund University in Sweden developed an interesting way of rewarding and recognising excellent teachers and their departments by creating a pedagogical academy within the faculty (Olsson and Roxå, 2013). Entry into the pedagogical academy is very prestigious, and can only be gained by participating in a rigorous evaluation procedure. In addition to status, members of the pedagogical academy receive a small additional stipend and their departments receive an extra amount for teaching-related activities, awarded on an ongoing basis.

Those teaching at universities, like all teachers, need to be accountable for the quality of their teaching. In the institutional submissions only a few universities indicated that they had a successful performance management system for academics, but those that were in place included appraisal of teaching. In only a few cases was reference made to the inclusion of personal development plans as part of the appraisal process. Greater attention to the appraisal and development of academics as teachers is one means of improving the quality of university teaching.

A threat to quality university teaching is the large, and increasing, proportion of temporary staff employed to teach. The percentage of temporary academic staff in South African universities increased from 62% in 2007 to 66% in 2012 (CHE, 2014). The conditions of service of temporary staff have a large influence on the extent to which they engage in professional development. Participation in professional development activities at some universities is not open to temporary staff, especially if they work part-time. For temporary staff who are also part-time, payment is often made according to the number of hours worked. That means that even if professional development is available, these staff members are unlikely to participate in their free time when they could be gainfully employed elsewhere. Universities need to devise strategies for ensuring that temporary staff, especially part-timers, participate in appropriate professional development activities. One way to do this is to enter into contracts involving a total number of working hours per week, month or semester, which would include time for professional development. The contracts could also include time for consultations with students, another issue that arises when part-time staff are only paid for formal teaching.

1.2 FOCUS AREA 2: ENHANCING STUDENT SUPPORT AND DEVELOPMENT

There are many dimensions to a student's life that affect his or her ability to succeed at university. The main dimensions that arose in the institutional submissions are illustrated in Figure 1.2. The dimensions are:

1. understanding of subject matter;
2. competence in various academic literacies, including academic reading and writing, quantitative literacy, information literacy and computer literacy;
3. use of effective study skills;
4. sense of vocation and identification with the chosen career;
5. physical health;
6. psycho-social-emotional well-being;
7. facility in a number of life skills;
8. provision of material needs, including funding, accommodation, food and transport.

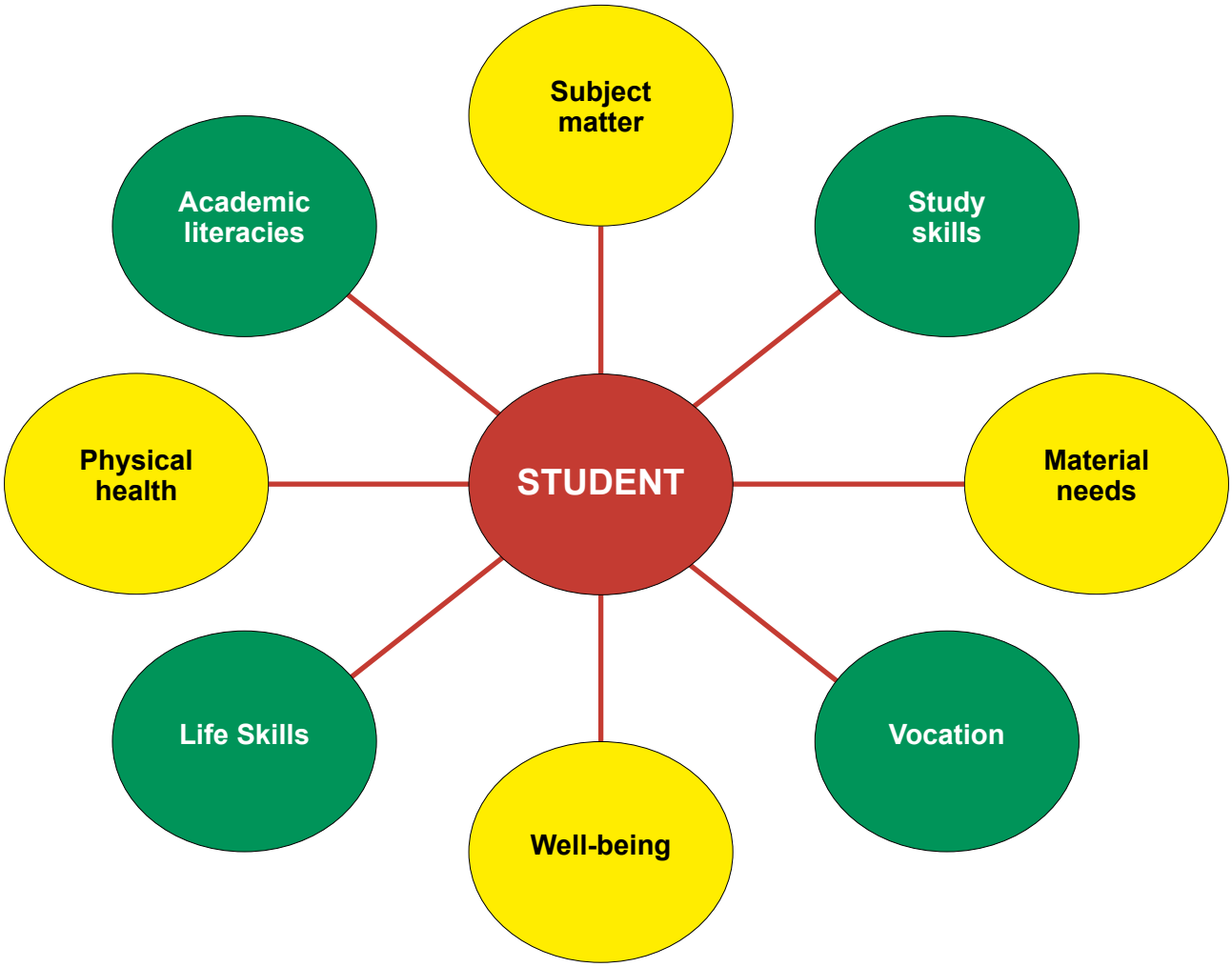

Figure 1.2: Dimensions of students' lives that affect their success at university.

If students could be offered support in all of these dimensions their chances of success would undoubtedly increase. However, universities do not have the resources for that. Of necessity, they select what support they are able to offer.

Institutional student support and development

The structural location of support, that is, who offers the support, varies from one university to another. As mentioned in Section 1.1, all universities have a central teaching and learning division. In addition, nearly all, if not all, universities have some sort of central structure for supporting students, which we are calling a division of student services in this document, but the brief of this division varies from one university to the next. These two divisions, together with faculties and departments, are the main providers of student support and development in universities. In addition, some student services fall outside of any of these structures at some universities, such as financial aid.

Material needs and physical health, while important, are not part of Focus Area 2 and have not been included in this document. Responsibility for providing support and developmentfor the other dimensions shown in Figure 1.2 lies with different structures in different universities. Figure 1.3 indicates which structures are responsible for the main support and development activitiesreferred to in the institutional submissions. Activities shown in the intersections between structures indicate that either the responsibility for the activity is shared between two or more structures or that the responsibility lies with one structure at some universities and another structure at other universities.

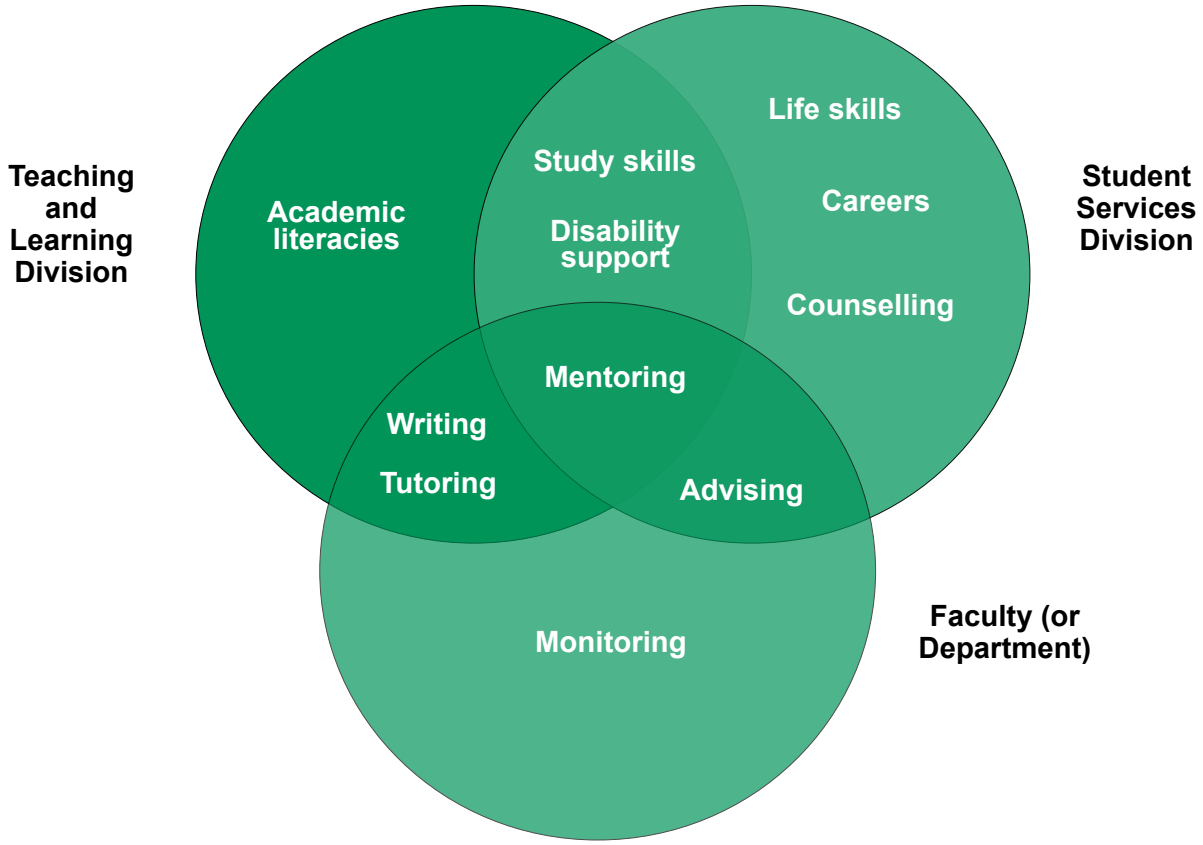

Figure 1.3: Location of responsibility for providing specific student support and development activities.

The development of most academic literacies are typically the responsibility of the teaching and learning division, with information literacy training usually being done by the library. Writing has been shown separately in the diagram because it sometimes falls under the division of teaching and learning, especially in universities that have writing centres, but sometimes there is collaboration between the teaching and learning division and faculties (or departments). Similarly, tutoring may be a collaborative activity, where faculties identify tutors and courses where they are needed and the teaching and learning division provides tutor training. Life skills development, career guidance and psychological counselling are typically the responsibility of the student

services division. But study skills development and disability support sometimes fall under the division of teaching and learning and sometimes under the student services division, depending on the institution. Advising, where it occurs, is sometimes faculty-based and sometimes done by student services. Monitoring of the performance of individual students is typically done by faculties, although use is usually made of institutional IT systems, either the management information system, the learning management system or both. Mentoring may be done through any of the three structures. The activities shown in Figure 1.3 can be categorised broadly as academic or non-academic. While there is no sharp divide between the two kinds of activities, for the sake of clarity in this document the following distinction has been made:

> **Academic support and development** involves helping students successfully execute the tasks required to succeed in their academic programme. This includes providing training in study skills, activities to develop academic literacies and additional support related to specific courses, such as tutoring.
>
> **Non-academic support and development** involves helping students successfully navigate the challenges associated with being a university student and with life in general. This includes providing training in life skills, such as time and stress management, peer mentoring, lifestyle and psychological counselling and special services needed by students with disabilities.

Academic and non-academic support and development will be discussed further in the sub-sections that follow. In addition to the activities shown in Figure 1.3, universities identified several institution-wide activities. The most frequently mentioned activities were first-year orientation, first-year experience programmes and efforts to identify student needs. In recent years it has become widely acknowledged, both here and abroad, that making the transition from high school to university is challenging. An orientation programme when students first arrive at a university is necessary but not sufficient to enable students to successfully navigate the transition. Increasingly, universities are developing first-year experience programmes, which are among the high impact practices that extensive research in the USA has shown increase student success (https://www.aacu.org/resources/high-impact-practices). First-year experience programmes typically include a range of activities that take place during the year, some of which are voluntary while others may be compulsory, such as a common core course. First-year experience programmes are not widespread in South African universities – only six universities listed them among their successful activities – but they are likely to become more common and well-developed with the recent creation of the South African National Resource Centre for the First Year Experience and Students in Transition (http://sanrc.co.za).

Institution-wide efforts to identify student needs usually take the form of surveys. A few universities have developed their own surveys for profiling students in order to identify what support may be needed, be it academic or psycho-social. It may be useful for the sector to develop a national survey, or at least a common core of questions, that could be used by a number of institutions as a guide to providing the right support to the right students.

One national survey that does exist is the South African Survey of Student Engagement (SASSE), which is a local adaptation of the National Survey of Student Engagement, developed and widely administered in the USA. Since student engagement is one of the factors that contributes to student success (Kuh et al, 2005), it is useful for universities to have an indication of their students' engagement. All universities can make use of SASSE for a fee (sasse.ufs.ac.za).

Student performance monitoring and referral

Across the world universities are increasingly being held accountable for the success of their students:

> During the past several decades greater societal demands for accountability have prevailed. This has obliged universities to demonstrate that learning is taking place. A greater emphasis is placed on measuring learning outcomes; it is no longer sufficient to measure the "inputs"-what is being taught and how the curriculum is delivered to the students (Altbach et al. 2009).

That means that universities can no longer afford to take a laissez-faire approach to student success, in which student performance is merely noted when the final examination marks are produced. Universities need systems to monitor student performance during the term, particularly in the first year of study, when a third of students in South Africa drop out or fail (CHE, 2014), and to intervene early enough that students who receive appropriate support still have a good chance of passing. Early warning systems are therefore important. Such a system requires that students are assessed early on in the term, that the marks are loaded onto an IT system that can compile the marks for all registered courses per student, that suitable interventions are available and that people are in place who are responsible for referring students to the interventions they need. Furthermore, the assessment tasks must not count for too high a proportion of the final mark such that a student who does poorly in the tasks cannot recover, no matter what interventions are put in place.

A number of universities indicated that they have such an early warning system, or at least components of it, although at some universities lack of adherence to deadlines and procedures by some of the lecturers can undermine the system, as can inadequate IT systems. Responsibility for following up students who have been identified as being at risk of failure typically lies either with academics or with faculty-based advisers. The usual approach reported is to contact such students via SMS or email and ask them to come in for an appointment, during which they may be referred for various academic and non-academic support. Clearly, further follow up is needed to determine the extent to which students make use of the services to which they are referred and whether the support they receive is appropriate and sufficient to help them succeed. However, other than in institutions that have faculty-based advisers, institutions did not indicate whether or not this is done.

Monitoring of student performance and referrals for support cannot be a once-off event. Systems are also needed to flag and refer students in need of support at other times during the year. In universities where learning management systems are used across the institution and marks are regularly uploaded, it is possible to set up alerts so that at-risk students are identified on an ongoing basis. Responsibility for monitoring and acting upon these alerts needs to be allocated to specific people.

Tracking and monitoring students beyond their first year is also important, both for the institution to manage its resources and for students to ensure that they are on an appropriate career path and not risk spending unnecessary time or money if they are not. One institution described its comprehensive tracking system that colour-codes students as green, orange or red during their entire degree according to whether they are making adequate progression. When a student is flagged as orange or red, there are actions that must be taken by both the student and the college.

In only a very few universities is academic advising on issues such as course and curriculum choices and changes done by academics. It appears that in most universities this is done by academic administration staff. While these staff are knowledgeable about rules, they may not have adequate insight into the content or demands of individual courses to know which courses students should be advised to take or to drop at various points in their degree programmes. Furthermore, it is often the students who are struggling and therefore failing courses along the way that take too many courses in order to try to catch up. Generic rules about how many extra credits students may take in a semester may encourage weaker students to further diminish their chances of success by overloading themselves. This is another area where a faculty-based adviser has an important role to play. In addition, faculty rules need to allow students to pursue flexible pathways at different rates by, for example, allowing lighter credit loads with more support in some semesters.

Academic support and development

The two main forms of academic support and development referred to in the institutional submissions were the development of academic literacies and subject-specific support.

Academic literacies

Students need proficiency in a number of academic literacies, including academic reading and writing, quantitative, computer and information literacy, in order to succeed at university. In the submissions, most of the discussions related to Focus Area 2 dealt with academic reading and writing. More than half of the

universities have writing centres that they consider to be successful, although the brief and modus operandi of these centres differ considerably. Good writing requires not only an understanding of subject matter but also craft knowledge, which is gained by writing often and receiving individual feedback. Writing centres provide a mechanism for offering students extensive, individual feedback on their writing that is nearly impossible in mainstream courses with large numbers of students. Their effectiveness, however, is dependent on highly skilled, well-trained staff.

The submissions indicated that formal development of academic reading and writing is done in one of two main ways – through stand-alone courses or through integration into mainstream courses or discipline areas, such as natural sciences. Research has shown that the latter is preferable, as learning that is embedded within a context that is meaningful to the learner is more likely to be lasting and transferrable. However, most discipline specialists are not specialists in language development. Collaboration between discipline specialists and language specialists is therefore a fruitful way of developing academic language skills that are relevant to learning in and of a particular discipline. But it is unrealistic to expect all courses to include an explicit language development component – not all courses lend themselves to the incorporation of extensive writing. In addition, a large number of language specialists would be needed. An approach taken by a few universities, which could serve as a model for others, is to designate certain courses as "writing intensive", and then require students to take a minimum number of writing intensive courses in their degree programmes.

Several universities use computer-based learning to develop reading skills. While these may be very effective, logistical challenges, such as old software that is unsupported or lack of access to software off campus, need to be addressed.

It is important to note that the development of proficiency in the language of instruction and the development of academic reading and writing skills are not the same thing. While development of the two may be done together, this must be made explicit in the curriculum design. However, there are many people who are proficient in the language of instruction who lack academic reading and writing skills, while the converse can also be true. Thus universities need to identify and address one or both areas according to individual student needs.

Subject-specific support and development

Subject-specific support nearly always takes the form of extra tutoring. Several universities make use of the well-known tutoring approach called supplemental instruction (SI), developed at the University of Missouri-Kansas City. According to the website of the International Centre for Supplemental Instruction,

> Supplemental Instruction (SI) is an academic assistance program that utilizes peer-assisted study sessions. SI sessions are regularly-scheduled, informal review sessions in which students compare notes, discuss readings, develop organizational tools, and predict test items. Students learn how to integrate course content and study skills while working together. The sessions are facilitated by "SI leaders", students who have previously done well in the course and who attend all class lectures, take notes, and act as model students.
>
> …SI is a "free service" offered to all students in a targeted course. SI is a non-remedial approach to learning as the program targets high-risk courses rather than high-risk students. All students are encouraged to attend SI sessions, as it is a voluntary program. Students with varying levels of academic preparedness and diverse ethnicities participate. There is no remedial stigma attached to SI since the program targets high-risk courses rather than high-risk students. (http://www.umkc.edu/asm/si/overview.shtml).

However, a problem that several universities identified with the SI model is that because activities are voluntary, some of the students who most need support do not attend. A second problem, which affects both SI and other forms of additional tutoring, is that typically the sessions are not formally timetabled. This creates two problems – difficulties in finding suitable venues and in finding suitable time slots in students' timetables. Where universities have central timetabling and venue allocation systems these problems could be addressed from the university's side if the extra sessions are planned in good time and incorporated into the university timetable. This assumes that the needed venues exist and are not fully booked. If not, this is an issue that needs to be addressed under Focus Area 3, enhancing the learning environment. However, addressing the problem from the student side is more difficult. Universities need to be careful not to inadvertently overload students who are struggling academically with support activities that seem like "extra work" to students and may, in fact, increase their overall workload, that is, the time they need to spend on academic activities. Support activities need to be carefully conceptualised so that the total time that a student is expected to spend working does not increase. Alternatively, if the nature of the activities means that the student workload must increase then ways need to be sought to lighten the load elsewhere, such as through taking a reduced credit load and stretching out the duration of students' academic programmes. However, such a route needs to be approached with caution so as not to subject students who most need support to a curriculum that is not coherent and thereby introduce another cognitive hurdle.

The quality and effectiveness of any form of tutoring, whether formal or additional, are reliant on competent tutors. Tutor selection and training are therefore important. Some institutions struggle to find enough tutors of the right calibre as they have too few post-graduate students to meet their needs and pay too little to attract

good tutors from outside the institution. On the other hand, in institutions that do have a large number of post-graduate students, pressure to produce research outputs may limit their participation in tutoring. Universities could benefit from taking a more holistic view in which learning to teach their subject effectively is seen as part of a post-graduate student's development. In some departments and institutions, every post-graduate student is expected to tutor, at least for a few hours a week, since it is not possible for academics alone to provide adequate discipline-based support.

All tutors need pedagogical training, but in institutions that are largely reliant on undergraduate tutors, high quality, ongoing training is vital. Typically divisions of teaching and learning conduct generic training, but departments must also be involved in tutor development on an ongoing basis in order to focus on pedagogical content knowledge and the academic demands of specific learning tasks from a discipline perspective.

In a few universities a limited number of longer term, higher level tutor appointments are available, which, in addition to ensuring adequate tutoring provision for the university, are seen as preparation for an academic career. This second function could be enhanced if formal pedagogical training were required of all incumbents in such positions.

It should be noted that more intensive academic support and development is offered at most, if not all, universities in certain discipline areas in the form of extended curriculum programmes. In these programmes, students take specially designed credit-bearing courses in addition to mainstream courses in order to strengthen their subject matter understanding and develop a range of skills. Curriculum issues, including extended curricula, were not included in Phase 1 of the QEP, and so were not discussed in this document, but may well become a focus in Phase 2.

Non-academic support and development

Non-academic support consists primarily of life skills workshops, mentoring and counselling. It is typically done by the central division for student services, although at some universities there are faculty-based student services structures, or at least faculty-based counsellors. Mentoring may also be faculty-based. As already mentioned, faculties may also have advisers who contact at-risk students, refer them for support and monitor their progress.

Most mentors are peers, usually senior undergraduate or post-graduate students, and most mentees are first-year students. In only a few cases did universities indicate that academics serve as mentors to undergraduate students. A mentor is often allocated several students. Sometimes social media are used to maintain contact between the mentor and mentees. The primary role of the mentor is usually to help first year students navigate the transition from high school to university and access support services they need. Peer mentors, in turn, develop their own leadership skills.

Co-curricular activities, that is, activities that are not part of the formal curriculum but that are valuable to students and help equip them for their post-student lives, are gaining increased recognition as an important part of student life. Developing life skills is a valuable co-curricular activity, yet the institutional submissions indicate that this is usually done on a voluntary basis through ad hoc workshops. This presents a problem as students who most need such workshops often do not attend, as indicated earlier, partially because they already feel overloaded. Furthermore, it is difficult to fit voluntary activities into students' busy timetables. One way of overcoming this problem is to integrate the development of life skills into a required, credit-bearing introductory course for all students. This approach is common in extended curriculum programmes, but less so in mainstream programmes. Another option is to conduct intensive skills development workshops out of term time, especially just prior to the start of a term. A third option is to incorporate skills development into community service activities and indicate that students who participate will earn "badges", a practice that is gaining ground in the USA and UK as a way of recognising co-curricular activities.

Every university has qualified counsellors who help students with psycho-social-emotional issues. Given the extent of social problems in South Africa it is not surprising that many students need counselling. However, the ratio of counsellors to students is very small, with some submissions indicating that students have to wait for two weeks before they can get an appointment. This raises the question of how much non-academic support a university can be expected to provide for its students. It would be interesting to explore possibilities for collaboration between universities and government services, such as having clinics close to universities so that both students and community members could access them.

The majority of universities provide support for students in residence, some of it academic and some non-academic. However, at many universities, particularly those located in big cities, residence students make up a small percentage of the total student body. A challenge is how to provide some of the support opportunities available to residence students to day students as well. A few universities are addressing this challenge by

creating "day houses", which provide both physical spaces and affiliation with a group of students for social activities and support.

Vocational support and development

In the South African higher education system students are expected to choose a career direction from their first year of study. Yet many students enter university without a clear sense of vocation, due, at least in part, to a lack of career guidance at school, combined with limited knowledge of the vast range of career possibilities. When asked to select possible programmes of study, many students make uninformed choices. And then, when they do not receive a place in their first choice of study programme, they may accept a place in a different programme just because a place is available. As a result, many students follow programmes of study that do not match their abilities or interests. Career guidance therefore has an important role to play in improving student success.

About half of the universities indicated in their submissions that they have dedicated structures for career counselling and development, while for others these functions are part of a broader student services structure. At some universities career guidance is offered to certain learners, such as those from feeder schools or underprivileged schools, prior to application. Once students are registered at a university it appears that any engagement in career planning or personal goal setting is voluntary. Given the small number of staff allocated to career services it also appears that few students participate in such activities. It would be interesting for South African universities to consider initiating something similar to the personal development planning (PDP) which all students at universities in the United Kingdom are expected to do. According to the Quality Assurance Agency for Higher Education (2009),

> PDP is a structured and supported process undertaken by a learner to reflect upon theirown learning, performance and/or achievement and to plan for their personal, educationaland career development. It is an inclusive process, open to all learners, in all HE provisionsettings, and at all levels.
>
> Effective PDP improves the capacity of individuals to review, plan and take responsibilityfor their own learning and to understand what and how they learn. PDP helps learnersarticulate their learning and the achievements and outcomes of HE more explicitly, andsupports the concept that learning is a lifelong and life-wide activity.

At the other end of the student life cycle, exit from the university and into employment, several universities indicated that they provide training in skills related to the workplace, such as writing a CV and interviewing for a job. Exposure to careers and employment opportunities are provided in various ways, such as through career fairs and online job portals and links with professionals in the field.

1.3 FOCUS AREA 3: ENHANCING THE LEARNING ENVIRONMENT

Teaching and learning spaces

Section 6.1 on global trends and issues related to Focus Area 3 introduces the term "built pedagogy", which is "the architectural embodiment of our education philosophies". The institutional submissions indicated that large lecture theatres are not only commonplace in universities in South Africa but that new ones are being built. It is important for universities to be clear about what educational philosophy is embodied in these large lecture theatres. Does the widespread use of these spaces, especially for first-year courses, imply an industrial model of education, in which students are lined up in rows and fed with information by a knowledgeable person at the front of the room? Or are they used in diverse ways to promote student engagement and cognitive development, using, for example, buzz groups of two or three students, diagnostic quizzes, shared in-class experiences that promote conceptual development and critical thinking, or personal response devices (also called "clickers"), a new technology for rapidly surveying the level of understanding of specific concepts of a large number of people? Physical spaces need to align with desired pedagogical practices, selected for their effectiveness in promoting learning.

In several of the submissions the need for more flat spaces that allow for small group interaction was voiced, mostly in the context of student learning spaces, as opposed to spaces for formally timetabled classes. Only a few universities seemed to take the view that effective teaching and learning involve interaction between groups of students and between students and academics, and therefore need physical spaces to accommodate such interactions.

Some disciplines require specialised teaching spaces, such as health sciences, engineering, architecture, performing arts, textile design and sports science. Such spaces may be costly to build and equip. Several universities are getting added value from their investment by making the facilities available to others in the university, using them to serve members of the local community or allowing industry to use them.

The need for more learning spaces, in addition to formal teaching spaces, was recognised in many of the submissions, both for students to study on their own and to work collaboratively, an essential 21st century skill. Several examples were given of creative re-purposing of unused spaces, including "nooks and crannies" in building foyers and passages, while there were a few examples of purpose-built learning spaces. Student residences were also given as examples of learning spaces. But for most universities, where a large majority of

students are day students, learning spaces are inadequate. Libraries, which are filling some of this need at a number of universities, will be discussed later.

One of the problems facing higher education institutions in South Africa is that the increase in student numbers in the past 20 years has outstripped the increase in the provision of new physical facilities. Many campuses and venues are overcrowded; there are maintenance backlogs at some institutions or on particular campuses of merged institutions; and many teaching venues are not adequately equipped, particularly in terms of educational technology.

In some cases pressure on venues, especially for formally timetabled activities, is exacerbated by inefficiencies, such as not having a central office that does both timetabling and venue allocation, or not having an accurate, centralised record of available venues, or allocating too many teaching periods in the mornings and too few in the afternoons. Undue pressure may also result from unexpected student behaviour. For example, in large courses with multiple sessions, students may be allocated to a particular session but choose to go to one at a time that suits them better, resulting in some sessions becoming overcrowded. This particular problem might be addressed by biometric scanning or radio frequency tagging, in order to give preference to students who genuinely need to attend class at certain times, such as those who live far from campus or are reliant on public transport.

For universities to cope with student numbers that have grown faster than their physical infrastructure, both staff and students have to make the best possible use of all of the available venues, hours in the day and informal spaces.

While there is no doubt that additional space is needed at many, if not most, universities, universities should think carefully about how their teaching and learning spaces, including new spaces they may wish to create, align with their educational philosophy. It is important that physical spaces are fit for the pedagogical purpose espoused by the teachers who will use them. It is therefore essential for discussions about space needs and design to involve academics as well as physical facilities and institutional planning staff.

ICT infrastructure, access and support

In the 21st century the incorporation of information and communication technology (ICT) into all aspects of life, education included, is widespread, and personal ICT devices are becoming increasingly accessible. Until

very recently, most students accessed the internet and other computer-based tools on university computers. Universities spent a great deal of money providing rooms filled with computers – computer labs – that students could use when they were not being used for formal courses. Computer labs still exist and are still needed, especially when specialised software or high-power computing is required. Computer labs are also needed for students who cannot afford their own devices. However, in the past decade laptop computers have become more affordable and therefore more accessible to students. Even poor students may receive laptops if they have sponsors. In addition, newer devices, such as tablets, enable students to perform limited computing functions, such as taking notes, as well as to access the internet. Smart phones also allow internet access and can be made to perform a range of functions by downloading "apps", specialised applications purpose-built for mobile phones. All of these devices can be connected to the internet using the wireless networking technology known as Wi-Fi. Therefore the provision of Wi-Fi on campuses has become increasingly important in enabling students to access the internet on their own devices, which eases the burden on universities to provide more and more computer laboratories as student numbers increase. But bandwidth is a challenge at all universities. Access to the internet off-campus for students who do not have their own devices is also a challenge. Two universities have addressed this problem by making it compulsory for all students to buy a tablet or notebook and negotiating reduced-cost devices from suppliers. However, even when such a device is available, being able to afford to pay for data to access and download from the internet is an issue when students live in places with no Wi-Fi. Negotiations are therefore needed with data providers for low-cost data packages for students.

On the other hand, cell phones and tablets are not adequate for all of students' computing needs – computers are still needed for producing assignments or conducting extended literature searches, for example. But university computers need not be stand-alone, fully functional personal computers, with all the associated costs and maintenance requirements. Another option is to have workstations – screens and keyboards only – networked to servers where the software resides. Such workstations take up less space than stand-alone computers, are less vulnerable to theft or vandalism, and make software upgrading and licensing easier to manage. Maintaining servers does, however, require skilled technicians and back-up systems to prevent entire networks from becoming unusable if one part of the system goes down.[3]

Lack of sufficient, suitably skilled IT technicians was raised as a problem at a number of universities. IT hardware and software are not much use without adequate support. Planning for IT provision must include the provision of sufficient posts at a level that will attract and keep staff with the necessary skills. Some support

[3] For an interesting example of how this can be done, see https://www.insidehighered.com/news/2015/03/20/austin-community-colleges-promising-experiment-personalized-remedial-mathematics#.VQwIPxCe7q0.mailto

can also be provided by students if they are properly trained, a practice mentioned by a few universities. Using student helpers has several benefits — it increases the university's ability to provide support, helps students meet their financial needs, and provides students with work experience, which can benefit them when they apply for jobs later on.

Software licensing is another issue raised by some universities. The cost of multiple-user licenses prevents universal, or even wide, access to some software, such as the plagiarism detection software, TurnItIn. It may be useful for South African universities to investigate options for national, reduced-fee licensing of the most widely used software.

Technology-enhanced teaching and learning

Nearly all universities indicated that they have a learning management system (LMS), a centrally provided on-line system that can support teaching and learning. The three most common LMSes in South Africa are Blackboard, which is proprietary, Moodle, which is free, and Sakai, which is open source and is being developed collaboratively by several hundred universities across the world. In many cases it appears that the LMS is being used primarily as an information repository for class notes, PowerPoint presentations and announcements. In several universities the LMS can be accessed remotely using various devices, including smart phones. While it is useful to make course-related information easily accessible to students, LMSes are capable of much more, including promoting on-line discussions among students, offering on-line testing, collating marks, delivering surveys and providing links to outside resources. The wide-ranging uses of LMSes for enhancing learning are yet to be exploited in many universities and by the majority of academics.

Several institutions said that they use technology to facilitate the simultaneous presentation of lectures at distant sites, communication between lecturers and students and meetings involving staff at multiple campuses that are far apart.

One university indicated a wish to use cell phone-based technology in class, but was aware of the danger of marginalising students who cannot afford a smart phone.

The effective use of an LMS, or any technology-enabled teaching, requires training that is both technical and pedagogical in nature. This, in turn, requires staff who are able to do such training and academics who have the time and interest to undergo the training. Several institutions indicated that the uptake of training opportunities

and use of LMSes among academics was less than desirable. One of the reasons put forward for this was lack of time, which relates to workload allocation, as mentioned in section 1.1.

Educational technology should not just be a "horseless carriage", a means of doing the same things that were done before but with different tools, as discussed in section 6.1. Educational technology opens up new possibilities for enhancing learning. But not everyone in a university can keep abreast of new technological developments and how to incorporate or exploit them in a particular university's learning environment. Universities therefore need learning designers, who have, among other things, specialised knowledge of educational technology, curriculum design principles and the affordances provided by the internet, to work collaboratively with academics on course design. A few universities indicated that they have a specialised unit for e-learning or educational technology, but engagement between the staff of such units and academics seems to be very limited.

There is an increased pressure on universities, both here and abroad, to move towards blended learning, which comprises a combination of face-to-face and on-line learning. Blended learning is often seen as a way to increase student enrolments without having to substantially increase physical infrastructure. In addition, there are potential pedagogical advantages. For example, several universities said that they video record at least some lectures and make these videos available to students on their LMSes. This enables asynchronous access to the lecture whenever and as many times as students wish. However, blended learning, while light on physical resources, is heavy on IT and human resources. As indicated above, the development of good blended learning materials is a time-intensive activity, requiring the involvement of highly skilled learning designers working in collaboration with discipline specialists. Chat rooms, wikis, blogs and social media are all potentially powerful tools for peer learning, but if left unmonitored they may have unintended effects, such as proliferating misconceptions, encouraging plagiarism or promoting online social exclusion or bullying. Email allows 24-hour contact with a course instructor, but mechanisms are needed to monitor and respond to what can become a deluge of emails. And increased use of blended learning requires more bandwidth, more storage space, faster processing speeds and more computers on campus for the people and applications that need them. Effective blended learning is therefore not a cheap approach to teaching and learning.

Libraries and information literacy

Many libraries at South African universities have been physically and operationally re-purposed along the lines of the international trends discussed in section 6.1. In a number of the submissions universities indicated that much of the space that had been taken up with shelves of books in the past has been reconfigured to create

learning spaces for both individual students and groups of students, sometimes referred to as "knowledge commons". Many journals and books are available on-line, while existing physical collections have been moved elsewhere. Some of the spaces are furnished with chairs and tables that can be moved around, or comfortable couches. Plugs for charging devices are usually available, sometimes accompanied by lockable storage bins to keep students' devices safe. Computers are widely available, which can be used, amongst other things, to access and read on-line journals, articles and books, and to perform literature and information searches. Printing facilities are usually available; in some cases students can access printers from any device. Typically libraries also have Wi-Fi that enables students to connect to the internet and access university web-based resources using their own devices.

Libraries are now, more than ever before, training sites for information literacy and knowledge management. Many libraries therefore have training rooms. Librarians are typically the ones who provide information literacy training to students, and sometimes to staff as well. There are different training models, including initial training during orientation, compulsory courses and integration into mainstream courses. Librarians may also offer training on specific topics, such as referencing, avoiding plagiarism and how to use information databases. In a few universities, librarians are seen as teaching and learning resource people – some are allocated to support particular faculties, some sit on faculty teaching and learning committees, and some follow particular courses on Blackboard and provide relevant on-line resources.

As with ICT provision and technology-enabled teaching and learning, staffing is an important issue that needs to be addressed. With the increasing complexity of a librarian's job, including not only the training and support functions mentioned above but also numerous administrative tasks, such as managing licenses and subscriptions, it is challenging to recruit suitable people. In addition, the demand for information-related support, which is increasing with an increase in the use of blended learning, student numbers and the availability of on-line resources, means that more librarians are needed. Pressure to keep libraries open for more hours a day, if not 24-hours a day, for the many students who do not have suitable places to study where they live also necessitates more staff. Some of the after-hours staffing needs can be met by students.

1.4 FOCUS AREA 4: ENHANCING COURSE AND PROGRAMME ENROLMENT MANAGEMENT

Selection, placement, admissions and registration

The starting point for promoting student success is to use sound methods to select students into an institution and then place them appropriately into programmes where they have a good chance of succeeding. That means trying to match the characteristics of incoming students with what an institution is willing and able to offer them. Effective selection and placement are therefore key to student success. South Africa has gone through multiple changes in school curricula in the past 20 years. In 2008 the school-leaving qualification, the Senior Certificate, was replaced by the National Senior Certificate (NSC), which abolished the offering of subjects on two levels, standard and higher grade. Universities therefore had to recalibrate their entrance requirements, as the meaning that could be attributed to marks obtained in the school-leaving examinations changed. In addition, as more and more universities offered extended curricula programmes (ECPs), mechanisms were needed to identify which students should be admitted into mainstream degree programmes and which ones should go into ECPs.

As the introduction of the NSC was nearing, Higher Education South Africa (HESA), comprised of all university vice-chancellors, commissioned the development of a set of placement tests, the National Benchmark Tests (NBT), to assess students' competence in mathematics, academic literacy and quantitative literacy. The tests are administered by the University of Cape Town and are available to students anywhere in South Africa for a modest fee. The NBTs were designed to help universities decide in which programmes to place students. According to the NBT marking scheme, "proficient" means a student is likely to be able to succeed without additional support, "intermediate" means a student needs support and "basic" means a student is unlikely to be able to succeed at university, certainly not without extensive support.

A number of universities reported in their submissions that they use the NBTs to help them make placement decisions, such as whether to place students into a mainstream or extended degree programme, as well as to determine students' academic needs. In addition, several universities have developed their own placement mechanisms, including psychometric tests, interviews, portfolios and questionnaires. What is clear from the submissions is that many universities do not think that the NSC marks provide sufficient information for making accurate selection and placement decisions.

But even if a university makes well-founded selection and placement decisions, there is no guarantee that selected students will actually register at that university. Students often apply to several universities when they are in Grade 12. Universities typically make provisional offers on the strength of students' grade 11 marks. Firm offers for places are only made once the National Department of Basic Education releases the Grade 12 results, usually in the first week of January. This triggers a flurry of activity as universities and students communicate about who has been accepted where and for what programme, prior to the beginning of the academic year in late January or early February, depending on the institution. Many universities do not know which students will actually take up the places they have been offered until they physically arrive on campus and register. Some universities are perceived to be more prestigious than others. As a result, students who do not get admitted to their preferred university may try to get into another, supposedly less prestigious university, sometimes by arriving on campus and applying for late admission. These "walk ins" present a great challenge to several of the least well-resourced universities. Other students only start looking for places in January because their grade 12 marks qualify them for university entrance but their grade 11 marks did not. Another factor that influences where, when and if students register is the availability of money to fund their studies – the search for financial aid by the hundreds of thousands of needy students may take weeks or months. Lack of timeous access to finances is a major cause of late registrations, which further disadvantages students who are often already disadvantaged in other respects, reducing their chances of success before they have even begun their studies.

The four universities in KwaZulu-Natal make use of a Central Applications Office, which sends each university the grade 12 results of its applicants as soon as they are released, together with other relevant biographical information. These four universities indicated that this system is very beneficial. The Department of Higher Education and Training (DHET) is implementing a national central applications office that will perform a similar clearing house function for all universities in the country. One of the planned functions is to be a rapid response centre to inform students on waiting lists as soon as vacancies become available in their preferred programme and/or university, as a result of some offers of places not being taken up. Such a centre could go a long way towards addressing the logistical nightmare that students and universities go through every January. However, mechanisms are still needed to ensure that deserving and financially needy students can access financial aid timeously.

Enrolment planning

Universities are required to negotiate enrolment targets with the DHET for each broad subject matter (CESM) category. Funding from the state is dependent on closely adhering to these targets. Enrolment planning is complicated by the issues raised in the previous section. It also requires high-level institutional planning skills, together with good management information systems and institutional research capacity to be able to monitor trends in the number of offers relative to actual registrations, as well as retention, progression and throughput rates. The level of such skills, and therefore the ability to carry out reasonably accurate enrolment planning, varies greatly across the sector. There is a need for capacity building in many institutions. The Kresge-funded Siyaphumelela project (http://siyaphumelela.org.za/), which aims to enhance the higher education sector's ability to collect and use data to promote student success, is an important capacity-building initiative.

Meeting enrolment targets is intimately linked to registration, and therefore several universities produce real-time, or near real-time, data during registration to track how the number of registrations relates to the enrolment targets per programme. Waiting lists are compiled by universities according to their own criteria. Applicants are supposed to be alerted when there is a vacancy, but not all universities have rapid and effective systems for communicating with wait-listed students. The timing of registration relative to the start of lectures is also important – if students on the waiting list are offered places then they need a few days to be able to get to campus without having to miss the first classes of the year. Registration, at least for first-year students, should therefore not be done immediately before classes begin.

Readmission

In addition to uncertainties about which new students will register each year, universities also face uncertainties about which students will return from year to year. Students may drop out or stop out, that is, take a planned break, without necessarily informing the university. In addition, universities are finding that an increasing number of students who are succeeding academically are not returning the following academic year because they are unable to access sufficient funding.

On the other hand, there are students who are readmitted from one year to the next that are not making adequate academic progress. This affects enrolment targets, throughput rates and class sizes as certain courses become "bloated" because of high numbers of repeating students. This phenomenon occurs when a university does not strictly apply its progression and exclusion rules.

Every university has rules that allow it to exclude, or, more appropriately, refuse to readmit, students that do not make adequate progress. Over half of the universities indicated that they have mechanisms for identifying students at risk of exclusion and then referring them for support. In addition, if a student is excluded there are appeals processes that students can follow. Given the difficult life circumstances of many students, they often find themselves in situations that have a negative impact on their studies. Appropriate forms of support may enable them to succeed. However, some students would be better served by changing programmes or institutions. Student advising is therefore important to help students find the best fit for their interests and aptitudes. It is best for advising to begin early in a student's university career so that students may avoid accumulating the heavy debt burden and diminished self-confidence that may result from continuing along the wrong path.

Gateway courses

At the level of individual courses, in every university there are certain courses that act as gateways or barriers to progression. These courses are often prerequisites for other courses, and so students who fail them typically have to spend an extra semester or two in their degree programmes. They are also often, but not always, first-year courses, and frequently have large enrolments, which means they have a disproportionate effect on student success in an institution. Such courses are sometimes referred to as high-impact or high-risk. Monitoring student performance in such high-impact courses and intervening when necessary is important in promoting student success.

Almost half of the universities referred to policies or practices that require pass rates in gateway courses to be monitored. However, only a few of the submissions referred to interventions in place to help improve pass rates in gateway courses, such as extra tutoring, staff development, and efforts to enhance teaching and assessment methods. In some universities, institutional inaction results in the same gateway courses creating bottlenecks year after year. Clearly this practice is wasteful of both student and university time and resources. Where gateway courses have low pass rates, universities need to systematically investigate the causes, which may be related, for example, to poor placement decisions (students being admitted to courses for which they do not have adequate prior knowledge), poorly designed curricula, inadequate controls or incentives for student participation, or teaching and assessment methods that are not effective for the students in the courses. Interventions need to be designed, implemented and closely monitored to gauge their effectiveness.

Management information systems

A good management information system (MIS) is essential for monitoring and tracking student movement through the system. The most widely-used commercially available systems are the Higher Education Data Analyser (HEDA) and ITS. Some institutions have their own purpose-built MIS. There is considerable variation across institutions in the data that is collected and what can be accessed by whom and when. In particular, some institutions appear to be better able to track and monitor student performance than others. The ability to track students during the semester in order to identify those who are risk and be able to intervene was only mentioned by a few institutions. Problems raised in this area related to ensuring timeous input of student assessment data, differing demands on the form in which data are available from different role players and the need for technical support for commercial systems. Another problem at some institutions is that the learning management system that houses information about student performance, often by course and not by student, does not speak to the MIS, which houses student demographic information.

1.5 SUMMARY

University teaching is a profession. As with any profession, university teachers need specific knowledge and skills in order to function effectively. And as with any profession, competence develops over time through a combination of formal and informal study, experience, participation in communities of practice and continuous professional development. In addition, professionals reflect on and in practice. All of these activities require time and therefore need to be catered for in determining workloads for academics. Performance appraisals need to hold academics accountable for the quality of their teaching, as well as providing opportunities for development. And academics need to be rewarded and recognised for their achievements as university teachers. Enhancing academics as teachers therefore requires alignment among policies and practices involving human resource departments, academics, heads of departments, deans and teaching and learning division staff.

Few students can succeed at university without some form of support; students also need to grow and develop along a number of dimensions to succeed, not only at university but in their future lives. If universities are to improve student success then they need to provide various forms of support and development opportunities. As stated in section 5.1.2, "Critical self-reflection is required, in particular on the scope, role and function of support and development with a view to examining how this domain can play a more significant role in accelerating student and institutional success." Universities differ in where responsibility for various forms of student support lies. While it is not necessary for different institutions to adopt uniform structures, it is

essential that each university has its own coherent conceptual framework into which the various forms of support fit, and that the various providers of support communicate with each other. Each form of support also needs sound theoretical underpinnings if it is to be effective and not just a knee-jerk reaction to an immediate need. Universities also need mechanisms for aggregating information from multiple sources so as to be able to look at students individually – how they are faring, what support they are accessing and what else they may need to have the best chance of succeeding. Enhancing student support and development requires alignment among policies and practices involving student support staff, academics, academic administrators and teaching and learning division staff. Monitoring and tracking student performance also requires appropriate IT provision and support and management information systems.

The learning environment affects what, where and how a student is able to learn. Teaching spaces need to be fit for their educational purpose. As stated in section 6.1.4 "built pedagogies" are "the architectural embodiment of our educational philosophies." Therefore communication is needed among institutional planners, physical facilities staff, academics and teaching and learning staff when new teaching spaces are being designed. The same is true of spaces for students to study individually and collaboratively, spaces which are becoming essential as universities admit increasing numbers of students who live off campus, sometimes far away, and/or do not have suitable places to study where they live. Technology can serve as an enabler of learning, but does not do so automatically. Good infrastructure, including reliable hardware, appropriate software and adequate bandwidth, together with sufficient support staff, are essential. In addition, the effective use of technology as a learning tool requires a cadre of skilled staff who can train and support academics. Blended learning, combining on-line and face-to-face teaching, is increasing in popularity as a means of admitting more students into universities without requiring more buildings. It can also serve to enhance learning if high-quality on-line resources are available. This is best done when skilled learning designers work collaboratively with academics, which has implications for staffing (hiring enough learning designers) and academics' workload (allocating time for on-line materials and curriculum development and training). University libraries are being reconceptualised as information hubs, incorporating learning spaces, ready access to electronic resources and the availability of support from librarians who are skilled in knowledge management. Enhancing the learning environment requires alignment among policies and practices involving academics, teaching and learning staff, IT divisions, physical planning and facilities staff, institutional planners and librarians.

Promoting student success must begin with admitting the right students, students whose characteristics match what an institution is willing and able to provide, and placing them in the right programmes, programmes where they have a good chance of succeeding. Valid selection and placement mechanisms are therefore essential.

In addition, universities negotiate enrolment targets per broad subject area with the Department of Higher Education and Training, which, if not met, affect their funding. Enrolment planning is complex and requires high-level skills in institutional planning and research, as well as good management information systems. However, even where a university has such mechanisms and skills in place, managing student registrations and enrolment targets is complex due to a number of factors external to the university. Managing enrolments beyond first year is also complex as students may change programme, drop out or "stop out" (take a planned break) without necessarily informing the university. Student progress may be impeded by specific gateway courses. Mechanisms are needed to monitor students' progress, identify those who are risk of exclusion and refer them for support, and ensure that those who cannot make adequate progress are not re-admitted. Enhancing course and programme enrolment management requires alignment among policies and practices involving institutional planners and researchers, academic administrators, support staff, IT divisions, academics, student services staff and teaching and learning division staff.

In each of the four focus areas evidence for the success or otherwise of initiatives is essential through ongoing monitoring and evaluation as a basis for sound decision-making. Furthermore, while improvements in each of the four focus areas are needed, coordination and integration across and among the focus areas is essential is order to bring about systemic improvements. Promoting student success is an institution-wide endeavour. In the words of Vincent Tinto (2012),

> Student success does not arise by chance. Nor does substantial improvement in institutional rates of student retention and graduation. It is the result of intentional, structured and proactive actions and policies directed towards the success of all students. Effective institutions provide a clear template for the actions of all its members: students, faculty and staff alike. They establish structures within which various parts of the organization relate to each other and together impact student success. They address systematically each of the conditions shaping student success and do so over the full course of student progression through the institution. Finally, they are proactive: they take action to control events shaping student success rather than merely responding to events (pp116-117).

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2. INTRODUCTION

From 2004 to 2011 the CHE carried out comprehensive institutional audits of the quality assurance systems of all public and 11 private higher education institutions (HEIs) in South Africa. This was the first time that such external audits had been conducted across higher education institutions in a single cycle in South Africa. The intention was to bring the institutions, especially those that were state funded, up to an acceptable level in terms of quality in their core functions and in their internal quality assurance processes. This was particularly important at the time as the institutional landscape had changed considerably between 2000 and 2004, when a process of state-mandated mergers and absorptions led to a reconfiguration of the 36 public HEIs into 23 HEIs.

After going through one cycle of audits, the Higher Education Quality Committee (HEQC) deliberated on whether or not to carry out a second cycle of audits immediately. Following a review of the HEQC and extended consultations with the higher education sector, the HEQC decided that rather than embark on a second cycle of audits, the more pressing need, as revealed in the audits, was to improve the quality of teaching and learning across the higher education sector. This decision was supported by statistics produced by the CHE (2013) that show that throughput rates in higher education in South Africa are low and are not improving, even though the participation rate of 20-24 year olds is low, ranging between 17% and 19%.

South Africa cannot undergo substantial economic and social development in the near term unless it produces more graduates, graduates who have attributes that are valuable to society and to themselves. Two options for increasing the number of graduates are to increase the size of the student intake or improve the performance of the existing student intake (or both). Research carried out by the CHE (2013) showed that, given the limitations on the number of students that South Africa's schools are able to produce who have a reasonable chance of obtaining a higher education qualification, it would be counterproductive to attempt to grow graduate numbers by admitting more students to higher education. Therefore, for the number of quality graduates to be increased, concerted efforts are needed across the higher education system to improve student success. Given the essential role of graduates in society, improving student success must be a national imperative.

In 2013 various consultations and awareness-raising activities were undertaken with over 1000 stake-holders in order to formulate a national project to improve student success in higher education. The resulting project is called the Quality Enhancement Project (QEP). It was formally launched in February 2014.

2.1 OVERVIEW OF THE QUALITY ENHANCEMENT PROJECT

In the QEP student success is defined as:

> Enhanced student learning with a view to increasing the number of graduates with attributes that are personally, professionally and socially valuable (CHE, 2014).

From this definition it is clear that improving student success cannot merely mean increasing the number of graduates — that can be done by lowering standards, which would serve no one's interests. Ways must be found to increase the number of quality graduates, graduates who have attributes that are valuable to themselves and to others in society. Exactly what those attributes are must be determined by higher education institutions and other stakeholders, such as employers. However, there are some attributes that are widely recognised as essential for 21st century graduates to flourish, such as being capable of life-long learning and working as part of a team.

Given the need to improve student success across the whole higher education system, the QEP makes use of a system-wide approach. This means working with all institutions simultaneously rather than sequentially, as was done in the first audit cycle. As the QEP is unlike any national initiative ever undertaken in South Africa, it was decided that the process followed in the QEP should be inductive. This would enable the results of one part of the process to inform and shape the next part. A broad set of steps was outlined when the project began in 2014, but details of each step of the process, such as what should go into institutional reports, or how collaborative groups are set up, are being developed as the process unfolds. The QEP process is also iterative in that it comprises two phases: Phase 1 runs from 2014 to 2015, and Phase 2 will run from 2016 to 2017.

Taking a leaf from the book of the Scottish higher education system, which has been running quality enhancement activities since 2003, in each phase of the QEP all HEIs engage with specific focus areas that affect student success in order to identify good practices and find solutions to common challenges. For Phase 1 the focus areas are:

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

The basis for the design of the QEP is collaboration — collaboration within institutions, among institutions, and between institutions and centrally coordinated groupings of role players. The reason for this is that a great deal of knowledge, expertise and experience reside within the higher education system—sometimes deep within and housed in thick-walled silos—which can be harnessed to improve student success. In the words of Bryk et al (2010),

> While innovations abound in education, we argue that the field suffers from a lack of purposeful collective action. Instead, actors work with different theories of the same problem, activities are siloed, and local solutions remain local.

The QEP process comprises a range of activities, some at institutional level, others at regional or national level, that are designed to enable existing knowledge and resources to become widely available and to support synergistic activities in which new knowledge and resources are created for the benefit of the higher education system and all of its constituent parts. This approach is akin to networked improvement communities, a tool that is being increasing promoted by the Carnegie Foundation for the Advancement of Teaching (http://www.carnegiefoundation.org/in-action/center-networked-improvement/).

> In an arena such as education, where market mechanisms are weak and where hierarchical command and control is not possible, networks provide a plausible alternative for productively organizing the diverse expertise needed to solve complex educational problems…
>
> …A networked improvement community is a distinct network form that arranges human and technical resources so that the community is capable of getting better at getting better (Bryk et al., 2010).

The QEP involves many role players, including HEIs, the CHE, professional organisations, non-governmental organisations (NGOs) and donors. Both public and private HEIs are involved in the QEP, but the process followed is different because of differences in the nature and modus operandi of institutions in the two sub-sectors. This document refers to the public HEIs'engagement with the QEP; a separate document has been produced for the private HEIs.

At institutional level, the Deputy Vice-Chancellor (DVC) Teaching and Learning (or Academic) is the point of contact between the CHE and the university. At the beginning of the QEP, DVCs were asked to allocate responsibility for coordinating QEP-related activities at their institutions to a committee, either an existing committee or one created specifically for this purpose. In addition, DVCs agreed to form a national leadership body, the QEP DVC Forum, convened by the CHE. One of the main aims of this body is to identify issues arising from the QEP that need to be addressed at a national level and to recommend or initiate appropriate actions.

Figure 2.1 provides a diagrammatic representation of the flow of activities for each of the QEP's two phases. Red blocks indicate institutional activities; yellow blocks indicate centrally coordinated activities. The focus

areas for Phase 1, listed above, were selected in 2013 (for a rationale see CHE, 2014). Institutional submissions that provided baseline information on how institutions are engaging with each of the focus areas were produced in September 2014. The specifications for these submissions are given in the Appendix. This document constitutes the primary feedback from the submissions. The next part of the process, collaboration, began with two workshops in March 2015, each of which involved approximately half of the public universities. Universities were each asked to send four people to one of the workshops, one knowledgeable person per focus area, to discuss key issues arising from the content analysis of successful and unsuccessful activities and make suggestions for actions to improve student success across institutions. A summary of these discussions will be available in another document.

In December 2015, following the collaborative processes, institutions will submit reports indicating ways in which they have improved in relation to the four focus areas and challenges that they still need to address. In the first half of 2016, individual feedback related to the Phase 1 focus areas will be provided to institutions, based on the submissions and reports they produced in 2014 and 2015, respectively. Peer evaluators will visit institutions individually to discuss institutions' areas of strength and areas in which improvement has been noted and is still needed in relation to the four focus areas.

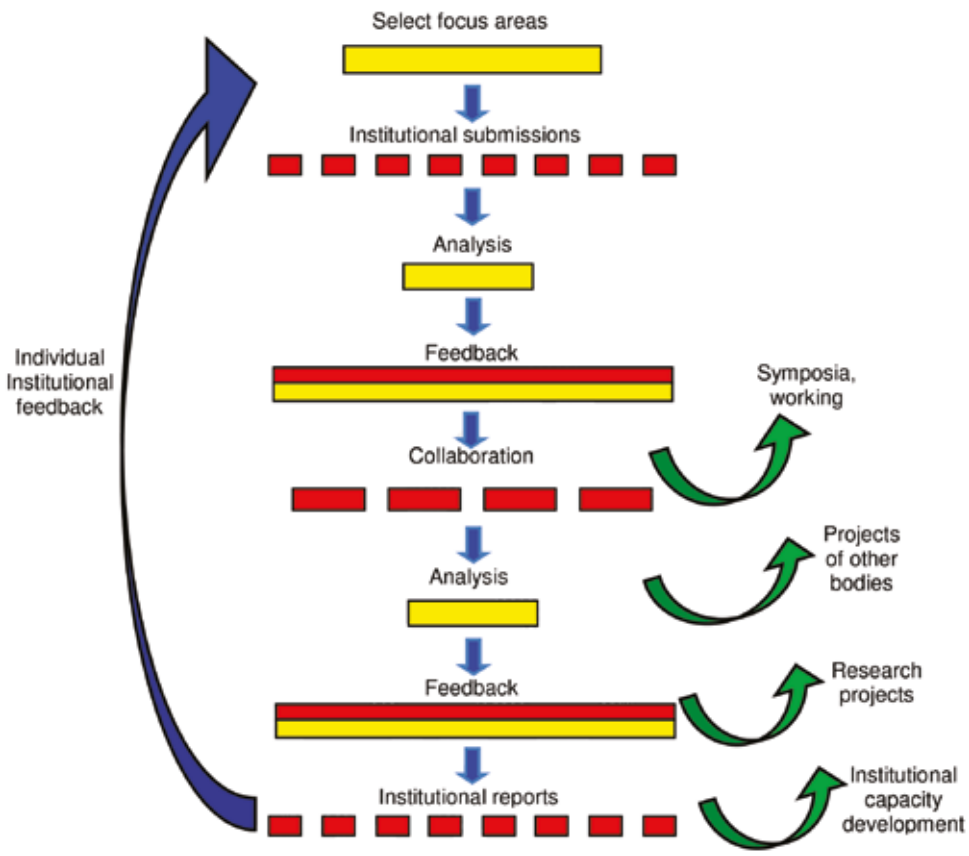

Figure 2.1: Flow diagram of the QEP for each phase.

Towards the end of 2015 new focus areas for Phase 2 will be selected, and the process will begin again in 2016 with these new focus areas.

2.2 ANALYSIS OF THE BASELINE SUBMISSIONS

It should be noted up front that this document is not a research report. It is a content analysis of key aspects of the institutional submissions of September 2014. The purpose of doing a content analysis is to identify promising practices that could promote student success in a number of institutions, and to highlight challenges faced by many institutions. In preparing their submissions, institutions were asked to provide baseline data on what they were doing in relation to the four focus areas. The content analysis therefore provides a snapshot of what is happening nationally in these areas. It is descriptive, not prescriptive.

In order to carry out the analysis, the institutional submissions were first imported into the qualitative analysis software, nVivo. An inductive analysis was then carried out in which like chunks of text were grouped with like. Through this process descriptive categories emerged. In this document one or more extracts from the submissions are used to illustrate salient aspects of the categories. In some cases there were many possible extracts that could have been chosen from a number of submissions, but only a few have been included in order to illustrate different aspects of the category. In addition, there were instances where only one or two institutions referred to a particular practice or issue but it was deemed to be of general interest and so was quoted in the text.

In conducting the content analysis, no judgments were made as to whether or not activities were successful — institutions' own assessments of the success or otherwise of their activities were taken at face value. Furthermore, in a number of the submissions institutions recognised that the same activities could have both successful and unsuccessful aspects. They therefore had to decide for themselves whether to categorise specific activities as successful or not successful.

In this document institutional names and contexts have been deliberately omitted. This imposes a limitation on the analysis, as context has a profound influence on what is doable, how things are done, and what the effects are. Furthermore, readers may wish to contact institutions whose activities interest them. Nonetheless, the choice to anonymise the extracts from the submissions was made in an effort to enable readers to consider the activities that are described with an open mind. Given the hierarchical relations that exist among HEIs in South Africa, it is easy to either dismiss or elevate information that comes from particular institutions on the basis

of readers' preconceptions and biases. The place of context in later steps of the QEP process is discussed at the end of this chapter. To address the problem of readers not knowing who to contact if they are interested in finding out more about particular activities, the complete institutional submissions are accessible on the CHE website.

A striking feature of the institutional submissions was that, for the most part, the sections on unsuccessful activities were much shorter than those that dealt with successful activities. There are a number of possible reasons for this. Informal discussions with various stakeholders suggest that institutions were reluctant to write about unsuccessful activities for fear that it might somehow reflect badly on them. This is a great pity, since much information can be gained from analysing what does not work. In the context of creating the shared resource that this document is intended to be, a great deal of time, money and effort can potentially be saved if institutions take cognisance of what has not worked well at other institutions, and why, before they implement new activities that might produce similarly disappointing outcomes.

There were a number of challenges involved in carrying out the content analysis. These included the considerable variation in the extent to which institutions adhered to the template provided and addressed all of the sub-themes in each focus area, as well as differences in style. In this document certain sub-themes are discussed more extensively than others, which reflects the differences in the extent to which they were covered in the institutional submissions. Some submissions presented a synthesis of inputs from various sources, while others comprised a concatenation of disparate inputs from a number of sources. In some submissions there was extensive narrative, while others consisted primarily of bullet points, which are far less informative and therefore could rarely be included in the quotations. Not surprisingly, given the breadth of the focus areas, there was also information provided in some of the submissions that went beyond the scope of the focus areas. This information, although valuable, was omitted for the purposes of the content analysis.

2.3 STRUCTURE OF THE DOCUMENT

Institutions were asked to identify aspects of their context that were salient to their students' success at the beginning of their submissions. An analysis of this part of the submissions has been carried out and is presented in the next chapter, together with a short historical overview of higher education in South Africa.

The main body of this document comprises the content analysis by focus area of activities that institutions regarded as either successful or less successful than they had hoped. Each of the chapters dealing with a focus area is preceded by a section on trends and issues, both global and national, related to the focus area, in order to place the analysis within a broader context.

In the template, institutions were asked to indicate what evidence they used to decide whether an activity is successful or not, but not to provide the actual evidence. In many cases, references to evidence were very limited. It was therefore decided to carry out an analysis of the types of evidence cited in all of the focus areas and to present this analysis as a separate chapter, following the chapters dealing with the individual focus areas. The remaining sections of the institutional submissions, which deal with alignment to institutions' strategic plans, plans for the next 12 to 18 months, challenges that still need to be addressed related to the focus areas and other challenges not related to the focus areas, have not been included in this document. They will be addressed in other parts of the QEP process.

2.4 CONCLUDING COMMENTS

This document provides a snapshot of what is happening nationally in relation to the four QEP focus areas for Phase 1. The snapshot is constrained by what institutions chose to include in their submissions, and framed by their assessments of the extent to which they viewed the activities as successful. Some areas are therefore quite dark, where little information has been provided. Removing contextual information associated with individual institutions has decreased some of the resolution, making certain parts somewhat blurry.

Nonetheless, it is clear from the analysis that there is considerable commonality among a number of institutions in the types of activities that are being undertaken and the problems that are being faced. On the other hand, there were certain activities, deemed to be successful, that were mentioned by only a small number of institutions, which might have been expected to be widespread. It may be that such activities take place at other institutions, but it is not possible to know this from the submissions. Furthermore, the fact that they were not mentioned by some institutions may suggest that these institutions do not consider them to be significant. Whatever the reasons for limited reporting, there are a number of practices included in the analysis that can be identified as promising, that is, that have been shown to be making a difference to student success in certain institutions, and that could be more widely adopted.

One of the intended outcomes of the QEP is to produce codes of good practice for undergraduate provision in South Africa. Identifying promising practices is the first step. But there are a number of other steps that are needed before a promising practice can be considered a "good" practice, such as clear articulation of the elements of the practice and the rationale for it, as well as evidence of its effects. Promising practices typically have certain core elements that are universally applicable, with other elements that need to be contextualised. Where core elements of promising practices can be extracted from their context and then successfully recontextualised in a variety of different contexts, good practices emerge (Figure 2.2) that can form the basis of codes of good practice, codes which can be used to improve the quality of undergraduate education across the higher education system.

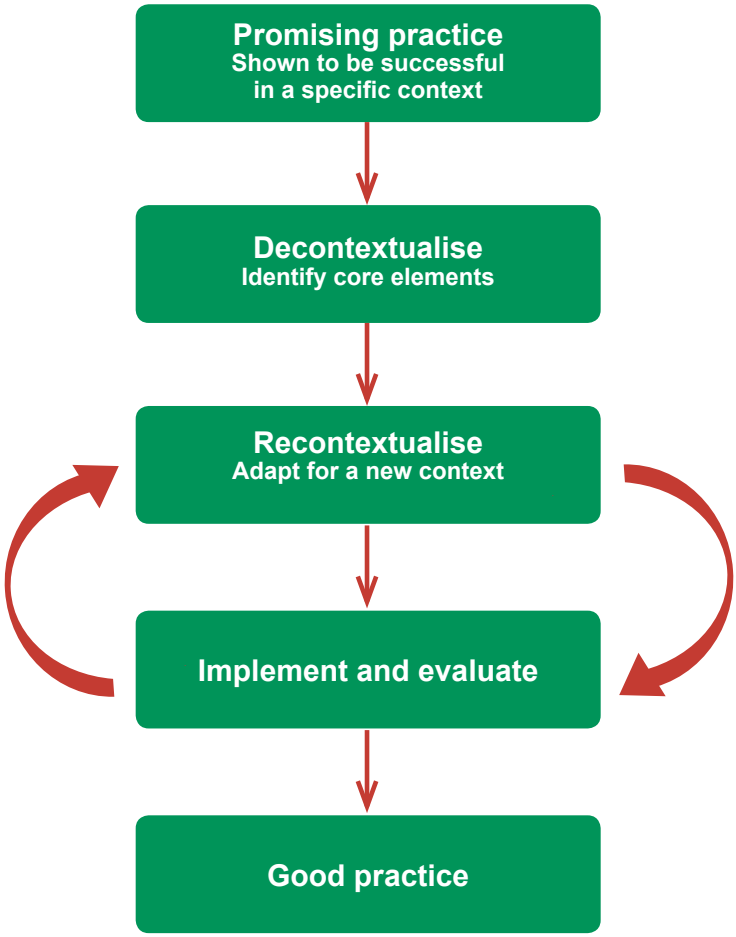

Figure 2.2: Illustration of how promising practices can lead to good practices

As stated earlier, the QEP process is designed to facilitate participation of, and collaboration among, many role players in the higher education system in order to harness and build on the knowledge and experience of those within the system to improve student success. The sharing of promising practices and the development of good practices can obviate the need for each institution to reinvent the wheel. Working as a networked improvement

community across the higher education system can lead to solutions that are more likely to be effective than those proposed by a single part of the system. Moreover, by raising possible solutions and suggestions for improvement to a national level, other role players, such as government departments or industry, can be requested to undertake actions to improve student success that extend beyond the ambit of HEIs.

It is hoped that through the QEP process in which information is shared, tools and strategies for improvement are devised, reflection is promoted and structured, evidence is collected, capacity is developed and gains in knowledge are made public, that the ability of our higher education system to promote student success will grow rapidly.

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3. HISTORICAL AND INSTITUTIONAL CONTEXTS

History and politics have played a significant role in shaping the South African higher education landscape and its evolution over time, as is evident in the short historical overview of South African higher education that follows in the first part of this chapter. While external influences have led to present-day institutional contexts that differ greatly, the Quality Enhancement Project is intended to enhance the success of students at all higher education institutions, taking due account of such contextual realities. In their submissions on their activities in the four focus areas addressed in the first phase of the QEP, institutions were asked to describe the features of their institutional contexts that are most salient to the success of their students. In the second part of this chapter, an outline is presented of the most frequently mentioned contextual features that influence student success.

3.1 THE HISTORICAL CONTEXT: POLITICS, IDEOLOGY AND EMERGENCE AND CHARACTER OF THE HIGHER EDUCATION SECTOR[4]

3.1.1 Introduction

In order to comprehend the current challenges faced by higher education institutions, it is necessary to understand where these institutions came from and their different historical purposes. Context (political and geographical) and institutional culture continue to be reflected in the way institutions function. In this section, the origins of the various higher education institutions will be discussed briefly, highlighting the impact of the ideology of apartheid on the higher education sector, before considering developments post-1994 which have shaped the present institutional landscape.

3.1.2 Origins of the various institutions

The origins of higher education institutions can be divided into two main groups. The first group are those with their origins in schools or colleges that, over time, expanded their tertiary offerings until they developed into higher education institutions. Some colleges were linked to specific religious entities or business interests. Among the universities in this group are the University of Cape Town (it began as the South African College in 1829), the University of the Witwatersrand (it began as the South African School of Mines in Kimberley in 1896), Rhodes University (it began as Andrews College in 1904), the University of Pretoria (it was initially the Pretoria Centre of the Transvaal University College founded in 1908), and the University of the Free State

[4] This section draws in part on Professor Ian Bunting's chapter "The Higher Education Landscape Under Apartheid" in Transformation in Higher Education edited by Cloete, N; Maassen, P; Fehnel, R; Moja T; & Gibbon, T (2006) Dordrecht, Springer, to which readers are referred for details of the effects of apartheid ideology on higher education.

(it began as the Grey College School in 1910). What is interesting about this group of universities is that while they all began as English-medium institutions, some changed their medium of instruction to Afrikaans in the 1930s and 1940s (such as the University of Pretoria and the University of the Free State), which came to influence their character. All of these institutions were established for white students, and often started by only admitting white males.

The other major group of institutions are those formed during the apartheid period (1948 to 1990) with the express purpose of implementing apartheid higher education policy. This group includes those established for a particular racial or ethnic group and those created with a technical focus. Those that fall into the former category include those developed in the rural areas and homelands (such as the University of Transkei for the Xhosas and the University of Zululand for the Zulus) and those in urban/ peri-urban areas (including the University of the Western Cape for 'Coloureds' and Rand Afrikaans University for Afrikaners). In the latter group are the technikons, including those for a particular ethnic group (such as the Vaal and Border Technikons) and those formed through adapting Technical Colleges.

While most South African institutions fall into one of these groups, there are some exceptions: the University of South Africa (UNISA) developed out of the University of the Cape of Good Hope and became the first "examining" university under the Union government; ML SultanTechnikon developed as a community initiative with philanthropic funding; and the University of Fort Hare (UFH) was founded by missionaries and was the first higher education institution for black students (and the only one not formed by the apartheid government).

3.1.3 Higher education under aparthied

By the 1980s, higher education institutions could be divided quite clearly into five groups, although their origins often still had an impact on their institutional culture. The first were the white English-medium universities (University of Cape Town, University of the Witwatersrand, Rhodes University and the University of Natal), which were generally more liberal than other universities and critical of the apartheid government. The second was the group of white Afrikaans universities, which tended to support apartheid ideology and worked with the state in this regard. Generally, but to varying degrees, universities in the first two groups focused on knowledge creation and teaching at both undergraduate degree and postgraduate level. These institutions had some level of autonomy, although their reliance on state funding ensured a certain level of compliance. The third group of institutions were the institutions established for different black ethnic groups. These tended to be more teaching focused and came under a considerable amount of state (or homeland) control. The fourth group

were distance education institutions, namely UNISA, Technikon SA and Vista University. The final group were the technikons, which were diploma-awarding institutions focused on training technicians.

Taking the above into consideration, it is clear why one of the main objectives of the post-apartheid state, when it came to higher education, was to develop a single and coherent higher education sector. In 1994, when the first democratic elections were held, the sector consisted of fifteen different departments of education and 36 universities and technikons with varying degrees of academic freedom and institutional autonomy. Institutions were divided along racial lines and in terms of politics, culture, language, programme mix, research output, postgraduate enrolments, staff and student profiles.

3.1.4 The post-apartheid higher education landscape

In the immediate post-apartheid period, the new government set up the National Commission on Higher Education (NCHE) to identify problems with the higher education landscape and recommend how it could be transformed to align with the values espoused in the constitution of the new South Africa. The NCHE submitted its report in 1996, in which it highlighted the inefficient and fragmented state of higher education and stressed the need for increased participation in higher education, greater responsiveness in terms of both teaching and research, and co-operation and partnerships between government and institutions, among institutions, and with society. The period from 1996 until about 2003, was characterised by a number of policies and Acts which established the government's vision for higher education and its relationship with higher education institutions. Some of the more influential documents included the *Education White Paper 3: A Programme for the Transformation of Higher Education* (1997), the *Higher Education Act* (1997 and amended thereafter), the *National Plan for Higher Education* (2001) and the development of a new *Funding Framework* (2003).

The major purposes envisaged for higher education were as a driver of economic growth and development and as a major player in consolidating democracy and bringing about social justice. The government thus focused on the need for a single, coherent higher education sector which would meet the needs of both the changing South African economy and the society through increased and more diverse access and greater responsiveness to the needs of the country. The themes of redress and transformation characterised many of the policy documents, and the need for higher education to engage with society and develop civil society was identified.

As part of realising its vision for a single but diverse and coordinated higher education system, the Ministry of Education embarked on a series of mergers between institutions. One of the motivations for the mergers was

to help solve the problem of a sector divided by historical origin. The mergers changed the sector dramatically, although it is debated as to whether this was a positive change or not. Through mergers, the number of institutions was reduced from 36 to 23, and institutions were categorised into three institutional types: traditional universities, universities of technology and comprehensive universities (which combined the programme offerings of traditional universities and technikons). All institutions now reported to a single Ministry and all were expected to engage in both teaching and research. Despite this radical intervention, as well as the opening up of all universities to students of all racial and ethnic groups, the division between historically white and black institutions remains and the historical legacy of the different institutions has not been overcome. The effect of mergers was uneven. Some institutions were not merged, others were merged with similar institutions or with those close by geographically, and still others were merged with institutions many kilometres away or with institutions with a different mission and vision.

The Table below shows the names of the universities after the merger process and the institutions that were merged or absorbed.

Table 3.1: Universities that were merged and the names of the resulting institutions

Name	Institutions that were merged or absorbed
Universities	
University of Cape Town	
University of KwaZulu-Natal	University of Durban-Westville, University of Natal
University of Fort Hare	University of Fort Hare, Rhodes University East London Campus
University of the Free State	University of the Free State, Qwa Qwa Campus of the University of the North, Vista University Bloemfontein Campus
North West University	University of the North-West, Potchefstroom University for Christian Higher Education, Vista University Sebokeng Campus
University of Limpopo	University of the North, Medical University of Southern Africa
University of Pretoria	University of Pretoria, Vista University Mamelodi Campus
Rhodes University	
University of Stellenbosch	
University of the Western Cape	
University of the Witwatersrand	

Name	Institutions that were merged or absorbed
Comprehensive universities	
Walter Sisulu University	Border Technikon, Eastern Cape Technikon, University of Transkei
University of Johannesburg	Rand Afrikaans University, Technikon Witwatersrand, Vista University East Rand and Soweto Campuses
Nelson Mandela Metropolitan University	University of Port Elizabeth, Port Elizabeth Technikon, Vista University Port Elizabeth Campus
University of Zululand	
University of South Africa	University of South Africa, Technikon South Africa, Vista University Distance Education Campus
University of Venda	
Universities of Technology	
Cape Peninsula University of Technology	Cape Technikon, Peninsula Technikon
Durban University of Technology	Durban Institute of Technology (formed from Durban Technikon and ML Sultan Technikon), Umlazi Campus of the University of Zululand
Central University of Technology	Free State Technikon, Vista University Welkom Campus
Mangosuthu University of Technology	
Tshwane University of Technology	Technikon Northern Gauteng, Technikon North-West, Technikon Pretoria
Vaal University of Technology	Vaal Triangle Technikon (incorporating the infrastructure and facilities of the Vista University Sebokeng Campus)

At the same time, the Ministry also made the decision to incorporate teacher training colleges into the universities. All teacher training colleges were closed, and some of the campuses became satellite campuses of universities. The incorporation of the colleges affected institutions in different ways and added pressure during this time of transition.

The new government's vision for higher education affected all institutions to differing degrees. Below some, but by no means all, of the changes and challenges that have affected higher education over the last two decades are discussed.

Enrolments in the higher education sector expanded rapidly from 587 505 in 2000 to 983 698 in 2013 (a 67% increase). The increase in student numbers has put a lot of pressure on institutions. In the first place throughput levels are lower than would be expected and some students are not sufficiently prepared for higher education, meaning that institutions have needed to adapt to accommodate these students. Changes to school education have also affected the higher education sector in this regard. Secondly, most institutions have reached or

exceeded their capacity in terms of physical space as they have had to expand rapidly in order to accommodate growing student numbers. It was only in 2014 and 2015 that new universities were established, namely Sol Plaatje University, University of Mpumalanga and Sefako Makgatho University. Thirdly, the pressure on academic staff has increased significantly. While student numbers grew by 67%, there was no parallel increase in the number of academic staff, which increased by 37% during the same period. Furthermore, the pressures on staff have increased - such as administrative requirements in line with quality assurance and research assessment. Staff members have also been put under pressure to improve their qualifications as doctorates have become more sought after, even at those institutions that historically did not focus on knowledge creation.

The demography of the sector as a whole is very different to what it was is 1994, although race and gender are still reflected in different student participation and success rates and in staffing profiles. Transformation has not been equal across the sector, and historical legacy and geographical location continue to play a role in institutional culture and demography. Pressure to transform continues to affect institutions.

A new funding formula was introduced in 2004, which changed the calculation of funding from a formula based on institutional cost to one focused on outputs related to national goals and approved institutional plans. This was in line with the general change towards a more state-steered system determined by national needs. The formula included earmarked funding for specific priorities (such as teaching and research development). While institutional factors are one aspect of the formula, the same formula applies to all institutions regardless of history and context, putting particular pressure on those institutions without financial reserves.

One of the main funding challenges remains student funding. Despite the establishment of the National Student Financial Aid Scheme (NSFAS) by Act in 1999, and substantial increases in the funding available through NSFAS, many students continue to struggle financially. The financial pressure on students affects the university in a number of ways – for instance it influences the support systems students require and the financial stability of the institution. Again, not all institutions are affected equally and institutional context is a factor.

The way in which institutions are governed and managed has also changed post-1994 and this has affected each institution differently depending on its history. A number of institutions have faced challenges in this regard, and since 1997 (and the promulgation of the Higher Education Act) an Independent Assessor has been appointed on 14 occasions to investigate institutional crises, and in 11 cases an Administrator was appointed to temporarily run an institution. Four institutions have been investigated more than once. Context and historical legacy have played a role here too.

The past 20 years have also seen an increase in external regulation, both through the development of a National Qualifications Framework (NQF) and the requirements related to this, and with the introduction of external quality assurance. Institutions had to respond to these requirements by aligning their programmes and qualifications. Institutions are also now required to get approval for their Programme Qualification Mix (PQM) from the Department of Higher Education and Training.

It is against this history of differentiation based on, among other things, race and ethnicity, gender, privilege, qualification type and research level that South African institutions need to be viewed. The higher education sector is still undergoing a process of transformation to eliminate discriminatory practices and to become more responsive to the needs of the post-apartheid society and economy. It is against this background that the following section of the chapter is set: what are the main features of institutions' context that have been highlighted in the institutional submissions as having an effect on student success?

3.2 INSTITUTIONAL CONTEXTS: CONSTRAINTS AND OPPORTUNITIES

3.2.1 Introduction

It is one thing to provide access to post-school education to as many people as possible; it is another to ensure that those who have access are also able to succeed. Yet levels of success in higher education remain low, with drop-out rates as high as 50% characterising the system as a whole (CHE, 2013). In the face of a package of other challenges (not least, funding for students) it is the issue of student success that the QEP aims to address.

The historical, social and political origins and development of South Africa's universities have, not unexpectedly, placed the institutions in very different locations, not just geographically but also in terms of their general characteristics.

Some are located in rural areas (which often remain economically depressed), others in peri-urban areas associated with the borders and boundaries of the apartheid era, while others are in thriving urban centres. They have also been placed in contexts of their historical roles; of fiscal sufficiency or shortage, and in the realms of, and emphasis on, teaching or teaching combined with broader research priorities. In other words, the geographical and performance maps of universities reflect, for the greater part, the history outlined in the first part of this chapter. It is not surprising, then, that they face widely varying challenges and opportunities when they engage with the Quality Enhancement Programme (QEP).

This section of the report considers the contextual challenges and some opportunities identified in the institutional submissions produced as part of the QEP in 2014 by South Africa's universities as being salient to their students' success. There are now 26 universities in the country but, at the time of the submissions, three were only just, or about to be, operational. All of the other 23 universities submitted responses to the request for information about their context, but in three cases the information provided was not relevant to question 1.1 posed in the QEP submissions template.

An observation that applies to the responses from some universities should serve as a cautionary consideration in the interpretation of the submissions that follows. Universities that might realistically have been understood to have experienced similar challenges or opportunities arising from their common circumstances have often not mentioned those challenges; as a result the overview does not provide a complete account of what these might be. Nevertheless, those contextual factors that are explicitly mentioned are grouped and discussed in the sections that follow.

3.2.2 Analysis

As explained in the previous chapter, the names of institutions are not included in this report. Instead, the focus is on the picture of challenges and opportunities that are faced by the higher education system as a whole, bearing in mind the very real contextual and historical differences that exist.

In question 1.1 of the QEP submission template (see the Appendix), institutions were asked to describe the features of their institutional context that are most salient to the success of their students. An inductive analysis was carried out of the responses to this question, resulting in five main categories of features that were raised. In order of the number of responses that fall into each one, these categories are as follows:

- Multiple Campuses (7)
- Institutional culture (6)
- Socio-economic considerations (5)
- Institutional facilities and capacity (5)
- Location (5)

It is clear that these categories are closely related to the history of the institutions outlined in the previous section, as well as the effects of mergers. Although most of the contextual factors mentioned are seen as impeding or militating against student success, some factors identified are ones thatsupport student success.

Multiple campuses

In the submissions, several institutions raised multi-campus structures as a feature that affects student success, without specifying that this presented a challenge. These responses came from universities that have multiple, and often far-flung, campuses inherited from other institutions during the process of mergers that took place in the early years of the 21st century. Only two institutions clearly spelled out the nature of the challenge and its impact on student success, which came across very clearly:

> [our] geographical spread poses specific challenges to student learning, including the equity of student learning and support services across all campuses. In addition, there is a largescale consolidation project, which aims to move faculties onto one campus. This is posing several challenges to teaching and learning primarily associated with the provision of suitable infrastructure to support the requirements of the academic project. Over time, the development of several new buildings will go some way to address these challenges.

And

> Factors that impact on this challenge [improving success rates] are the geographical distance between the campuses, as well as the different histories and developmental phases of the institutions from which the merged University was formed. While substantial progress has been made in promoting the equity and standards of academic provision, further attention needs to be paid to the conditions, in terms of institutional policies, processes, structures and systems that will ensure a consistent, high quality learning environment for all students.Specific challenges include the institutional planning, coordination and monitoring of activities across campuses, based on effective consultation between responsible staff members and units.

Although the mergers of institutions took place more than a decade ago, differences in infrastructure at many of the merging institutions, as well as large distances between some of the campuses, will require more time and resources for equitable facilities and educational offerings across campuses to be achieved.

Institutional culture

Whatever institutional cultures universities have, some of which might have been inherited through being merged with others, it is possible that some aspects of these cultures might militate against the various, and often difficult, steps that need to be taken to improve student success rates. An unmerged, traditional university reported as follows, for instance:

> One of our greatest challenges relates to institutional culture. Teaching and learning, and more particularly the assumptions that underpin teaching and learning practices, can be understood to be profoundly cultural although dominant understandings tend to construct these as 'neutral'. It therefore becomes a priority for academic teachers to be able to appreciate the diverse array of understandings and practices which

> students bring to their learning, for them to be able to challenge, in constructive ways, those understandings and practices that are not productive for academic learning and to be able to build on those which are productive.

A formerly Afrikaans-speaking university noted a similar challenge:

> In many respects the [University] is emblematic of two apparently different sets of problems in South African higher education: a conservative and difficult-to-transform intellectual and institutional culture and a growing number of students who struggle in the transition to university education.

A University of Technology (UoT), formed from a merger, on the other hand, reported that

> In addition, there is an over-reliance on part-time lecturers, with the majority of academic staff members being either part-time or temporary appointments. This has implications for the quality of the academic offering and has a negative impact on student success.

So while a university of long-standing faces the need to address "ways of thinking and doing" when it comes to teaching and learning, a new university is faced with the challenge of having insufficient funds to deal with large numbers of under-prepared students and so resorts to hiring part-time teaching staff (which saves on salaries and normal employment benefits).

A comprehensive university finds itself in a similar position:

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

A traditional university with a strong research focus, in different mode, indicates that its primary institutional culture is that of

> a research-intensive university located in the heart of [a large city], a dynamic, metropolitan, world-class African city,

Institutional cultures, then, can be positive; yet, even for institutions with very different histories and current roles and responsibilities, institutional cultures are certainly not neutral and can operate in ways that create difficulties and challenges for student success.

Socio-economic considerations

Poverty, or near-poverty, has always generated associated disadvantages. If a family subsists on an income below a reasonable survival rate, then health, access to important (or any useful) information, and educational challenges follow. And so it is in the current system of post-school education, which aims at being socially just in order to promote broader, ongoing social justice. A school-leaver from a poor family who does not expect a good Grade 12 result, and/or does not know about how to apply timeously for entrance to a university, but who then achieves an entry-level result, is disadvantaged by having to make a late application (if one is available at all) and, if accepted, might for that and other reasons, arrive late and miss important orientation

and support sessions. That, then, becomes just one scenario that can launch a learning trajectory that will lead to learning challenges, and possible departure from the university, for a variety of reasons. Here is what one UoT explained:

> Lack of finance, lower NSC pass marks and the perceived desirability of other regional universities, means that [we are] dealing with large numbers of applicants who arrive late for admissions and are still waiting to register, long after classes have commenced.

While other UoTs report as follows:

> In terms of its student population, the 2013 [our] poverty profile shows that 84% of the students can be classified as poor, and 64% of these as belonging to the poorest of the poor.
>
> The student racial profile is 92.9% black and 5.7% white, while the gender profile is 51% female and 49% male. The majority of our students are first generation students. A key factor affecting student success is their academic under-preparedness in the transition from secondary to higher education.
>
> [We are] agonizingly aware that having a good Grade 12 pass is not necessarily a guarantee that a student would do well at university.
>
> For [us], one of the most important features of [our] institutional context for student success has to do with the socio-economic and educational backgrounds of the majority of students. The majority of [our] students come from extremely poor and educationally disadvantaged backgrounds thus bringing with them into their studies an associated set of teaching and learning challenges for the institution.

On the other hand, there are institutions that are able to report as follows:

> One of the most significant contributions to student success at [our university] is the quality of [our] students. In 2012 67% of the first time entering intake had achieved notional A or B matric aggregates. The rigour of [our] selection and admissions processes ensures that [we] compete for the most talented students in the country while striving for a diverse intake across all programmes

In other words, socio-economic status, financial need and preparedness for post-school education remain (as they were) major challenges when it comes to implementing well, and intelligently, programmes to enhance student success. In this regard, a tally of UoTs and comprehensive universities shows that most have proportions of students who fall into low social economic status (SES) groups that exceed 75%.

Institutional facilities and capacity

Excellent staff, first-rate programmes devoted to student success, and a positive institutional culture are all important (even essential) in improving retention rates and student achievements. But if an institution lacks important facilities (e.g. laboratories, suitable classrooms and lecture theatres) and capacity, the raft of advantages can easily be destabilised. A typical response in this regard is that

> [we] are acutely aware of the challenges we face with respect to the provision of quality infrastructure for teaching and learning. The infrastructure development project is underway and we envisage that improvements will be evident in the next two years, especially with respect to teaching-learning spaces, expanded internet access and increasing student residences.

And, again:

> … enrolments at the University grew from around 5 000 students in the first decade of its existence – for which the infrastructure was barely adequate – to about 15 000 during the first decade of democracy, when the massification of higher education was actively pursued. Unfortunately, infrastructure development and the recruitment of professional teaching and research staff failed to keep pace with the growth in student numbers. Although massive investments in infrastructure have been made over the past five years, the University still lacks sufficient infrastructure, especially for the delivery of quality teaching to large classes.

Much attention and funding have been devoted to this problem, but it remains a serious constraint for many campuses and their instructional homes.

Location

The location of an institution is clearly a critical piece in the puzzle when it comes to putting together the framework for student success. An institution in a large metropolitan area that can readily draw on financial, cultural and social resources of the kind that will be supportive of and congenial to students has advantages literally on its doorstep; an institution in a deprived rural area, lacking in resources and student accommodation conducive to study has, in effect, none. On the other hand, students in a rural area may be safer, be less exposed to drugs and crime and more likely to live close to the university so not have to commute for hours. These are stereotypes, of course, but here is how some institutions responded:

> The University is based in a remote rural area and recruits its students mainly from historically disadvantaged rural backgrounds where schooling is poor. At times the university has to wait until other universities have closed admission in order to enrol those students who did not get accepted at their universities of choice. In addition, the university faces the challenge of recruiting and retaining staff in competition with urban and more established universities.

> The rural setting of the main campus of the university has brought both advantages and disadvantages to the University and its students over the years. On the positive side, the rural location has stimulated connections with local communities & the growth of community engagement in academic programmes. On the other hand, the rural situation of the campus of the University has resulted in a shortage of student and staff accommodation close to the university. Fewer than one third of the current enrolment of 16,400 students can be accommodated in university residences on campus.

Then, again:

> … we believe the small size of the town in which the University is located is, in many ways, also a contributor to [student] success. We have noted the proportion of students accommodated in the residential system. Those living in other accommodation, even when that accommodation is in the poorer areas of the town, generally have comparatively short distances to cover to get to campus. In most cases, students can walk to lectures from their accommodation. This means that the cost and inconvenience of travel is not a problem for the great majority of students. Nonetheless, although the University enjoys some of the best success rates in the country, only 34% of its students graduate in regulation time.

3.2.3 An overview and conclusion

The contextual factors identified in the institutional submissions as having a bearing (primarily, but not solely, negative) on student success must be taken seriously. The main contextual challenges that were identified are multiple campuses, institutional cultures, socio-economic considerations (including students' financial challenges, school-leaving results, and late arrivals amongst first-year students for the first academic term), institutional facilities and capacity and location. These are neither surprising nor unexpected, seen in the light of the ways in which the South African post school/higher education landscape has developed through remarkably varying socio-economic and ideological conditions over more than 180 years.

Social and economic differentials that approach the worst in the world[5], a history of homelands and geographical dispersal, ethnic and gender discrimination and financial differentiation have taken their toll on South Africa's higher education institutions. That there are Acts of Parliament and systems in place to overcome at least some of these contextual issues we have inherited is encouraging. But to fail to take them into account as the country aims for student success would be, at the very least, short-sighted.

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[5] The Gini coefficient, a measure of inequality in income distribution, for South Africa is one of the highest in the world (http://data.worldbank.org/indicator/SI.POV.GINI)

4. FOCUS AREA 1: ENHANCING ACADEMICS AS TEACHERS

Including professional development, reward and recognition, workload, conditions of service and performance appraisal.

In any education system, the quality of the teachers profoundly affects the quality of student learning. In addition to disciplinary expertise, academics, in their role as teachers, need skills in pedagogy, curriculum development and assessment, as well as a number of other skills and attributes. In many universities, there are limited opportunities and incentives for university teachers to acquire such skills. On the contrary, university reward and promotion criteria often act as disincentives for academics to put time and energy into developing teaching skills, since research output is often the main criterion. Workload models may underestimate the time required to undertake quality teaching, and conditions of service, including serial, short-term contract appointments, may hinder young academics from acquiring teaching skills. Performance appraisals may not require evidence of good teaching.

4.1 GLOBAL AND LOCAL ISSUES AND TRENDS RELATED TO FOCUS AREA 1

4.1.1 Introduction

Institutions of higher education are tasked with enhancing academic staff for their role as teachers as a measure for enhancing their students' learning; this is the area of interest for the first focus area of the Quality Enhancement Project. Here we will provide a context by looking at how such enhancement is carried out both in South Africa and internationally and how it has developed, drawing on the scholarly literature. University reward and promotion criteria have often acted as disincentives for academics to put time and energy into developing their teaching, since research output was often the main criterion. This has changed internationally since the massification of higher education, and in South Africa in particular with its particular educational legacy. Workload models, performance appraisal practices and contractual conditions that neglect the teaching aspect of academic positions have all militated against young entrants to the academy putting time and effort into developing teaching skills.

In 2013 the South African government approved a White Paper, *Building an expanded, effective and integrated post-school system* (DHET 2013), which states that, "A focused renewal and expansion of the academic profession is vital for the long-term sustainability of high-quality public higher education in South Africa" (p36), and, among other things draws up a programme of measures that can accomplish this. There are two measures of direct relevance to this focus area: "Supporting the development of lecturers' teaching skills. While this is best done within disciplines, and therefore requires mentoring and co-teaching, academics can also benefit from opportunities to examine and develop their teaching practice on an ongoing basis", and "The development of appropriate systems to better support and reward teaching in universities." These two aims speak directly to Focus Area 1.

In this introduction we will look at ways in which enhancing academics as teachers can be supported in five senses: providing activities of professional development, instituting appropriate conditions of working, monitoring and balancing academic workload, performance appraisal, and recognising and rewarding good teaching, by referring to the national and international literature. It is not a comprehensive, systematic literature review, but rather an overview for the purpose of contextualisation.

4.1.2 The character of professional development

Activities that are intended to support teaching and learning in the university can go under different names, bringing focus onto different aspects of the needs and ambitions of the institution: instructional development, faculty development, educational development, academic development or professional development. In this section we will focus on *professional* development, which aims to arm the teacher with ways of understanding and ways of acting to support their students' learning in a multitude of ways. Elton (2000) refers to a distinction between development aimed at training for a craft and for a profession, where the former addresses doing given things in the right way, more suitable for induction to teaching for new academics, and the latter to asking questions such as "Are we doing the right things?", which should engage more experienced staff. The latter can be considered as professional training, "at a level that would be considered appropriate for training in any other field, if provided by a university" (p422).

Moves to improve teaching in higher education, intended to right earlier shortcomings and in the face of massification and social expectations, have developed enormously over the past 40 years and globally, as summarised by Gibbs (2013). He writes, from the UK context:

> In the mid 1970s, an enterprise involving perhaps 30 people in the whole of the UK, mostly part-time, has become an enormous enterprise involving thousands of people and well over £100m a year of investment. Similar growth, in scale and complexity, has been experienced in a number of countries, though it often takes different forms in different contexts. … [T]here have also been sweeping changes over time in what is seen as important, what conceptual underpinnings are fashionable, in the extent of 'professionalism', in scholarly pretensions and in the organisational position of educational development (p 4).

He identifies a large number of sorts of activity that are intended to develop teaching and learning at a university, including developing individual teachers, developing groups of teachers, developing learning environments, developing the institution, developing students, developing quality assurance systems, undertaking educational evaluation, and undertaking educational research, or educational development research, and supporting the scholarship of teaching and learning across the institution. He also identifies change in focus over the 40 years he writes of: from individual teachers to course teams and leadership, from teaching to learning, from simple tactics to complex and aligned tactics, and from quality assurance to quality enhancement.

South Africa finds itself at the forefront of this process of change, having invested heavily in supporting students' experience of higher education in several ways, including through moves to develop teaching. The institutions of higher education have been able to build on global experience and move directly to the implementation of coherent programmes of professional development of teachers. They have moved rapidly to implement quality enhancement processes and to problematise the environments within which teaching and learning are able to take place, as evidenced by this Quality Enhancement Project. They have been able to initiate scholarship of teaching and learning as a form of professional development, while it has taken decades elsewhere.

Programmes of professional development are in place in South Africa that not only build on previous and international experience but also, and more importantly, build on national experience and research. For example, Vorster and Quinn describe such a programme, grounded in four axiological principles while aiming at the same time "to foreground and disrupt academics' everyday common-sense notions of teaching and learning, in order to create spaces for them to develop theoretically sound understandings and practices in relation to teaching and learning in their disciplines" (Vorster & Quinn 2012, p52). Such a potentially inflammatory aim demands, of ethical necessity, the adoption of clear values, which include: assisting lecturers to fulfil their moral obligation to ensure student success; acknowledging and respecting the disciplinary differences and expertise of programme participants; encouraging the critical interrogation of participants' dual roles as knowledge producer and teacher; and supporting their critical engagement with theory and practice of higher education (p56-57). The authors echo Elton when they write that "teaching, in our view, is not only the exercise of a set

of skills and techniques, it is a scholarly activity", and describing that their curriculum for professional development "faces 'both ways' – to the emerging field of higher education studies (HES) and to lecturers' work as teachers" (p52).

Such programmes are accredited as scholarly learning, again echoing Elton's declaration that professional development should be at a "level that would be considered appropriate for training in any other field, if provided by a university" (Elton, 2000, p422). That there remain challenges for South African higher education and the professional development of its teachers is brought to light in a recent study of educational development in South Africa (Leibowitz, Bozalek, van Schalkwyk & Winberg, 2015). They ask the question: "What structural and cultural factors appear to constrain or enable quality teaching and the professional development of academics in their teaching roles?" (p327), which they tackled by studying documents and interviews from eight institutions of varying historical character. They identify features that

> pertain to the structural and cultural domains, as well as the properties of individual agents. They play themselves out in unique and unpredictable constellations in each context, and at different times, due to the relationship or interplay between the various factors or properties.

They conclude that:

> Despite all the caveats, the nuances and the depiction of multiple outcomes, it seems clear that socio-economic features, including geography and history, play a strong role in influencing quality teaching and participation in professional development. (p328)

4.1.3 The activities and structures of professional development

The activities that comprise professional development might be categorised according to the position and experience of the academic staff involved, forming three broad categories:

1. induction on entering the profession, with focus on the teaching aspects of the profession;
2. continued professional development activities that support increased responsibilities as a teacher; and
3. scholarly engagement with teaching and learning.

These can be aligned with the "core characteristics" of professional development which are identified in a broad empirical review of the literature by Amundsen and Wilson (2012), focussing on the activities which comprise them in terms of their "intention or goal, the processes and activities planned to realize the intention or goal, and the evidence collected to demonstrate success in achieving the intention or goal." A framework with six "clusters of practice" emerged from their analysis: "skill, method, reflection, disciplinary, institutional, and action research or inquiry" (p92). These can be seen as extending from the basic and individ-

ual (skill, method, reflection), to the broader (disciplinary, institutional), to the scholarly (action research or inquiry), a progression that needs support from within the university and a functional professional development strategy. The question arises: what structures can such a strategy embody?

First, the initial stage of professional development, the induction phase, of such a strategy can be illuminated through a Dutch study where two views on induction into teaching in higher education have been identified (Van den Bos & Brouwer, 2014). The *linear* mode favours a direct attempt to move teachers' conceptions of teaching away from traditional teacher-centred transmission models towards student-centred conceptual change models since they are associated with higher quality of student learning outcomes (e.g. Trigwell, Prosser & Waterhouse, 1999). The *interactive* mode gives precedence to experimentation with teaching approaches so that teachers have the opportunity to develop their own conceptualisations (e.g. Devlin, 2006). Both of these can come under Elton's header of professional training, whether conceptual or experiential (Elton, 2000), and both of them can be seen as disrupting everyday notions of teaching and learning to "create spaces for them to develop theoretically sound understandings and practices in relation to teaching and learning" as Vorster and Quin (2012) have it. Van den Bos and Brouwer studied entrants to Dutch institutions in a program designed to embrace both of these approaches. "In short, we tried to move the conceptions of our participants in a more student-directed direction, but at the same time we encouraged and supported every participant to search for what works for them in their own particular teaching practice" (p775). As a result, among other things, they identified three key principles for enhancing their own understanding and practices as teachers: *experiencing*, both as students themselves within the course and as teachers in their own practices; *experimentation* by trying out different pedagogical techniques; and *observation* by studying themselves and their peers on video.

Their result is echoed by a study from New Zealand, where belonging to a community of teaching practice is held as essential for developing teaching practice (Viskovic, 2006), irrespective of the structures the new teachers found themselves in. Trowler and Knight (2000) have theorised induction into new teaching contexts with recourse to activity system theory (e.g. Engeström, 2001) and the work on communities of practice (e.g. Wenger, 1998):

> The main conclusion we reached is that what the higher education institution does about the induction of NAAs (new academic appointees) is far less significant than what happens in the activity systems and in the cultures created in communities of practice. In essence, induction is about the discourses and practices of the teams and departments that the NAA is trying to join" (p28).

What these studies, and others like them, point to is that professional development is less successful at the individual and intellectual level, but needs to be tackled primarily at the level of culture and practice, and that

entrants need to feel empowered to enter these cultures and practices. Two recent and related doctoral theses from Sweden (Mårtensson, 2014; Roxå, 2014), and the numerous articles that comprise the theses focus on academic development at the meso-level of the university, the level that lies between the individual and the department, that of networks of individuals and groups, or what they call microcultures. Then, professional development practices need to support initial induction into such microcultures with related interests and practices, and ongoing development activities needs to aim at specific aspects of these practices, maintaining the networks and groupings. There is also the need to involve heads of departments and others in managerial positions in these conversations, networks and groupings, with professional development working "middle-out" (Trowler, Saunders & Knight, 2004).

Moving on to continuing professional development, such pedagogical themes as curriculum development, assessment, evaluation, teaching large classes and group work are taken up, as are student-related themes such as language and identity development, in workshops and courses, even though these might have been taken up at the induction phase. These can provide lecturers with the official and scholarly knowledge they need, and challenge and inspire them, but it is still the networks of the meso-level that can apply the knowledge and make sense of issues and problems that teachers encounter in their day-to-day practice. Roxå and Mårtensson (2009) have surveyed teachers at a research-intensive university in Sweden to investigate the conversations that take place "behind the scenes" of professional development, in which private, trustful and intellectually intriguing conversations are reported as significant for understanding teaching and learning. They write:

> Our findings clearly indicate that teachers have sincere conversations about teaching with a few specific colleagues. The data also indicates that some features of these conversations are critical: they are permeated by trust, they have an intellectual component of problem solving or idea testing, and they are private and involve only a few distinct individuals. In relation to conversations in the larger social context, there are indications in our data that those conversations are less sincere and less personal" (p554).

This speaks for professional development in a faculty or disciplinary, or even departmental, context, so that novices, established staff and heads of departments can be brought into the same conversations, imbued with trust and respect.

A picture now emerges of professional development to support academics as teachers, whether new or senior in the profession, taking place in a supportive socio-cultural climate across the institution, as well as in the workshops and courses on offer from centres established for the purpose. While such establishments must act as instigators of initiatives and activities related directly to teaching development, and as repositories of relevant knowledge, experience and expertise, the ways in which such knowledge comes to be understood and put into practice by the academics depends on the existence and the maintenance of trusted communities. Here

there can be ongoing conversations about both doing the right thing as given and questioning what the right thing might be, in line with Elton.

But we cannot afford to ignore the content and thrust of initiatives, activities and conversations that are intended to facilitate professional development, or to ignore their coherence if a culture is to be nurtured where communities and networks can communicate with one another. In contrast to texts for development of teaching as a craft, with their emphasis on skills and methods (e.g. McKeachie, 1978; Gibbs, Habeshaw & Habeshaw, 1984; Becker & Denicolo, 2013), research findings on the nature of student learning in different disciplines have become very influential in professional development, in particular the work related to constructivism (e.g. Biggs, 2011) and phenomenography (e.g. Prosser & Trigwell, 1999; Ramsden, 2003; Bowden & Marton, 2000). In such work emphasis is placed on the teacher coming to understand the variation of ways in which students approach their learning tasks and the ways in which they comprehend the message they find there, then acting to support quality learning. It has been found empirically and supported theoretically across subject areas and tasks, that tendencies to deep or surface approaches to learning can be discerned, which are linked to the quality of the learning outcome (e.g. Marton, Hounsell & Entwistle, 1997; Marton & Booth, 1997). Literature that supplements such research findings with consideration of specific issues of teaching — course design, assessment, evaluation, problem-based learning, web-based learning and so on — now form the backbone of the knowledge and expertise that informs professional development (e.g. Light, Calkins & Cox, 2009; Fry, Ketteridge & Marshall, 2009; Shabani & Okebukola, in press).

One generally agreed attribute of a profession is that the practitioners produce the knowledge base on which their practices rest. Many of the research findings that underpin professional development were derived from educational research into higher education (e.g. Marton & Säljö, 1976; Ramsden & Entwistle, 1981; Biggs, 1996; Barnett 1997) but for over two decades there has been a rapid increase in publication in journals and conferences (e.g. International Journal for Academic Development, Teaching in Higher Education, Higher Education Research and Development, HERDSA in the Australasian area, SoTL Commons in USA and ICED internationally) where research from professional developers, practising teachers and educational researchers is to be found.

Pitso (2013) problematises the relation between the SoTL on the one hand and scholarly teaching on the other, defined as

> teaching grounded in critical reflection using systematically and strategically gathered evidence, related and explained by well-reasoned theory and philosophical understanding, with the goal of maximising learning through effective teaching (Potter & Kustra, 2011).

In a study of the attention paid to SoTL by seven South African universities he sounds a warning, that SoTL work that is conducted for the personal interest and reward of the academic is not likely to transform into scholarly teaching, concluding "it can reasonably be concluded that the impact of SoTL on teaching and learning remains generally weak though hopeful" (Pitso, 2013, p206). SoTL work that does intend to impact on student learning needs to have that intention in focus from the outset, producing knowledge in the Mode 2 form proposed by Gibbons, Limoges, Nowotny, Schwartzman, Scott and Trow (1994), which is oriented towards solving specific problems by academics from a number of disciplines and favouring dissemination through practice as well as by publication.

4.1.4 Recognising and rewarding excellence in teaching

The recognition of good teaching and its reward has traditionally taken second place — if placed at all — in contrast to research. But with the changing demography of higher education student populations across the world, the rising costs to those students, and a concomitant demand for good value, both institutions and governments have taken the improvement of teaching and learning seriously. As mentioned earlier, the South African White Paper of 2013 articulates one of its aims as, "The development of appropriate systems to better support and reward teaching in universities." (DHET, p36). The rise of SoTL in the US came about as one response, with the pioneering work of Shulman (1987) and Boyer (1990) at the Carnegie Institute in the lead. In the UK and Australia focus was put on quality of teaching (Chalmers, 2011), leading in England to the establishment of the Higher Education Academy, which offers numerous development activities, from workshops and conferences to lengthy accredited courses and fellowships. In England and Northern Ireland 74 Centres of Excellence in Teaching and Learning (CETLs), sited at different institutions across the country and specialising in specific subject areas or specific areas of pedagogy, were founded, with a remit to both develop education in those disciplines and to provide rewardsin the form of funding for associated studies.

More recently, mandatory training for university teachers prior to acquiring tenure has been introduced, for example in Sweden (Lindberg-Sand & Sonesson, 2008) and the Netherlands (de Jong, Mulder, Deneer & von Keulen, 2014). Such initiatives facilitate the conversations that occur in the networks and groups at the meso-level culture of the institutions, referred to earlier. Pedagogical portfolios that are internally and externally evaluated have become standard documents in many academics' lives and are significant in appointment and

promotion processes. In Swedish universities the concept of Pedagogical Academies has grown, where staff apply for membership and put their teaching experience and prowess through a rigorous vetting process (Olsson & Roxå, 2013); the consequences at one faculty include a rise in income both for the individual who is accepted and for the department where he or she works.

Vardi and Quin (2011) report that in Australia, rewards in the form of grants, excellence awards and fellowships are given nationally by the Australian Learning and Teaching Council, thereby establishing "benchmarks to which academic staff may aspire" in terms of "scholarly activities and service innovations that have influenced and enhanced learning and teaching". They go on to claim that:

> This national focus on teaching and its scholarship has significantly impacted on universities and how they manage and reward staff. All Australian universities, including universities that describe themselves as research intensive, now provide promotional opportunities based on excellence in teaching and a number of Australian universities now recognize teaching as a valid career path (p40).

4.1.5 Conditions of service

There are issues of governance that directly or indirectly affect the support of academics as teachers, some of which are implied in the discussions so far. To implement a Pedagogical Academy, for instance, demands that a Vice-Chancellor (VC) or Dean has the authority to allocate funds to it and that the relevant institutional structures are prepared to support the move. More significantly, as universities have diversified their programmes of education, they have also diversified their academic staff to include professionals from the world outside the academy who, for example, teach specialised courses, mentor students and supervise work placements, often on a part-time basis, leading to a diversification of identity among the staff (Whitchurch & Gordon, 2011).

> Often such identities are derived from practice-based disciplines, which involve linkages 'beyond the confines of the university' (Clegg, 2008, p341), as well as increasing numbers of staff having fractional and short-term contracts, and associates from the public and private sectors who assist with teaching and research" (Whitchurch, 2012). Support as teachers is not necessarily geared to the needs or opportunities of these academics, as they come and go in the institution. At the same time, conditions of service vary across the academic population as the tendency for concentration on either research or teaching increases and as academic staff take on increased administrative roles. "Such changes have stimulated an intermingling of academic and professional activity within traditional organisational structures (Whitchurch & Gordon, 2011, p69).

4.1.6 Workload

Intertwined with the conditions of service academics work under is the issue of workload – its constitution and its limitations. Balance has to be sought between the roles of the individual—teaching, research, community service andadministration—and the needs and expectations of the institution. Balance for the individual between working life and the world outside is also necessary for the well-being of the institution as

well as that of the individual. Additionally, the introduction of alternative pedagogical models–for example, workplace integrated learning where teachers spend time establishing and mentoring collaborations (Clark, Rowe, Cantori, Bilgin & Mukuri, 2014), and blended on-site and distance learning where staff develop new courses that focus on student learning (Laurillard, Boyle, Bradley, Ljubojevic, Neumann & Pearce, 2008) – brings the issue of workload into focus as academics become designers, negotiators, mentors and supervisors as well as teachers, involving a spread of workplaces and working hours. The problem is that current models do not accurately capture the tasks each individual academic is expected to undertake, as well as the required time to engage with these tasks.

Discussing a study of the implementation of models of workload allocation in New Zealand, Houston, Meyer and Paewai (2006) observe the complexity of the task:

> The duties and even the timing of the academic year for faculty within the same university will vary considerably, such that any attempt to standardise workload expectations is fraught by different realities. […] Clearly, managing the workloads of academic staff whilst respecting the academic culture is an exercise in balancing the complex and variable. (p27)

Work coming from Australia, where unions and institutions periodically reach decisions on conditions of work, in the face of rising student numbers and limited resources, suggests that negotiated limits on workloads cannot cope with the diversity of roles played by university teachers. Kenny and Fluck (2014) state that "With no defined hours of work, no overtime payments and no time off in lieu, coupled with reduced job security, academics are clearly vulnerable to exploitation" (p586) and ask "in this context, there is a real need for effective processes to allocate academic work in a fair and reasonable manner. The key question is how should this be done and who will determine what is fair and reasonable?" This is addressed from the standpoint of practical ethics by Davson-Galle (2010) who identifies two sets of guiding principles that can instigate discussion over workload models: Substantive principles (comprehensiveness, equity, skewing and feasibility) and procedural principles (collegiality, manageability, challengeability and transparency), addressing the questions of what is to be allocated and how it is to be allocated, respectively, with their concomitant tensions. Kenny, Fluck and Jetson (2012) describe a case of developing and implementing a workload allocation model in an "evidence based process of consultation with academic staff and benchmarking against existing models … to identify the range of activities in academic work, develop clear definitions, consistent terminology and realistic associated time allocations" with allowances for Davson-Galle's skewing (or diversification for differing situations) and challengeability (the internal resolution of grievances). They report, however, that after being initially accepted by staff, very rapidly "political and economic factors within the Faculty and University again threaten the implementation of the model" (p59). From the point of view of supporting academics as teachers, this is

a parlous state, where those with a vocational approach to teaching are likely to neglect research activities, or even professional development activities, in order to carry out their teaching in a reasonable amount of time. We can conclude that the issue of workload in academia is fraught with difficulties and problems, bringing serious challenges to policy makers and administrators.

4.1.7 Performance appraisal

To the extent that performance appraisal of academic staff involves their teaching, it is often based on the evaluation reports of students which give limited basis for improvement with any lasting pedagogical enhancement. Nevertheless, such evaluations form a substantial part of any teacher's pedagogical portfolio that can be proffered for appraisal. Another source of evaluation for evaluating teaching from the point of view of student learning is the Course Experience Questionnaire (Ramsden, 1991), which is grounded in a theoretical view of learning and teaching related to a large-scale study of students and their perceptions of the learning environment (Ramsden & Entwistle, 1981), and which acts as a performance indicator at the departmental, programme level. The questionnaire comprises a number of statements which are related to students' perceptions of one of five factors found to favour the adoption of deep approaches to learning: good teaching, clear goals and standards, appropriate assessment, appropriate workload, and an emphasis on independence (Ramsden, 1991, p136). While this is directed to the institutional level of student experience, individual teachers involved are able to use the outcomes in support of their teaching quality. The questionnaire has been modified in various ways to take into account different foci of teaching. The CEQ has been used extensively at a national level in both Australia and England to benchmark student satisfaction with their learning and teaching experience across institutions and programmes of study.

A third way in which teachers can support their performance claims is through peer review, which can be understood as: "Peer review of teachingin universities involves academic colleagues giving and receiving feedback on their teaching practices and its effectiveness in promoting student learning" (Harris, Farrell, Bell, Devlin, & James, 2008). In an Australian handbook for institutions planning to implement professional development through peer review of teaching, grounded in a number of case studies, these authors point out:

> While often equated with classroom observation, peer review can cover the full range of teaching activities and environments including assessment, the development of teaching and learning resources, curriculum design, online teaching, clinical and other field-based teaching. This further complements systematically collected evaluation from students, which tends to focus on their experience in the classroom.

Such peer review, far from being the traditional judgmental and administrative exercise becomes "an integral element of the scholarship of teaching (p5).

In an extensive review of the literature Thomas, Chie, Abraham, Raj and Beh (2014) have analysed research in a SWOT matrix, weighing up Strengths, Weaknesses, Opportunities and Threats of peer review of teaching, and come to the conclusion that "Having PRT in higher education can encourage a deeper understanding on the role of peers as helpers who provide the "critical energy" needed for change (Barnett, 1997) and contribute to their colleagues' professional development" (Thomas et al., p154). We are now back at our earlier observation, that there is a strong socio-cultural theme to professional development, but we should not forget Elton's claim that *professional* development asks if the right things are being done and not only judging if given things are being done in the right way; without the strong and coherent conceptual framework of learning and teaching, peer review threatens to bring collegiate discussion to the level of teaching as a craft.

4.1.8 Conclusion

In this section we have dipped into the literature on a number of aspects of offering support to academics as teachers, and that raises questions on how the quality of the support can be enhanced. What we find above all is that an institution-wide strategy is likely to lead to the best and most long-lasting results; that even isolated initiatives need to be seen in the bigger picture of the development of the profession within the institution. An understanding of the social aspects of the life of a university teacher – as witnessed by the work of, for example, van den Bos and Brouwer (2012), Roxå and Mårtensson (2009), and Thomas et al. (2014) – needs to be built into the overall scheme of professional development. A coherent theoretical foundation is necessary to facilitate professional conversations while acknowledging that insights from other theoretical and practical approaches can illuminate specific issues. Professional development demands professional knowledge building, and that can only come from both lecturers and professional developers problematising and rigorously investigating issues that arise in their practices, and, as Pitso (2013) points out, implementing change and disseminating the results locally and even on a wider scale. Performance appraisal needs to be built into the overall strategy of professional development, so that on the one hand conversations on planning, execution and evaluation of teaching, and on the other hand recognition and reward of perceived excellent teaching, are aligned.

Tensions can and do arise when such an implementation of professional development is considered to be in place, and these have much to do with time. Workload issues arise for the individual when research is seen to be weighted more heavily in career advancement than teaching: Where is time allocated to activities of professional development and how can they be fitted into an already fragmented working day, month and year? And workload issues arise for the department or institution when fairness and outcomes of the distribution of work are scrutinised and when staff on different forms of contract are treated differently. Again, an

institution-wide strategy with clear guidelines and the transparency that comes from offering clear monitoring and evidence collection is needed.

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4.2 SUCCESSFUL ACTIVITIES

Institutions were asked to identify what activities they currently have in place related to focus area 1, enhancing academics as teachers, that are successful. They were also asked what evidence they use to conclude that the activities are successful. In this section a summary of the most common practices that institutions said were successful is presented. In addition, examples of activities that are noteworthy but not common are described. The types of evidence for success put forward are discussed in chapter 7.

4.2.1 Professional development

Professional development in higher education is a broad term with many different connotations. Continuous professional development (CPD), which often takes the form of ongoing, structured learning opportunities for qualified professionals, is well known and widely practiced in professions such as medicine and engineering.

In some fields professionals are required to earn a minimum number of CPD points within a certain time frame in order to retain their professional registration. Among academics the concept is less well known or clearly defined. An activity such as presenting a paper at a conference is sometimes considered a professional development activity, one which typically relates to an academic's role as researcher. However, the use of the term "professional development" in higher education more often refers to the development of academics in their role as university teachers. One institution provided the following understanding:

> 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.

In this section professional development initiatives have been grouped into training, which includes structured learning programmes, workshops and seminars, conferences and symposia, peer learning and teaching-related research. Before discussing specific professional development activities, it is useful to first discuss the role of academic development staff, as they are often the ones responsible for running or overseeing such activities at universities.

Role of a centralised teaching and learning division

Nearly all universities indicate that they have a centralised structure responsible for promoting and developing effective teaching and learning. The name, location and functions of these divisions differ, but the majority have some level of engagement with academics in enhancing their capacity to be good university teachers. For the sake of consistency, in this document these structures will be referred to as "divisions of teaching and learning".

There is considerable variation among the divisions in the extent to which their staff are viewed as academics within the discipline of higher education, and therefore participate in teaching and research. At about half of the universities, teaching and learning division staff teach formal, post-graduate courses and publish research in accredited journals, while at others the staff are primarily engaged in offering practical support and guidance to academics to improve their teaching approaches, assessment practices and curriculum development capacity. In some universities there are discipline-based academic development staff, who may be part of faculty structures or may be allocated to serve specific faculties while remaining part of the central structure. Such staff are able to engage with academics about discipline-specific teaching and learning issues. One university described a different model in which discipline-specific academics are relieved from some of their departmental teaching duties in order to work part-time as Curriculum Officers (COs).

> COs are a group of ±80 programme specialists, representing 90% of the programmes offered at [the university]. They play a dual role in their departments: subject lecturers and teaching and learning specialists. The DVC:Teaching and Learning provides a budget through which COs receive teaching relief from some duties. This is a successful model for improving teaching and learning as information gained centrally can be rapidly moved out to departments.

Teaching and learning division staff also typically assist academics to develop their competence with technology-enabled learning tools, such as on-line learning management systems, social media and personal response devices ("clickers"), as they are often the ones who keep abreast of developments in the educational use of such tools. Moreover, the teaching and learning division is usuallyresponsible for the centralised learning management system that most universities utilise, albeit to varying extents.

Training

In this document, the term "training" is used to refer to structured, planned educational programmes that extend over more than one day and are designed to address specified learning outcomes. In the institutional submissions three main forms of training related to university teaching were identified: induction or orientation programmes for new academic staff, short courses and formal qualifications.

Induction or orientation

Nearly all universities indicated that they have some form of induction or orientation programme for new academics, although not all indicated whether or not it is compulsory. For the majority of institutions, the programme is short, typically a few days long, and is a once-off activity. At one university, the induction programme is followed up with a "reflection session with new academics 6 months later". A few universities have an induction programme of more extended duration, ranging from several days to several months.This is illustrated in the three quotes below.

> As a practical demonstration of its commitment to nurturing and developing newly appointed academic staff, the University offers an Induction Programme for all new academic staff. The programme takes place every semester and comprises a three-day block seminar and weekly meetings for twelve weeks. The programme explores a variety of topics relating to higher education pedagogy, including student-centred approaches in learning, teaching and assessment strategies, and foregrounds the scholarship of teaching and learning and transformative educational practices. Academics on the programme submit a reflective paper towards the end of the semester. A sharing session is held at the end of the programme where participants present their reflections on their teaching and assessment practices. Comments on the reflective papers and presentations by participants at the Sharing Day indicate the benefit of the programme, especially to newly appointed academic staff.

> Since 2004 over 240 academic staff have participated in the New Academic Practitioners Programme (NAPP) for new full time academics at [the university] with not more than 5 years teaching experience in higher education. The programme aims to induct new academic staff through a holistic programme of professional development. Currently 20 participants per semester participate in a 5-day programme, which includes a 3-day residential retreat and 2x1 day on-campus workshops spread out over a semester. Participation in NAPP is not compulsory, but analysis of the data suggests that there is a reasonable correlation between the number of new academic staff appointments and the number of participants in NAPP with good representation from three faculties and fair representation from the other faculties.
>
> An important advancement made in supporting academics as teacher[s] is the introduction of the University Education Induction Programme (UEIP). This is a mandatory continuous professional development programme (80 hours duration) that is part of the Integrated Talent Management Policy and Procedures implemented in 2012 to enhance the teaching and supervision competences of academics. UEIP is compulsory for all new academic employees and those currently at lecturer level and below. All current senior lecturers and above may be exempted on the basis ofsubmitting a Teaching Portfolio evaluated at 'Strength'…It offers academics modules in four key areas: Assessing Learning; Designing and Evaluating Curricula; Supervising Research; and Teaching and Learning (20 hours per module).

It is interesting to note that in the last quote above supervising research is explicitly included in a programme on university education, effectively providing a bridge across the often perceived divide between teaching and research.

Short courses

A range of short courses are offered at different universities, some of which are stand-alone and others can be combined towards a formal qualification. For several years, the Cape Higher Education Consortium (CHEC) has run a number of short courses for academics from the four Western Cape universities, designed and taught by staff from the four institutions. One of these universities wrote about its involvement as follows:

> CHEC offers nine 'Quality Teaching in Higher Education' (QTHE) short courses. The courses are cooperatively designed, taught and assessed by teaching and learning specialists regionally. Senior [division of teaching and learning] staffconvene the 'Teaching and Learning', 'Curriculum' and 'Assessment' courses. Each course enrols between 30-40 participants who volunteer according to their interests. The courses are well attended by [university] staff. Advertising and payment is dealt with through [the university's] HR Learning Development Office and the CHEC. Participants consistently report on the value of sharing and networking with colleagues from other universities in the region, as well as the benefits of being taught by experts from the different universities. Staff who have attended QTHE courses are interviewed about the impact on their own and others' teaching; there are thus follow up studies on the impact of the course. Participants always evaluate the courses and comment is used for redesign. A group of staff participants and facilitators from the four universities presented on this collaboration at the 2012 and 2013 HELTASA conferences. The QTHE courses led to the development and implementation of the regional Post-graduate Diploma (Higher Education) (Teaching and Learning).

Academic staff at a few universities enrol for short courses offered by other universities, particularly where the university does not have the capacity to run such courses itself. By effectively increasing the audience for the courses, this has supported the development of a critical mass of expertise in a few centres, enabled the provision of high-quality courses to the higher education sector and made possible the appointment of academic staff in higher education at these centres. Short courses cover a range of topics, including teaching and

learning, curriculum design and development and e-learning, but from the submissions it appears that the most popular courses deal with assessment and moderation.

One university offers a short course in which several academics work together on improving an aspect of their teaching.

> The staff development unit in [the division for teaching and learning] has been offering 'The Short Course in Teaching', based on a group consulting model of staff development, since 2008. It uses a combination of weekly meetings, one-to-one consultations, and peer teaching observations over a semester. The groups of not more than 5 participants work together to address an aspect of their teaching practice that they wish to interrogate and improve. The model has worked particularly well in deepening lecturers' pedagogical gaze and the small group has provided a safe space for sharing of strategies to respond to teaching challenges. Participants have provided extremely positive feedback on the effectiveness of this course in assisting them in addressing their teaching challenges in the evaluations of the course.

In a few instances, faculties offer discipline-specific short courses, such as teaching and learning in science, a health science educators course and a problem-based learning facilitators' course.

Formal qualifications

Half of the universities indicated that they offer formal post-graduate qualifications in higher education, including post-graduate diplomas, masters and doctoral degrees, although there is a large variation in the number of enrolments in these programmes.

One university is using the increased emphasis on the need for academics to have PhDs as an opportunity to attract academics to enrol for the PhD in higher education. A consequence of this programme is that a critical mass of discipline-specific higher education researchers is being created.

> In advancing the requirement for all academics to have a PhD as a minimum qualifying requirement at a research-led University, the [teaching and learning] Portfolio has drawn on this initiative to create a critical mass of educational research experts with doctorates across disciplines in the University. To this end a PhD in Higher Education based on the Cohort Model of Supervision was launched in 2011 (12 registered) and a second cohort commenced in 2014 (19 registered). Staff receive tuition fees remission for Masters and PhD studies and are awarded research productivity units upon completion of PhDs.

Another university offers a discipline-specific Postgraduate Diploma in Health Sciences Education.

In the Western Cape, three universities work collaboratively to offer a post-graduate diploma on teaching and learning. One university indicated that it collaborates with an international partner to offer an on-line masters degree.

> Academics are offered the Master's degree in Education (ODL) – a collaborative qualification for University of Maryland University College and [the university] (60 academics are currently enrolled).

As with the short courses, there are arrangements between some universities that do not offer higher education qualifications to be enrolled at other universities where they are offered.

Workshops and seminars

Workshops and seminars are typically stand-alone activities, as opposed to part of a structured learning programme, although they may be part of a series that is offered annually or regularly scheduled, such as a monthly seminar in which different speakers give presentations. On the basis of the institutional submissions it appears that attendance at all, or nearly all, workshops is voluntary.

At a number of universities, workshops are run on a needs basis by teaching and learning division staff. Some workshops focus on specific aspects of teaching, such as teaching large classes, using technology in teaching, course design or online assessment. As stated in one submission,

> While once-off training workshops seem less effective in enhancing teaching than more structured and assessed courses, workshops are effective when they are focused and serve a particular need.

Other workshops are run for a specific purpose, such as those that help potential teaching award winners to construct teaching portfolios, or workshops that help participants prepare conference presentations.

About half of the institutions indicated that they hold university-wide seminars or symposia, which are usually organised by the central teaching and learning division and may be regularly scheduled or ad hoc. They may involve visiting presenters, either national or international. One university offers a biannual series of workshops and seminars designed to build capacity in both academics and academic development staff.

> The programme provides developmental opportunities at two levels. Firstly, it develops lecturers in key areas of teaching and learning, but secondly it provides more in-depth training required for staff developers. By providing [academic development] staff with an opportunity to enhance their skills, particularly with respect to new challenges relating to teaching and learning technology, blended learning and open and distance education, they will be empowered to eventually develop in-house workshops/seminars on these topics.

On occasion a group of universities may work together to bring out an international speaker who then visits each of the universities.

Workshops may be generic and open to any academic, or they may be tailored to specific faculties. Three examples of discipline-based curriculum development are given below.

> Deep engagement in teaching and learning is offered through discipline-based curriculum development workshops facilitated by staff in [the teaching and learning division]….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.
>
> The project adopted the principal idea of Decoding the Disciplines as developed and followed in the History Learning Project at Indiana University, USA. Theoretically the model is based on the large differences in thinking among academic fields. The seven-step decoding process begins with the identification of student learning obstacles or "bottlenecks" by experts in the field. This is an example of a faculty-based initiative that focuses on helping staff to make sense of teaching and learning from a disciplinary perspective.
>
> In the Faculty of Health Sciences there is a strong tradition of curriculum design teams working over several months or more to develop new, or refine existing, courses; and develop integrated, cross disciplinary teaching programmes.Several health sciences staff members have obtained postgraduate qualifications in [the division of teaching and learning] and elsewhere, and have become key resource people that the [faculty] Education Development Unit (EDU) staff call upon to assist with running faculty-wide workshops, or contributing to short courses. More recently, the Postgraduate Diploma in Health Professional Education was developed and implemented by the EDU.

In some faculties, teaching and learning committees or interest groups have been formed that organise regular seminars on topics related to the teaching and learning of the discipline, where "discipline" could be broadly defined at the level of a faculty, such as engineering, or narrowly defined at the level of a department, such as mathematics. The seminars may be presented by group members or by outside speakers from the university or beyond, including people from industry or professional bodies. Other forms of interaction were also noted, such as workshops and on-line discussions. Two examples are shown below.

> …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 Law and Engineering and Built Environment (EBE) Faculties have introduced annual day-long Teaching and Learning Workshops/retreats for all academic staff. The EBE one has been running for the past two years. It provides an opportunity for staff to reflect on their own teaching. The Commerce Faculty established a Commerce Education Group 14 years ago, which organises bi-monthly seminars on educational topics. A high proportion of staff in the Faculty attends the seminars. This is testament to the extent of engagement about teaching in the faculty. In addition the Faculty runs workshops in departments/sections around course design, learning outcomes, assessment, and curriculum alignment.

One university offers three- to five-day workshops twice a year for heads of departments (HODs), with a particular focus on curriculum alignment. The workshops are designed to enable HODs to cascade what they learn into their departments and faculties.

Conferences, symposia, and forums

Conferences, symposia and forums may be university-wide or faculty-based. Nearly one half of the universities indicated that they hold an annual teaching and learning conference or symposium. These conferences are usually designed primarily to afford the university's academics with the opportunity to share their good practices, innovations and teaching-related research with the broader university community, as illustrated by the three quotes below. Typically there are also some nationally, and possibly even internationally, known speakers, in order to provide other perspectives and insights into national and global debates and trends. The quotes below illustrate three variations.

> The University also hosts an annual internal Learning, Teaching and Assessment (LTA) Symposium which affords academic staff the opportunity to reflect on their work as teachers and professionals in their various fields. This is a forum for sharing insights and challenges relating to teaching and learning. In line with the principles of action research and critical reflection, academic staff present papers on the challenges they face as university teachers. Since its inception in 2012, the LTA symposium has featured international and national keynote speakers who have made a significant contribution to scholarly debates about teaching and learning in higher education.

> …the annual [university] Teaching and Learning in Higher Education Conference serves as a platform for academic staff to share research findings, best practices, generate debate and to theorise all aspects of higher education policy and practice.

> The Eduvate Forum, an event that showcases the nominees of the institutional Teaching Excellence and Innovation Awards, is another way of improving internal teaching practices. Every second year [the university] arranges a teaching, learning and student success conference: the first was on the Foundations of Excellence (2011) and the second on Re-visioning Student Success (2013).

About half of the universities organise annual symposia on issues related to extended degree programmes. In the Western Cape there is an annual regional colloquium on extended curriculum programmes.

Peer learning

The peer learning activities described in the submissions consist mostly of voluntary group meetings. In many cases, peer learning activities are discipline-based, either at faculty or departmental level. Two examples are shown below.

> Many faculties and departments have "brown bag" lunch conversations or "teaching mornings" where academic colleagues discuss their innovative teaching practices on a regular basis.

> Brown bag lunches, a well-attended monthly meeting in Health Sciences, Economic and Management Science and Veterinary Science, offer creative opportunities to share good teaching practice. It is important to note that each Faculty has its own culture and associated practices, and that it is appropriate for each faculty to meet its needs in its own way. Lecturers find that discussions at Faculty teaching and learning committees also provide opportunities to learn about teaching, student engagement and assessment.

A few universities referred to structured mentoring as a means of promoting professional development, as shown in the two examples below.

> 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 [the teaching and learning division]. 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.

> …two kinds of staff development schemes have been initiated, Tag Teams and Mentorships. The idea of tag teams is that two staff members work together for a period of time observing one another's teaching and providing feedback. There have been eight tag teams to date. Currently there are eight academic staff members who are acting in the capacity of mentor, and eleven members of staff who are being mentored. The number of academic staff involved in the tag team and mentor initiatives shows that these have been welcomed in an environment often known to be competitive and isolated. The initiatives have opened up a space to engage with vulnerabilities around teaching and learning, as well as providing academic staff with an opportunity to have objective feedback about their teaching, leading to a consciousness of the importance of reflective practice and to shifts in teaching practice.

Research and the scholarship of teaching and learning

Another aspect of professional development in university teaching is engaging with the scholarship of teaching and learning (SoTL). Over half of the universities indicated that they use National Research Foundation funding or Teaching Development Grant (TDG) funds to support and develop academics' capacity and opportunities to carry out and publish research related to their teaching. In some institutions, individuals can apply for teaching and learning innovation or research grants, for example,

> Scholarship in teaching and learning has been actively supported since the establishment of the [teaching and learning] Portfolio. Each year funds (+R1.5m) are made available to staff through the Teaching and Learning Competitive Research Grant and Teaching Innovations and Quality Enhancement Grant. Proposals are called for, reviewed and funded.

Capacity development activities include writing retreats and workshops, and interest groups, for example,

> For several years, a Health Sciences Education Interest Group has met monthly to participate in presentations of research on some aspect of teaching, learning or assessment or to obtain feedback on conference or publication drafts, or to obtain guidance on practice-related problems.

One institution referred to a discipline-based education research centre. Academics' participation in the centre has led to increased knowledge about the learning and teaching of the discipline, as well as a number of research publications.

> The aim of the Centre is to promote research that informs the development of the learning environment and educational process in engineering, science and related disciplines. Dissemination of the results of the research is a secondary aim and over a 3-year period 44 papers have been published, which have also served to improve the research profile of the academics. The publications by [centre] members include conference papers, book chapters and journal articles. Publications cover a spread of topics including:

> approaches to teaching, curriculum interventions, reporting on student experience, models for admission and retention and teaching with technology.

Staff who participate in formal postgraduate programmes in higher education also have opportunities to develop their capacity to undertake and publish research related to their teaching. Some universities pay the costs of registering for these programmes.

Several universities are involved in inter-institutional teaching-related research projects, including projects on academic staff development, integration of language and content in professional communication, emerging technologies in higher education, work-integrated learning and transformative education studies. Some of these projects involve international collaborators and funding, and others are funded by the National Research Foundation.

Opportunities to present academics' SoTL work are available at institutional teaching and learning conferences and SoTL conferences, the annual conference of the Higher Education Teaching and Learning Association of Southern Africa (HELTASA) and various specialist conferences, which, increasingly, welcome presentations related to the teaching and learning of disciplines. One university said that it provides funding for academics to attend education-related conferences.

> Funds are also provided in some Faculties for attendance at discipline-specific education conferences often related to professional associations. Further, staff members belong to the special interest groups of the Higher Education Learning and Teaching Association of Southern Africa (HELTASA) and attend annual conferences.

Several universities have in-house publications, ranging from magazines to journals, in which academics can publish their work. In 2013 a new journal, Critical Studies in Teaching and Learning, was launched at the University of the Western Cape, adding to the list of journals in which SoTL work can be published.

4.2.2 Rewards and recognition

Teaching awards

Seventeen universities indicated that they have institutional awards for excellence and/or innovation in teaching and learning. These awards are regarded as highly prestigious. While not all institutions specified whether or not there was a monetary component to the award, it seems that this is usually the case. In some institutions the award winners receive a cash award, while in others part of the award is given in cash and part goes into the winners' research accounts. In a few cases there are also faculty level awards.

A few universities indicated that there were different categories according to which academics could be nominated. For example, the university quoted below has three categories of award.

> The Emerging Teaching Excellence Award recognises lecturers who display a long term vision for their professional and career development, through exceptional and proven achievement towards innovation in teaching and learning within their field.
>
> The Teaching Excellence Award also honours exceptional and proven achievements in excellent and innovative teaching, while encouraging scholarly teaching that leads to contextualized teaching approaches and strategies that make learning accessible, applicable and valid to students in a specific discipline.
>
> The Distinguished Teaching Excellence Award recognises lecturers for leadership and achievements in the scholarship of teaching and learning, and endorses excellence by making the award as a commendation within the category of the Teaching Excellence Award.

Several institutions indicated that they require nominees to compile a teaching portfolio. Most institutions did not provide details on how the assessment of nominees is done, but considerations that were noted in the evaluation of the nominees include student evaluations of courses and lecturers and peer evaluations.

A few submissions indicated that the teaching and learning division staff are actively involved in helping applicants construct teaching portfolios. Workshops aimed at constructing teaching portfolios are also helpful for academics who need the portfolios in order to apply for promotion or satisfy probationary requirements, as well as those who are nominated for the CHE-HELTASA National Excellence in Teaching Awards, as illustrated below.

> Academic Development staff based in [the teaching and learning division] facilitate annual workshops for academics on the compilation of teaching portfolios. The evaluation panel for the teaching excellence award assesses the supporting evidence provided in these portfolios. The training of academic staff to compile teaching portfolios takes into account the University's Academic Staff Promotions Policy (2012) which also requires applicants to submit teaching portfolios when they apply for promotion irrespective of their research achievements. In these workshops academics are encouraged to apply for the HELTASA/CHE national Teaching Excellence Awards.

Probation and promotion

One university indicated that all academics must provide evidence of teaching competence in the form of a teaching portfolio that meets specified criteria in order to end their probationary period and be appointed as permanent members of staff. The teaching and learning division provides support to help academics do this by means of a credit-bearing course, which can form part of a post-graduate diploma in higher education. The teaching portfolio, once created, can be added to over time and included in applications for promotion later on.

> In order to meet the criteria for the confirmation of appointment, the great majority of staff enrol on courses provided by [the teaching and learning division]. The latest of these, called CATALyst (Conversations around Teaching, Assessment & Learning) builds on a previous course, known as the 'Assessors' Course' which was offered for many years… The CATALyst course not only offers staff members the opportunity to achieve 30 credits at level 8 of the HEQSF, provided assessment tasks are completed successfully, but

> it also allows them to build the portfolio of evidence they will need to meet criteria related to teaching for confirmation of appointment. These 30 credits can also be 'transferred in' to the 120 credit Post Graduate Diploma (PGDip) in HE qualification. A number of staff members choose to complete the PGDip or even a Master's in Education specialising in Higher Education Studies. Having built a portfolio of evidence related to teaching for probationary purposes, staff can continue to add to this over their years of employment at the University in order to apply for personal promotion.

One university requires academics to complete at least one credit-bearing module of a post-graduate diploma in higher education and training (PGDHET) in order to apply for promotion:

> The availability of the PGDHET's constituent modules has meant that the University has been able to introduce a new element to its promotion policy for academic staff, namely that academic staff applying for promotion must have successfully completed the module on Assessment and Moderation of Student Learning. This has been a positive experience for many, leading to the increase in registrations for the full qualification as well as an acknowledgement of the complexities of university-level teaching and the skills required.

Nine universities stated that teaching quality is one criterion used to decide whether an academic is promoted, although the weighting and method of assessment differ.

> Teaching is explicitly evaluated and considered in academic promotion procedures and decisions**.** The Academic Promotions Policy stipulates that an applicant may be evaluated for promotion in four main areas: teaching; scholarship and research; community service and development; and University service. For promotion to all levels, applicants must demonstrate a minimum of strength in teaching and in research... In the period from 2009 to 2013 all applicants were assessed on their teaching and research. Teaching is evaluated through the presentation of a Teaching Portfolio for which detailed guidelines are provided in the Academic Staff Promotion Procedures & Guidelines.

The university quoted below has integrated teaching competence into all of its hiring and promotion practices.

> A key element towards realising [the objective of enhancing and promoting the status of teaching and learning at the university] has focused on recognising teaching and learning practice as a required competency for academic advancement and appointment as well as a criterion for overall academic excellence. Policy frameworks that outline core teaching and learning competencies required for academic staff have been developed and integrated into processes of decision making regarding academic staff selection, appointment, probation and promotion.

Several universities provide *ad hominem* promotion opportunities based primarily on teaching performance. In one model a teaching-focused promotion route is available as an alternative to the traditional research-focused route; in another model academics can choose whether they wish to have the teaching component of their work weighted more heavily than the other components. More than half of the universities indicated that assessment of teaching quality is done by peers in faculties using various forms of evidence, sometimes supplemented by an external reviewer's evaluation, particularly when applying for promotion to senior levels. While generalised criteria may be available, the specific demands of teaching different disciplines are recognised, as illustrated in the three quotes below.

> For teaching and learning, in most faculties applicants are asked to present a portfolio of evidence that covers topics such as their approach/philosophy to teaching, their teaching load, and giving examples of teaching innovation, course evaluations, sensitivity to diversity and transformation issues in teaching and evidence of success as a postgraduate supervisor…In some faculties, sub-committees of experts are set up to review teaching portfolios and advise applicants on how to improve the application, with respect to

> their teaching and to their research. Regardless of the weightings, in all faculties, staff must show effective performance in both teaching and research, and the failure to deliver teaching is a significant barrier to promotion at all levels. Several faculties have established a subminimum on teaching for promotion to Associate Professor and above levels and have developed elaborate mechanisms for evaluating the teaching portfolios.
>
> All staff members [applying for promotion] 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 [the teaching and learning division].

Teaching sabbaticals

While a number of universities enable academics to take sabbaticals in order to complete post-graduate qualifications or do research, one university provides teaching sabbatical grants that provide limited funding for leave replacement teachers. These grants allow qualifying academics to spend up to six months on teaching sabbaticals that enable them to enhance or broaden their educational expertise and experience. Funding for the teaching sabbaticals comes from Department of Higher Education and Training grants and Skills Development Levy funds.

4.2.3 Performance management

Not all universities have a performance management and associated performance appraisal system in place. Only a few institutions made explicit reference to their performance management systems, but these institutions indicated that teaching is one of the areas that is appraised. Where performance management systems are in place, academics meet at least once a year with their line managers in order to reflect on their performance and identify training and development needs. In some cases this is formalised through the production of a personal development plan, which may be used by the human resources division to identify suitable training. In some universities, feedback from student evaluations is sent to heads of department, who are then responsible for addressing student concerns with the responsible lecturer(s).

One university has a particularly thorough performance management system that goes beyond annual performance appraisal meetings with a line manager:

> Every 4 years, the HOD and the Faculty Promotions and Remuneration committee is expected to undertake a full performance assessment of all academic staff and to rate each member as a high achiever; satisfactory performer or an underachiever. Remuneration…is linked to the performance level. For high achievers, the HOD can recommend merit or excellence awards. For unsatisfactory or under performance, the HOD must put in place a performance improvement plan, and must ensure that the staff member receives all the support needed to benefit from such a plan (e.g. participation in workshops, teaching courses and individual mentoring).

4.2.4 Workload

Only nine universities made reference to workload under successful practices, and of these two have not yet implemented an institution-wide framework for the allocation of academics' workloads. Another university indicated that academics' workload in terms of research and supervision, community interaction and undergraduate teaching is managed by heads of departments. A fourth university used the term "teaching loads", which does not include all aspects of an academic's work, and indicated that decisions about the allocation of teaching loads are left to faculties and heads of departments. In this submission it was acknowledged that, while this approach recognises that the work required in different faculties may be different, there are also problems:

> It is recognized, however, that extreme disparities can evolve under such a system, resulting in some staff having excessively high teaching loads while others are left to choose their own paths. The disparities tend to grow because of historical claims on particular resources, and diminishing resources available for employing academic staff. The situation is further exacerbated by the increasing complexities in the teaching environment as a result of diverse student needs. Where such disparities are identified, they need to be brought to the attention of relevant Deans or HoDs, so that corrective action might be taken.

Only three universities indicated that they had university-wide workload guidelines, two of which include all aspects of academics' work and the other pertains only to teaching.

> [The university] has a workload guideline which was developed in consultation with the faculties. The guideline is a monitoring tool, with the main goal of ensuring equitable workload distribution. It captures information about a range of academic activities, including teaching, preparation, practicals, supervision, meetings, community engagement, personal development, research, innovation and work-integrated learning (WIL) visits. A survey of the faculties indicated that in most of them the guideline is used by all departments and monitored by the Executive Dean's office on an annual or bi-annual basis. The majority of the faculties also reported that the guideline is fair and is a useful tool not only to balance workload and responsibilities but also to track agreed-upon deliverables.

> A Teaching Workload Framework (TWF) was approved by Senate in 2011 and implemented in 2012. The purpose of the framework was to provide objective quantifiable measures of the teaching related activities of individual academics that have application across the University. These measures are based on clearly stated principles to create a transparent teaching workload accounting system that fosters greater equity in academic work to achieve transparent, fair and equitable planning and accountability. It measures four large drivers of teaching time: contact; preparation; assessment; and supervision. All Colleges and Schools have implemented the TWF. It provides a means for quantifying teaching that can be assessed alongside research output which is measured in terms of Research Productivity Units.

4.2.5 Conditions of service

Very little mention was made of conditions of service under the heading of successful practices. A few institutions indicated that there are opportunities for academics to take sabbatical leave or study leave in order to complete a qualification. Some departments have an internal arrangement whereby academics do no teaching for one term per year and can therefore spend that time on other aspects of their work, such as research or curriculum development. Three examples are shown below of favourable conditions of service.

> The strategic intention of [the university] 2025 and its associated Academic Plan is clear: to implement internal differentiation of academic activity so as to avoid a 'one size fits all' approach to teaching excellence and research productivity. While all academic staff are expected to be research active, the agreed upon research output of individuals will vary and be tied to annual performance management cycles. The following examples illustrate approaches to balancing teaching and research: In one of the Humanities departments, each lecturer has the opportunity not to teach for one quarter per year, thus allowing time for research. In Theology, some departments are able to have one teaching and one non-teaching semester, which enables staff to take a sabbatical without the Faculty needing to appoint a contract replacement.
>
> [The university's]policy on sabbatical leave enables academics to enhance and improve their qualifications …. While staff members are on sabbatical leave, they receive their total reward packages including monetary and non-monetary benefits. Upon completion of the qualification, academics are rewarded according to the policy on qualification improvement. There is also a policy on academic promotion of junior lecturers to lecturer positions upon completion of Masters qualifications.
>
> [The university] has very generous provision for study and research leave for full-time permanent or T3 (3-year contract) members of staff on academic conditions of service who fulfil the standard requirements of teaching, learning and research. Study and research leave accrues at the rate of two months leave for every completed year of full-time service. Leave credit may be accrued up to a maximum of sixteen months. Study and research leave may be granted for periods of six, nine or a maximum of twelve months, within the limits of the current credit of the applicant. Alternatively, one or two months may be granted for the specific purpose of completing a piece of writing.

4.3 UNSUCCESSFUL ACTIVITIES

Institutions were asked what activities they initiated during the past three or four years related to focus area 1, enhancing academics as teachers, that had not been as successful as they had hoped. They were asked in what ways the activities were unsuccessful and what they thought the reasons might be for lack of success. In this section a summary of the most common activities that institutions said were not as successful as they had hoped is presented. In addition, examples of activities that are noteworthy but not common are described. It is worth noting that some activities were considered to have aspects that were successful and other aspects that were not successful.

4.3.1 Introduction

Institutional responses to this question were much shorter than the responses to the previous question on successes. While a number of different activities were identified that were less successful than institutions would have wished, most of them are inter-related. At the most fundamental level, the reasons for the apparent limited success of activities related to enhancing academics as teachers can be traced back to institutions' conceptualisations of the role of an academic and how that role is operationalised within individual institutional cultures. From a reading of the submissions it appears that in many institutions there is a lack of alignment between institutional policies and practices and the explicit and tacit assumptions of what is it takes to be a good academic, particularly the teaching component of being an academic.

In the sections that follow examples are provided of specific activities that institutions said were unsuccessful.

4.3.2 Professional development

One of the most commonly cited unsuccessful activities in the submissions was attendance at professional development activities. A number of possible reasons were given for this, one of the main ones being lack of time on the part of academics. While there is no doubt that academics have to cope with many competing demands on their time, the way they choose to allocate their time is not just a logistical issue but also an institutional culture, or "conceptual", issue, as indicated in the quote below.

> The problem of little to no time is not just a structural one. Certainly the way the system operates makes it difficult for staff to find time, especially if they have to choose between teaching and research. But this problem is also a conceptual one. The "choice" between teaching and research is based on a particular conceptualisation of what teaching is and how teaching and research relate (separately) the bodies of knowledge. This also applies to the concept of (community) engagement, often seen as a discrete activity in relation to teaching and learning, and research.

Another institution made a related point:

> Scale up promotion of nexus between teaching, research and engagement. **[**There are**]** no strategies in place to promote this nexus. Academics lack expertise in engaged teaching and building research into their teaching.

Whether or not an academic makes time to attend professional development activities is linked to how workloads are allocated — whether professional development is included — as well as to whether participation in professional development is taken into consideration in performance appraisals or rewards, such as promotions. The relationship between attendance at professional development activities and reward structures is evident in the following two comments:

> Although the workshops offered by the [teaching and learning division] have been proven to be successful in terms of equipping lecturers with the skills and attributes to be "good" lecturers, the majority of academic staff seem to see such professional development activities as "a luxury" they cannot always afford. The stature of teaching is not similar to that of research, neither in regard, reward or resources. And even though reflective practice is advocated, lecturers – generally speaking – find it hard to carve out the thinking space amidst other workload pressures.

> [The teaching and learning division] does offer some ad hoc workshops and other activities (including, for example, Educational Technology 'Showcases') from time to time. Attendance at these events can be patchy and evidence of learning from them can be difficult to collect. In comparison, we believe the structured approach taken in relation to staff development opportunities described [earlier] yields more reward. We believe that embedding staff development in reward structures is critical not only to the take-up of opportunities to develop the capacity of academics as educators but also to the potential for learning which results from them.

Heavy teaching loads, which also relate to the need for workload frameworks, are cited as another reason for poor attendance of professional development activities, as are clashes with lectures when activities take place during term time. The latter reason relates to conditions of service, in particular to arrangements regarding

leave, since there is sometimes a tacit assumption that professional development activities must take place during term time because lecturers may not be available at other times.

Attendance may also be affected by how relevant academics perceive the workshops to be, as illustrated in the two quotes below.

> [The university] provides various professional development opportunities relating to teaching and learning to its academic staff, by means of workshops, colloquia, seminars and short courses…These opportunities are not compulsory so that their attendance depends on awareness and interest amongst academic staff, and perceptions on the relevance and quality of these opportunities. Consequently, attendance is low …A review of these activities has revealed that there is no consistency in the provision of professional development across the… campuses…Some opportunities are based on a needs analysis, while others are assumed to be necessary. This fragmentation emanates from a lack of an institutional strategy for professional development, which impacts on how lecturers are systematically guided in their careers as academics.

> Need for customised training – Presently the [teaching and learning division] offers generic professional development programmes across all faculties. There is still a need to provide customised training that addresses discipline-specific issues.

A different set of problems with attendance was raised by one university, where academics may feel uncomfortable attending workshops run by their former students, or by facilitators from universities with a different history who they feel do not understand their institutional context well enough to be of assistance.

> [The university] has introduced workshops for academics in order to enhance their teaching and learning skills. Although the attendance has always been good, it is still a concern that some academics are not keen to attend the workshops. The reasons for these are varied. Old and senior academics think that they know it all and therefore there is nothing new that they will learn. Of course this is misguided as things have changed drastically due to the context and times in which higher institutions in South Africa and even the world operate. Moreover, some academics argue that in many instances, the workshop facilitators are their former students and they feel uncomfortable to be taught by such facilitators. Another reason that these academics advance is that most workshop facilitators are from 'historically advantaged universities' and thus lack the requisite expertise to guide them on issues that affect 'historically disadvantaged universities'.

In several cases academics are supported by their universities to enrol for formal degree programmes or short courses but do not complete the programmes. High workload is cited as the main reason for this failure, although one university stated that:

> The fact that there is no formal appraisal process means that only determined and motivated academics develop and submit their portfolios.

Some institutions referred to efforts to set up peer learning opportunities, such as journal clubs, collaborative action research projects and special interest groups, which faltered and eventually fell away. Time constraints were usually cited as the cause.

Staffing constraints in the teaching and learning division were cited by several universities as a limiting factor on their ability to offer specific support when needed or to follow up on professional development activities.

This is illustrated in the two quotes below.

> Just-in time support is needed but the Blended Learning and Teaching Development teams have capacity constraints.

> To ensure that participants in the various professional development programmes offered by [the teaching and learning division] have the opportunity to reflect on their learning, all programmes include a follow up activity after attendance of each programme. In some of the programmes … a class visit and follow-up discussion by the Curriculum Development Practitioner and the HoD is compulsory for successful completion of the programme. However, these activities are not often undertaken because of the lack of adequate human resources in [the teaching and learning division] and a lack of commitment from the academic managers whose role it is to supervise the process.

In some institutions, the provision of teaching and learning support staff across campuses is uneven.

About a quarter of the institutions indicated that a high proportion of staff are part-time. However, it was noted that sometimes the terms "part-time" and "temporary" are used interchangeably, which can cause confusion. In terms of the law, temporary staff are hired on fixed term contracts, while permanent staff can expect to keep their job until they retire (unless restructuring leads to retrenchment). Both temporary and permanent staff can be part-time or full-time. A few universities referred to the challenge of getting part-time staff to attend professional development activities as they are not paid to do so and would not normally be willing to participate in their own time. In addition, professional development activities are not always open to part-time staff.

> Over half (54, 4%) of academic staff at [the university] are employed on a part-time basis. Because part-time staff members are not paid, or rewarded, for professional development they do not take part in it, although their need for it is in general higher than is that of other staff.

> The majority of academic staff members at [the University] sites of delivery and many academic staff at the main campus are part time lecturers. This situation might impact negatively on staff retention, teaching and learning and so forth.

There is a great deal of variation in the administration of professional development at different universities. At some universities professional development is entirely voluntary, while at others each academic agrees to a personal development plan with their line manager, in which case certain professional development activities are compulsory. Participation in certain professional development activities is also compulsory for academics on probation at some universities. At some universities professional development is arranged by human resources divisions, at some it is offered by the teaching and learning division and at others both divisions are involved. All of these arrangements offer potential strengths, but there are also potential weaknesses, some of which are identified below.

> The HR Learning Development Office plays an important role in staff development. However, we believe that HR could be an even more significant driver in enhancing teaching if this was to become the main focus of its training support. Currently, HR pays fees for external studies, and provides funding for staff to improve their qualifications …. In addition, the Learning Development Office pays for staff to attend external courses … aimed at improving teaching and learning. The HR Learning Development Office also coordinates the new staff induction. The training offered is not always aligned with [the university's]

> Teaching and Learning Strategy, thus there is a need for coordination of academic staff development initiatives, and for shared capacity building (rather than out-sourcing of training).

Another short-coming identified with the offering of professional development is that often it is generic, whereas there is also a need for discipline-specific training.

4.3.3 Workload

It is clear from the submissions that there are problems with how workloads are conceptualised and allocated. In the case of some professional appointments, workloads are very difficult to manage, as illustrated below.

> In Health Sciences, staff members also carry a heavy responsibility for patient care and might have joint appointments with the [provincial department of health]. Staff workloads, and in this regard, managing appropriate staff: student ratios, remain a challenge. Committed lecturers in all Faculties frequently work in excess of a full-time workload but still have difficulty in committing dedicated time to research and often cannot find time to take sabbatical leave.

The distribution of work within a department may not be equitable in institutions where no workload framework exists. This could have a particularly adverse effect on the quality of teaching of young academics who usually have limited teaching experience, particularly when coupled with a reward system that places more value on research than on teaching.

> The staff climate survey revealed concerns about competing demands on junior academics, who have not yet established research track records, but who are carrying large teaching loads, and who therefore battle to find time to advance their careers, given that research still tends to carry more weight in ad hominem decisions.

Several institutions indicated that academics have very high teaching loads. In some cases this may be partially a result of relying on traditional lecturing as the main mode of instruction.

> Despite many positive initiatives, teaching practice at [the university] is characterised by over-teaching regimes, over-large classes and difficulties in finding space (or support) for tutorials and other forms of peer learning. This leaves little time for adequate preparation, formative feedback, or appropriate assessment. The culture of over-teaching is the result of a lack of leadership for good teaching and learning practice in departments, as well as a lack of experience in active learning and e-learning modalities.

A few submissions indicated that technology-enabled forms of teaching and learning can both save and cost time — they may cut down on the time needed to prepare and deliver formal lectures, but they require time for communicating electronically with students and creating on-line learning resources and activities. Academics may need to undergo specialised training to be able to effectively use various learning technologies, including institutions' on-line learning management systems. Therefore the use of blended learning, which is gaining popularity here and abroad as a means of increasing student numbers without increasing the physical facilities needed on campus, requires a rethink of what needs to go into a workload framework.

Even where workload frameworks do exist, not everything that occupies, or should occupy, an academic's time is factored into them. Time for professional development seems to be a glaring omission in most institutions. Other aspects which may not be adequately factored in are time for reflection, teaching innovation and development, programme and curriculum development and student consultations.

4.3.4 Rewards and recognition

While most universities have teaching excellence and/or innovation awards as a form of recognition, several submissions indicated that the number of academics who apply or are nominated for the awards is small. The main reason given is that creating a teaching portfolio as part of the application process is a very time-consuming and sometimes quite protracted process. This is particularly a disincentive in universities that do not require teaching portfolios as part of the process for applying for ad hominem promotion. In one case, resignations of contract staff from the teaching and learning division led to the suspension of the Vice Chancellor's Teaching Excellence Awards. At one university teaching excellence awards are only faculty-based and not all faculties give such awards. The following is an example of possible reasons for non-participation:

> The lack of uptake could be ascribed to an under-valuing of the difficulties and value of good teaching, as well as a lack of accountability in implementing teaching and learning policy requirements.

In a number of institutions promotion criteria still weight research more heavily than teaching. One of the problems is that identifying indicators for quality teaching is more complicated than for research, as illustrated below:

> An initial task team that investigated the possibility of developing strategic management indicators for measuring the quality of academics' teaching concluded that a workable set of indicators for quantifying good teaching could not be developed very easily.

A few institutions stated that there is a limit to how high a person can go on the academic ladder primarily on the strength of his or her teaching, while others indicated that the minimum requirements for promotion to the higher levels are biased towards research at the expense of teaching, as shown in the two quotes below.

> The new rank structure … has acted as a disincentive for academics to put additional time and energy into teaching. This is because the criteria for moving up the career path…are weighted heavily towards research – which could be at the expense of teaching excellence. From Grade 9 (Junior Lecturer) to Grade 6A (Assistant Professor) level, a minimum requirement exists in terms of teaching excellence. However, from Grade 6B (Associate Professor) to Grade 4 (Senior Professor) the minimum requirements focus on research only.

> As part of an institutional strategy to elevate the status of teaching, provision has been made since 2010 for the appointment of staff on a "Teaching Track", and to allow ad hominem promotion to the level of senior lecturer. Currently 13 academics have opted to follow the teaching track because of their passion for teaching, and to remove the pressure to do research and focus on teaching. Whilst the initiative has been welcomed concerns have been raised that promotion to Associate Professor is not possible at this stage, and that it is difficult to access funding to attend conferences (since … travel funds are directed towards research activities).These matters require institutional attention.

4.3.5 Performance management

Over half of the universities identified problems with performance management. In the most extreme cases, no performance management system is in place at all, which can undermine other efforts to improve teaching quality, as illustrated below.

> The establishment of the [teaching and learning division] to champion academic development was very successful in designing and implementing structures, systems and processes for academic staff development. However, professionalization of teaching as a strategy to improve low throughput rates could not be enforced to all academic departments, despite breakthroughs in some areas. The measuring of teaching effectiveness has to date not been sufficiently acknowledged and, coupled with the absence of an institution wide Performance Management System has resulted in teaching effectiveness not being duly acknowledged as part of an annual performance review linked to remuneration.

The need for a link between performance management, teaching and rewards is also evident in the extract below.

> Mainly because there has been no university-wide implementation of the Performance Management System, there is no clear link between performance management, and the scholarship of teaching, and reward and remuneration.

A few universities have had to manage dissatisfaction with, or even active opposition to, the implementation of a performance management system, as illustrated in the three quotes below. Suitable training is also an issue.

> A process of performance management and appraisal was introduced. There was a lot of opposition from academics and non-academics to this process. This process was revived during the past 18 months. It is now better managed, proper training is given to all staff at all levels so as to ensure buy-in from all role players, and promises to be successful in 2014 as the first year of implementation.

> The current individual Performance Management (PM) system is the result of work done over a period of three years (2003-2005), in the form of a literature review performed by a technical committee as well as a series of workshops conducted at various University levels during 2006…The intention of the system was to cascade planning from the institutional level down to the level of the individual, culminating in the individual's performance/improvement plan. The PMS includes teaching as one of the areas of performance of academics. Despite the considerable effort put into making this work, academic staff is not satisfied with the existing system...In our view, as things stand, the University will find it nearly impossible to demonstrate that the PMS has had any positive influence on the improvement of teaching and learning.

> Although thePerformance Management System(PMS) has been approved, the delay in its roll-out to all academic and non-academic staff at all levels has meant that there has been no official monitoring of performance at the university. This has serious implications particularly for the lecturers, who provide the core functions of teaching. The delay is due to a dispute with the unions on its implementation and also to difficulties in procuring service providers to provide university-wide PMS training.

In some cases the performance management system is not uniformly applied or does not adequately facilitate appraisal of academics' teaching. Three examples are shown below.

> Despite the important strategic framework in place to take forward and guide [the university's] vision for teaching and learning across the institution, implementation across all faculties has in some areas been uneven. An important factor here in influencing successful implementation is the seniority and experience of the staff sitting on Faculty Teaching and Learning Committees. Similarly, the Performance Development System (PDS) and its attention to teaching and learning competencies needs to be more fully utilized across the institution.

While there are policies governing performance appraisal, there are difficulties with their alignment – they are not what Trowler and Bamber (2005) call 'joined-up'. This makes them ineffective in meeting institutional goals. There is thus a need to align these policies with teaching and learning best practices and with institutional goals (e.g., with regard to the enhancement of student success).

As can be expected with performance reviews, while the impact is hard to measure directly, the "satisfaction quotient" is easier to obtain by a feedback mechanism. On the positive side, there is no doubt that defining and refining the performance criteria and measures of performance are valuable both as a management and assessment tool and that use of the merit and excellence awards has motivated some staff. On the other side of the coin, whilst no academic was rated as an underperformer the [University's] Climate Survey conducted in 2012 revealed that there are perceptions of unfairness of assessment, or of unfair teaching workloads, particularly amongst black staff, which need to be addressed.

5. FOCUS AREA 2: ENHANCING STUDENT SUPPORT AND DEVELOPMENT

Including career and curriculum advising, life and academic skills development, counselling, student performance monitoring and referral.

The days when universities could admit students on a sink or swim basis are long gone. Along with the massification of higher education has come the expectation that universities will support students in a number of ways. In South Africa, many students need material support in the form of financial aid, accommodation, food and health care. These needs are a consequence of the socio-economic status of many students. While the need for such support should not be minimised, for the first phase of the QEP the intention is to focus on aspects of student support and development that are directly related to academic performance, including academic and career advising, life and academic skills and literacies, counselling and performance monitoring linked to referral systems.

5.1 GLOBAL AND LOCAL ISSUES AND TRENDS RELATED TO FOCUS AREA 2

5.1.1 INTRODUCTION

> Unlike the many forces that shape student dropout that are beyond our control, such as student personal lives, the conditions in which the students are placed are under university control and can be changed if the university so wishes (Tinto, 2002, p2).

> Student engagement in educationally purposeful activities is positively related to academic outcomes as represented by first-year student grades and by persistence between first and second year of college (Kuh, 2008, p555).

> Improvement in rates of student success requires intentional structured and proactive action that is systematic in nature and coordinated in application (Tinto, 2013).

These quotes from seminal writers focus our lens on key principles which contribute to student persistence and success: 1) universities have agency to address student success; 2) student engagement matters; and 3) the conceptual and organisational integration of student support and development into the academic life of the institution is critical to student persistence. Student support and development has moved into the centre stage of the debate around student success. The developments in higher education in South Africa over the past decade have compelled our HEIs to review their Student Support and Development divisions with a critical lens and

to move these divisions into the centre of core conversations which shape student success in South African higher education.

South African higher education has effectively played its part in the broader transformation agenda in terms of equity of access, but the levels of success of different demographic groups still differ widely and remain "disturbing" (CHE, 2014, p7). Morrow (2009), in referring to this gap between access and success, explains that formal access is a necessary but not a sufficient condition for epistemological access and student success. The negative personal, economic and social implications of what has been called the "articulation gap" are too serious to ignore. If students do not succeed in reasonable numbers within our higher education system, there is a serious disjuncture between the society and the higher education sector. As Keup (2013) contends, universities have a social contract and social responsibilities towards the societies into which they are embedded. This means institutions must evolve to effectively teach the students they have, not the ones they think or wish to have.

5.1.2 Impact of student support and development

The mandate for student support and development is clear: contribute effectively to student and institutional success via the support and development agenda (CHE, 2013; DHET, 2010; DoE, 1997). Institutions need to interpret this mandate within the discourse of their own realities and various communities of practice. In addition, national platforms are available which enable and facilitate a vital national conversation.

Critical self-reflection is required, in particular on the scope, role and function of support and development with a view to examining how this domain can play a more significant role in accelerating student and institutional success. The focus needs to be on the integration of support and development into the life of the institution in terms of frameworks and models into which interventions are embedded, and to critically self-examine the barriers which inhibit support and development from having as effective an impact as it potentially can.

5.1.3 Learning and integration redefined

Student support and development constructs learning to be a complex and synergistic process, premised on the integration of cognitive-academic, personal-affective and social-cultural parts into a coherent system. This re-conceptualisation of learning is explored in the seminal and widely cited ACPA-NASPA publication entitled *Learning Reconsidered*, based on the Student Support and Development "philosophical foundation", which understands learning as a "comprehensive, holistic, transformative activity that integrates academic learning and student development" (Keeling, 2004, p2).

It is a widely accepted assertion that the contribution of student support and development to higher education is predicated on the integration of academic and personal-social development (Baxter-Magolda, 1995; Kuh, Kinzie, Schuh, Whitt, 2010; Pascarella & Terenzini, 2005; Schuh, Jones & Harper, 2010). As Baxer-Magolda assert, "Cognitive and affective dimensions of development are related parts of one process" (1995, p163).

Epistemological access is grounded in the active construction of knowledge (Bernstein, 2000), that is, the active engagement with context and interpretation of experience, or as Baxter-Magolda (1995) expressed it, "the known is inextricably connected to the knower" (p165). Knowledge is socially and personally constructed (Boughey, 2005).

Vygotsky maintained that knowledge is always contextually constructed (Weiten, 1998). Personal meaning-making is linked to academic meaning-making. The personal, affective, and social development of the student is inextricably linked to academic development and, hence, to academic success. This has implications for the co-curriculum[6] in that the active engagement with out-of-classroom experiences and the university context is correlated with active engagement within the classroom and, hence, they are inseparably intertwined.

The process of academic meaning-making is premised on psycho-social development. In other words, it is the psycho-socially mature student who can evaluate different arguments, compare different positions, explore different solutions, and critically engage with the learning process. This is not a reference to the predictable change a person experiences as a result of exposure to higher education but rather to development in the sense of a restructured inner world, incorporating new rules and schemata which engage the world in a different way. Hence, the infusion of student support and development into the wider educational experience through the re-definition of learning as a broad process across cognitive, affective, and social domains assists in achieving the educational outcomes of higher education. Learning is synergistic, not segmented. An integrated approach to learning, which incorporates student support and development principles and applications, improves higher education outcomes.

It emerges clearly that any separation of the support and development function from the academic function is artificial. The student support and development domain and academic domain need better articulation and coordination within institutions. The QEP focuses our lens on this area of organisational and structural disjuncture, and creates opportunities to improve integration and promote a greater sharing of discourses across

[6] The term "co-curriculum" is complex and does not imply a reductionist binary with the curriculum. Neither does it imply a separation from the extra-curricular or from life beyond campus which constitutes the stage for life-wide learning (Jackson, 2010).

the different discursive and formal communities and domains in higher education. It is encouraging to see that higher education is increasingly recognizing the importance of the intersection of the academic with the personal-social (Scott, Yeld & Hendry, 2007; CHE, 2014; Lange, 2010; Lewin & Mawoyo, 2014; Strydom, 2014).

5.1.4 Disjunctures

At a National Higher Education Summit, the minister of Higher Education and Training, Blade Nzimande, asserted that "student services are fragmented" and that "better integration of student support service" needs to be addressed as a matter of priority (DHET, 2010, p19). In their comprehensive research study on student access and success, Lewin and Mawoyo (2014) contend that the "complex and multi-dimensional" factors influencing student success result in a situation where fragmented and ad-hoc solutions are sought but are not likely to succeed.

Tinto (2013) contends that one of the main reasons why innovations and changes have not had the desired positive effect on student success is because they have remained on the margins and have left institutional cultures unchallenged. It appears that in anticipation of massification, universities created a proliferation of student support and development activities and structures, while attempting to cope with increasing demands for positivistic accountability and fiscal discipline. This resulted in some universities having a fragmented, poorly coordinated student support and development domain, with many offices at various levels, sprinkled across campuses with nebulous, insular or self-referential goals (Fraser & Killen, 2005; Schreiber, 2012; Tinto, 2013). Organisational disjunctures seem to be one area which requires much attention in order to improve the effectiveness and efficiency of student support and development activities. A coordinated, coherent and integrated Student Support and Development division is within the control of universities; efforts are required to improve this area.

5.1.5 Social justice and engagement

The social justice framework, with its principles of equity, participation, and human rights, is particularly useful for the conceptualization of a national normative framework for Student Support and Development (Schreiber, 2014). Nancy Fraser's (2009) notion of participatory parity, principles of Universal Design for Learning, and the multidimensional conceptualization of student engagement as active sense-making offer unique guidelines for enhancing student support and development's potential to deliver on its mandate to promote social justice in South Africa (Schreiber, 2013; Trowler, 2010; Trowler & Trowler, 2010).

Kuh (2009) defined *student engagement* as, "the time and effort students devote to activities that are empirically linked to desired outcomes of college and what institutions do to induce students to participate in these activities" (p683). Harper and Quaye (2009) emphasise that engagement is more than just participation; it requires dynamic sense-making and responding. Trowler (2010) proposed that engagement is conceptualized in behavioural, emotional, and cognitive dimensions. These notions of student engagement provide a textured model to dramatically shift student success rates, which supports the promotion of equity, participation and social justice in South Africa.

Student engagement literature and research cogently assert that the goals of student engagement serve the goals of equity and participation, especially if the engagement framework is conceptualized beyond the normative and focuses on those specific groups for whom engagement with, and connection to, the academic environment is already a challenge. These groups are those who are underrepresented in the current hegemony. They include various visible and invisible minorities and majorities. It is precisely on these groups that our attention needs to focus in order to promote and deliver on social justice (Nelson, Smith, & Clark, 2012; Trowler & Trowler, 2010).

For current South African student support and development practitioners, our responsibility to shape institutional strategies to promote engagement has never been more pronounced. Such efforts promote student success by enabling students to feel "legitimated and supported by [the] university learning community" (Coates, 2007, p122).

5.1.6 Evidence-based decision making

Student support and development in South Africa has followed the European Higher Education Area and the USA in its focus on the development of a trans-disciplinary and conceptually coherent body of knowledge that reflects multiple indigenous realities. It is relevant to contemporary experiences in South Africa, while being embedded in coherent national and international Student Affairs theories and frameworks. Student Support and Development scholarship and research needs to generate reliable evidence, which enables evidence-based decisions on what hinders or promotes student success (UNESCO, 1998; Pascarella & Terenzini, 2005; Tinto, 2012; Kuh, 2009).

5.1.7 Efforts at improvement

Over the past decade South African universities have increased efforts aimed at improving student success. These efforts have, however, not been very successful, as illustrated by two system-wide studies during the past decade (Scott et al., 2007; CHE, 2013). The stark facts are that in South Africa, only approximately 18% of citizens in the 20 to 24 year-old age group participate in higher education, and of that selected group, a mere 35% of the 2006 cohort graduated in the 5-year period to 2010 (CHE, 2013). This situation has led the Council on Higher Education to state that "... the system has not yet come to terms with the learning needs of the majority of the student body" (CHE, 2013, p16) and it seems that "higher education is failing in its basic mission to produce the graduates required for the reconstruction and development of South African society" (CHE, 2014, p i).

The same disjuncture is present in the United States, where it was found that despite significant resources being invested into efforts at improving student success over the past 20 years, very little real progress has thus far been made (Reason, 2009; Tinto, 2012). Effort in itself therefore does not improve student success. Reason, Terenzino and Domingo (2006) concluded that student support is the most important factor influencing a student's growth in terms of academic competence, which is a prerequisite for academic success. This is also echoed by the McKinsey report (2014) which conducted a large survey across Europe to explore graduate readiness for the employment market. It appears, that student support and development is a crucial role player in assisting graduates to develop the meta-level or generic competencies required to succeed in their studies, which are also the competencies required to succeed in the world of work (McKinsey, 2013).

One of the main reasons why effective interventions to improve student success have proven to be so elusive is because of the complex, often individualised, web of factors that impede success and cause drop-out. Lewin and Mawoyo (2014) identify several, often interlinked, non-academic factors that have a negative effect on student persistence and success. They include financial constraints, living conditions, socio-cultural and systemic factors as well as institutional cultures. These may cloak underlying issues of alienation, disempowerment, lack of integration and low engagement, which are highly correlated to poor persistence and low success.

Many institutions expect students to be the only ones who adapt to their new higher education environment and its entrenched ways of being and doing. Universities must also be willing to assess and change the status quo in order to ensure that all students have a fair chance of success (Leibowitz & Bozalek, 2015; Tinto, 2002). Goldrick-Rab, Carter and Wagner (2007) found that successful student development and support is dependent

on institutions being responsive to the social, academic and cultural needs of their students. In addition, universities need to embrace the notion of multiple pathways, flexible approaches and multiple modes of engagement, and particularly focus on the kinds of resources and opportunities that are necessary to enable particular outcomes for students (Leibowitz & Bozalek, 2015).

5.1.8 Conclusion

It is essential to learn from international, continental and national best-practice for student support and development. A lot of research has been done. The underlying principles of success in supporting students, according to Thomas (2012), include a commitment from the institutional leadership to create a culture of integration and belonging. This should cascade through the institution, and all staff should prioritise activities that enhance student engagement. All staff should be held accountable, as well as be supported and recognised in their efforts to improve student engagement and success. The focus needs to go beyond identified at-risk groups, taught by tenuously contracted staff in add-on extended curriculum-type programmes. Any efforts at improving student success must be built on and supported by coherent institutional strategies and reliable data. Student behaviours should be monitored as part of the data gathering exercise. The scholarship of Student Support and Development is gathering momentum and needs to be strengthened to enable evidence-based decision making which impacts positively on student success (Luescher-Mamashela, Moja & Schreiber, 2013).

Student Support and Development is a crucial role player in student success, in helping students to develop personally, professionally and socially valuable graduate attributes. As Tinto says, none of this is a coincidence, but is within our agency (2002, p2).

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5.2 SUCCESSFUL ACTIVITIES

Institutions were asked to identify what activities they currently have in place related to focus area 2, enhancing student support and development that are successful. They were also asked what evidence they use to conclude that the activities are successful. In this section a summary of the most common practices that institutions said were successful is presented. In addition, examples of activities that are noteworthy but not common are described. The types of evidence for success put forward are discussed in chapter 7.

5.2.1 Student support and development structures

The section on focus area 1 indicated that universities have various organisational structures for promoting teaching and learning. In addition, each university has its own structures for student support and development—there is no uniformity across the system. Most, if not all, universities have one or more functional units that offer various services to students. Typically these are referred to as student services, support and/or development, although there are other names, such as student affairs or student wellness. In this document the

generic term "student services division" will be used to refer to all of these structures, with the understanding that the "division" may comprise a number of sub-structures, such as units or departments.

While there is no sharp divide between academic and non-academic support and development, for the sake of clarity in this document the following distinction will be made:

> **Academic support and development** involves helping students successfully execute the tasks required to succeed in their academic programme. This includes providing training in study skills, activities to develop academic literacies and additional support related to specific courses, such as tutoring.
>
> **Non-academic support and development** involves helping students successfully navigate the challenges associated with being a university student and with life in general. This includes providing training in life skills, such as time and stress management, peer mentoring, lifestyle and psychological counselling and special services needed by students with disabilities.

Non-academic support and development, as defined above, typically falls under the student services division. This usually includes life skills development and physical and mental health. In some institutions some aspects of academic support, such as academic skills workshops, also fall under the student services division, while at others they fall under the teaching and learning division. Aspects of student support and development related to the identification and pursuing of students' career goals, such as career guidance, preparation for the workplace and curriculum advising, do not fall easily into one category or another—they sit at the intersection between academic and non-academic support. Thus different institutions allocate these functions to different structures.

Over half of the universities indicated that, in addition to the central student services division, there are faculty structures that provide different types of student support. For example, at a number of universities there are faculty teaching and learning committees, which, amongst other things, identify student support needs and implement strategies, either devised by the faculty or mandated by university level policies, to improve student success. A few universities indicated that they locate academic development staff or units within individual faculties, which provide and promote student support. For example,

> The Faculty of Health Sciences has an Academic Development (AD) unit which provides academic support for students. The faculty monitors student development and success and the departmental AD staff member will either refer students to the faculty AD unit for more specific or academic learning issues or alternatively provide subject content support within the department. The AD unit also provides English Language Support and emergency social cases are referred directly to Student Counseling and Health.

In some cases, support is offered at departmental level:

> Resource Centres are available in for example the Mathematical Sciences and Geography, Archaeology & Environmental Sciences [departments] that are manned during working office hours with qualified tutors and with additional resource materials.

One university wrote about a centralised committee dedicated to student access and success.

> To start, in 2010 a Steering Committee for Student Access and Success was formed, chaired by the Vice

> Principal: Teaching and Learning. As mentioned, executive leadership was important to the success of the committee's work. …The steering committee became a forum for wide-ranging, rich discussions on student success as well as a practical instrument for planning and resourcing student development. It produced a First-Year Experience Strategic Plan. The work of the committee evolved to a 'First Year and Beyond' approach as it was acknowledged that high-impact modules could occur in other years, e.g. final-year modules with high failure rates that were impeding graduation. Initially five Faculties participated in piloting a number of initiatives identified in the literature and at international conferences as key to student success, particularly at first-year level: academic orientation, supplemental instruction and academic advising. Other tutoring, mentoring, pilots included the use of technology – clickers and mobile devices. By the end of the first year all Faculties had joined the committee…. At about this time, the learning from the successful pilots was systematised as the Student Academic Development and Excellence Model (SADEM). The model looked at institutional, Faculty and student readiness (input); processes in place to identify and resource high impact modules as well as at-risk modules and students; output variables; and outcomes and impact.

5.2.2 Institution-wide efforts to identify student support and development needs

In over half of the submissions reference was made to institution-wide efforts to identify student support and development needs. A few universities administer diagnostic tests at the beginning of the year in order to create profiles of new students that facilitate the development and implementation of appropriate interventions, as illustrated in the three quotes below.

> 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 [the university] 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 [the university] 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.

> …A student academic readiness survey (STARS) [is] administered to first-year students during registration…The survey is used as an early warning system to identify first-year students in need of academic and psycho-social support. STARS assesses students' academic readiness by measuring their support needs in fields such as motivation, well-being, integration and support, goal orientation, academic skills, study skills, time management, anticipated/ current academic involvement and vocational identity.

> [Student services division]administers psychometric assessment (Student Profiling) to first year students at the beginning of each academic year. Its purpose is to identify any difficulties that students have, and focuses on English proficiency, career choice, learning and study strategies and emotional skills.

About a quarter of the universities referred to student surveys that they administer during the year in order to inform their interventions. One such survey is the South African Survey of Student Engagement (SASSE), which is available nationally and administered at a number of universities, enabling benchmarking with other institutions. Other surveys, such as student satisfaction and student experience surveys, are developed and analysed in-house.

5.2.3 Identification and support of at-risk students

Early warning systems

Almost all of the universities indicated that they have various ways of identifying students who are not faring well early enough in their first semester that they can still be supported and failure can be averted. Three examples are shown below.

> The Faculty of Natural Sciences has begun with a pilot programme in one department to implement an on-line "three-week-diagnostic-test". This assessment focuses on basic literacy, basic numeracy and the understanding of important concepts in the modules of the programme registered for. The programme helps to identify students' level of preparedness for the academic programmes registered for and allows for supporting intervention at a very early stage – well before the main formative assessments (which form part of the qualifying criteria for entrance into the summative assessment process, namely examinations) take place.
>
> The Early Assessment Report is a university-wide initiative that was established in order to identify as early as possible, in the main, first year students who were at high risk of failing the semester. Early identification of at-risk students is intended to enable these students to receive appropriate and timeous academic and non-academic advice and/or to participate in appropriately designed life skills development workshops.
>
> The Engineering Faculty was the first to implement an Early Warning System, which has been refined over several years of implementation. This has been extended to additional faculties with the support of the E-learning Centre that provides an early alert to lecturers with regard to student difficulties – thus enabling early implementation of support activities (e.g., academic literacy or mathematics support).

Tracking and referral of students

More than half of the universities indicated that they have systems in place to track the performance of individual students. The systems typically make use of data that is provided centrally through the university's management information system or learning management system. Tracking of student performance and identification of students in need of support is done at either departmental or faculty level. One university described its comprehensive programme of monitoring and referral:

> One of the successful institutional initiatives implemented systematically in line with the Academic Monitoring and Exclusions Policy is the University Academic Monitoring and Support Strategy (AMS), a home-grown support programme that recognises that student success and failure are products of both institutional and student (under)preparedness. AMS is evidence-driven and determines what is required to improve institutional responsiveness for student progression, success and quality.
>
> The AMS programme is primarily targeted at "At Risk" students, who are identified on the University system through academic progression codes, which use a colour coding based on students meeting (or not meeting) their minimum credit progression requirements... However, AMS is available to all students who require additional support. If a student falls below minimum progression requirements for their qualification, their status on the system changes from green to orange and this initiates required AMS actions on the part of both the student and College/School staff. If low/poor performance persists, their coding on the system changes and they are flagged as red, showing they are at risk of exclusion.
>
> Through a coherent University-wide system**…**students receive academic, personal and other counselling support. Additionally, Colleges are able to access early-warning indicators that impact student progression through a Dashboard of Institutional Data.

Responsibility for following up with students identified as needing support may lie with academics in departments tasked with this function or with staff who are specially appointed at faculty level. Three examples

showing different approaches are given below.

> Generally, academic staff identify at-risk students after the first round of formative assessment. This enables staff to initiate suitable academic and student support interventions to assist these students in improving their academic performance. Interventions include extra lessons and tutorial sessions by academics and academic support staff, pastoral and mentorship interventions by academic staff and peers, and referral to the Academic Literacy and Language Unit and/or Mathematics and Science Education Unit in cases where language proficiency or numeracy is a source of risk. Referrals to the Student Counselling Unit, Campus Health Services or the Financial Aid Bureau are given for matters such as learning difficulties, psychological and health problems, socio-economic and social problems or financial issues.
>
> Generally the [early warning] system requires that course convenors upload test and other marks that contribute to the students' year mark by a given date after the first quarter assessments are conducted. An administrator in each faculty runs a report which aggregates marks for students enrolled in a particular degree programme. Relevant faculty academic staff members are supposed to review the report, identify at-risk students, and contact them via e-mail in order to offer them one or more possible support services. The services include:
>
> - An invitation to an interview with an academic staff member to discuss academic performance, academic challenges encountered and possible strategies for improving management of learning.
> - An invitation to participate in one or more life skills development workshops (*e.g.* time, stress and anxiety management, examination preparedness).
> - A student being counselled to transfer to the extended curriculum programme at this point.
> - Appropriate referral of the student for assistance if the interview with an academic member of staff reveals that poor academic performance is due to non-academic problems.
> - Convenors engaging with students about restructuring their curriculum with a view to lightening their load to give them the best chance of success.
>
> It is the responsibility of the Faculty Student Advisor (FSA) to monitor the students as soon as the student academic readiness survey results become available by texting the students asking them to set up an appointment. A record of each session is kept, together with feedback from the various channels to which the students are referred. Students lacking co-curricular skills are invited to attend group sessions for study, test-taking and time-management skills. The FSA also conducts individual sessions with students… The FSA also works in close collaboration with the Department of Student Affairs where student counselors are located and mentors are trained. Identified students are referred to the counselors and the FSAs follow up.

In universities where faculty-based student support staff exist, academics are encouraged to refer students to them when they become aware that the students appear to be struggling for reasons not related to meeting the demands of their specific subjects.

5.2.4 Institution-wide initiatives to support first year students

Two institution-wide initiatives to support first-year students that a number of institutions identified as successful are orientation and some form of first year experience programme.

Thirteen universities cited an orientation programme for first year students prior to the start of the academic year as a successful activity. The duration varies greatly, from one day to two weeks. In some universities orientation is organised by the student services division and focuses mainly on introducing new students to the campus and the various services that are available. At other universities there is an organising committee that

comprises a number of academic and support staff as well as students. In some cases there are both centrally organised activities and faculty-specific activities, dealing with both academic and non-academic issues. The approaches to three of the more wide-ranging orientation programmes are described below.

> The annual orientation for first year undergraduates includes academic, non-academic and social orientation [and] is designed to support the transition from school to university. All faculties, support departments, residences and student organisations submit programmes to a central Orientation Co- ordinating Committee to ensure collaboration and eliminate duplication. A Council approved Orientation Policy guides the work of faculties and committees. Faculties and departments are supported by a Student Orientation and Advocacy Service and well-trained student orientation leaders who play a peer mentoring role during orientation.

> The [University orientation] 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 [university], their selected faculty and programme, as well as promoting the transition into higher education. During the past five years the [orientation programme] 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 [university orientation] committee is chaired by the Executive Director Academic Development and Support and has strong faculty and support involvement. Strategic [orientation] 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 extended orientation] is a two-week intensive skills-building programme for first year students that integrates the work of [the teaching and learning division's] Student Learning Unit, Student Counselling Services, the Disability Unit, the Library, and Student Affairs. This pre-start-of-year skills development programme has successfully prepared many students for engagement in academic study. The extended orientation owes its success to an integrated approach, support from [the university's] Leadership and the availability of resources.

At one university the orientation programme is run in small groups facilitated by peers who are senior students studying in the same field or discipline as the new students. These peers, "accompany their first year group for the first term, often connecting via social media." This university also has an on-line orientation website.

Six universities indicated that their First Year Experience (FYE) programmes were successful. The quotes below illustrate the institution-wide approaches taken by two universities.

> A very important recent development is the launch of the First Year Experience Project. The university wide First Year Experience project has as its main focus the promotion of first-year success by working alongside faculties and service structures to improve student learning...This umbrella project, which incorporates mentoring, orientation and other programmes, has been conceptualised as part of the institution's plan to improve the undergraduate completion rates by 2020. A key finding across the institution is that while [the university] has many support resources for students, these often do not reach all students. There is also very uneven provision across faculties. Through this project, the institution has attempted to provide more consistent support across the University. Three activities which have gained momentum and mobility through the First Year Experience Project are the Mentorship, Early Interventions, and Orientation.

> The highly successful [university] First-Year Experience (FYE) initiative was launched during 2010 and has become part of the [university] culture and its strategic direction. The [university] 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 [university] 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.

Two universities indicated that they prescribe a formal course as part of a common core for all first year undergraduate students.

> Another form of support is the Life, Knowledge, Action (LKA) a compulsory first year course, which is based on the concept of humanising pedagogy. It is designed to assist students in establishing learning rituals as well as aid them in becoming part of a distinct [university] learning community through networking and offering peer-directed mutual support.

> A core undergraduate curriculum module for all first-year students has been piloted, which emphasises broad knowledge rather than early specialisation; it conveys the intellectual qualities needed to enable students to think critically and to engage across the domains of science, aesthetics, ethics, culture, values and ideas. [The course] is aimed at creating the next generation of citizens and young academics to stand out among other graduates in South Africa. Implicit in the design of [the course] is the development of engaged scholarship among [the university's] graduates. The curriculum also provides support for under-prepared students, while giving stronger students access to additional stimulation. The module consists of seven units. Each unit comprises two lectures with either a learning experience or tutorial for each unit…. Among the strategic goals behind the module is the conviction that students exposed to different, more interesting and more challenging types of learning will themselves demand better curriculum and better teaching from their lecturers thus becoming themselves catalysts of change.

5.2.5 Academic support and development

Academic literacy and language development

The majority of students in South Africa attend universities in which the language of instruction is not their mother tongue. In addition, only a minority of students is proficient in the academic literacies required to succeed in higher education, including academic reading and writing, computer literacy, quantitative literacy and information literacy. In many institutions, "academic literacy" is used as an umbrella term to encompass a variety of literacies as well as language development. For the sake of brevity, academic literacy will be used in that way in this document, except where a specific type of literacy needs to be discussed separately.

Support in developing academic literacies and proficiency in the language of instruction, predominantly English but also Afrikaans at several universities is offered in a variety of ways at different universities. The main modes are: (i) compulsory courses for first year students, either selected students or all students, (ii) voluntary services accessed on a needs basis, and (iii) integration into disciplinary courses. In most institutions the support is offered either through a unit for academic literacy or through the teaching and learning division. The variation in the location of the support is linked to how the development of academic literacy is conceptualised. It is also linked to the variation in the roles and responsibilities allocated to divisions for teaching and learning at different universities, which results in enormous staffing and structural variations, from two staff members

in some universities to over 100 in others. In a few universities, some individual faculties have teaching and learning units that may be involved in both staff and student development. At a few universities there is a unit in the student services division that is responsible for academic literacy support and development. There are also a few universities that indicated that they have integrated the functions of an academic literacy unit into a department of English and/or Communication.

Seven universities indicated that they had successful general academic literacy courses or programmes, most of which are compulsory for first-year students. One of these universities offers its academic literacy course online. A few universities indicated that they had faculty-specific courses in which academic literacy was developed, for example,

> [The teaching and learning division] works well with faculties, and the integrated and highly successful Language for Science module is currently being used to model other literacies development modules.

Thirteen universities have writing centres that they indicated are successful. The modus operandi, location and roles of writing centres differ from one university to another. Some writing centres focus solely on helping students improve their academic writing, while others also address other aspects of academic literacy, or work with academics to help them to help students develop their writing. Five examples that illustrate different writing centre roles are shown below.

> To enhance the quality of student learning, the university has recently established Writing Centres on most campuses. These centres provide tutorial support to students in the areas of reading and writing. Tutors who are selected and trained by the staff based in the Writing Centres focus primarily on academic writing but also encourage and support students to pursue creative writing. The Writing Centres offer the following activities:
>
> - One-on-one, small group and online writing consultations with staff and students
> - Workshops on academic and creative writing
> - Annual creative writing competitions
> - Roadshows for awareness of Writing Centres
> - Reading groups meant to encourage a reading culture amongst students and staff.
>
> The Writing Centre, which forms part of the Language Development Group in [the teaching and learning division], offers one on one consultation sessions with students who would like advice on their academic writing. The Centre also offers workshops for groups of students and courses on aspects of academic literacy.
>
> Further support is provided through the Writing Centre where peer writing tutors guide, advise and support student writers, with the aim of developing their skills and confidence. The Centre also provides support to academic staff as they work with their own student writers.
>
> There are Writing Centres on all of [the universities'] many campuses that offer excellent student facilities, such as computer laboratories on all campuses. There are some Writing Centres in residences, with the necessary technical support and opportunities for one-to-one consultations and workshops.
> Writing Centre academic dev. professionals collaborate with lecturers to embed writing-to-learn, academic integrity & academic literacies into curricula.

A few submissions stated that the development of academic literacy is embedded or integrated in disci-

pline-based courses. At some universities this is done by means of collaboration between specialist academic literacy practitioners, housed in teaching and learning divisions, separate academic units or departments, and discipline specialists, as illustrated below.

> [The university] supports programme-based academic literacy, which includes co-teaching (and other forms of collaboration and language support) between [the teaching and learning division] academic literacy lecturers and academic staff…Language development is based on the concept of language and content integration… with multilingual support and support for English second language speakers. The success of language interventions is due to a long history of leadership and innovative academic literacy practice at [the university], including the appointment of Language Coordinators in faculties, regular language indabas, and an active Senate Language Committee.

Two universities indicated that they have "writing intensive courses". These are mainstream courses offered in an academic department that enable students to develop their writing skills within the context of a particular discipline.

> The need to develop language and literacy in the disciplines (an aim of the Writing Intensive Course Project), rather than in generalised 'stand-alone' courses, is affirmed by both research and theory. The Writing Intensive Course Project began in the Faculty of Humanities in 2012 and has now spread to other faculties. A project co-ordinator, who is an expert in writing development, is employed to support academics who agree to introduce activities intended to support writing development into their courses. These activities are negotiated by the academic and the course co-ordinator….Already, it is becoming clear that spreading writing support over a faculty is an efficient way to allocate some sort of support to a large number of students.

In the submission quoted above the university also indicated that it is in the process of creating a "ladder" of writing intensive courses at faculty level.

In a few universities students make use of commercial software packages designed to improve their reading and writing skills. One university provides an on-line multi-lingual glossary to assist students for whom English is not their mother tongue. A few universities indicated they use blended learning to provide a combination of on-line resources and activities and face-to-face interaction.

Subject-specific academic support and development

Most, if not all, universities offer subject-specific academic support. For the most part, this takes the form of extra tutorials, including Supplemental Instruction (SI), offered in addition to the tutorials that are a normal part of formal courses, or on-demand tutoring available in a specified location and sometimes at specified times. Three examples are shown below.

> [The university] has a well-established Supplement[al] Instruction (SI) programme, which commenced in 2004, and is implemented at all campuses. In common with the approach that is adopted internationally, SI provides a non-remedial approach to learning enrichment that increases student retention and performance, by means of regularly scheduled, out–of-class "super group" study sessions where students work

> together to consolidate key concepts and develop effective study strategies. SI sessions are facilitated by SI leaders, students who have previously and successfully completed the targeted module. SI leaders attend lectures, take notes and act as model students for their peers. In this manner, SI creates broader learning communities for many disciplines. Although the SI programme at [the university] is largely used in first year modules to support the first year experience, research has shown that it is equally effective at further levels of study. During 2013, there was a noticeable trend for more students from their second year onwards to attend SI…a review of the impact of SI attendance for the period from 2008-2013 suggests that the SI programme contributes to student retention, as withdrawal percentages are consistently higher for students who do not attend SI.
>
> Directly supporting the teaching and learning experience at [the university] is the 'Tutor Training' programme where senior students are identified and trained to support students, especially first-year students. Such tutors are placed in mainstream first-year classes and many others provide academic assistance after hours in the student residences. 'At-risk' modules, such as Mathematics, Physics and Economics have been identified for special attention and much effort of the tutor programmes is directed towards these modules.
>
> A number of subject lecturers across faculties have used tutors to provide support for students in 'at risk' subjects. The success of the programme is due to the stringent academic criteria used for the selection of appropriate tutors, on-going tutor training and support that includes the planning of tutorial activities and assignments, the provision of learning resources, and lecturer consultation with tutors.

Two universities provided illustrations of how the needs of learners from different language groups are addressed in subject-specific support activities.

> Multilingual mathematics tutorials are run by speakers of isiXhosa, Afrikaans and other African languages (as well as in English). The tutors are trained and supported by the [teaching and learning division] mathematics education specialist. Tetra-lingual dictionaries of Maths and Science are distributed to support students.
>
> [Students] appreciate the opportunity that the smaller groups provide for personal interaction with the SI leaders, and it is often mentioned that some SI facilitators are willing "to walk the extra mile" by facilitating in a variety of (home) languages as requested by SI participants.

Nearly half of the institutions referred to the importance of tutor training and development in ensuring that tutorials are effective, whether they are normal, scheduled tutorials that are part of students' formal course load, or extra tutoring of some form. One university has a dedicated tutor development unit within its teaching and learning division. Approaches to tutor training are illustrated in the four quotes below.

> Tutors are trained by Academic Development Practitioners from [the teaching and learning division] to ensure that they facilitate tutorials in a way that is beneficial and supportive for students. Tutor Training and Development introduces new tutors to effective facilitation techniques and affords them the opportunity to work closely with module lecturers who provide the necessary guidance.
>
> The Engineering Faculty has run the 'Step-up' tutor training programme for several years. The particular success of the programme is the formal, timetabled opportunities for peer learning that are facilitated by well-trained and well-supported tutors.
>
> To ensure the successful and consistent implementation of the programme, the SI manager has developed a suite of training manuals for SI leaders, SI mentors and supervisors, and participating lecturers, which set out their respective roles and responsibilities.
> The Peer Assisted Learning (PAL) Programme is an intervention which is offered for the high-risk as well as gateway courses at first year level. The process starts by requesting faculties to identify and submit their high-risk courses as well as their gateway courses. The academically competent senior students are recruited, selected, trained and appointed to be the Peer Assisted Learning Leaders (PALLs). The training

> involves: facilitation of learning, exposing students to collaborative learning (peer-to-peer interaction in problem solving) and infusing study skills in learning.

Two universities linked their tutorial programmes to the development of future academics. At one university, an explicit aim of its academic tutorial programme is the development of future academics who are skilled in teaching and learning. Another university has created senior tutor positions for postgraduate students who take on more responsibilities than tutors and are also mentored and trained in order to, "develop them into possible future academics". This university goes one step further and appoints assistant lecturers on 3-year contracts.

> A total of 50 assistant lecturers (Als) have been appointed across [the university] 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 [the university] forward. The Assistant Lecturers receive generic training in teaching, from within the [teaching and learning division] and they receive mentoring within their academic departments.

Two examples of student support that is offered online are shown in the quotes below.

> Web based learning programmes; e.g. the Pearson's Lab is offered in the Mathematical Sciences and Physical Sciences (Physics and Chemistry) that allow students to test their own competencies and to submit online assessments.

> These [tutorial programmes] involve both online and residence-based tutoring, with the on-line tutoring focusing on Mathematics courses for first-year students.

5.2.6 Non-academic support and development

Non-academic support and development primarily takes the form of mentoring and peer support, life skills workshops, advising and counselling. The distinction between advising and counselling is blurry. Reference to faculty advisers was already made in the section on tracking and referrals. Typically these are people who monitor student performance. They may or may not have the training to offer some kinds of support themselves, such as life or study skills training. In a few institutions, advising may refer to curriculum advising, which could be considered academic support.

Strictly speaking, counselling can only be done by a registered psychologist, and includes psychological counselling for a range of conditions, including anxiety, post-traumatic stress and depression. However, in some institutions counsellors, some of whom are educational psychologists, also help students develop life and academic skills, as well as personal and professional goals. To complicate matters further, the word "counselling" is sometimes used informally to include the broader concept of pastoral counselling, which involves offering support and guidance and need not be done by a trained professional.

A number of institutions made reference to a range of co-curricular activities, that is, activities that are part of university student life but are not directly related to academic programmes. These include sports, student

clubs and societies, community service and volunteer activities and participation in student leadership and governance. These are undoubtedly student development activities and they are increasingly being regarded as crucial in helping graduates succeed and flourish in the 21st century. However, they fall outside of the scope of focus area 2 of the QEP and will not be discussed here.

Mentoring and peer support

Nearly all of the institutions made reference to some form of mentoring. In the majority of cases, mentoring is done by senior undergraduate or post-graduate students. In only a handful of cases is reference made to mentoring of undergraduates by academics. For the most part, being a "mentee", that is, someone who is mentored, is voluntary. However, students who have been identified as being at risk of failure or dropout are sometimes assigned to a mentor. In the Health Sciences Faculty at one university all first year students are assigned to a peer mentor who is a senior student in the faculty.

Over half of the universities referred to structured mentorship programmes, which are coordinated by either the student services division or the teaching and learning division. In these programmes training is provided to mentors, who are required to submit reports of their interactions with their mentees.

> The Mentorship Programme aims to assist students from disadvantaged schooling backgrounds and follows a holistic approach, focusing on academic and interpersonal skills. The programme incorporates two types of mentorships, running concurrently: 1) Student-Student (a senior student mentor paired with a maximum of 3 first-year students as mentees). 2) Staff-Student (a departmental staff member mentor paired with a maximum of 2 senior students as mentees).

One university indicated that it has faculty-based mentoring.

> For several years all faculties have been running mentoring schemes. Over the past two years the Student Wellness Clinic has facilitated workshops to discuss the different models and to generate debate about effective models. …[Mentoring] is aimed at assisting first years to navigate their transition from school into the university. Mentors become the eyes and ears of the university, as well as take on the important role of monitoring and guiding mainly the psychosocial, but to an extent also the academic, progress of the first year student. Based on evaluations conducted on some of the mentoring initiatives, the mentorship model has proven effective, as peer relationships are often valued over and above relationships or input from authority figures. The mentors, who are senior students, also develop their own leadership potential. A further goal is for senior students involved with mentoring first year students, to experience first-hand the rewards a future university career can bring.

A few universities made reference to the explicit use of social media and technology in their mentoring programmes, illustrated in the two quotes below.

> The main aim of [the university's] e-mentoring programme is to establish and sustain contact between mentors and mentees through the use of Blackboard or social media, such as MXit or Facebook…This is because good communication is a key component of an effective mentoring programme, but mentors often experience difficulties such as insufficient time for mentoring and difficulties in maintaining contact with mentees. These modalities are used at [the university] for offering students mentoring in the online spaces where they spend most of their time. The systems are accessible anywhere and anytime and offer oppor-

> tunities for peer-learning and student-mentor interactions. These online environments meet the needs of 21st Century students and support students with academic and psychosocial difficulties. The programme follows a 'blended learning' approach, which consists of face-to-face mentoring as well as on-line mentoring. The mentees and mentors use of MXit extensively as a way of interacting with their emergent social network around issues related to their learning socialisation, in particular the conceptual challenges related to their courses.
>
> Mobile apps are used by both mentors and mentees within the BeWell mentoring project to record their sessions, to access supporting material and to engage with social media. All mentors and mentees are also supported by their own individualised and secure wellness websites with assessments, e-books, audio-books, e-workshops, tracking tools, journals and profile pages.

In a few submissions universities referred to peer helpers or "peer buddies" whose role was to act as an interface between students and the student services division in identifying students in need of assistance and promoting the use of available services.

Life skills development, advising and counselling

Study skills and life skills may be developed through a variety of activities, but, for the most part, these activities are voluntary. Life skills that may be addressed include: time management, stress management, goal setting and interpersonal relationships. Study skills that may be addressed include: academic reading and writing, examination preparation and writing strategies and memory and concentration techniques. Support for the development of these skills is often the responsibility of the student services division, for example,

> The Centre for Student Counselling and Development offers a variety of workshops as well as an interactive module on [the learning management system] addressing challenges from Time Management to Study Skills, Stress Management, Speed Reading, etc.

Some universities indicated that the development of life skills is integrated into formal programmes.

> The acquisition of life skills is seen as a central factor in achieving student success. At [the university] life skills are dealt with in formal programmes and activities. First-year students, who are one of the most critical groups in the student population, along with students enrolled in the Electrical Engineering Extended Curriculum Programme, are involved in a formal course on Life Skills and Study Skills.

All universities have student counsellors, but their roles differ from one institution to another. At some universities student counsellors run workshops to develop life and academic skills and provide individual counselling to students on both academic and non-academic matters. At other universities their function is psychosocial and/or psychotherapeutic counselling. About one quarter of the institutions indicated that their student counselling centres train intern psychologists. The extracts below illustrate two approaches to the broad-ranging work of student counsellors.

> Student Counselling and Development is staffed by a team of registered counselling and clinical psychologists, intern psychologists and intern counsellors. At Student Counselling and Development the following services are on offer for registered students: Psychological counselling for – depression anxiety, trauma, grief and substance abuse; Academic Support – study methods, extra time evaluations and presentation skills; Career counselling – complete psychometric evaluations and individual interviews; Developmental workshops – self-discovery, stress management, self-esteem, learning styles and study methods.

> [The university] has a well-established and effective Centre for Psychological assistance and Career Development (PsyCaD) represented on all…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
> - …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 [university] stakeholders…to enable the delivery of holistic and integrated support
> - Psychiatric referrals where deemed necessary and appropriate.

It is interesting to note that one university indicated a considerable increase in the number of counselling sessions, "in response to the notably greater amount of students presenting with serious psychological and psychiatric issues."

A few institutions indicated that they have faculty-based counsellors or advisers who are well-positioned to address the needs of students in their faculties, as illustrated in the two quotes below.

> Some faculties provide faculty-based counselling services via psychologists on site who conduct life skills development programmes and workshops for students who need that support in order to manage their academic work. Counselling services based in faculties allow for easy referral both from academic staff and students themselves. They have the advantage of ease of access because of their location within faculties. The development of faculty specific knowledge by the counsellors involved, as well as the articulation with other faculty-specific support services such as Lifeskills and mentoring programmes, presents a good fit for use by students.

> The appointment of Faculty Student Advisors (FSAs) is one of the most effective new interventions related to SADEM [Student Academic Development and Excellence Model]. …It is the responsibility of the FSA to monitor the students as soon as STARS' [Student Academic Readiness Survey] results become available by texting the students asking them to set up an appointment. A record of each session is kept, together with feedback from the various channels to which the students are referred. Students lacking co-curricular skills are invited to attend group sessions for study, test-taking and time-management skills. The FSA also conducts individual sessions with students. We see excellent synergies between this new advising role in the Faculties and an existing tutoring strategy: the FSA has a list of all the tutors in the Faculty so that students who indicate that they need academic support are referred appropriately. After the first test, the marks of these students are monitored to determine how the student is coping. There needs to be a close working relationship between lecturers and the FSA so that the academics can help to steer a student, who seems unable to cope for other than subject-related reasons, towards the FSA. After the first semester's cluster analysis results are known, the FSA contacts students to address the obstacles that prevent them from succeeding. The FSA also works in close collaboration with the Department of Student

> Affairs (DSA) where student counsellors are located and mentors are trained. Identified students are referred to the counsellors and the FSAs follow-up.

In a few institutions reference was made to academics who are involved in counselling, although what is described seems to be "academic" counselling, rather than the psycho-social counselling described above, as the two quotes below show.

> …faculties individually also provide specialised support that is tailored to the needs and requirements of individual programmes. For instance, special consultation and counselling sessions are conducted by senior academics in the Faculty of Law for students who fail more than one module after the first semester examinations.

> …the Faculty of Health Sciences has in place a process to counsel students in the first month of registration. In respect of 'gateway subjects', in many programmes lecturers are required to identify students 'at-risk' in these subjects on an ongoing basis and to counsel them.

Several institutions indicated that advice about curricula and selection of courses is provided by academic administrators. In a few cases, deans or deputy deans participate in curriculum advising.

> Deans spend a good deal of time crafting appropriate curricula for students as they embark on their degrees or encounter problems along the way. Sometimes advice extends to a change in study direction depending on the problems faced.

One institution indicated that it has an academic advising system, although the details of how it operates were not provided in the submission. The philosophy behind the system was described as follows:

> Academic Advising is a developmental teaching and learning process in which advisors use conceptual, informational and relational skills to help students learn to define their personal goals for higher education, to be study focused and to be able to progress more quickly through their academic years. While the primary purpose of academic advising is to assist students in navigating through the institutional structure and system, it can also help them to integrate their academic, personal, social and emotional development into their overall educational goals and plans. Accomplishing this objective requires an intentional, systematic deliberation of purpose that is understood by, agreed to and supported by administrators, advisors, and students. The Academic Advising system is focused on supporting students, especially first-generation students, and aims to break the vicious cycle of credit overload and study debt.

Support for students in university residences

Fourteen universities referred to tutoring and mentoring that takes place in university residences. In most cases tutors, mentors or residence advisers are located in residences and are available to provide support as needed, either academic or non-academic. In a few cases there is a structured programme, as illustrated in the three quotes below.

> The Residence Education Programme tutorials complement other activities in residences that contribute to making the residences places of living and learning. These tutorial sessions are not only confined to subject content but also cover what could be regarded as essential academic skills that students require to succeed at university. The duration of tutorial sessions is two (2) hours where one hour is for addressing subject-specific content and the other hour is allocated for psycho-social and personal development support.
> As part of the initiative to enhance [the university] residences as places of academic excellence, senior students have been trained and used asResidence 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.
>
> All first-year undergraduates [in residence] are required to participate in study hall sessions every Sunday evening during the teaching term, aided by staff and senior students. The failure rate among undergraduates in our residences is substantially lower than among non-residence students. Academic wardens in junior residences monitor the academic progress of first-year students and encourage the strugglers to seek additional assistance.

A few universities also provide structured support for day students, through "day houses", including a space to study and an opportunity to feel part of a community in a similar way to residence students.

Support for students with disabilities

Seven universities indicated that they successfully support students with disabilities. The support includes technical assistance for visually and hearing impaired students, physical support such as wheel-chair friendly access to buildings and academic support such as test and examination facilitation. Three examples are shown below.

> A vibrant service to students with disabilities. This service provides academicaccommodations and support for over 300 students registered with disabilities at [the university].Services focus on accommodations, academic support, as well as test and examfacilitation. The 'social model of disability', that recognises disability as a human rightsand development concern and draws from a systemic rather than medicalisedperspective, informs the approach of these services and what is strived for.
>
> The Disability Unit has excellent facilities for students, including sign language interpretation, and technology support (e.g., voice recognition software). The success of the unit is supported by collaboration with other [university] student support services.
>
> A dedicated set of services is rendered to all students with disabilities, with close collaboration with lecturers who teach them, and support divisions involved (from translation to/from Braille to the upgrade of buildings to be wheelchair-accessible, and the provision of additional writing-time for examination and test papers)

5.2.7 Career guidance and workplace-related support

Career guidance and counselling

Almost half of the universities indicated that they have a dedicated structure for career guidance, career counselling and development, while at other universities these functions are part of a broader structure, such as student counselling or the student services division.

Some universities indicated that they have successful activities involving testing, career guidance and exposure to various careers for learners while they are still at school, as illustrated below.

> The institution offers career information for individual prospective students and schools, as well as further tests and interviews for groups and individuals for career guidance.
>
> To prepare prospective students for studying at [the university], the Student Counselling Unit provides career assessment and career guidance services to underprivileged schools in the broader feeder area of [the university]. The Unit does this in collaboration with the Institute of Rural Development and Community

> Engagement.

A few universities indicated that they offer their students a range of career-related services that are available at different stages of their academic careers, as shown in the two examples below.

> [The student services division] provides counselling and career counselling support across the various phases of the Student Walk [including]…. Career guidance for Grade 12 focused on career choice and decisions on post-school field of study,…Career guidance and information on career paths and the relationship between a field of study and the potential career paths,…Career information and guidance on choice of subjects and prospects related to specific curricula, Career development programmes that include graduate employability skills, student-employer linkages and on-campus career fairs.

> The Centre for Student Counselling and Development on the other hand focuses on [amongst other things] career and vocational sphere, and course selection,career choice, experiential training, vacation jobs, job search skills.

In a few cases, explicit reference was made to helping students link their personal development with their career goals, illustrated in the two quotes below.

> The focus of career guidance is generally on issues such as career exploration, personal career development and related issues. The emphasis is on identifying the career opportunities available in the programmes the students have registered for. The counselling psychologist on the [student services division] staff helps students to put their experience, strengths and weaknesses, location, the job market and further educational possibilities in perspective in order to gain a better understanding of their personal desires, either so that they can plan a career for themselves or to guide them with help.

> The Careers Service works across all faculties and student cohorts, offering students a suite of services and facilities that encourage and promote early career planning and development, and help prepare students to succeed in and make the most of opportunities in a constantly changing and challenging labour market. Students are encouraged to actively manage their time at university in ways that will help them to develop skills and strategies in preparation for the world of work. The Careers Service offers information (both online as well as through face-to-face consultation), advice and opportunities to students to support their career planning, job search preparation and ongoing personal and professional development.

Workplace-related skills

Several institutions referred to support that they provide in helping students make the transition from university to the workplace. In some universities there are workshops that help students develop various workplace-related skills. Three examples of how students are assisted to become ready for the workplace are shown below.

> Academic Advisors conduct workshops for the final year students so as to prepare them for the world of work. The workshops include employability skills: Good CV writing, interview skills, communication skills, etc. entrepreneurial skills: Business Plan writing, presentation skills, networking, communication skills etc.

> 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.

> The Career Consultant provides workshops and individual consultations that help students to understand the qualities that employers are looking for, and provides specific guidance and support relating to CV-writing, preparation for job interviews, and the job search process….Work has commenced on the de-

> velopment of online resources to support students in CV-writing and preparation for job interviews, while consideration also must be paid to appointing dedicated career consultants on each campus…

Links with graduates, employers, professions and curricula

Several universities indicated that they have a variety of initiatives to expose students to career options, such as career fairs, and to expose alumni and employers to students and to universities. Three examples are shown below.

> The Career Centre plays a vital role in promoting the employability of [the university's] students, through the services that it offers to students and employers, as well as the networks that it creates for liaison amongst employers, alumni, academics and students. …The annual career fairs that are held on each campus provide students with the opportunity to network with potential employers, so that they can develop a better understanding of the range of careers in their respective disciplines and fields of study…In addition to the career fairs, the Career Centre provides various other services to employers and students, including the CareerZone, an online career portal where employers can advertise vacancies, the career guide which contains information on a range of careers, and opportunities for employer presentations.

> A number of services are offered that provide for career development of students. These aim to prepare students for migrating from graduation to employment, presenting themselves successfully to employers, and improving job search efficiencies. Important here are the Career Expos where students are able to engage with prospective employers and envisage themselves in the world of work.

> The institution further offers the following services to its current students: An annual Career Fair at both the … campuses; job-hunting workshops; CV writing; an employer database; graduate work-readiness workshops; career library services; and assistance with on- and off-campus recruitment and the appointment of students.

One university referred to workshops that it holds with employers and academics in certain professions in order to discuss the universities' graduates and how to prepare them for the workplace.

> In order to enhance opportunities for liaison with employers, various employer consultative workshops have been held since 2011, providing opportunities for employers and academics in specific professional fields and fields of study to discuss the qualities of [the university's] graduates and to consider how the curriculum best can prepare graduates for the "world of work". These consultations have been well attended, and need to be taken further through the creation of structures for more regular consultations with employers.

This university also participates in a number of surveys in order to gain insights into how well the university prepares students for the workplace and how their former students' careers are progressing.

> A further manner in which the Career Centre contributes to employability is by means of regular participation in a range of national surveys, including the Universum South African Student Survey, the Universum South African Professional Survey (since 2013), and the SAGRA Employer & Candidate Surveys. These surveys help the University to improve its understanding of [the university] students' academic experience, their preparedness for the world of work, and their job goals and expectations, while also learning from alumni about their career progress and the degree to which their academic programmes prepared them for their professional lives. The Career Centre currently is also involved in the development of a graduate destination survey, to obtain feedback from recent graduates on their experience in finding employment, the relevance and quality of their academic programmes, and the opportunities provided by [the university] to develop important qualities and skills relating to the world of work.

Another university referred to several career initiatives that are related to particular professions.

> Other avenues are open to students to learn about career opportunities while at the University. These include presentations by the Department of Accounting and Auditing, which invites promotional speakers who are Chartered Accountants to address students. Commerce students affiliated to Enactus, an international non-profit organization … form teams on campus and apply business concepts to develop outreach projects to improve the lives of needy local people and promote entrepreneurship. The Law Students Council in conjunction with the Law Department and [the students services division] hosts a career law day where legal firms are invited to address law students on career options in law. Members of the legal fraternity are also invited each year to address the law students about legal matters and career options.

One university described how students take the lead in certain departments in activities related to their chosen professions. They work with professionals, government and business.

> The Black Lawyers Association also provides training to [the university] law students. Most disciplines have well organized student societies, located within departments, whose mission is to promote knowledge of and interest in the particular discipline and associated careers in the University. These societies help organize debates on campus on topical issues as well as tours to businesses, industries and government bodies which employ graduates. For instance, the Department of Economics organizes an annual excursion for thirty senior students to organisations like the SA Reserve Bank, the National Treasury, commercial banks, and the Department of Trade and Industry, among others. These tours stimulate considerable interest among the students in prospective employment in the areas of finance, banking and marketing among others.

At another university there are, **"**Comprehensive programmes for final year students in preparation for the world of work through the Final Year Experience".

5.3 UNSUCCESSFUL ACTIVITIES

Institutions were asked what activities they initiated during the past three or four years related to focus area 2, enhancing student support and development, that had not been as successful as they had hoped. They were asked in what ways the activities were unsuccessful and what they thought the reasons might be for lack of success. In this section a summary of the most common activities that institutions said were not as successful as they had hoped is presented. In addition, examples of activities that are noteworthy but not common are described. It is worth noting that some activities were considered to have aspects that were successful and other aspects that were not successful.

5.3.1 Timing, timetabling and voluntary nature of support

A number of the activities that were reported as being less successful than desired were negatively influenced by their timing (after hours), lack of formal timetabling, voluntary nature or a combination of all three. These three factors are related to the add-on, and sometimes ad hoc, nature of the support, as opposed to what students see as core activities, namely, scheduled classes.

Many universities indicated that a number of their student support activities, including peer mentoring and

workshops, were not formally timetabled. As a result, suitable venues are not necessarily available during the day and students may experience clashes with their scheduled lectures. To address the latter problem, activities are sometimes scheduled in the late afternoon or on Saturdays, but then students may have transport problems if they are reliant on public transport. Lunch-times are another option, but students get tired and need a break at lunch-time. Two examples illustrate some of the problems.

> Often out-of-class student enhancement activities have to be held in lunch-times, late afternoons/evenings, and on Saturdays. These slots are not always convenient for students, especially if they depend on public transport. While offering more of these online is an option, lack of off campus connectivity could result in some students still not being able to access them.

> In 2010, [the teaching and learning division] initiated the First-year Student Experience (FYSE) project in two faculties with the aim of providing specialised support to first-year students. The project was successfully piloted in both the Faculty of Applied Sciences, and the Faculty of Engineering and the Built Environment…The project could not be sustained because venues were not available for these specialised tutorial sessions and it was difficult to incorporate them into the mainstream timetable.

Even residence students may be reluctant to attend support activities offered after hours.

> Presentations on life skills/psycho-education/wellness/coping themes offered in the residences after hours have been of limited value. Students are generally reluctant to attend additional presentations in their spare time, particularly if these are not part of the compulsory academic curriculum.

In a few universities even tutorials that are associated with formal courses and that all students are meant to attend are not on the university timetable. At some institutions there are inconsistencies in the provision of tutorials between faculties, for example,

> Tutorials are offered in various programmes, e.g. Mathematics, Physical Sciences and Built Environment in the Faculty of Engineering and Information Technology. This is not an institution-wide programme.

About a quarter of the universities indicated that they offer Supplemental Instruction (SI), a specialised and internationally known form of student support, but in addition to timetabling problems, the voluntary nature of student involvement in SI, one of its features, can be problematic, as illustrated below.

> Supplemental instruction (SI) is offered in a total of 104 subjects for first-, second- and third-year students. SI assists students with their academic studies. Two periods are allocated once a week for SI. Furthermore, bi-weekly meetings are held with SI leaders to discuss problems. Students have to complete a quality questionnaire and attend compulsory classes. The use of electronic devices and [a learning management system] helps the institution to achieve the objectives of SI. Many SI sessions take place during lunchtime due to logistical problems, and in some cases SI does not form part of the timetable. All these problems are further aggravated by a lack of suitable venues for SI classes/sessions. The fact that the SI philosophy argues that it is non-compulsory is a problem for a university that depends on walk-ins and that hardly recruits matriculants that are the cream of the crop, as it were.

As one institution, quoting from the international literature, put it, "students don't do voluntary." Another institution stated that, "Often students who will benefit most from such opportunities do not attend." On the other hand, many students' schedules are already very full, and it is difficult for them to fit in additional activities, such as mentoring sessions. Attendance at voluntary support activities can also be negatively affected when

they are perceived to be duplications of other activities, for example,

> The life skills programmes in residences are not as well received in residences as in the past, and are consequently not well attended, partially because they replicate programmes that exist in the faculties and in the First Year Experience - and also because the students have such busy lives.

5.3.2 Tutors and tutor training

A few institutions made reference to the problem of recruiting and retaining suitable tutors.

> There are also difficulties with retaining good tutors and writing centre facilitators; this is possibly because tutor payment is too low, and that there is a lack of support or recognition from academic staff.

At one institution, running an effective tutor programme is difficult because most of the students are undergraduates, so there is a small pool of students from which to select tutors. As a result, most tutors must come from outside the institution, but the pay is not attractive.

> Even though our academic support system is generally successful, our largely undergraduate Programme and Qualification Mix makes it virtually impossible to select student tutors of the right academic stature from within [the university]. This situation compels us to recruit tutors with, or working towards, a Master's degree from outside [the university]; however, the low remuneration offered poses a hurdle.

A few institutions referred to problems with tutor training, indicating a need to have better links with departments, as shown in the four quotes below.

> The tutor development workshops were not as well attended as we would have liked. It would seem that although many tutors come to the initial training, participation is not sustained at the same levels. Feedback suggests that timing is an issue with students under pressure towards exam times. However, departments also need to be more proactive in ensuring that their tutors participate in the workshops.

> …before 2013 [the university] conducted two sessions of training workshops per year...This training proved to be ineffective and impacted the quality of the programme negatively. Reasons for the lack of success could be the lack of integration with the faculties. The programme needs to include tutor supervision and check in sessions to ensure follow up training or refresher training when required.

> Tutorial sessions in the Mathematical Sciences seem to be less effective than in other Schools within the Faculty, hence the introduction of an official year-long tutor training programme of staff involved in tutoring in the Mathematical Sciences. Students have complained about the lack of structured support in the tutorials in the past; students who have done relatively well academically in other subject areas still experience difficulty with mathematics. Effective tutor training will hopefully address this matter.

> Many departments have training programmes and supervision in place, but not all do, which detract from the impact of such activities.

5.3.3 Non-credit bearing courses and programmes

A few institutions indicated that they provide support and development activities that are compulsory but not credit-bearing and therefore are poorly attended. Some institutions indicated that they have made, or intend to make, these activities credit-bearing and part of formal programmes. Two examples are shown below.

> Academic Language Proficiency (ALP), which is now called Academic Literacy and Communication

> Studies (ALC), was introduced in 2007 to address the language proficiency needs and under-preparedness of first-year students at [the university]. This programme was not credit-bearing and subsidy-earning, and as a result students in some faculties, e.g. Engineering and Information Technology, attended very poorly because they regarded the programme as occasional and not contributing to their qualification.

> The courses taught by the ALLU [Academic Literacy and Language Unit] are inherently limited by their non- credit-bearing status. The danger is that this infers a lack of value for students, regardless of the fact that there are experienced and dedicated lecturers teaching the courses.

5.3.4 Technology challenges related to student support and development

A few institutions indicated that they had problems related to software. Problems that were mentioned include the use of software that is not supported, software that can only be used in on-campus computer laboratories and software that demands a great deal of administrators' time.

> The Reading 100-online system crashed and had to be replaced, and students were no longer able to access these services. However, because of the need for these services, five learning facilitators were temporarily employed to attend to at-risk students. At a later stage the programme was replaced by the Tell Me More language programme. This took time and was a set-back.

Another problem is the use of software that was developed overseas and is either not appropriate to meet the needs of local students or is too generic.

> On each campus provision is made for reading laboratories where students can develop their reading skills…The current arrangements for reading development suffer from various challenges in terms of the software used. While the University uses a combination of various reading programmes, inter alia to support reading development in different languages, some of the programmes are no longer supported by their suppliers, or require significant staff resources. They are also laboratory-based, which limits students' ability to participate in reading development. In terms of their contents, the programmes are not optimally geared towards the development of academic reading skills at tertiary level, as they have a more generic content. The programmes also require significant staff resources to record reading skills.

Even when the support is available to students on-line, students may not make use of it off campus. Possibly hindrances are lack of connectivity off campus and lack of confidence in using an on-line platform.

> Students currently still prefer face-to-face peer learning activities. Lack of connectivity off campus hampers online collaboration and e-PAL/e-tutoring after hours. While many lecturers incorporate technology in teaching, some do not, and not all students feel comfortable using technology to enhance their learning.

Technology challenges also affect institutions' ability to monitor students' performance. In some institutions there are not enough skilled IT support people, while in others the IT systems themselves may be problematic, either because of incompatibilities between systems that house different parts of the data or instability or both, illustrated in the three quotes below.

> On the use of the early warning system for identifying students at-risk of failing, only 45 of the 90 lecturers use it and send notices to students. There are currently pilot programmes running to support students identified as 'at- risk'.The low uptake of the Learning Management System is partly due to the unstable information technology system at the University and poor support services from [computer services], which demotivates lecturers wanting to innovate with technology.

> Although there are disparate programmes to perform some aspects of a student tracking system, obtaining

> management information to make decisions quickly is underdeveloped. Some of the available technologies used for this purpose are archaic and labour intensive.
>
> The tracking of individual students across all their modules would be facilitated by the central capturing of formative assessment marks. The proposal has met with resistance, often with well-substantiated reasons related to security, the stability of PeopleSoft Oracle (PSO), integration between [the learning management system] and PSO or workload. [The university] is investigating the integration of the grade centre within [the learning management system] with the grade centre in PSO campus solution that is used as the student information system but progress has been slow owing to resource constraints in Information and Technology Services. A related challenge is to increase awareness within Faculties about the data available to them in [the learning management system] to support student success initiatives.

In some instances efforts to monitor student performance are hampered by a combination of technological challenges and non-participation of staff in entering or updating the required data.

> Although the tracking system is in place, it does not function optimally. The effective implementation of the system is hampered due to ineffective data capturing, IT system and software, Enterprise Resource Planning configuration and lack of tracking interventions.
>
> Currency of information – the tracking system was designed to alert course leaders of students at risk. However, course leader information on the ITS system tended to be incorrect or outdated.

5.3.5 Structural, financial and staffing constraints

Certain initiatives can only work if suitable structures and staff are in place. For example, at one institution the lack of a student development officer prevented the implementation of a student tutor programme.

> The policy of training senior students who would primarily play the role of tutors and also provide the necessary mentoring and academic advice to students was tabled for discussion at an Academic Executive Management meeting in 2011. The peer tutors would be known as TMAs (Tutors, Mentors and Advisors). Although the policy was generally supported by the academic managers it could not be implemented because of the lack of a coordinating student development officer to lead this institution-wide initiative. The implementation of this policy requires the leadership of a dedicated student development officer and the commitment of all support units and academic departments.

At other universities there is a need for better coordination of functional units across the institutions or a different organisation, as illustrated in the two quotes below.

> There is a need for certain aspects of Student Counselling Services to be standardised and better coordinated across the Institution. Differences in approaches across Campuses in Colleges as well as the somewhat fragmented approach to student support in some instances within Student Services and within the Colleges persists, and leads to uneven service delivery.
>
> The optimal organisational structure for the coordination and management of studentsupport and development at our University – what activities should be grouped in the same (or in different) centres, divisions and responsibility centres – has been revised recently. Upon the establishment of the former Division for Student and Academic Support (SAS) in 2009 it was undertaken that its systemic effectiveness would be evaluated independently after three years, and measured against optimal service delivery and support and the accomplishment of strategic objectives. Said investigation was conducted during 2012…This investigation confirmed determining trends with regard to academic and student support services at universities, both local and worldwide. Based on these trends and the findings and recommendations of the investigation team, management decisions were made to reorder support service environments within the [university] in a more functional manner.

In some submissions institutions indicated that staffing and/or financial limitations impose constraints on the

activities that they can successfully undertake, as shown in the three quotes below.

> Mentoring, or an initiative such as SI, which has a long track record of enhancing student success, is not offered in all modules due to capacity and financial constraints.

> A shortage of staff has prevented the extension of programmes to students in the residences after hours.

> Materials development constraints: For example, developing multi-lingual glossaries is labour intensive and costly. [The university] does not always have the human and financial resources to increase the number of modules where there are multi-lingual glossaries.

At one institution there has recently been a shift from generic academic literacy courses taught by a small number of staff in a central academic literacy unit to faculty-based academic literacy development. While this may be seen as a positive move from a pedagogical perspective, there are concerns about the demands that will be placed on specialist academic literacy staff.

> Over the past years there has been a move towards greater integration of academic literacies into each Faculty. It is still too early to assess the degree to which the initiative has been successful, while there is a workload risk factor for the Unit for Academic Literacy (UAL). Some Faculties opted to remain with UAL's established academic literacy modules while others developed more integrated or Faculty-specific modules… A major concern is the sustainability of UAL involvement in departmental- and Faculty-specific initiatives, given their small permanent staff complement: they were able to sustain a single, generic academic literacy module with this small staff but not multiple, Faculty- or discipline-specific language modules.

Several institutions indicated that they lack the capacity to implement student performance monitoring at all levels – course, programme, department and faculty – as well as in the institutional planning office. Examples of some of the types of capacity problems are illustrated in the three examples below.

> Data input – a multiplicity of factors were involved here. In some instances, the capturing of assessment marks was done by course leaders but the more usual approach was to pass this task on to Faculty Managers as some lecturers either did not wish to take on this task, or were unable to do so due to low levels of computer literacy. There was (and still seems to be) a poor understanding of how to edit the capture spreadsheet in the set-up phase. There also appears to be reluctance to preset the number of tests and assignments that have to be written, despite the possibility of introducing flexibility in this regard.

> The student performance tracking system that was developed and implemented in April and October of 2010 entailed sending progress reports to newcomer first-year and second-year students on the [main campus] and first-year students on the [other campus]. This was seen as a concrete initiative to create an early warning system to identify students who are at risk academically and consequently to contribute towards improving student performance patterns at the [university]. The involvement in terms of intervening was limited due to capacity constraints. Furthermore, due to internal delays, capacity and systems-related issues, progress reports were not always sent timeously, thus undermining the purpose of an early warning system.

> Concerning student Performance Monitoring in particular, the following challenges can be reported,
> Capacity at the institutional planning and academic office to rollout tracking and monitoring systems in all the faculties.
> Data cleansing project has to be prioritised in order to establish cleandata in the student management information systems.
> Academic management capacity to implement student performancemonitoring and tracking system at course/module, programme anddepartmental levels.
> Not all faculties are implementing student tracking and monitoring asrequired.
> Challenge, integration of [different systems]

Several institutions indicated that the number of appointments students are requesting with counsellors is in-

creasing, but limited resources mean wait times of several weeks. Of a more serious nature is the demand for psychiatric services.

> Efficient care of students with psychiatric issues presents a continuous challenge. The lack of a psychiatric service on campus presents significant difficulties in assisting and managing students with urgent psychiatric difficulties.The peer counselling service has been of limited benefit to students, as the majority of the issues presented for counselling require counselling with a mental health professional.

5.3.6 Communication about and use of available services

About half of the institutions indicated that communication about, and use of, the available support services is not effective. Neither students nor academics necessarily make good use of the services. At a few universities student counselling units approach academics to inform them of their services, but this does not necessarily lead to many referrals as the two quotes below show.

> Road shows are intended to inform the departments about the Student Counselling Unit. Only five out of 23 academic departments responded positively in 2013.

> At the start of each academic year the counselling psychologist visits the Dean of each of the four faculties with referral forms for students who have been identified by lecturers as having academic challenges. The students are encouraged to attend study programmes run by [student services division]. Student Peer Counsellors also assist in identifying students at risk of failing the year or dropping out and referring them for professional assistance. Academics also often counsel students themselves as the [student services division] system can only cope with a small percentage of the numbers who require assistance. However, these measures have not been effective in countering a high drop-out rate.

In some instances a lack of student referrals to other forms of support may also be caused by academics' lack of awareness of services that are offered, as the three examples below show.

> An area of weakness is that some lecturers are not aware of the support provided by the writing centres, and therefore do not refer students for assistance. Another challenge is the impression amongst academics and students alike that the Writing Centre performs an editing service, despite the fact that this type of service is not part of its mandate.

> Given the range of learning enhancement opportunities available…, more needs to be done to raise awareness about them and market them to students and staff.

> Visibility and use of counseling & therapy services
> Services not known to students and therefore used by only a small percentage thereof.
> Few referrals from staff members
> Lack of appropriate visible infrastructure
> No collaboration with the Student Affairs Directorate
> Understaffing

Career guidance services are not necessarily accessed early in the year, which may lead students to choose a programme that does not suit their interests and abilities.

> Lack of career guidance in schools means that many first-time entering students are doubly disadvantaged – in terms of Higher Education preparedness and in terms of choosing a course of study that is aligned with their interests, aptitude, etc. It takes some students a while to find that they are in the wrong programme and by the time that they have received career counselling it might already be so late in the year that they cannot switch to another programme until the subsequent year. This can be very demotivating and some students might dropout as a result.

> Many students tend to register for programmes without sufficient prior career information. Although career-counselling services are available, not all late applicants consult a Counsellor if their application for their first choice of programme has been unsuccessful. Late applicants often select a programme merely because there is space available.

A few universities indicated that the involvement of first year students in mentoring programmes was less than desired for a number of reasons, as illustrated below.

> A Student Peer Mentorship Programme was implemented in 2012 in the residences and in 2013 in three faculties. The programme still has teething problems, and is still to be implemented in the Faculty of Humanities. This programme depends on funding from the TD grant and must be implemented by the residence managers and the faculties. So far, challenges of poor student attendance; poor planning; and haphazard implementation by faculties and residences have been identified.

6. FOCUS AREA 3: ENHANCING THE LEARNING ENVIRONMENT

Including teaching and learning spaces, ICT infrastructure and access, technology-enabled tools and resources, library facilities.

As with student support, the learning environment is affected by a combination of general socio-economic factors, such as students' living conditions, and university-specific factors. In this focus area, the intention is to focus on university-specific factors directly related to teaching and learning. These include spaces for teaching and spaces for students to learn, both individually and collaboratively, ICT infrastructure and access, technology-enabled tools and resources, and library facilities.

6.1 GLOBAL AND LOCAL TRENDS AND ISSUES RELATED TO FOCUS AREA 3

Michael Wesch, assistant professor of cultural anthropology at Kansas State University, released a video on YouTube entitled "Vision of students today" (2007). The video begins in an empty lecture hall with the camera zooming onto different pieces of classroom graffiti written on walls, desks and chairs. This graffiti makes the following point:

> "If these walls could talk …
> What would they say?
> If students learn what they do …
> What are they learning sitting here?
> The information is up here.
> Follow along.
> Follow."

The introduction to the video suggests that while Information and Communications Technology (ICT) has changed the way that students access and connect with their subject matter, their peers and their professors, the structures within which their education occurs sends out a message that students should follow. Students, used to engagement and interaction via Information and Communication Technology (ICT), find the passive approach of the lecture stultifying and even alienating. While students may have computers at their disposal, and may even be encouraged to use ICT in class, the unidirectional flow of information in the lecture hall and the built form necessary to support such an instructional approach remains unchanged.

Today, the majority of teaching still occurs in these lecture halls, designed to house large bodies of students while listening to a single scholar; libraries are filled with rows of books interspersed with alcoves offering quiet space for intellectual pursuits. Administrators are housed in impressive buildings, corner offices for professors and smaller quarters for less prestigious staff, and students are accommodated on campus in halls or residences.

And yet, within these spaces, it is common to find a range of facilities offering ICT tools and resources. Many lecture halls are equipped with a data projector and computer on the podium, and appropriate software is available. Libraries are equipped with workstations for students to search through databases of resources. Intellectual pursuits can also be conducted in the computer laboratory, equipped with banks of computers. Administrators have the capacity to attend meeting after meeting with tablet in hand and are able to access necessary information via campus Wi-Fi. Students are able to study and submit assignments from their rooms using a laptop computer hooked up to a local network connection. ICT infrastructure and access, while being far from ubiquitous, has become a commonly held expectation amongst many members of the campus community. But there seems that there is a disconnect between how teaching and learning were conceptualised prior to the widespread availability of ICT and what are now possible, and often preferable, approaches to promoting learning.

6.1.1 Information and communication technology in teaching and learning

The inclusion of ICT into higher education allows the "out-side" to be brought in, and the "inside" can be brought out (Bachmair, 2010). ICTs offer opportunities for digital media, tools and resources to be brought into the learning environments by students and academics. These resources can be used to substitute, augment, modify and redefine current teaching and learning practices. These changes in practice are in turn returned back into the digital world.

ICT's capacity to mediate interactions between "real world" experiences and educational experiences introduces a new agenda onto campus. This new agenda is no longer determined by academics, may not have the best outcomes, either for the institutions, or for other involved stakeholders, and introduces both risks and opportunities to institutional stakeholders. Creating conditions for the use of educational technologies requires that choices about hardware, software and infrastructure are addressed. However, questions such as, "Which Learning Management Software should we choose?" and "Shall we equip students with tablets?", are only preliminary issues to be decided on. Creating conditions to facilitate the diffusion of technology-enhanced

learning (TEL) right across an institution requires more than infrastructure, access, resources and tools. Yes, giving students and staff support when using ICT platforms is as important as offering access to them, but neither access nor support are necessarily going to lead to established and educationally worthwhile use of these resources.

For e-learning to be fully institutionalised, the effects of systematically diffusing TEL should be felt at a range of intervention points. These points range from the 'micro' level such as the inclusion of digital and interactive resources for teaching content, to the 'meso' level, such as changes to library facilities or provision of media centres, to the 'macro' policy and large-scale collaborations level, where the university considers how to use technology to facilitate learning.

At present, the increased availability of digital technologies has not resulted in substantial changes to the formal learning process. Often students and academics merely substitute an electronic tool or resource for a conventional one, such as posting notes online rather than handing them out on paper. The deployment of ICTs into existing campus structures does not necessarily lead to wide-scale, systematic, sustainable and effective adoption of ICT. Enhanced or redefined use of ICT is only possible when academics and their institutions jointly decide to revisit and re-view current teaching and learning activities to take full and optimal advantage of the new technology. As long as ICT infrastructure and provision remain an afterthought, with hardware bolted onto walls, the impact of digital media on formal teaching and learning practices will remain limited.

Teaching with technologies is always restricted by previous experiences of teaching, knowing and learning. When the spaces in which teaching and learning takes place re-inforce these past experiences, then it is likely that the ICTs will merely substitute a digital for an analogue form. Tablets may replace textbooks, data projectors may replace blackboards, but ICT infrastructure, access, resources and tools will never, by themselves, be the magic formula for providing a new and 21st century education.

6.1.2 Traditional university buildings

For ICTs to be more than substitutes for analogue tools, the physical infrastructure of a campus needs to embody the physical representation of the institution's vision and strategy for learning. Those responsible for implementing the vision need to be able to analyse needs and understand learning and teaching modes and the mediating effects of technology. Then administrators and academics can generate a new and a shared understanding of learning in these new spaces (Moore, 2013). Such transformation is not to be under estimated.

Almost a thousand years after the first universities were established, some tertiary education's built forms have become established archetypes, expected by students and academics and duly replicated by architects (sometimes with a modern twist) on other campuses. Global similarities between these built forms allow us to identify the various elements of a university campus.

The striking similarities between built forms across different continents may be attributed to a range of factors. Higher education institutions have a great deal of history wrapped up in these built forms (Brown & Lippincott, 2003): they often date back to the founding of an institution, were constructed and are maintained at substantial cost and evoke a deep response from their alumni and the communities that they serve, as these built structures represent the civic role the university plays within society. Apart from their symbolic value, these archetypes are a means for ordering and reinforcing the relationships within the institution; they are also used as tools of thought and action (Temple & Batchelor, 2008).

The built structures — lecture halls, libraries, offices and residences — on campuses are informed by historical archetypes. Despite massification and ubiquitous ICT, these archetypes continue to dominate the design and functionality of most buildings on a campus. Many university campuses are judged on the ability of the administration to aesthetically adhere and maintain these archetypes. Architectural awards and positive reviews for newly constructed university buildings reinforce these built forms (Jamieson et al., 2007).

Most other medieval built forms (castles, cathedrals etc.) are museum relics, acknowledged for their previous contributions to the cultural record. While many a campus building may appear quite dilapidated, these built forms are still heavily trafficked and used. Larger class sizes and new curricula have introduced new challenges to the higher education sector (and the built infrastructure that houses it) and some of these archetypes are loosening to accommodate these new forces. The library is probably the most obvious form type that has experienced such changes.

6.1.3 The library

For many students, the academic library was traditionally a rather daunting, formal place where one went to do scholarly work and where whispered conversations were barely tolerated. The traditional setting of the interior space was one of closely packed tables, numerous individual study carrels and rows of shelves groaning with books. It was a book and shelf dominated space where the comfort of the user and an inviting interior design were not necessarily a priority. Although this type of setting still prevails in most academic libraries

internationally and in South Africa, there has been a shift, albeit an unexpected shift, but a welcome one nevertheless. Some academic libraries have abandoned the traditional setting described above and embraced technology to drive the library into the future.

Advances in technology enabled academic libraries to emerge in a new guise. The trigger for this transformation, which started more than two decades ago, was the explosive growth in technology which significantly impacted on teaching and learning in higher education. This development, in turn, contributed to the evolution of new modes of teaching and learning (a changed pedagogy), such as blended and online learning. It fundamentally changed how academics and students search for and use information. As a consequence, the physical space and the virtual environment of the library have had to change to keep pace with the expectations of library users.

The academic library, being an early adopter of digital technologies, harnessed technological innovation and introduced services and facilities that have altered the traditional academic library almost beyond recognition and made technology the mainstay of academic libraries. Technology also introduced another dimension to the physical collection of the library. The academic library is no longer the physical storage space for the collection but is instead the virtual gateway to unlimited information resources (Beard, 2012, 439-440).

When did the transformation of the academic library begin? Latimer (2011) chronicles the evolution of libraries through the ages and notes that at the turn of the twenty-first century cynics were predicting the demise of the bricks-and-mortar library. Library users, according to the cynics, would get everything they required from the internet and would have no need to leave the home or office for resources. In effect, the internet would destroy the academic library as we know it. Contrary to expectations, however, the converse happened.

> The digital age, contrary to predictions, has had a largely positive impact on library design. The increase in the use of IT and e-resources allows libraries to be more flexible and the spaces within them more fluid. Library spaces are no longer defined by the collection…the creation of exciting and attractive library space has been shown to bring people into the physical library to use the virtual resources (Latimer, 2011, p125).

The transformation of academic libraries, although gradual at first, increased exponentially with each wave of innovative technology, such as smart phones, wireless access, tablets, and so on. These devices impacted on the way students use information and what they expect from their library to support the technologies they use. Not many libraries have the funds to have completely new buildings designed from concept to finished product. However, the literature abounds with examples of how academic libraries have repurposed their existing spaces to transform the interior of the library.

Use of technology in libraries

The introduction of technology-enabled tools such as Radio Frequency Identification (RFID) into libraries significantly increased efficiencies and reduced repetitive handling of individual items. RFID technologies are used to, amongst other things, identify and track people, animals, and goods. RFID technology offers identification beyond line of sight and the possibility of identifying individual items at high speed (Butters, 2009, p 198). Some libraries embraced this technology early in the twenty-first century, while adoption across South African academic libraries is steadily increasing. RFID in libraries also allow library users to issue and return materials without the intervention of a staff member. The introduction of RFID technology into libraries has reduced the number of hours required in human resources for shelf management and related activities, which frees staff from tedious repetitive functions to engage with library users. The following is a list of possible benefits of RFID:

- Increase in productivity as staff are freed for increased interaction with library users;
- More efficient use of staff time;
- Greatly improved services for library users, e.g. self-issue and return of items;
- Reduced queues as multiple items can be discharged at a time;
- Reduction in repetitive motion injuries in the workplace;
- Improvement in collection management. Misfiled items are now retrievable in seconds using portable readers. Related tasks such as shelf ordering, inventory, weeding and item searching are done in reduced time.
- Security is enhanced due to the tagged items (Butters, 2009, p200).

Other forms of technology that influence library space and services are described below.

Reference management software

Before *EndNote, Ref Works, Zotero and Mendelay,* teaching reference skills to young students was the bane of many librarians' lives. The introduction of these citation reference management software products have automated referencing as we know it. The software usually consists of a database in which full bibliographic references can be entered. The user is able to integrate these packages with word processers, which allows the user to produce a reference list at the end of an assignment or article. This substantially reduces the risk of omitting a cited source from the reference list. Most of the reference software packages can be customised into various reference styles, such as APA or Chicago, and changed in a matter of minutes to a different style if necessary. Citation reference management software is often available on the networks at universities, and

librarians teach library users how to use these tools. Reference management software is available in proprietary (EndNote, RefWorks) or in open source (Zotero) formats.

Photocopying, printing and scanning facilities in libraries

Most academic libraries provide for printing and photocopy solutions to allow library users to print from databases or photocopy from resources. A recent introduction has been the scanning facility which allows students to scan and upload information onto any storage device. The introduction of Wi-Fi has allowed technology to leapfrog traditional barriers. Library users are now able to wirelessly route printing from any device to the library printers and, with the swipe of a card, release the printing. The next big innovation, recently introduced in international libraries, has been the wireless charging of devices such as smart phones and tablets. The user is able to charge devices without the obligatory cables. Tables come equipped with a "charging pad" or "charging mat" on which devices are placed and wirelessly charged using Qi, the global standard for wireless power. http://betanews.com/2014/12/17/hub-it-can-now-charge-your-devices-wirelessly/

Social network media

Students have become used to ubiquitous Wi-Fi on university campuses and expect institutions to communicate using these tools because of ease of access. Some libraries in South Africa are now routinely using SMSes (text messages) to remind library users when books are due or can be collected, and Twitter is used to announce events and other marketing initiatives.

A ground-breaking study by Stvilia and Gibradze (2014, p141) revealed that social media platforms, such as Twitter, are increasingly being used as channels of communication and information service provision in libraries. The authors reported on a study on the use of Twitter by six large academic libraries in the USA. Analysis of the tweets sent out by the universities revealed that the event and resource categories were the most frequently occurring types of tweets. The analysis further revealed that tweets related to study support services and to building and maintaining connections with the library community were the most frequently retweeted and selected as favourites.

Organisation of the physical library space

A decade or two ago the biggest concern for librarians was creating more space on the shelves for books and/or rearranging the space to accommodate more shelves. The advent of the digital era saw libraries embarking on the digitization of their information resources, as well as procuring online and e-resources. This proved to

be the change agent that led to the development of surplus space. If one peruses the library literature and university library websites one will be astounded by the changes that have been brought about in libraries in this short amount of time.

Changing higher education pedagogies brought about a new paradigm in teaching and learning and promoted active learning techniques, such as group work and problem-based learning. According to Forrest and Hinchliffe (2005, p296) this new approach to the changed higher education pedagogical landscape meant that, "… students need space to meet, to talk and to collaborate…."

The new modes of teaching and learning alerted academic librarians to the fact that the existing spaces in the libraries were neither appropriate nor supportive of the new paradigm. The literature in support of the new paradigm for higher education advocates the creation of "social spaces" for teaching and learning on campuses, and particularly in libraries. There is a school of thought that contends that physical learning spaces can affect student engagement (Matthews, Andrews, & Adams, 2011, p105) and also have a powerful impact on student learning outcomes (Hunley & Schaller, 2006).

The introduction of "information commons" in academic libraries was the precursor to the transformation of the academic library. According to Lippincott (2007, pp 24-7), an Information Commons is a learning space that not only underpins the social aspects of learning, but also offers abundant technology and digital content within an appropriate physical setting. Many of these spaces have a coffee bar and comfortable table and chairs that can be reconfigured to suit the needs of the library user. Some of the literature refers to surveys conducted with students on their perceptions of the ideal academic library. Not surprisingly, many comments referred to the need for colourful décor, comfortable upholstered chairs, a space where food can be eaten in the library and 24/7 access.

Libraries provide students with banks of computers to allow them to search for information online, but also use them to teach library users information management skills that can be a lifelong benefit. These computers are equipped with a full suite of application software, such as word processing, email and web-browsing. Staff are on hand to provide technical assistance when required. Today it is not unusual to find academic libraries providing loans of laptops, kindles, tablets and other devices to supplement the purpose of the electronic classroom or information commons. It is about the ability to access information anywhere, anytime 24/7.

Many academic libraries now sport repurposed spaces that include flexible, collaborative and individual study and social learning environments.The "flexible" refers to the fact that students should be able to rearrange the furniture to suit their needs at any time. The interior of the library should also factor in spaces for less scholarly activities, such as comfortable reading spaces or spaces overlooking beautiful landscapes. The individual and the group activity environments make provision for ubiquitous access to technology. Beard and Dale (2010, p481) describe the transformed libraries as "technology-rich learning spaces", which should, as a minimum, make provision for students to access Wi-Fi, allow them to borrow laptops or other devices while in the library and have seamless access to software that supports learning and teaching. Collaborative or group study areas should have data projectors with wide plasma screens, which are wall-mounted to enable the whole group to view. Other facilities for collaborative group rooms and group spaces include electrical outlets to charge laptops and other devices.

This does not mean that the new modern academic library has become a hub of activity and noise. There is still a need for quiet, individual study spaces and this should be clearly indicated with appropriate signage. Quiet zones and discussion zones should preferably not be near to each other.

The literature is not short on suggestions on what the academic library of the future should look like. There is consensus that in terms of design the library of the future must be a green and sustainable building. Many authors emphasise the need for natural light and spacious, well-designed interiors. Riddle and Souter (2012) produce a list of design principles that should guide the design of learning spaces as follows:

- Comfort—refers to natural light, controlled temperature (heating and cooling), comfortable furniture and acoustic shielding;
- Aesthetic—refers to symmetry, harmony, simplicity and fitness for purpose;
- Flow—refers to both the state of mind of the student (being in the zone) as well as the movement through physical space. The authors suggest that spaces should not just be corridors or long passages but that little nooks and crannies should be incorporated to allow spaces for students to stop and have conversations or just to find a chair to relax. They add that these places could become rich learning nodes in their own right.

- Equity or universal access—refers to access for the disabled, with ramps rather than stairs, and spaces that are easily navigable by wheelchair or with other walking devices. The literature stresses that thought must be put into the design of the furniture and the manner in which it will accommodate the disabled person. A suggestion is that certain study tables be height adjustable and that power outlets are embedded into table tops for easy access (Riddle & Souter, 2012). There are many supportive software options and applications, such as JAWS (job access with speech) for blind and visually impaired users as well as other software for the hearing impaired that converts speech to text or speech to video sign language. In South Africa these devices are not often available in the library but rather kept at the Disability Unit, if there is one, at a university. Internationally, the best practise is to have these devices available in the library.
- Blending—refers to the subtle merging of technology into a predominantly face-to-face environment through features such as Wi-Fi, power outlets and powered lockers for laptops and other handheld devices.

6.1.4 Teaching and learning spaces in universities

The performance of all higher education facilities as contemporary places for teaching and learning needs to be considered when judging the suitability of built forms. University architecture should not only appeal aesthetically to users, passers-by or judges of architectural awards. The idea that the formal teaching and learning process 'takes place' somewhere needs to be acknowledged by university administrators, facility managers and architects, educational researchers and teachers (Jamison et al., 2007). At present, campus built forms are often determined by cultural and institutional factors and basic operational constraints, like the need for daylight or access. Energy and environmental aspects are also considered and novel construction methods and materials (steel frame, elevators) and new servicing systems (electric lighting, air conditioning) break previous constraints on form (Steadman, 2014). The suitability of the built forms should also be influenced by current curriculum and the students using them. This should also be a consideration in the design of new buildings or the redevelopment of existing facilities (Jamison et al., 2007).

As mentioned above, for academic libraries there has been a reconsideration of their inherited archetype and thinking about how their use of space impacts on their role in a higher education setting. Writing centres are often positioned in libraries, which means that students are able to obtain guidance in writing papers or proposals without leaving the building. Coffee bars or cafes have also become the norm and students can grab a bite to eat while talking about their work. The convergence of IT and library services has resulted in many libraries now also housing technical staff from the IT division to assist library users who may have problems with their devices or encounter problems accessing Wi-Fi.

Other built forms on campus also need to interrogate their inherited archetype. The repurposing of libraries has shown that the design of space has an impact on practice and this can shape the learning that happens in that space. We call this shaping "built pedagogy", and it is the architectural embodiment of our educational philosophies. For example, "a classroom with neat rows and desks embodies pedagogies or 'tacit curricula' of discipline and conformity, whereas spaces personifying flexible properties… can be said to embody pedagogies of freedom and self-discovery" (Monahan, 2002).

> Space – whether physical or virtual – can have an impact on learning. It can bring people together, it can encourage exploration, collaboration and discussion. Or space can carry an unspoken message of silence and disconnectedness. More and more we see the power of built pedagogy (the ability of space to define how one teaches) in universities and colleges (Oblinger, 2006).

If we accept that the spatial arrangements can preclude or support retention, graduation and pedagogical innovation (Van Note Chism, 2006) then out-dated, organisationally and physically compartmentalised structures need more than a lick of paint if they are going to be suitable "next generation learning spaces". The traditional "egg box" suite of lecture halls may have suited an industrial model for education, where structures focussed on efficiency and the ability to foster student concentration, and not on creating an inspiring environment that promoted agility, creativity and collaboration (Moore, 2013).

In the second half of "A Vision of Students Today", Professor Michael Wesch (2007) attempts to catalogue his students' feelings about their classroom experience by co-creating a class survey. Their responses offer a candid insight into students' perspectives of their learning experience. With large signs held up above their heads, the class members briefly articulate their thoughts about their university experience. Their responses include large impersonal classes, lecturers who did not know the students' names and students who did not attend class or complete the assigned readings. Their silent admissions suggest that technology is not facilitating good teaching, has made learning more impersonal and is used to reinforce the top-down authoritative knowledge model. The built form type associated with teaching, the large lecture hall with chairs bolted to the floor and a single focal point, be it a data projector, chalkboard or whiteboard, at the front of the room continues to re-inforce the signal about how teaching and learning will be conducted (Oblinger, 2006).

The physical environment is an important characteristic of any campus and the built archetypes that we have come to accept as features of campus mean that space arrangements are also taken for granted. Thinking about the way campus spaces are built, utilised and intended to be used requires a different mind-set. New learning paradigms require new paths for teaching, learning and space utilisation. We often start the design of learning spaces with service and operational considerations rather than with questions about the character of the learning we want to happen in the space (Bennet, 2007).

Learning environments of the future should be flexible, inspiring, supportive of effective teaching and learning, involve the users and the wider community, and link with other learning places. Certain institutions have their own "pet versions" of future learning environments and it is possible that these new forms will have an impact on the current range of built forms of a campus, including existing buildings where teaching takes place (lecture halls, seminar and class rooms), learning and studying spaces (libraries, studies, cubicles) and new built forms that will support learning. These pet projects have not, however, yet developed into archetypes and are unlikely to be replicated elsewhere.

Refurbishment and building programmes are good news if the right type of buildings are being constructed. Refurbishments offer HEIs an opportunity to ensure that learning environments are up to date. New buildings offer opportunities to design learning environments for the future. Imagining how to design these buildings is, however, hard, because knowing how tertiary education might develop is difficult to foresee. The safest thing to do is to make sure that the future is not constrained by what we do today. Built structures are, of necessity, a compromise among utilitarian needs, engineering imperatives, financial constraints, and aesthetic values. If budgets are spent on refurbishments to accommodate more students, or architects' designs for future buildings are intended to simply expand the space to practice dated teaching methods, then our buildings will not have the necessary educational impact.

The central question is how to balance that uncertainty of rapid change, largely fuelled by technology and rising student numbers, with a long-term responsibility towards developing a campus that prepares the brightest young minds for the future. The challenge for higher education is to design an architecture that is appropriate for its mission, is culturally sophisticated and prompts engagement. Unlike previous buildings programmes, academic information technology will need to be considered when designing these buildings.

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6.2 SUCCESSFUL ACTIVITIES

Institutions were asked to identify what activities or facilities they currently have undertaken or put in place related to focus area 3, enhancing the learning environment, that are successful. They were also asked what evidence they use to conclude that the activities or facilities are successful. In this section a summary of the most common undertakings that institutions said were successful is presented. In addition, examples of undertakings that are noteworthy but not common are described. The types of evidence for success put forward are discussed in chapter 7.

6.2.1 Teaching and learning spaces

From the submissions it is clear that there has been a great deal of building activity at universities recently, both constructing new buildings and refurbishing existing buildings. Several universities indicated that they have recently built large lecture venues. There are also a number of references to ensuring that lecture theatres are adequately equipped with appropriate teaching technology, as well as meeting basic standards in terms of lighting, seating and ventilation.Two examples are shown below.

> Following a major initial 350 common lecture venue upgrading project in 2008/9 at a cost of more than R7 million, the University made a concerted effort and invested significantly to expand wireless access and improve lecture room electronic infrastructure. Common lecture venues have been fitted with podiums, sound (microphones, amplifiers and speakers) and projection. Some lecture venues have been fitted with more advanced infrastructure, mainly high impact venues, as a lack of funding has prevented this advanced technologies include classroom automation and remote support (Crestron units) and document imaging cameras. Problems of equipment theft have been mitigated through the rollout of video cameras in all common lecture venues, which has been shown to reduce theft.

> The new building has six three hundred seater venues (inclined) & seven thirty five seater venues (flat) together with a computer laboratory with thirty work stations. Folding partitions between two of the rooms allow for the combination of two by two eighty seater teaching rooms. These venues also allow for desks and chairs to be moved around to support alternative teaching scenarios such as group work. The construction has incorporated green design aspects and low maintenance intervention. For instance, the roofing was constructed to allow maximum overhang to prevent the sun from generating heat on the large external brick facades, which is important given the high summer temperatures…The cladding material used on the sides of the building has introduced a wind shield and open-flue cavity walls create air circulation.

Although residences may not be conceptualised as learning spaces, a few institutions referred to study areas in residences, both for students to study individually and for collaborative work. In some cases this involves the re-purposing or broadening of access to existing spaces. One institution indicated that, "there has been an increased uptake of the study spaces in residences by non-residents."

> We have redesigned existing residence spaces to encourage more collaborative learning, and introduced deli services in some cases which is open 24 hours a day. New residences and hubs, the redesign of the faculty building foyers, and the refurbishing of study centres with custom-designed furniture (e.g. for students to lock-away their laptops whilst charging it). Residence dining halls have been opened-up for usage by private students as well.

> There has been improvement in residence accommodation and facilities, such as the availability of computer laboratories and study areas. This is as a result of leadership support for quality learning and living spaces in residences as well as the provision of mentors and tutors at the residences.

Almost all, if not all, universities' libraries are providing a variety of learning spaces. These are discussed under the section on libraries.

Specialised teaching and learning spaces

Certain disciplines require specialised teaching and learning spaces. This is particularly true in the professions related to health sciences, engineering and architecture. However, there are other disciplines that require

specialised spaces, for example, clothing and textile design, visual and performing arts, food sciences and biokinetics, as the two quotes below show.

> [The university] also boasts faculty-specific specialised learning spaces such as: a language laboratory, advanced life-support vehicle and specialised clinics (Faculty of Health Sciences); theatre and studio rehearsal rooms, television studios, an Outside Broadcasting Van, (Faculty of Arts and Design); kitchens and a restaurant, a fully functional nursery with live plant specimens and a demonstration garden (Faculty of Applied Sciences); new tutorial rooms (Faculty of Accounting and Informatics), and specialised laboratories, design studios and workshops across all faculties.

> The Nursing Science Simulation Clinic: an example of state-of-the art technology in the service of professional health training. In order to improve the quality of nursing science education at the University, a comprehensive business plan was developed to introduce a fully equipped simulation laboratory, emulating a fully operational clinic…The basic structure is an already existing building sited in the central core of the academic teaching and learning space of the campus. This building was given a face-lift on the exterior and completely gutted internally to present a radically new interior configuration…The building has been equipped with all the systems and technologies to be found in any state of the art medical clinic. Students who have been trained in this simulation laboratory will be familiar and proficient with the daily operation of equipment and facilities in their future work environments…Arrangements have also been made for the clinic to be used by local general medical practitioners and emergency medical care personnel as a practice centre for annual training and certification.

In two cases, universities said the technology provided by the university is more modern than what is available in the field. As a result, students have to be trained in how to use both new and old technologies, for example,

> One of the challenges this department faces as a result of the use of modern technology in training their students is that some of the industry partners have older equipment and as a result, the department still has to expose their students to older equipment.

> A challenge is that not all staff members are willing to learn how to use the new technologies and the industry does not always have the new technologies, and as a result, the [technology] station has to teach students both the old and new technologies.

Some specialised spaces are being used by universities to interact with departments or faculties beyond the individual department or faculty. In some cases, university facilities are even used by industry or community members outside the university, which strengthens links with external role players. Four examples are given below.

> The [Engineering] faculty has a multimedia recording studio which is built for recording podcasts…and digital stories, allowing staff to innovate with technology and students to have access to video and audio recordings that explain threshold concepts. The facility is open for use by the [the university] community and has attracted users from other regional universities.

> This Technology Station offers state of the art facilities for [the university] staff and students and the clothing, textile and related sectors. It serves as a training and consultative hub for these sectors in the [province]. The product testing and analysis laboratory is used by the retail sector…Technology platforms are also provided, amongst other services. The station is funded by the Technology Innovation Agency (an initiative of the Department of Science and Technology).

> A state-of-the-art laboratory/workshop facility has been established at [a city] Hospital for the Medical Orthotics and Prosthetics programme in the Faculty of Health Sciences. This is a joint initiative between the University and the Department of Health in [the province]. This faculty also boasts a new Health Clinic that provides health care services to the greater [municipality] community and at the same time provides opportunities for students to gain supervised clinical practical training. The new complex houses Somatology, Homoeopathy, Chiropractic, Dental and Radiology Clinics and students from the related programmes benefit from their interactions with the public, [university] students and staff.

> [The Human Performance Lab (HPL)] is one of the best sports technology facilities in South Africa, with exceptional equipment to support learning and research. The HPL provides space and cutting edge technology to enhance education and technical training in terms of human performance in sport and related activities, including human factors. Importantly, it capacitates research possibilities for both undergraduate and postgraduate studies. It provides a platform where undergraduates and postgraduates acquire knowledge, skills and experience to enhance their employability and to respond to community learning needs by way of research in the field of sport and community development. It has good IT infrastructure, excellent outdoor facilities for the discipline, and strong departmental leadership.

Learning spaces

Outside of libraries and residences, few successes were recorded in the submissions related to student learning spaces. One university referred to a purpose-built study centre for students in engineering.

> The study centre has three sections: one equipped with computers; one wired but without computers where students can use their own devices; and the third part comprising cubicles with about seven seats where students can work in groups and even project what they have on their computers. The study centre has been very successful in creating a learning environment with a professional atmosphere that students reportedly like.

The same university wrote about a new building that was designed with learning principles in mind:

> Engineering 3 includes learning spaces for group work and working on laptops—in fact, the whole building was designed on learning principles.

More than half of the universities indicated that they have created informal learning spaces, in some cases by making use of public spaces or underutilised spaces in existing buildings, as the two examples below show.

> The recent installation of Wi-Fi and the growing use of mobile devices have highlighted the need for spaces to learn together and alone with technology other than laboratories (an increasingly dated concept). One initiative in this regard focuses on neglected nooks and crannies where students choose to gather.

> The increased provision of social and learning spaces, in the way that buildings are designed and built, is an ongoing consideration where new projects arise. A 'MySpace' project has been launched, which has created extra seats and in many instances tables with access to wi-fi, mostly in foyers at lecturing venues in 23 buildings.

Flexible teaching and learning spaces

A few of the universities indicated that they are taking advantage of renovations or new building to create spaces that allow for a variety of pedagogical approaches, as the example below illustrates.

> - The design of the studios in the New Teaching and Learning Building…designed based on a novel lecture theatre design at UQ "hybrid lecture/ group work space". Students seating is horseshoed and layered with alternating thick and thin rows of desks. Students can then swivel to have group discussion and swivel back to lecture, style. Working with innovative space design helps to accommodate different pedagogies and active learning modes.
> - Active problem solving venues with a number of moveable whiteboards in one lecture hall to accommodate multiple tutorials in a single, flat-floor space.

6.2.2 Technology-enabled teaching and learning

Learning management systems

Most universities indicated that they have a learning management system (LMS), although there is wide variation in the extent to which it is used across the institution. The most common systems are Blackboard, which is a commercial product, Moodle and Sakai. The extent of usage varies enormously, with one institution indicating that it is used by 18% of lecturers and another institution indicating that it is used by 90% of lecturers. The way in which the system is used also differs widely, not only from one institution to another but even from one academic to another, with some people using it as a repository for lecture content and others making use of the system's capabilities to foster interactive learning. The range of uses of institutional LMSes is illustrated in the three quotes below.

> At present the [university] makes use of Blackboard as the learning management system (LMS). Its use has grown significantly in all faculties…especially at the undergraduate level, and in 2013, 2 503 modules and 25 148 students were registered on the system. The system is mainly used to distribute course content, to make announcements (i.e. mass communication from lecturer to students), assignment submission, and plagiarism detection and prevention. While this is an improvement from no online presence, it does not make use of the full potential of technology for teaching and learning innovation.

> The development of an on-line presence in the majority of Faculty of Informatics and Design programmes (through the use of Blackboard and social media) has managed to improve communication among students and between students and staff. It also contributes to the reinforcement of various communities of learning and support, both formal and informal learning beyond the classroom and towards a blended learning approach…Although most programmes in this and other Faculties have a presence on Blackboard, effective use of Blackboard for teaching and learning is done by a small minority of lecturers. Most lecturers tend to use Blackboard as a content management tool. While extensive training is undertaken, staff need to implement this effectively. The advantages of the use of social media (e.g., Facebook and blogs) have been shown.

> The institution's learning management system…is functioning effectively in enhancing students' learning experiences. Students are able to access study material via [the LMS]and they can upload assignments. In addition, [the LMS] is a platform that enables students to participate in discussion forums for optimum learning.

At some universities students can access the LMS on their smart phones, for example, one university wrote, "The mobile app gives access to [the LMS] and 32 000 students are using this means of access in 2014." This university surveyed its students to assess their perceptions of the value of the LMS and found that in 2013, "a total of 86.8% of [university] students estimated the value of [the LMS] to their success as very important (23.7%) or extremely important (63.1%)."

Training of academics to use the LMS is typically done by staff in the teaching and learning division. In some universities there are dedicated units for e-learning that provide training and development for academics to use a range of technologies and teaching and learning formats, including social media. For example,

> The Centre for Innovative Educational and Communication Technologies (CIECT) provides eTools training and support to staff and students across faculties. These training interventions enable academics to create online environments, making use of various communications, content creation and assessment eTools. eTools are available within the institutional Learning Management System (LMS)… and other Personal Learning Environments such as Google Applications.

Other technology-enabled learning and teaching

More than half of the universities indicated that some academics and departments are making use of social media, including Facebook and Twitter, although the submissions do not indicate that this is widespread, for example,

> Many departments have a Facebook page – alumni also stay connected and can provide information on job or internship opportunities. Twitter hashtag discussions in- and out-of class.

One university makes use of test creation software that is integrated into its LMS.

> [The university] uses the Moodle-based i-Learn LMS and has two dedicated computer engineers to develop, maintain and update it…Respondus is fully integrated into Moodle (LMS). It is a tool for creating and managing assessments that can be printed to paper or published directly to the LMS. Respondus provides educators with access to the Respondus Test Bank Network. This network, in turn, allows them access to thousands of test banks for the leading textbooks in higher education.

Another university has created an in-house on-line learning platform, drawing on open source software.

> One key development which has significantly contributed to [the university's] learning and teaching environment is VULA, [the university's] open source on-line learning platform. Vula is jointly developed with other universities worldwide as part of the Sakai Project. It is constructed to be open and accessible 24 hours a day, 7 days a week. It provides a platform for networking, collaboration and learning opportunities. It is also used as a site for sharing communication, chat rooms and facilitating course administration. Other more recent developments include Opencast Matterhorn for Lecture Recording, Turnitin (Plagiarism detection software), Adobe Connect (for virtual meetings) and [the university's] OpenContent.

One university described how a space constraint led to a technology-enabled teaching and learning innovation:

> [In 2009] calls were made for the construction of additional large lecture theatres. As these calls were being made, the University was aware of complaints from staff regarding poor student attendance at lectures and of the financial implications of building costs. A project initiated in the Faculty of Commerce, the Commerce Curriculum Project, aimed to address both of these problems by exploring the possibility of replacing one formal teaching period per week (which would release space that can be used by others) with other means of teaching involving ICTs. The intention was not to reduce teaching but to change the mode of teaching…
> A relatively small sum of money (R250 000) was made available for the project. Each of the four departments in the faculty was asked to identify an initiative that would replace a formal teaching period with other means of teaching. [Teaching and learning division] staff members were available for discussion and support but the impetus was on departments to come up with ideas. In the event, all four departments identified completely different ways of meeting the challenge. The financial cost of these innovations was such that relatively little of the original budget had to be used to fund them. As a result of the project, members of the Faculty have not only shown how a lecture per week can be dropped but also how the replacement of traditional teaching methods with innovations related to the use of ICTs does not impact negatively on and can actually enhance student performance.

Another use of technology is to enable students to gain remote access to academics, illustrated in the three quotes below.

> The Nursing Science Simulation laboratory has also been equipped with a new Telemedicine communication system. This allows live interactive teaching between the simulation clinic instructor and student nurses who may be stationed in out-lying rural clinics. The system also has a recording capability, which means that students can re-play the practical or lecture in their own time. In addition, thanks to the Cisco IP Telephone system, students from other universities and hospitals can dial into the telemedicine system and participate in the lecture at no extra cost as [the university] uses the IP routing technology.

> The Faculty of Engineering and Technology implemented a successful virtual classroom that functions well and assists in remote lecturing at other delivery sites.

> The Unit for Open Distance Learning (UODL) …has 55 open learning centres in South Africa and Namibia to which lectures are broadcast. Each study centre has at least two interactive whiteboards to which lecturers can be broadcast, while study material can be downloaded and shown on the whiteboards. In some cases simultaneous translation of lectures into up to four official languages is provided, in order to enhance student access. Furthermore all lectures are captured in electronic format, so that students can revisit the lecture at a later stage that is convenient to them. Alternatively students who could not attend the lecture can access the recorded version online.

Over half of the universities indicated that they are providing asynchronous access to lectures through video-recording and podcasts, which enable students to view the lectures whenever they wish as many times as they wish. Four examples are shown below.

> [The Learning Commons] enables online tutoring through the use of interactive lessons, presentations and storing of lectures for later viewing. The Audio Visual System enables teaching and learning to break away from the physical boundaries of the traditional classroom and also gives academics the opportunity to take part in video conferencing. Facilities in the Learning Commons include one-touch recording to a USB flash drive to capture lectures for later viewing; a Smartboard; a data projector; DVD viewing; and iPod docking stations.

> Lecturers use pod-casting and screen-casting to ensure that the complex context (e.g., in Organic Chemistry) can be captured and re-listened to by students. The multimodal teaching and learning materials are cell-phone compatible (both for recording and for listening), which makes them well-used by students.

> The use of Visual Learning technolog**y** is currently being piloted in the College of Health Sciences. This technology is being taken up across the College, and in several other disciplines at the University. The initial 5 000 user licenses have almost been exhausted. Visual Learning manages lecture streaming, a video portal to access pre-recorded lectures, classroom interaction between lecturers and students, quality assessment surveys, and gateway questions or tests.

> The lecture recording project, which was piloted in 2012, began to have mainstream influence in 2013 with 23 venues being equipped and the total number of published recordings increasing from 499 in 2012 to 1652 in 2013, with a success rate of 92% in the second semester of 2013. The Faculty of Engineering and the Built Environment has conducted research, which shows the positive impact of lecture recording on student learning.

One university provided the example below of using mobile technology to enable students to learn anywhere at any time.

> The department has made extensive use of mobile technology (tablets, PDAS and mobile phones) for teaching and learning to provide a high quality, flexible education by enabling students to design, develop and electronically submit programming assignments, and to learn anywhere, anytime…The project has a strong student-centred learning focus, and there is training and on-going support in the use of technology by service units and a team of dedicated lecturers.

A description of one university's integrated on-line student portal is given below.

> There is a personalised Microsoft SharePoint student portal with access to timetabling, results, module collaboration/learning management system (LMS) sites, financials, secure file storage, adverts, notice-board, almanac, news, events, social media, online forms and study related information. A mobile version of this portal gets presented if the student so chooses when accessing from a mobile device…

6.2.3 ICT infrastructure, support and access

All universities provide computers for student use, but the number and location varies greatly. Most, if not all, universities have computer laboratories, as well as computers in the library. In addition, some universities provide computers in a number of different locations. For example,

> Library Information Services has brought technology to where students are on campuses by opening computer centres (Electronic Resource Centres (ERCs) and Internet Centres) outside the library buildings, in faculty buildings and in student residences. ERCs are heavily used on a daily basis, as many students do not have access to computers and the Internet from home.

All universities provide Wi-Fi to some extent, from discrete hot-spots to nearly universal campus-wide coverage. The provision of Wi-Fi eases the burden on universities to provide more and more computer laboratories, at least for accessing on-line information, as an ever increasing number of students have their own electronic devices with which they can connect to the internet. Wi-Fi provision in residences, coupled with on-line access of library resources and availability of residence computers or students' personal devices, also means that students do not have to walk to the library at night, which can be dangerous.

One university requires all first-year students to have a laptop or tablet.

> 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.

Two universities make use of Microsoft 365, which enables all of students' files to be stored in the cloud and therefore accessible from any device.

The availability and quality of support from IT technical support staff varies greatly from one university to another. One university described an integrated support system it has developed as follows:

> 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 [university] 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…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… 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.

Where an institution does not have enough IT staff, one way to leverage more IT support is to make use of students, as illustrated in the two quotes below.

> Support for technology in the classroom is good at [the university] in terms of the expertise of ITS staff but the workload of technicians means that availability and speed of response are at times problematic. Veterinary Science makes use of students for IT support for lectures (e.g. the class representative is trained).

> Student helpdesk services have been initiated with two student assistants providing support between 08h00 and 16h00 daily at a contact desk in [two of the] site libraries. They assist with the set-up of devices for student Wi-Fi, email, and general troubleshooting with student-owned devices.

Multi-campus universities face challenges when it comes to collaboration among academics and sharing of resources, particularly when the campuses are far apart. In addition, a great deal of time gets lost in travelling between campuses. The two universities quoted below have found ICT-based solution to help overcome these challenges.

> The distance between the campuses poses a challenge with regards to collaboration and sharing of resources, and this limits the ability of staff and students to collaborate in teaching and learning activities…. Over the past two years, [the university] has been successful in establishing an online, software-based web conferencing service…. This service currently utilises Adobe Connect Enterprise Edition 9.2. It is a scalable and flexible solution offering entry-level to high-level quality of service for multiple purposes. Unlike proprietary hardware solutions [the service] offers freedom of choice when it comes to peripheral hardware, allowing more flexible and sustainable installations in terms of cost and supportability.
> The [satellite] site of delivery has a virtual classroom facility which is linked to the [main] campus and supports mainly the enhancement of the BTech Power Engineering offerings at the [satellite] campus. This takes place by means of lectures and live interactions between staff and students of both campuses. This facility is not only used for the purpose of teaching and learning but also for meetings between staff and students via a video linkup system.

6.2.4 Information and computer literacy

Although some institutions made reference to information and computer literacy under Focus Area 2, that information is being presented in this section. A number of institutions indicated that they have successful information literacy courses or training. Such courses typically include how to find information on the internet and information on the use of databases to find publications, plagiarism and copyright, as shown in the three quotes below.

> The Library has successfully integrated the information literacy programme in the curriculum across all faculties (face-to-face supplemented by on-line duplication of the face-to-face course). This is made possible by the development of the Information Literacy policy and the awareness campaigns carried out by the Information Literacy Committee. There is also increased facilitation of resource-based teaching whereby a librarian is present on-line on Blackboard during a lecture noting the requirements of the course and providing on-line resources to students. This has been made possible by dedicated librarians and communication lecturers.

> Faculties, academic departments and the library contribute to student academic development by developing their information skills for life-long learning, providing equitable access to information facilities and engaging in flexible and blended delivery modes. A non-credit bearing introductory module on information literacy, offered to all first-year students by the Library, introduces students to basic information literacy which is further reinforced by academic departments.
>
> Arrangements are made with departments for students to receive information literacy training soon after registration and commencement of classes and before they have to submit assignments. This provides them with skills in using information, including referencing skills (to avoid plagiarism) and compilation of bibliographies.

Computer literacy training is essential for students who have no experience of computers from their high schools or homes. Universities have various units that are responsible for computer literacy development. This may take place through stand-alone courses or may be integrated into other courses. Three approaches are shown below.

> Academic Computing Support Services (also known as e-Learning) is a unit within ICT with the aim of promoting the use of technology amongst the academic staff and students. A basic element of this objective includes computer literacy for students. While it is generally acknowledged that our students relate well to the use of technology, they mostly have never used a computer when they start their studies at [the university]. It is encouraging that computer literacy is now mandatory for majority of our students.
>
> Because of the growth of the use of technology (computers and mobile devices) at [the university], 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.
>
> A Digital Academic Literacy (DAL) Programme is offered which is a computer literacy programme for students, integrated into accredited modules across faculties which cater for the varying needs and demands of novice users of technology.

6.2.5 Libraries

Facilities

Substantial efforts have been made by a number of institutions to provide library facilities at all sites of delivery, campuses and regional centres. In addition, hours are being extended to include evenings and weekends, and in a few cases 24-hour a day access is available, at least to certain areas of the library. Typically, after-hours library access and support is reliant on student assistants.

> The [branch] Library extension opened for service during 2013 and has a 24-hour study area and Information Commons. This is the kind of environment the Library Information Services would like to provide for all [university] students.
>
> An example of successful use of 24/7 access is in the Main Library, which provides access to safe and comfortable study areas (i.e. 2 facilities are available comprising 120 and 90 seats). Further provision of 24/7 study areas is expected in a number of the branch libraries as a way to provide extended access to safe and comfortable study areas when the library facilities close in the evenings and on weekends.

More than half of the universities indicated that there has been a major reconfiguration of the library that accompanies a reconceptualisation of both its role and its modus operandi, with libraries increasingly functioning as learning spaces not only for quiet, individual study but also for peer learning and group study. A selection of descriptions of library spaces is given in the six quotes below.

> In 2010, the completion of a new extension to the University Library alongside the refurbishment of the 'old' Library building resulted in the provision of an array of versatile learning and work spaces that promote the skilled use of high technology and online research. The 'new' Library has fast emerged as environment with a communal, social and scholarly atmosphere….[The] Library offers a number of 'alternative' learning spaces including:
> - The Information Commons dedicated for the use of undergraduates with 54 computers, 9 group study rooms with assistance at hand from staff and trained students during Library opening hours;
> - A Research Commons dedicated for the use of postgraduate students (master's and doctoral levels) which provides high-end computing facilities and professional assistance;
> - Group study rooms, reading rooms and over 1100 individual study spaces which encompass flexible and comfortable seating;
> - Dedicated spaces for the physically impaired;
> - A secure 24 hour study area;
> - Photocopying and printing hubs throughout all facilities.
>
> The main campus library has been refurbished to become a vibrant and attractive physical and virtual space that promotes collaboration, social networking as well as self-study and reflection through the creation of a learning and a research commons, e-classrooms, alongside discussion rooms, study cubicles, seminar rooms and open-floor study areas. Space has been repurposed with traditional bookshelf spaces giving way and material being stored elsewhere, with a strong move towards e-books and –journals being acquired.
>
> A concerted effort has been made to expand the social learning spaces within the University. In particular the university library has incorporated a range and variety of individual and group study spaces such as the Knowledge Commons, 'The Hub', open study areas as well as dedicated postgraduate student spaces, for example, Research Wings and the Research Commons. …Undergraduates are catered for in the Undergraduate Wing of the Library complex. Here students have access to a variety of workspace options, including numerous study desks, computer workstations, and comfortable couches with power and network points for laptops, group project areas, and audio-visual viewing facilities. The very popular Knowledge Commons, as evidenced by the constant high demand for the space, with its high-end computing, printing, copying, and scanning facilities, is a one-stop-shop for undergraduates to research, write up, and print out their assignments and essays.
>
> The Library has steadily diversified the types of learning spaces to meet different needs. These include: silent study areas; discussion rooms; meeting rooms; Knowledge Commons; Reading Room; Reference Desks; Self Learning Zone; Disabled Student Centre; Print & Go kiosks; and Training Rooms.
>
> All libraries are equipped with dedicated electronic classrooms (Ezones) with a total of 300 computers across all library sites. The Ezone is available as a general computer lab when not in use as a library teaching space. All Library computers are connected to printers/copiers and at some sites students have the option to print or copy in colour. Group study rooms for joint collaboration are available through a booking system. They are ideal for 5-8 students to confer on assignments or group projects. Although these rooms are not equipped with computers, sockets are available for using one's own laptop and Wi-Fi is enabled. IT enabled spaces for students to charge laptops and other devices are available, both inside and outside the libraries.
>
> [The library] has a seating capacity of 1720 (10% of the student population), with 12 seminar rooms used for group study, 80 carrels for individual study, 2 electronic classrooms, a multi-media section, a conference room, a committee room, 6 WiFi zones and the newly opened Info Cellar.

Resources

Nearly all of the universities indicated that their libraries are equipped with computers, as illustrated below.

> The Library Information Services (LIS) have spaces for both individual and group studies with personal computers which students use next to the LIS collections, and library staff with expertise to help them with information they need. This makes LIS different from general computer laboratories.

> A joint project with the SRC enables libraries at all sites to loan laptops to students. Quick Access Computers were implemented in 2013 for two purposes, namely to provide dedicated computers for students wanting to read e-books, and for students in need of a computer linked to a printer. This service has only been implemented at [one] site. An Open Source booking system was implemented in five libraries during 2013 to facilitate effective allocation of computers. This system allows students to pre-book a computer for a maximum of two hours in any of the library Ezones. A new service called 'EveryOne Print' was implemented in 2014 to enable students to route printing from any mobile device to a printer in the library.

Increasingly libraries have wireless connectivity (Wi-Fi), which allows students to access resources electronically on a range of platforms and devices, including laptops, tablets and smart phones. More and more resources are being made available online, as the three examples below show.

> The Library purchases cutting-edge journals, databases and e-books and makes these available to the university community. To promote and facilitate the use of these resources the Library procured Summon, a web-scale discovery service which facilitates one single search across multiple databases. Summon is mobile compliant; students can use smart phones to access the library catalogue and download full-text versions of articles if necessary using …Wi-Fi.

> [Resources include] Electronic access to 81 320 online journals and 486 768 electronic books, An online 24/7 reference service (Ask-a-Librarian), Mobile access through [a university] app.

> A major drive in library facilities provision in the past few years has been the specially-designed Research Commons in the Campus libraries. Electronic resources (academic journals, databases, electronic thesis, e-books, etc.) are available to all staff and students via the University's library website… Currently more than 23 000 electronic journals can be accessed through library subscriptions to journals and databases. Electronic books are also available.

More than half of the universities indicated that they have institutional repositories where research carried out by their own academics is stored and made available online. The quote below from one institution explains the value of such repositories.

> The value of an institutional repository lies inter alia in the fact that it is a type of digital library that captures the original research output and other academic intellectual property generated by the academia and researchers of the university. It gradually becomes an integral part of the future of research libraries, allowing researchers to perform self-archiving and, by so doing, self-management of the publishing of their research output.
> The institutional repository extends the library's capability to participate in the scholarly communication system, especially in the growing world of digital resources. The content forms an integral part of the library's collections and provides a service to and a platform for the academic users and the community at large.

Training and support

In over half of the submissions it was clear that the ambit of the library's and librarians' activities is considerably broader now, in the information age, than in the past. Increasingly librarians are involved in training for

both students and staff. Training spans a range of needs, from basic information literacy to complex knowledge management. Staff training sometimes includes how to use plagiarism detection software, most commonly Turnitin. Five examples of the work done by librarians are shown below.

> Library Orientation, Information Literacy training and Bibliographic Instruction programmes are presented to undergraduate and postgraduate students and academic staff to improve their knowledge of library resources and services and skill them in being able to know when they have an information need, how to find, evaluate and use information ethically. These are supplemented by training on using databases offered by either librarians or product suppliers.
>
> The Library is an active partner in the learning enterprise, primarily through student support in managed facilities, but increasingly also through teaching and coaching, as librarians are becoming an educational resource for lecturers and students. New developments include:
> - Faculty librarians form part of Faculty Teaching and Learning Committees and are increasingly requested to devise suitable training interventions aimed at assisting students to pursue research and inquiry processes independently or collaboratively.
> - The ongoing provision of one-on-one support to students by librarians.
>
> The Library is important both in providing support for students' academic development and in enhancing their general knowledge and awareness. The following activities are successfully carried out:
> - Academic support: The Library provides general academic support to students by making relevant resource material available.
> - Study skills focus: During the semester and before exams, talks are given and displays are created to give students tips on how to prepare for the exams.
> - General knowledge and awareness: Since students often have limited general knowledge, the Library focuses on events throughout the year to broaden their knowledge and experience.
>
> All students are offered library orientation upon arrival at the university. This ensures that they know where their campus library is located; the collections of literature and references sources relevant to their studies, both in print and online; information services and the relevant information librarians and information literacy training programmes available; and most importantly, the library rules.
>
> The Library organizes library orientation sessions for first year students, attendance at which is compulsory for registration as a library user. New staff are also encouraged to attend library orientation sessions. Information librarians who are responsible for academic departments in each faculty advise and assist students and staff on information search and retrieval for both print and electronic sources. Workshops are held in the library on e-Resources, such as Ebsco Discovery and referencing techniques such as the use of Endnote software and Copyright, Plagiarism and Turnitin software. There is on-going User Education conducted by library staff and academics are encouraged to bring their classes to the library for this training.

Many institutions indicated that support services are increasingly being provided on-line or using other technologies that enable self-help.

> 22 online guides have been developed to provide students with advice that is frequently sought and includes, for example, some generic information on referencing styles, literature reviews, and information literacy tutorials. There are also subject specific guides.
>
> Since the implementation of the self-help services in the Library (using Radio Frequency Identification Technology, RFID), the usage of the self-help issue desks in all libraries has improved significantly. It now indicates a larger use of self-help services than desk issues. The implementation of additional RFID-enabled circulation equipment at existing and new branch libraries…was finalised in 2013. The Library can therefore focus on client services and support for clients with time saved on manual issues.

6.2.6 Support to students with disabilities

A few universities provided examples of how the learning environment has been designed to support students with disabilities. Three examples are shown below.

> The Disability Unit has a strong presence at [the university] in the support of learning for disabled persons. It is supplied with well-equipped laboratories with specialised software programmes (Jaws, Zoom text, Wynn, Dragon and Microlink suite) at the … campuses. On [one] campus, there are computers with fingerboards and big screens; 3 scanners; I magnifier and 1 braille printer. There is strong leadership around universal design and disability-friendly learning environments across all campuses. Training and support is offered in the use of assistive technology and there is 24-hour access to assistive technology services on the two main campuses. Examination support is provided for learners in the form of scribes, oral exams or specialised programmes during exams /tests. To address universal access for deaf students in the classroom, during conferences, graduations and training, a loop system was installed in one of the seminar rooms on the [one] campus, as well as a portable ramp for usage in the major sports hall. A portable loop system is also available for usage in classrooms when needed...The Unit has a resource centre which issues with the loan of assistive devices, laptops and specialised text reading programmes for students… The use of specialised software programmes to make learning materials accessible to students has been implemented via Blackboard.
>
> In addition to this, the Library has a dedicated drop-in laboratory for students with disabilities, which makes it possible for these students to access material that is located in areas of the Library that they cannot reach.
>
> [The university] has an active ARCSWID [Advocacy and Resource Centre for Students with Disabilities] office, which ensures that students with disabilities are able to access all teaching and learning material (ARCSWID office). In addition, the ARCSWID office has formed collaborations with the regions to establish centres of excellence for students with disabilities.

6.3 UNSUCCESSFUL ACTIVITIES

Institutions were asked what activities or facilities they have undertaken or put in place during the past three or four years related to focus area 3, enhancing the learning environment, that had not been as successful as they had hoped. They were asked in what ways they were unsuccessful and what they thought the reasons might be for lack of success. In this section a summary of the most common activities or facilities that institutions said were not as successful as they had hoped is presented. In addition, examples that are noteworthy but not common are described. It is worth noting that some undertakings were considered to have aspects that were successful and other aspects that were not successful.

6.3.1 Teaching and learning spaces

About a quarter of the universities indicated that the audio-visual and educational technology in lecture theatres is inadequate, for example,

> … even with the provision of additional lecture venues there is still inadequate teaching and learning space at the university for the current enrolment of students. In addition, some of the lecture venues

> require technology upgrades. While the first phase of the smart board roll out has been completed (40 smart boards on both campuses), not all teaching venues have been supplied with electronic boards, some of the lecture rooms still require technology upgrades. Nor are all lecturers trained on the appropriate use of smart-boards, some use them only as data projectors.
> Not all lecture venues are technology enabled, which frustrates staff; some venues do not have/have inadequate WiFi access, which curtails the use of online activities in class.

Over half of the universities indicated that some of the lecture venues are overcrowded. In some cases this is because the student numbers have grown too fast relative to the available infrastructure. As a result, some universities schedule lectures on more than one campus, but this can cause other problems, such as long travel times between campuses. Three examples of the problems of overcrowding are shown below.

> Use of lecture venues across campuses (e.g., North and South campuses) given the shortage of venues: students often have to walk/travel reasonable distances between venues and arrive late for class; there is insufficient inter-campus transport to assist movement between campuses; this is impacting negatively on class attendance.

> Part of the challenge of the lack of teaching spaces is that large classes are sometimes held in unsuitable venues: Students commented "certain classes are very, very large. This hinders hearing and visual ability, especially if you are sitting at the back. The class becomes stuffy and uncomfortable" and "the lecturer cannot ensure that all of us understand well".

> …the current temporary arrangements to accommodate the large increase in student numbers while new facilities are being built are not optimal. The existing venues are not large enough and it takes a significant portion of the lecture time just for 200 students to file in through small doors and find a seat.

The offering of new programmes can place an additional strain on the availability of suitable venues. One university has problems with finding suitable venues because the timetabling is done by departments but the room allocation is not.

> Adequate teaching venues at the [university satellite] campus is a major concern. The venues are not conducive for effective teaching due to insufficient departmental management. The fact that academic departments have not total control and management of teaching facilities, aggravate this situation.
> The above-mentioned situation regarding the availability and size of lecture rooms, create problems when lecturers develop time tables for different programmes. Staff members responsible for the drafting of time tables, experience difficulty in finding proper teaching venues that can accommodate students. Venues at the [University satellite] campus range from a capacity between 30 – 200 students. From 2015 this problem will escalate as the realigned diplomas are introduced. This will run concurrently with the existing programmes offered at the institution.

In other cases overcrowding is because students do not always attend the class for which they are officially scheduled when there are several sessions offered for a particular course. As a result, some venues are overcrowded while others have ample space, particularly during sessions that take place early in the morning or late in the afternoon, as illustrated below.

> A recent space audit demonstrates that [the university] has adequate space for its student body size in terms of DHET norms. It also has an efficient online system to allocate teaching venues according to the timetable and module enrolments. However, despite this there are repeated claims that the current lecture space is not adequate. This arises from students in modules with large enrolments not adhering to the allocated blocks in the timetable to which they are assigned and pressure on the timetableto accommodate the teaching of modules during the mornings. Hence, the timetable does not utilise the full teaching day and is unevenly spread, resulting in many venues remaining empty in the afternoons.

There is a tension between the need for large lecture venues, which accommodate many students at one time, and smaller venues that are more suitable for interactive teaching and learning. Also, the development of flexible teaching and learning spaces competes with other demands for university funding.

> While there is a need for more large lecture venues, given the emphasis [the university] is placing on active and collaborative learning, the layout of many venues make such learning challenging to implement and there is a need for more small venues for group work, skills training (e.g., in professional programmes).

> Providing additional and flexible teaching and learning spaces was not achieved in the last two infrastructure development funding cycles as the bulk of the funding went towards the construction of science facilities with specialised undergraduate and postgraduate laboratories.

A few universities referred to the need to better resource laboratories, not only with specialised equipment but also with basic needs such as appropriate furniture and access to water and gas. There were also a few universities that indicated that more laboratories are needed, including specialised laboratories for some of the Advanced Diploma (formerly BTech) students, for example,

> …Even though the University has completed the Engineering laboratories and offices as well as the Natural Science laboratories, there continues to be a shortage of laboratories to accommodate the current number of enrolled students. More specialised laboratories for B.Tech/Advanced Diploma students, as well as research laboratories, are required.

There was an indication that there are limited spaces available in which students can study in some universities. This is particularly a problem for students who are not in residence and do not have suitable study spaces at home, as illustrated below.

> [The university] has very few dedicated study spaces for students. Given that the majority of students commute to university and often do not have adequate study facilities at home, more study spaces need to be provided on campus. During busy test and examination periods these study spaces should be open 24/7.

About a quarter of the universities indicated that there was a need for maintenance and renovations of buildings and infrastructure, as the four quotes below show.

> A number of factors were identified regarding teaching facilities from the QEP focus groups. These comments included: "need maintenance, renovations and well-planned buildings", "not enough quality venues" and "need to carry equipment around not good". Reasons for this include lack of budget for planned maintenance, old infrastructure and high rates of theft of installed electronic teaching equipment.

> The renewal and re-purposing of vacated space on campus has taken much longer than anticipated. … Maintenance, especially addressing backlog maintenance, also continue to pose huge challenges, especially in terms of the associated cost.

> A lack of proper maintenance of teaching equipment and infrastructure at the [one] campus (broken and insufficient furniture, insufficient lighting, lack of maintenance of teaching equipment, lecture rooms that are ineffective for teaching due to structural reasons and so forth) impact negatively on effective teaching and learning activities.

> Ageing infrastructure and a huge backlog in maintenance as a result of funding limitation.

On some campuses building work is in progress, but this can have a negative effect on students' ability to study, as the two quotes below show.

> While the re-design of our libraries to create a learning commons along with spaces for individual and group work is important for learning enhancement, the re-design is disruptive and could impact negatively on student learning during the refurbishment as students do not have/find it more difficult to access to the full array of library services.

> Physical building projects create various disturbances in terms of the student experience and may not have been handled well-enough with regard to taking student needs into account (e.g. ensuring noise-free preparation times for tests and examinations) and limiting the impact on the living and learning experience of students.

A few institutions indicated that a major challenge in providing adequate teaching and learning spaces is a lack of data on what spaces are currently available. This makes it difficult to use existing spaces optimally and to plan appropriately for new spaces that may be needed. This is illustrated by the two quotes below.

> There is a lack of data on teaching and learning space. Consequently, there is therefore no data to use for HEMIS reporting to the DHET or for monitoring space usage at the university which currently cannot determine if teaching and learning spaces are adequate or not. This is currently a concern for the HEMIS office as it impacts on the quality and adequacy of data that they use for HEMIS reporting to the Department of Higher Education and Training (DHET).

> … it [timetabling]has resulted in teaching venues not being used optimally and serious overcrowding in some venues. The reasons for this have included a poor database of teaching venues and, especially on the [main] campus, no centralised venue allocation system as well as a sense of venue ownership by faculties and departments.

6.3.2 ICT infrastructure, access and support

The main ICT-related problems identified by institutions were: infrastructure, access, support for old or inadequate hardware, outdated software, inadequate bandwidth and support staff that are either too few in number or not sufficiently trained. Lack of collaboration or coordination across functional units in a university is also sometimes a problem. These problems are illustrated in the three quotes below.

> Over the years, the IT system has been unstable, sometimes affecting academic and administrative tasks. The client support provided by [computer services] is also poor partly because of lack of adequate staffing at the Unit and lack of unclear working processes from other units (streamlining workflows from other services such as campus protection services, health and safety and maintenance/facilities). Although the Unit has a helpdesk, the response rate to queries is poor, as is support from [computer services]. There is also conflicts between academic flexibility and legislative/risk compliance from [computer services] due to lack of understanding of the relationship between the two endeavours.

> Key themes related to infrastructure, logistics and the physical environment emerging from academic staff teaching and learning needs assessment research, still strongly spoke of the lack of a technological presence on the three campuses. The inadequate infrastructure and technology in classrooms and lack of technical support for staff in this regard poses a significant challenge to excellence in teaching and learning on campus.

> The quality of ICT support to students and staff has been unimpressive, characterised by a lack of timeous troubleshooting and problem resolution for PC, laptop and network faults. This appears to stem from inadequate staffing levels within [computer services], compounded by insufficient skills amongst existing staff. Major faults are generally routed to service providers whose priorities and eventual solutions may not be in tandem with those of [computer services].

Reliable, high-speed, off-campus access to university computer systems was mentioned by more than half of the universities as problematic. The four quotes below illustrate the problems.

> Students have encountered difficulty accessing Blackboard, especially off-campus, due to the server being slow or passwords that constantly have to be reset.

> The unreliable ICT connectivity hampers the provision of e-learning infrastructure as a critical component of Open and Distance Learning.

> Increasingly University activities depend on technology and a system that provides uninterrupted and stable access to staff and students. [The university] occasionally experiences system downtime, which disrupts all access to and from the university.

> Arrangement for access to all electronic journals, books and databases for users away from the Campus network has been made. Access is via the [library] web page and although access has improved, some resources are not accessible off-campus.

Inadequate bandwidth was mentioned specifically as a problem by nearly all of the universities. Three examples are shown below.

> There is progress in terms of the migration of the Blackboard application/database to cloud-based hosting where scalability will not be an issue; however, adequate internet bandwidth and bandwidth management will be essential to ensure that the quality of the student experience is not compromised. There is a concern that the current Internet bandwidth allocation is congested due to oversubscription. Although a large upgrade has been ordered, it is likely that [the university] will still find it a challenge to cope with increasing student demands.

> The increased bandwidth has not had the anticipated effect of providing easy access to teaching and learning resources. Downloading files and utilities such as journals, animations and images continues to be hampered by speed bottlenecks. At times, downloads 'time-out' and have to restart. More network bandwidth needs to be secured because new applications and new teaching and learning resources tend to require more network bandwidth than in the past.

> Response times do slow down when the number of users on the system increase, this is not just on the WIFI equipment but also on INT bandwidth allocated to the WIFI and the access level devices in some areas that are limited to 100 Mbp/s.

A problem mentioned by several universities, particularly those that underwent mergers, is the difference in the quality of infrastructure at different campuses, as the three quotes below show.

> Inadequate infrastructure (lecture halls and staff offices at [two] Campuses, and IT infrastructure at [one] campus in particular) does not create an environment for good-quality learning and teaching for staff or students.

> Also, we acknowledge that there still exists differences in the quality of libraries and ICT services between main campus and satellite campuses.

> After the merger, most [university] campuses had old network infrastructure and access levels. The Department of Higher Education and Training (DHET) provided limited funding for the development of network infrastructure. As a result, not all campuses have the same infrastructure and access levels.

Another infrastructural problem is poor integration of different software, such as management information and learning management software. This makes student monitoring and tracking difficult.

> The Sakai platform has been integrated with the institutional …Student Administration System but there are still integration challenges. On-going downtime and network problems also have a very negative impact on the effectiveness of e-teaching and e-learning.

While the proportion of students with their own internet-enabled devices is increasing, there are still many students who do not have such devices. This provides a dilemma for universities that want to incorporate aspects of e-learning into their course structures.

> About half of the students do not have access to a mobile computing device which curbs in class participation; many students do not have connectivity off campus, which makes out of class online collaboration challenging.

> The use of smart phones for teaching and learning purposes have tried to engage the new generation of learners however this has also excluded those who do not have smart phones.

Some universities do not have enough computers and computer laboratories on campus. The ratio of students to computers mentioned in the submissions ranged from 24:1 to 8:1. A few universities referred to the need for more computers for specific purposes, such as online assessment.

> The need for a dedicated online assessment centre with enough stations to accommodate large classes is critical for the implementation of online assessment.

In some cases, universities' efforts to work with outside partners to provide students with access to services have not borne fruit.

> Collaborative initiatives between the University, the Municipality and MXit to create a huge hotspot in [the municipality], with the promise of free internet and WiFi, has not been realised as yet (due to a variety of reasons). Various meetings have been held with the different cellular phone companies to setup data bundle contracts for off-campus students. Also, sustainable financial modelling systems to enable internet usage and establish free site zones e.g. in the library has not been implemented yet.

> As a way of increasing students' access to technology, [the university] created an opportunity for students to buy laptops at reduced rates, however, most students still found these laptops unaffordable.

ICT infrastructure is costly, and a number of universities referred to lack of funding as the reason that they have been unable to acquire certain equipment or services.

> The aim of this phase [of the wi-fi infrastructure project] was to increase Wi-Fi hotspots to include student residences. Due to a lack of funding for management of access points, the rollout of Phase 2 has not been implemented.

> While much progress has been made in installing electronic infrastructure in lecture rooms, a lack of funding has prevented this technology from being rolled out to all venues.

6.3.3 Technology-enabled tools and resources

One of the things that hinders the effective use of technology-enabled tools and resources is the general ICT literacy and skill level with specific software of users, both academic staff and students.

In the case of a learning management system (LMS), academic staff need to be trained how to use it, both technically and pedagogically. In some institutions, training is voluntary, which means that only some courses have a presence on the LMS. In addition, problems with ICT infrastructure and support may negatively

influence the willingness of academics to use the system. These problems are illustrated in the three quotes below.

> In spite of a large number of lecturers attending training on the use of the LMS for teaching and learning in past 9 years, there is low uptake… with only a small number of the lecturers at [the university] using the LMS appropriately for teaching and learning. Some academic staff members resist the use of technology in teaching and learning generally… The low uptake of the LMS is partly due to the unstable information technology system at the University and poor support services from [computer services], which demotivates lecturers wanting to innovate with technology. The (in) appropriate use of the system can be attributed to the fact that in training, more emphasis is given to the technical aspects of the LMS with less emphasis on pedagogy.
>
> The current LMS, Blackboard, is not used optimally to enhance teaching and learning and many staff experience frustrations due to system instabilities. ..Although students and staff are comfortable with technology, receiving adequate training is very important to them. Capacity to provide the necessary resources and training are not always readily available.
>
> E-learning is not widely used across [the university] with infrastructure and support issues appearing to be real obstacles…Additionally, numerous staff commented that if the infrastructure challenges could be removed many academics would engage with e-learning as there was enthusiasm and a wish to remain current.

In some institutions, there is reluctance among lecturers to use various ICT tools, even where system stability or support are not issues, as the five examples below show.

> The successful rollout of the e-learning project is dependent on the appropriate integration of the student database in ITS with the creation of and enrolment for online classrooms. Although the foundation has been laid, the project is hampered by slow uptake by lecturers. As a result, the analytics system for e-learning cannot be implemented at this stage.
>
> …a significant number of academic staff do not fully utlise the available technology despite training opportunities.
>
> While Smart Boards and Qomo boards are regarded as effective learning tools and some provision of these has been made at the University, these have not progressed beyond the concept stage. Little or no use has been made of technology and they stand unused in venues where they have been provided.
>
> Certain eTools and ICT skills packages do not attract the expected staff interest and feedback indicates that time-constraints do impact on their ability to participate in training.
>
> [The] uptake of blended and e-learning [is] slower than hoped for… some [academic staff] do not want to move out of their comfort zone and are afraid of using technology in teaching; blended learning workshops sometimes clash with lectures; need more just-in-time support.

A few institutions indicated that tools were provided in venues but they were stolen or vandalised, as shown below.

> Sound systems at the [university] Campus that were stolen. This was due mainly to lack of adequate security measures in the lecture theatres.
>
> In 2009 the institution rolled out a project that was aimed at installing projectors and screens in all lecture halls. However, this project was badly affected by vandalism and theft; some of the screens were torn apart and some projectors stolen. The remaining projectors were distributed amongst academic departments, where they are currently used for classes (carried along).

While universities are being encouraged to use blended learning as a way of providing access to more students and to provide more opportunities for student engagement, this requires increased provision of ICT resources and student access to them. The increased adoption of blended learning modes of delivery places a strain on universities' ICT resources.

> The [university] ICT environment is currently unable to cope with the increasing online demands brought about by the adoption of a blended mode of teaching.

6.3.4 Library

As mentioned in the previous section, libraries are increasingly being used as study and learning spaces by students. Several universities indicated that the space is too small for the number of students on campus, and refurbishing is needed. In some cases, the facilities at branch campuses are inadequate.

> New libraries at [three] campuses were not constructed because of internal and external project delays, infrastructural and financial deficiencies. The libraries at those campuses have never been academic libraries but are make-shift buildings which cannot accommodate the needs of an academic library which needs technologies, seating space, training facilities, seminar rooms, staff rooms and other facilities. 24-hours study areas and other services including Information and Research Commons are needed for the [two] campuses. In addition, the [one campus] library needs an extension to provide more seating space, Information Commons, seminar rooms and a training facility. The [main campus] library does not have sufficient capacity to cater for its current 25,000 student population.

> Expansion of Learning spaces and facilities for the main and site of delivery requires urgent attention; the [university] should consider the building of a modern library facility with more physical space in the near future, as the current library cannot accommodate all students.

A few universities indicated that academic staff do not make much use of the resources.

> There is poor uptake by many lecturers of some resources provided by the library (e.g., Inter-library loans, database searches, training on the E-journals), possibly because of insufficient knowledge of the role of the Library in teaching and learning and lack of knowledge of the resources available.

About a quarter of the universities indicated that budgetary constraints adversely affect the resources that the library can provide. In some institutions, poor students are dependent on the library for access to expensive textbooks that they cannot afford to buy. The three quotes below illustrate the problems.

> The library budget is inadequate for purchasing resources and full subscriptions to E-journals, etc. The budget is inadequate for the purchase of expensive engineering reference textbooks, while students not buying textbooks (due to financial difficulties) put additional strain on the library budget as they support students with these.

> Sufficient copies of textbooks and frequently used sources are not always available in the libraries. The number of students needing to use a particular book/source should be taken into account in the requesting and ordering process. In addition, some books are only available in Afrikaans and not in English.

> A high proportion of library resources are outdated. Furthermore, a great deal of library books was not relevant to the teaching and learning programmes of [the university]. Similarly, the library collection on research materials lacked depth and variety. This was largely a result of insufficient funds allocated to acquire library resources and a lack of broad-based interest among academics in the selection of library resources.

Students also need to access computers in the library, and in some libraries the computer facilities are inadequate.

> There are limited computer service points, and most of the computer work stations in the library have virtually outlived their usefulness. It became practically impossible to run some computer programmes on these 'tired' machines. Thin client computer monitors and keyboards, as well as an Online Public Access Catalogue (OPAC), were acquired and installed in the Electronic Resources Access Centre and computer laboratories.

A few universities indicated that they are having difficulties hiring suitably qualified librarians, particularly as the role of librarians has expanded over the years and now includes a range of administrative as well as educational responsibilities.

> Electronic resources are a new source of information for libraries. They are processed differently from all the other resources. In addition there are licences to be managed, budgets to be administered, communications and representation in the national consortium, with links to be created, access to be facilitated and enhanced and copyright compliance to be managed. The hiring of a qualified librarian dedicated to managing electronic resources has not been successful.

7. FOCUS AREA 4: ENHANCING COURSE[7] AND PROGRAMME ENROLMENT MANAGEMENT

Including admissions, selection, placement, readmission refusal, pass rates in gateway courses, throughput rates, management information systems.

Student success is greatly influenced by how students are selected into universities, which programmes they are placed in, whether or not formal support is available and compulsory and when and why registered students are not re-admitted. Addressing these issues is part of achieving a match between the characteristics of students and what universities offer. At the level of individual courses, in every university there are certain courses that may act as gateways or barriers to progression, including, typically, some of the large first-year courses. Monitoring student performance in such high-impact courses and intervening when necessary is important in promoting student success. And, of course, throughput rates are important indicators of student success. Effective enrolment management is only possible if appropriate management information systems are in place.

7.1 GLOBAL AND LOCAL TRENDS AND ISSUES RELATED TO FOCUS AREA 4

7.1.1 Introduction

Higher education institutions are increasingly being held accountable for how effectively they use public funds for the development of human capital. This not only entails transparency with regard to spending, but also monitoring those aspects that affect the lives of those who have enrolled in the system. To date the sector has not performed well on this score. The recent CHE report advocating extended degree programmes (2013) has characterized the failings of the system clearly and in detail. While the direct economic cost of this "low participation, high failure rate" system can be estimated, its negative impact on society, in particular within communities that have borne the brunt of historical inequality, is harder to calculate.

It is clear that while addressing issues in the school system on a large scale, undoubtedly one of the causes of the problems experienced in higher education, lies outside the direct ambit of influence and intervention by universities there is much that resides firmly within the control of the HE sector.

[7] Also called modules at some universities

7.1.2 Admissions, selections and placement

Traditionally the selection and admission of students to an institution has relied primarily on student performance in the final school leaving examinations, such as the National Senior Certificate (NSC). Thus, in general, decisions on whether or not to admit a student to a particular programme involve his or her having met various criteria that are based on matriculation marks. In most instances admission would be to the mainstream courses associated with a particular major. In some instances, particularly in science and engineering, students might instead be admitted to extended degree programmes. However, the general difficulty in relating school performance to university performance led to the establishment of the National Benchmark Tests (NBT), which offer additional information about each student regarding their proficiencies in various areas. As stated on the NBT website (www.nbt.ac.za):

> The National Benchmark Tests (NBTs) were commissioned by Higher Education South Africa (HESA) with the task of assessing academic readiness of first year university students as a supplement to secondary school reports on learning achieved in content specific courses.

While many universities now require students to write the NBT, the way the results are used differs widely across institutions as well as across different faculties within a particular institution. In principle, the reporting of NBT results assists not only in helping to make the decision whether or not to offer a student a place but, more importantly, provides information that can be used to place students on curricula that have the appropriate level of support. Thus, students are assigned to one of three NBT levels: *proficient, intermediate and basic*. It is suggested that students who fall into the proficient band will be able to cope with the regular academic programmes on offer while students who are at the basic level should be guided towards the Further Education and Training (FET) sector. The majority of students who are admitted to the HE sector, however, fall into the intermediate category and are described thus:

> Challenges in domain areas identified such that it is predicted that academic progress will be affected.If admitted, students' educational needs should be met in a way deemed appropriate by the institution (e.g. extended or augmented programmes, special skills provision).

It is clear from this statement that student success will depend crucially on the degree to which students are appropriately placed at the outset or that there are opportunities and procedures for *in situ* placement. However, placement is not as well developed a concept in South Africa as in the USA, for example, where placement at an even more fine-grained level is seen as a critical part of the broader admissions process that is intimately related to student throughput. For example, in their study on the admission aspects of the City University of New York (CUNY) system of community colleges, Jaggers et al. (2013) note that using test scores alone to make placement decisions often resulted in large numbers of "severe placement errors" with negative consequences for student progression. They go on to argue that while large scale testing is efficient and helps to cast

a wide net for admitting potentially suitable students, the results of such tests are not sufficient by themselves to diagnose the degree to which there is alignment between the skills and background required for particular first year courses at the level of detail that matters at a particular institution.

7.1.3 The need for evidence to inform institutional decisions

Student success can be thought of as the summative outcome of a non-linear process of stepwise progression through the degree. However, while students ultimately make their own choices, there are many reasons why students are not always well-placed to make the best informed decisions after their initial placement at a particular institution. Thus, at the outset student advising is of paramount importance each step of the way. From the student perspective, the experience of entering an institution, or embarking on a particular area of study within an institution, is more often than not bewildering. In order to reduce the complexity involved and to provide appropriate assistance, student advising based on evidence is becoming ever more pressing. Such an approach involves developing a series of tools that allow for decisions to be made based on student interest, preparedness, etc. with the view to maximizing the chances of success.

While not all the facets of the community college system in the USA correspond directly to features of South African HE landscape, the challenges that face this sector with regard to student-related issues are not dissimilar. It is therefore interesting to note the recent, large scale initiatives that are being undertaken toward instituting an array of reforms in order to improve the present levels of student success. The central theme driving these initiatives is the notion that meaningful reforms must be evidence driven if they are to have a chance of succeeding. An example of the multifaceted and multi-levelled nature of this approach is reflected in Columbia University's recently established *Assessment of Evidence Series* (Bailey et al., 2011) which "…use(s) the research literature to draw conclusions and provide evidence-based recommendations to practitioners, policymakers and researchers."

As one area of focus, for example, namely the issue of student access and progression, the paper of Jaggers and Fletcher (2014) entitled "Redesigning the student intake and information provision processes at a large comprehensive community college" provides the research basisfor the following two "practitioner packets" by Jaggars, Fletcher, Stacey and Little (2014), *Simplifying complexity in the student experience: gathering data,* and *Simplifying complexity in the student experience: using data.*

Several universities have instituted studies of various magnitudes around the theme of what students experience in first year, gathering both quantitative and qualitative data. However, the practice is not a uniform one across the sector and insights that have emerged from the data are not usually integrated into student advising and other decision-making processes at a systemic level. This raises the broader issue of "locality" within individual institutions themselves, where various individualized initiatives and changes, each of which are often examples of excellence, remain localised within a specific domain and thereby limit their usefulness rather than becoming enabling parts of the system as a whole. Jenkins and Cho (2014) describe efforts by universities to redesign academic programmes and support services to create "guided pathways", noting that

> Research on organizational effectiveness and improvement strongly suggests that to achieve large improvements in student outcomes, piecemealchanges will not suffice.

They go on to make the following comment about the importance of institutional contextualisation :

> Rather than try to bring to scale "best practices,"colleges and universities need to redesign their policies, programs, and services at scale (Jenkins, 2011).

Coupled with the idea of using evidence as the basis of decision-making, the point underscores the need for combining the findings from the research literature with institutional data in order to be able to make systemic, aligned changes that have practical meaning within the institution. The argument of contextualization of data also applies within an individual institution. Data can be obtained at many levels (individual courses, degree statistics, individual interviews etc.) within an institution and from many sectors (different faculties, student support services, planning departments etc.) and understanding their interpretation within the immediate context, their origin and their original purpose is key to the notion of meaningful, evidence-based change. As expressed by Bailey et al. (2011)

> …no single strategy in isolation will increase student success rates on a substantial scale; rather, strategies must work together in concert across an institution.

In their paper they go on to note four areas for attention: (1) simplification of structures and bureaucracies that students must navigate, (2) broad engagement of all staff including involvement in student support activities, (3) alignment of course curricula and learning goals and assessment, and (4) "Colleges should collect and use data to inform a continuous improvement process," thus summarizing the main theme of the present brief of underpinning improvement, change and reform by evidence-based management.

There are a number of factors that lie outside the immediate confines of the academic curriculum, such as student motivation and environmental adjustment. These too are institution dependent, and while such issues provide common challenges across the HE sector, the unique nature and ethos of each institution requires specific solutions. A deeper understanding of how to provide effective interventions that take the overall complexity

into account requires detailed data on admissions and selections at the institutional level and at the programme level within an institution.

7.1.4 Gateway courses

Clearly, failing a course during a degree programme will affect the projected progress of a student in some way. However, the extent to which progress is actually impeded depends on the relationship of the course to the degree programme as a whole. For example, an optional "filler" course might, in fact, have little effect on whether or not the chances of graduating are compromised. At the other end of the spectrum, there are courses that significantly impede progress to the extent that a student may not be able to graduate, either because the time to graduation becomes unacceptably long or because access to further progress is denied. What is of greatest concern is where large numbers of students fail such gateway courses, leading to a severe reduction in throughput. Such courses may not always be large components of an overall degree programme — they could be small parts of a modularized curriculum. For example, in the report on improving throughput in engineering degrees, Fisher (2011) has noted that the term "killer" courses is sometimes used to describe courses that have a severe negative impact on graduation. However, it is clear that in order to address the issues meaningfully with regard to a particular high failure rate course, careful analysis and detailed contextualization is required in order to understand the problem (or problems) that have lead to the situation at hand.

7.1.5 Readmission refusal

One of the consequences of students falling foul of academic progression rules is academic exclusion. This may be viewed primarily through the lens of throughput statistics, but the impact on a student, and in all likelihood on the immediate family or other support systems, is catastrophic. Detailed studies of "collateral damage" inflicted by the HE sector on disadvantaged communities have yet to be carried out, but it is clear that the most disadvantaged students, i.e. those with the highest risk of failure, are often the ones left with huge debt that cannot be paid. In addition to the often crippling debt, is the cost in human terms of labelling the best output of the school system as failures.

Thus, refusing students readmission should be the result of a careful process. On the one hand it is not responsible to allow a student who has no chance of making any further progress to return and simply accumulate debt; on the other hand it should be recognised that in admitting a student to an institution in the first place, there is an accompanying responsibility to ensure that the chances of success are maximally high. Where it is clear that it is in the best interest of a student to leave the institution, the reasons for the decision need to be clear, and

where possible some academic guidance needs to be given to the student as to how to proceed (to some other area of study, or to another institution for example).

It is often the case that a student who has performed poorly at one institution may find another institution to be a better fit for many reasons. However, the archipelago-like nature of the HE system, with each institution acting not only individually, but competing for both students and other resources, has not allowed for systemic solutions. Yet it has become clear that both cooperation and sharing are vital to the health of the sector and that the common currency of meaningful information exchange is an essential ingredient.

7.1.6 Management information systems

The shift towards evidence-based management and decision-making has become part of a global thrust in many areas of activity, ranging from business to medicine. Of particular interest is the area of higher education where there are an increasing number of examples internationally of reform being initiated by recourse to information-based studies.

These data gathering exercises, though, require careful formulation of well-posed research questions rather than post-hoc interpretation of "available statistics." Coherent planning at the institutional level, with effective monitoring systems in place, is key to setting up an evidence base for understanding and managing the issues across the various levels within a particular institution. For example, in the context of education in the USA, and referring specifically to reform initiatives in the community college sector, Bailey et al. (2011) note that

> Using measurement and evidence to inform management decisions is a central feature of effective organizational improvement models outside of education. It is likewise a key part of K[indergarten]-[grade] 12 school reform efforts and a primary tenet of college improvement models such as Achieving the Dream[ref A] and the Academic Quality Improvement Program [ref B]. Such models emphasize that major improvements to a system can best be achieved through a process of examining key outcomes, enacting policies that attempt to improve those outcomes, and re-examining outcomes, in a continuous cycle.

Thus, the purpose of setting up data collection systems is to be able to use the patterns that emerge as the basis for making decisions about suitable interventions and environmental changes that will promote and enhance success of individual students as they navigate through the complexities of the system. The first question that arises is which students are selected and to what extent they are appropriately placed relative to their backgrounds. While NSC and NBT results are clearly important markers for selection and placement there are many other factors that affect the success or otherwise of students. However, obtaining a clear picture of the effects of these influences requires setting up systems that enable the detailed tracking of information at several levels on a sustained basis.

There is little doubt that evidence-based decisions and interventions that arise from well set up management information systems are more likely to bear fruit with regard to overall success of students in whatever way this is measured. The starting point lies with setting up systems that include the capturing of detailed data regarding applications, selections, admissions and placement of students. At the heart of the academic enterprise is the "unit student" who, once selected and admitted, is placed onto a suite of courses that eventually make up the curriculum through which the student will progress. Progression through the curriculum requires careful monitoring of pass rates (both first time and repeats) at both the course level as well as at the programme level (throughput rates). However, it should be noted that the interpretation of pass rates, including the impact on the academic trajectory of individual students, requires careful contextualisation. Similarly, programme throughput rates need to be interrogated from a holistic perspective.

Meaningful changes to existing courses and programmes that impact positively in a systemic manner can only take place where there is a sufficiency of data to use as the basis for making such changes. The success or failure of students often starts well before the first lecture. Having suitable management information systems in place has clearly become a sine qua non in the quest for improving the student experience in general and throughput in particular. By monitoring the many strands and links that make up the student journey, decisions and interventions can be made in the knowledge that the best available evidence has been used to do so.

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7.2 SUCCESSFUL ACTIVITIES

Institutions were asked to identify what activities they currently have in place related to focus area 4, enhancing course and programme enrolment management, that are successful. They were also asked what evidence they use to conclude that the activities are successful. In this section a summary of the most common practices that institutions said were successful is presented. In addition, examples of activities that are noteworthy but not common are described. The types of evidence for success put forward are discussed in chapter 7.

7.2.1 Selection and placement

Selection

South Africa has gone through several school curriculum revisions since the first democratically elected government took office in 1994. In 2008 a new school-leaving qualification, the National Senior Certificate (NSC), replaced the previous one, the Senior Certificate (SC). One of the big differences between the old and the new qualifications is that in the SC subjects were offered at two different levels, standard grade and higher grade, while in the NSC there is only one level for each subject. The examinations are meant to be constructed in such a way as to differentiate among learners that are able to achieve at various levels of cognitive demand. Prior to 2008 universities had developed selection mechanisms based primarily on achievement in the SC, but with the implementation of the NSC those mechanisms were no longer valid. Universities are therefore developing various tools and measures to try to identify students that are likely to succeed.

All universities use the Admission Points Score (APS), which is based on performance in the NSC, as one of the main criteria for admission, in some cases the only criterion. It is common practice for individual faculties to stipulate their own entry requirements, particularly in those faculties that require mathematical proficiency, such as science or engineering, or those that have limited places, sometimes called selection programmes, such as medicine. Universities' experience since 2009 with students that write the NSC has led to a recalibration of the APS scores required for admission. A number of universities indicated that they have had to raise the required APS score over the past few years as it has become evident that lower marks on the NSC show poorer correlation with success at university. A few universities referred to a careful process of review and subsequent amendment of their entry requirements, as the two quotes below illustrate.

> Evidence-based review and amendment of minimum entry requirements for undergraduate degree programmes have taken place. Reports … on "First year undergraduate student profile and performance (2007-2012)" enable Colleges and Schools to investigate these further and develop proposals for approval, particularly during a period of much discussion regarding the new National Senior Certificate (NSC)

> and concerns about the minimum entry requirements into degree programmes and their possible impact on meeting enrolment targets and throughputs. The profiles provided insight into how each new entrant undergraduate bachelor student cohort was transforming year on year from 2009 to 2012 on a range of indicators; and signalled where student recruitment efforts need to focus.
>
> The data on first year pass rates provide a gauge for the impact of the Academic Management System which has been funded and implemented in all Colleges since 2009. The review of minimum entry requirements (including Matric points/APS) by Schools and Colleges was complemented by a simultaneous review of the admission and selection processes.
>
> The Engineering Faculty performed an extensive statistical investigation of the ability of various selection criteria to predict graduation success. This investigation is informing current decisions on admissions and selection, but the statistics is also being updated each year to identify trends.

The four universities in KwaZulu-Natal make use of the Central Applications Office (CAO), which captures data relevant to student applications, including the grade 12 marks when they are released, and makes the data available to the universities at which students indicated they wish to apply. In the words of one university,

> The decision to use the CAO for students applying to study at [the university] has proven to be a good one in that the University has a large pool of applicants to choose from. It is also in line with the DHET's strategy to utilise Central Applications Services. The use of the CAO has resulted in an improvement in the quality and accuracy of student data capturing, faster processing time and lower administrative costs.

Placement

While South African universities have had selection mechanisms in place for many years, the concept of placement as a separate process from selection or admission has only recently entered universities' discourse, and it is not yet universally understood or implemented. A student is admitted to a university (offered a place) and selected into a particular degree programme, but placement mechanisms are needed to identify a student's level of preparedness for particular university courses or programmes. One placement mechanism that is increasingly being used by universities is the National Benchmark Tests (NBTs), developed as a national project of Higher Education South Africa (HESA), which comprises all university vice-chancellors. The NBTs test academic literacy, quantitative literacy and mathematics. The ways in which NBT results are used differ from one university to another, as does the extent to which prospective students are required to write the tests, as illustrated in the five quotes below.

> …applicants are required to have passed the National Senior Certificate (NSC), or another school leaving qualification that meets the matriculation exemption requirements. Applicants normally resident in South Africa must also complete the National Benchmark Test (NBT). Faculties draw on these and other information (such as language proficiency where appropriate) to assist them in determining which applicants should receive offers.
>
> Deans are able to suggest to applicants who cannot initially be admitted that they take the National Benchmark Tests (NBT). The NBT results are used to augment the APS and inform the placement decision.
>
> Applicants may apply for two programmes of study, which are considered simultaneously for offers of admission. The different programmes have robust mechanisms – relating variously to achievement levels in selected NSC subjects, achievement in different areas of the NBT, and language proficiency – for academic placement.

> The NBTs have been investigated as a placement mechanism at [the university] since 2010. The purposes of the investigation include determining the extent to which the NBTs can be used to place students within [the university'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.

> The National Benchmarking Test (NBT) has been approved by the Senate in selection to two sets of programmes: (1) Health Sciences and Veterinary Science (where it is used to provide variance amongst a group of students who all have very high aggregate NSC marks); and (2) the extended programmes. Other Faculties may also use the NBT for admission of students: e.g. those who miss the admission requirements in a particular matric subject by just 1%. The NBT is thus a valuable instrument for inclusion.

The administration of placement tests is only useful if there are alternative programmes or courses provided for students with differing levels of preparedness. In most, if not all, universities, certain programmes, particularly those which rely on a high level of mathematical competency, such as science and engineering, are offered as both mainstream and extended curriculum or degree programmes (ECP or EDP). Admission into mainstream programmes is determined, in whole or in part, by a student's Admission Points Score (APS), which is based on performance in the NSC. Students whose APS score, or, in some instances, whose score in certain key subjects such as Mathematics and Physical Science, is too low to qualify for automatic admission into mainstream programmes but who may be considered for ECPs typically have to take placement tests — the NBTs and/ or other tests devised by the university. Examples of other placement tests are described in the four quotes below.

> The regularly revised admissions policy includes procedures for the admission, selection and placement of prospective students as well as the re-admission of formerly registered students. Selected applicants are categorised into those who (a) meet admission requirements; (b) are subjected to the testing of potential; (c) referred to an extended curriculum programme (ECP); and (d) who qualify for recognition of prior learning (RPL).

> …in some instructional programmes in the Faculties of Management Sciences, Health and Environmental Sciences, and Humanities, applicants undergo one or more of the following procedures before selection and admission can be finalised: Psychometric testing/assessment; submission of a portfolio; interviews; completion of a questionnaire; assessment of practical skills; and/or any other process as approved by Senate.

> …where ECPs exist, these selected students may be placed in these ECPs, depending on their results obtained in the NSC examinations as well as the Standardised Assessment Tests for Access and Placement (SATAP)… In some departments the NBTs are used for diagnostic purposes.Within faculties a variety of selection tests which include interviews, portfolios and presentations supplement the process of selection of students.

> Two-tier approach: applicants that meet the direct admissions requirements are accepted. An applicant who does not meet the direct requirements but whose APS falls in a certain range is referred to CAAR [Centre for Access Assessment and Research]for developmentally focused access assessment. CAAR consultants make the admission decision based on school and test results and advise on other placement/ programme options, where necessary.

One university offers a special form of access to students who meet all the entry requirements except for mathematics, a key barrier for many students.

> A successful intervention that was made on the basis of analysis of applicants meeting all requirements except the level of pass in Mathematics, is the offering of the Foundation Mathematics module from the BSc Foundation Programme as a short course…to candidates seeking to improve their NSC Mathematics results and for candidates who took Mathematical Literacy in high school. Senate approved that a pass in the Foundation Mathematics module could be considered in lieu of NSC Mathematics. This intervention has assisted several enrolment targets and provides access.

Admission and registration

Once the grade 12 results are released by the Department of Basic Education in early January each year, provisional offers made on the basis of grade 11 marks become firm offers and students can then register for the programmes to which they have been admitted. In a few universities, students may apply for, and obtain admission to, two programmes from which they choose one. Other universities require students to rank their chosen programmes in order of preference. While students may be admitted to more than one programme, having to rank their preferences has an influence on which programme they may be accepted into if there is a limit to the number of students that can be accommodated, since students for whom a particular programme was their first choice may be given preference.

A problem in the past at a number of universities has been a large number of "walk-ins", i.e., students who do not apply in advance, or who do apply but whose grade 11 marks are not high enough for them to meet the admission criteria but then obtain high enough marks in grade 12 to meet the criteria. These students literally walk into the university in January, in the hopes of finding a place. Most universities no longer allow walk-ins, especially after some incidences of violence (for example, one person was trampled to death). Nonetheless, universities have to have mechanisms to deal with late applications. Where students did not submit an application at all by the stipulated deadline it is straightforward to deny them admission. However, dealing with students who applied, were rejected and then met the entry criteria on the basis of their Grade 12 marks is more complicated. One approach is described below.

> The late application enquiry system is also available to ensure that only those applicants complying with the admission requirements are accommodated during the late application period. Only applicants meeting the admission requirements are given access to the online application functionality.

In order to try to match registration numbers to enrolment targets as closely as possible, some institutions use real-time (or near real-time) monitoring tools during registration, as the two quotes below illustrate.

> There have been occasions when over-enrolment has occurred within individual faculties for a diversity of reasons; as a result a daily enrolment report is issued and circulated widely. This report is highly comprehensive and includes total students, new students (both by campus and qualification), foundation students, students in residence and course enrolments; in addition the status relative to targets is now also provided. The system is so effective that a few years ago the improper admission and registration of students to a particular qualification outside the proper registration procedures was immediately detected.

> 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.

One university also monitors the number of credits for which students register in order to identify students with excessive course loads that could put them at risk.

> Course load reports are also run regularly. This is to identify students who are enrolled for excessive numbers of courses. These reports are circulated to faculties who then investigate cases above a certain threshold. High loads are often the result of students changing courses and failing to cancel the old ones. This obviously has a financial impact on students ([the university] charges students per course taken rather than per academic year) and may impact on their ability to return the following year.

7.2.2 Re-admission refusal and exclusions

All universities have rules that require students whose academic performance is not adequate to terminate their studies, either in a programme or at the university. Typically these are referred to as "exclusion rules." The term "exclusion" is contentious. "Exclusion" suggests that a student's continuation at the university is the default position; "re-admission refusal" suggests that a student needs to earn the right to be re-admitted from year to year (or semester to semester).

More than half of the universities indicated that they have measures in place that enable students at risk of exclusion to be identified in time for suitable support to be provided. Four examples are shown below.

> It is an accepted practice to refuse admission to students who clearly show that they are not able to progress towards completing a qualification. However, such exclusions are not taken lightly and within most departments there is an effective monitoring of results to identify those students who are at-risk of being excluded. An adequate period of warning is given to such students. In many cases, interventions are made in order to give such students the opportunity to improve their performance.

> The practice in the faculty [of Engineering and the Built Environment] is to counsel students at the first indication of their falling into an exclusion category in terms of general and departmental rules. All extenuating circumstances such as health, social impediments and other issues if any, are considered. All appeals and exclusions are dealt with by the Executive Dean and this function is not delegated. Through timely interventions the number of exclusions has been reduced over the years.

> The Re-admission Policy makes provision for the performance of all students to be tracked so that those who experience challenges can be identified early and be assisted or referred to, for example, [the student development division] for counselling and assessment. They could also be advised to change programmes. As a result, many departments have processes in place to monitor student progress and to engage with students that are identified as experiencing difficulties.

> The university also has a risk management system through which students' performance is tracked and academic intervention mechanisms put in place to improve student success. The Policy on Academic Exclusion thus makes provision for a preventative strategy of continuous academic monitoring and intervention.

Most, if not all, universities have appeals processes that enable students to put forward a case for why they should be allowed to continue with their studies. Two examples are shown below.

> Senate sets faculty-specific readmission requirements, and we may refuse readmission to students who fail to meet these requirements. There is a careful process for looking at individual cases and about half of those who fail to meet minimum readmission requirements are readmitted. Students denied readmission may appeal. Appeals are heard by a faculty's Readmission Appeal Committee (RAC). The decision of this committee is final, but can be taken on review to the Vice-Chancellor on the grounds of procedural irregularity or unfairness. This is a very thorough process with each RAC constituted to include a member of the Student Representative Council, the Department of Student Affairs, and a member from the Centre for Higher Education Development, amongst others. Some faculties readmit some students on probation for one semester only. If progress is satisfactory in mid-year, they are allowed to continue in the second semester. If they are not allowed to continue, they may again appeal to the RAC. The robustness of the process is reflected by the very low number of committee decisions that are referred to the Vice-Chancellor for review. Faculties have systems for advising students of the RAC process, and advisers to assist them.

> The Faculty runs 4 Faculty Re-admissions Committees simultaneously in order to facilitate all applications against exclusion; successful applicants are re-admitted and those who are not successful initially are counselled to apply to the University Re-admissions Committee.

7.2.3 Enrolment planning and monitoring

Since 2004 the Department of Higher Education and Training (DHET) has required every university to negotiate enrolment targets per Classification of Educational Subject Matter (CESM) category.This is necessary because the number of applications for places at universities by school leavers exceeds the capacity of institutions to cater for them in terms of money, facilities and human resources, in some cases by a factor of more than ten. Meeting enrolment targets, without either under or over enrolling, is challenging. Prospective students usually apply for university admission during their Grade 12 year. Many universities grant provisional admission on the basis of grade 11 marks, but firm offers of places are only made after the NSC results come out in early January. Not all offers will be accepted because students may apply to more than one university, may not be accepted for their first choice of programme and therefore not register at all, or may not find funding for their studies. Universities therefore typically "over book" (much like the airlines), on the assumption that some students will not accept their offers of places. Even so, universities need some way of prioritising offers to some students and wait-listing others. Four approaches are shown below.

> Our data repository of previous applicants and their educational history allows us to track patterns of enrolments; formulas of conversion from application to offer to enrolment are well established and allow us to manage our enrolment numbers at both undergraduate and post-graduate [levels] quite effectively.

> 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.

> [The university] recently shifted its handling of admission decisions away from 'fairness on a first-come-first-serve basis', underpinned by administrative efficiency towards quantitative targets, towards an emphasis on student success and academic excellence but without compromising equity considerations.

> The faculty researched and changed our minimum entry requirements to place greater emphasis on high achieving applicants thus offering places to top achievers first.

There is great variation in the level of detailed enrolment planning and monitoring that is undertaken at different universities. A few universities described elaborate systems of planning and managing their enrolment, indicating high-level institutional planning skills, two of which are described below.

> [The university] selects from among those meeting the minimum requirements to fill the limited places available to meet specific enrolment targets. These targets are set by the Senate and Council after consultation with faculties (based on infrastructural and resource constraints) who then apply the approved admissions policy and set over-offer targets against which to make offers to ensure the incoming class is constituted to meet the targets by race. The Senate Executive Committee (SEC) monitors progress throughout the cycle, and Deans report to the SEC at the end of the cycle. Faculties monitor each cycle to ensure that the admission threshold levels are able to successfully constitute a class that meets demographic targets while still being within the existing resource limitations that may apply… The Institutional Planning Department prepares annual reviews of the Admissions Process. These reports provide detailed data on the applicant pool, the offer pool and the profile of students who ultimately register at [the university]. These reports, together with the findings of periodic undergraduate experience and no-show surveys, conducted by the Institutional Planning Department, are used to refine admissions policies and processes where necessary and determine where things are working well.

> Enrolment planning sets the high-level targets for enrolment numbers at the institutional level and is a collaborative exercise between the institutional level and the departments. [The university's] enrolment planning process for the period 2014-2019 is a hybrid of top-down and bottom-up planning…Projections are based on the DHET enrolment targets, the historical pass rates and throughput rates for each approved qualification description. In addition, growth parameters are applied to [the university's] actual enrolments in 2012. Projections were adjusted by HoDs for the impact of merger and consolidation issues, on space, infrastructure and resourcing, as well as the phasing-in and -out of qualifications and Advisory Boards', or Professional Bodies', requirements…The development of an Enrolment Planning Monitor, together with the end of year marks administration process, provides the tools for [the university] to produce realistic enrolment plans and to manage the implementation of the plans effectively.

Two large universities described in some detail how they use historical data and involve many players in the university in their enrolment planning.

> In order to submit the required Enrolment Plan to the DHET, the first step in the process is the determination of student enrolment targets. These targets are determined at a programme and curriculum level within schools/entities at each campus. The targets include headcount enrolments (based on actual registration in previous years as well as resource requirements) and estimated full-time equivalent (FTE) enrolments based on historical trends and the enrolment shape by qualification type and major fields of study.
> Estimated outputs are determined based on analyses of student throughput, success and graduation rates (referred to as student retention). A sophisticated Management Information System (MIS) is critical to determine trends in relation to the retention of students. Student tracking is a complicated management information process and determination of output targets is difficult without a proper tracking system which provides actual historical analyses and trends… It is therefore important to emphasize that enrolment planning at [the university] does not only involve setting of targets in relation to student intake, but a strong emphasis is placed on output performance indicators (i.e. student success) using predictive modelling.
> Enrolment management cuts across various functions and departments at the [the university]… including programme development, financial aid, academic registration, academic student support services and marketing and recruitment. The communication of input and output targets at the [the university] is done as part of the Council approved Institutional Plan (and campus plans) and aligned with individual performance management of staff.

> 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. undergraduate diplomas and degrees, postgraduate 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.

Of all of the aspects of university life associated with the four QEP focus areas, institutional planning is one in which the disparities in institutional capacity are most evident.

7.2.4 Management information systems (MIS)

There is considerable variation among institutions in the quality, complexity and degree of integration of the systems that are used to manage institutional data, as well as who has access to the data, when and for what purpose. Two of the most widely used off-the-shelf systems are the Higher Education Data Analyser (HEDA) and ITS. Two examples of management information systems and how they are used are given below.

> We have implemented an integrated management information system (MIS), which is capable of reporting on HEMIS and operational data. Through the dashboards we can constantly monitor our headcount enrolments per school and drilled down to departmental level. Some of the pertinent reports that come from MIS are the cohort analysis which gives an account of the throughput rates of multiple cohorts. The cohort analysis reports do not only indicate the throughput rates, but they also indicate the drop-out rates and stop-out rates within the stipulated period of study.

> The institution has introduced the Higher Education Data Analyser (HEDA) system that provides modules used to improve course and programme enrolment management. One of the reports that can be downloaded from the HEDA system is the Application vs. Registration report, which provides information to the institution about the number of students registered per programme from the processed applications. This report provides insight into programmes which are fully enrolled and those which need to be filled…
> Interrogator Pro is another module on the HEDA/MIS system; this is used to identify student and staff data errors and provides suggestions for solving those errors. This module is very useful for programme management and enhances the quality of institutional data.

Some institutions have purpose-built management information systems. Three examples of what these systems are used for are given below.

> The [university] MIS reports on registration, enrolment, graduates, drop-out and various other indicators. The system includes a variety of business intelligence reporting solutions (reports, cubes, dashboards, etc.) which afford users of the system access to strategic management information. The data on this system is updated monthly, based on a three tier data import process with audit functions and error checking on each tier. This ensures accurate and trustworthy data…
> A single student administrative system across all [university] campuses is continuously developed, and regular training is supplied to all end-users of the system. This ensures a standardised approach in relation to the maintenance of student administrative data. Dashboard interfaces linked to a central student administrative system provide end-users with online access for management information purposes in order to assist in interpreting salient trends and developing a longitudinal view on KPA achievements, particularly as regards cohort analyses and throughput and dropout rates. The calculations are based on clear and concise business rules and definitions, and the service provision is aligned across all [the university's] campuses. The source systems from which data warehouse information is gathered are the following: student records, academic programme development, research administration system and HR system.
>
> Much of the analysis and system improvements are the result of a range of data made available through the University's Institutional Intelligence (II) Unit which serves as the information hub of the University by maintaining and providing accessible, accurate and relevant information to support the decision-making processes within the institution. It involves the integration of data from multiple sources…throughout the University and from sources outside the University in order to provide up-to-date management information. II is responsible for statutory reporting the Institution and data quality enhancement activities and has created websites that enable staff to access the data themselves. All Institutional reports rely on II for the provision of data on an ongoing basis.
> The dashboard of Institutional Data, accessible from the Institutional Intelligence system, enhances management of students, modules and programmes. II provides a variety of data including enrolment planning, registration progress, real-time registration statistics, student application and selection status, applications and intake summary, self-help registration, head counts, FTE and WFTE, student performance year-on-year, cohort analysis, cohort time taken to graduate, module pass rates and graduate head count by year of completion.
>
> A very important improvement for [the university] has been the development of the Student Enrolment Management System (SEMS) to support strategic enrolment efforts. SEMS effectively replaced a fragmented and unsupportive legacy IT systems to work from a single, integrated database to optimise online transactions and yield unduplicated data. The Student Administration System Integrator (SASI), a subset of SEMS, helps to integrate administrative efforts and all functional areas responsible for achieving [the university's] strategic enrolment goals…
> A Student Tracking System (STS) was developed to help track applicant, student and programme-related information. The generation of enrolment system reports assists to promote a culture of evidence for student success and strategic interventions. This system has also helped to track students' continuous assessment performance to ensure that promotion rules are integrated within the electronic system and that appropriate interventions are put in place.

A few universities indicated that their MIS system enables them to identify at-risk students early enough to be able to intervene before they risk being excluded, as illustrated by the three quotes below.

> Since the implementation of Marks Administration System (MAS), also part of (Student Enrolment Management System) SEMS, there has also been a marked decrease in the number of mark adjustments (corrections to marks) and improvements in the timely capturing of marks and the uploading of assessment schedules. Similarly, with more granular data more students are able to be identified to participate in and complete remedial work in targeted academic support interventions. These include at-risk students in a range of modules which either inhibit progress or impact their timely programme completion and time-to-degree rates.

> One of the modules on the MIS is the Student Tracking System which is used to track and continuously monitor students' progress and assessment marks and to identify students-at-risk. Intervention mechanisms are then put in place to assist the identified students.
>
> The ITS (ERS) system assists in tracking students' progress. Every undergraduate student's performance, based on their academic performance at the end of each semester or subsequent supplementary exams, is determined and entered on the student Electronic Robot System (ERS) as green, orange or red (as defined in the Academic Monitoring and Exclusions Policy). This information is also reflected on the Student Management System (SMS) which is accessible to students for monitoring their own performance. This online system helps the early identification of students who may be at risk of failure and enables the AMS support staff, together with the student, to decide appropriate support interventions. SMS is linked to Student Central and students are able to view their marks and monitor their own progress.

Two other examples of how student performance is monitored and tracked are given below.

> The monitoring of student performance is undertaken at a number of levels within the University. The measures taken include the compilation of internal Annual Quality Monitoring reports, and meetings within departments and faculties where the performance of students is discussed. Such monitoring is assisted by a well-functioning Management Information department which plays an important role in providing information on relevant student success indicators to academic departments and to Executive Deans. The Management Information department also conducts 'roadshows' within [the university] to promote the use of available software that can be used by lecturers to track the performance of their students.
> An important initiative is an annual assessment of student performance conducted by [the university's] Academic Executive team, chaired by the DVC (Academic). Such assessment includes detailed scrutiny of each faculty's annual performance report in relation to vital targeted success indicators such as graduation rates, throughput rates and success rates. Measures for improvement are usually the outcomes of such analyses.
>
> 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.

7.2.5 Interventions related to gateway courses

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

Almost half of the universities made specific reference to policies or practices that require the identification of courses that affect the progression of a large number of students. Two examples are shown below.

> [The university's] Institutional Planning Department publishes a series of metrics about courses that look at issues such as overall pass rate, marginal passes, and differential pass rates by both demography and gender, and these metrics allow courses to be identified that "impede graduation". These data are then fed into the formal reviews of academic departments and the Annual Teaching and Learning Reports.

> Modules are the core building blocks of all academic programmes. By focusing on aspects of modules – enrolments, pass rates, student and peer evaluations, and examiners or moderators' reports – overall improvements in success rates in a programme may be achieved. All College Academic Affairs Boards have established a threshold below which module pass rates are investigated. Three Colleges have set this at 60% and one at 85%. Colleges have also identified modules that impede curriculum progression for significant numbers of students and put measures in place to address these such as offering that particular module in both semesters.
>
> The university's Directorate of Information and Analysis (DIA) periodically produces reports… focused on:
> 1. students' success (modular views) using various filters…
> 3. modules at risk – in the past the SSF [Student Success Forum] used one formula for determining modules at risk, namely modules with student enrolments larger than 1500 and having module success rates lower than fifty percent. As from May 2014 the DIA, in collaboration with the SSF, has developed a more nuanced formula for determining modules at risk that particularly takes into consideration the uniqueness of each college. Various initiatives are used in the university to mitigate failure in modules at risk. The SSF annually considers modules that will have face-to-face tutorials at the various regional learning centres using the list generated by the DIA of modules at risk. At the end of each examination seating, the DIA produces information about students who are only left with twenty four credits or less to complete a qualification. These students are then provided additional support by academic departments and provided with a further summative assessment opportunity;
> 4. examination results per exam sitting – the analyses of these exam sitting results enables the institution to keep track of students' progress periodically…

Only a few universities explicitly referred to interventions that are put in place to help students succeed in such courses. Four examples are shown below.

> A monitoring system for module and student success rates has been created to identify courses that have a large impact on success and to identify anomalies and trends. Specific interventions in "bottleneck" modules are planned, including tutor programmes in junior courses and the more extensive use of Information and Communication Technology.
> After each summative assessment session, academic departments are required to submit a statistical report on the results to the Faculty Board and to Senate. Academic staff teaching modules with 'below-par' results are expected to table possible reasons for this and to provide suitable interventions to address the problem. Gateway subjects are identified and plans to implement suitable interventions (where necessary) are tabled.
>
> Pass rates of all courses are evaluated Faculty-wide [in the Faculty of Science] after the mid-year and year-end examinations; problematic courses are identified and then the Faculty Teaching and Learning Centre assist with staff development where necessary and the School Teaching and Learning Committees deal with School specific issues.
>
> Additional lecture time and/or tutorial time is provided in some high risk modules. Feedback from external examiners and moderators is used to redesign aspects of high risk modules the next time they are presented. Attention is given to teaching methods and assessment modes in high risk modules.

7.3 UNSUCCESSFUL ACTIVITIES

Institutions were asked what activities they initiated during the past three or four years related to focus area 4, enhancing course and programme enrolment management, that had not been as successful as they had hoped. They were asked in what ways the activities were unsuccessful and what they thought the reasons might be for lack of success. In this section a summary of the most common activities that institutions said were not as

successful as they had hoped is presented. In addition, examples of activities that are noteworthy but not common are described. It is worth noting that some activities were considered to have aspects that were successful and other aspects that were not successful.

7.3.1 Selection, placement and admission

A general problem in the South African higher education system is that the number of applicants to universities far exceeds universities' financial, space and human resource capacities. In some universities the ratio of applicants to places is greater than 10:1. Just managing the number of applications places an enormous burden on institutions. On the other hand, many applicants do not meet the entrance requirements and so universities may not meet the enrolment targets expected of them by the DHET. Even if sufficient offers of places are made, the number of students who eventually take up the places and are admitted to an institution cannot be known in advance. The three quotes below illustrate the problems.

> While significant improvements have been made to [the university's] student selection processes, some programmes at [the university] struggle to meet enrolment targets for first-year students. This can largely be attributed to the current applicant pool where a large number of applicants do not meet entry requirements. It is also possible that the entry requirements for certain programmes are set too high, precluding a number of applicants from qualifying to study.

> Teething problems with the new student enrolment system have impacted on admissions. The extreme pressure at the commencement of the academic year when matric results are released and students are required to register, has created logistical problems. In order to ensure we enrol the best academically deserving students whilst also meeting our targets, we expect students to accept the offer made to them within the prescribed time frame. The volume of responses and queries using multiple communication platforms (email, phones, fax, queues) has created logistical problems and a lot of duplication.

> To predict the actual enrolment rate with regard to the number of students we admit to a programme remains a challenge. The trends of the past are not always a good predictor for the number of students who will actually enrol in a particular year for a particular course. It is also difficult to predict what the enrolment uptake will be for new initiatives, e.g. extra language modalities offered in established programmes. As such we have not been as successful with reaching our diversity targets set for [several programmes].

As mentioned in the previous section, several universities have to deal with a large number of "walk-ins", students who do not apply in advance or who do apply but who do not meet the admission criteria on the strength of their grade 11 marks but then they obtain higher grade 12 marks that do enable them to meet the admission criteria. Other groups of "walk-ins" are students who applied at other universities that they perceived to be more prestigious but were not admitted, and students who faced difficulties finding the money to pay for their studies. In some cases, "walk-ins" are admitted after classes have started, which disadvantages them and disrupts university processes. The two quotes below illustrate the problems.

> One of the management issues impacting on the efficiency of the registration process is that of the large number of walk-ins that [the university] deals with after classes have begun. Ironically, these walk-in students often have higher entrance competencies than those students accepted through the official process and, in at least one faculty, these students are erroneously accommodated in the ECP programme,

> which is meant for a specific category of student and not generally for "walk-ins". The pass rates in these programmes are therefore reported to be higher than the mainstream programme thereby, inadvertently creating a positive climate for student success through a number of interlinked factors. However, in general it is accepted that the random acceptance of 'walk-ins' can result in students who are not committed to their studies and have poor motivation; poor attendance and lack of engagement, which is not conducive to student success.
> Over the years, various rules have been unsuccessfully introduced to deal with the issue of the walk-in students. The Registrar has also introduced selection committees to form part of the faculty structure, and support the admissions process. Guidelines exist for selection committees whose purpose is to ensure a consistent, fair, unbiased selection process…Many HoDs still rely on selection from the pool of walk-in students to source applicants with higher entrance requirements thereby compromising the integrity of the process and placing students at higher academic risk.

Two universities referred to their own communication processes as a contributing factor to the problem of walk-ins.

> Walk ins/late applicants wandered around not knowing where to go/not getting help on campus. The lack of success in this regard could be attributed to the non-downloading/matching of the Grade 12 results for the purpose of revising the applicants' admission status as well as the decentralisation of admission of walk-in applicants.
> Secondly, there is generally late application, admission and registration processes at institutions, and this is due to a lack of communication of admission and registration procedures of walk-ins to all the stakeholders.
> Thirdly, students do not receive (appropriate) communication relating to enrolment and registration from institutions, and eventually there is a tendency of late closure of the applications. Also, at [one] campus, the majority of admissions are walk-ins, and ultimately the admission letters for these applications are either sent late or not sent at all.

> In the past, walk-in applicants were encouraged to meet enrolment targets, which resulted in multiple challenges during the registration process. Although strategies to deal with walk-in applicants were developed, they proved to be unsuccessful. For example, in January 2014, University security personnel allowed walk-ins on Main Campus despite the plans to divert these applicants to the Faculty of Natural Sciences Campus which is situated 300 metres away from the Main Campus. This created much confusion and unhappiness. This misunderstanding might have been caused by a lack of clear directives.

One university referred to a problem created by a mismatch in IT systems at the university and at KwaZulu-Natal's Central Applications Office (CAO).

> Although the use of the CAO system for admission, selection and placement comes with many benefits, maximum use of it has not been made, resulting in a poor return on the investment made by the University. In January 2014 the selection of prospective students from the CAO listing could not be done timeously by [the university's] selection staff because there was a mismatch between some information on the CAO system and the University IT system (e.g. admissions requirements) due to different coding systems. This resulted in faculties having to resort to other means of selecting applicants, such as registering walk-in students.

Efforts to make the application process more efficient by using technology do not always work if students are not technologically literate, as illustrated below.

> Most prospective students who apply online fail to submit the required documents via the online functionality. As a result, the university has to write letters to ask them to submit the documents, as the selection process cannot be completed without the required documents. This delays the selection, and communication of the outcome to applicants. The documents are normally received via the post and this defeats the purpose of online application. Applicants may be failing to submit the required documents because they do not carefully read, or understand, the instructions about online submission of documents.

The National Benchmark Tests (NBTs) were developed as a tool to help place students into different programmes according to their level of performance in standardised tests. Some universities require all entering students to take the tests and then use the data to make placement decisions, as indicated in the previous section. However, at other institutions only some students write the tests, and the results are not always used in a productive manner. Furthermore, there is some confusion about the role of the tests in selection and placement.

> While the University used to run SATAP tests as a means of placing students in mainstream or extended programmes, since these tests were replaced with National Benchmark Tests (NBT), they have been found unhelpful for placement by [the university] and are not used.
> It has become a requirement that all new undergraduate students should take the NBT in order that the information generated can assist with suitable placement in programmes after admission to study at the University. Unfortunately, two issues have made this largely ineffective… as 80% of academic staff do not make use of it…:
> - Many students do not write the test at all, whilst many others write it too late for decision making for placement purposes; and
> - With the University's policy of encouraging access from its communities, some 80% of students are identified by the NBT as being unlikely to complete their studies without special support – …the University already is at its limits in terms of space availability to run the current loads of foundation provision programmes.

At one university, not only is it not compulsory for first year students to write the NBTs, but they are administered after classes have begun.

> The intention was that students arriving with the NSC marks only, should be automatically be placed onto the ECP until such time as they have written the NBT, at the university's expense, in the first two weeks of term. After the NBT results have been received, students would either remain on the ECP or be re-registered onto the mainstream.
> Reports indicate that the NBT project has not made significant inroads or a noteworthy impact at [the university] as a result of certain Senate endorsed restrictions, namely:
> • The NBT should not be compulsory for students. • No [university] student should be required to pay for the test. • The test(s) may only be written after registration (to prevent departments from using the test for selection, or as a gate-keeping measure).
> These restrictions mean that special test session have to be arranged after registration, at additional cost to [the university] and impact on registration. In addition, few students arrived for testing and in any given year that the tests were scheduled at [the university]. Also no department had a full complement of students who sat for the tests. Funding for the test does not seem to be an issue as it was supported from ECP funds and [university] students were funded, yet many never arrived to write the tests.

7.3.2 Readmission refusal and managing continuing student enrolment

Managing the enrolment of students once they are in the university is complicated by a number of factors. One factor is that students may drop out or "stop out" (take a temporary break in their studies), often for financial reasons, and without necessarily informing the university. Another factor is that progression rules are not always applied; as a result students are allowed to repeat courses multiple times, which inflates student numbers in some courses, negatively impacting on the number of places available for new students. These problems are illustrated in the two quotes below.

> Dropouts and stop-outs continue to be a problem at [the university] as with many higher education institutions in South Africa. Under-preparedness for higher education, as well as the question of finances,

> appear to be the major reasons for this. A major challenge for the development of retention programmes however, or even grasping a basic understanding of dropout behaviour at [the university], is that important information which could assist with retention research is not included in student records and institutional data. Nearly all of the students who leave do not follow formal procedures for de-registration. Their departure from the institution is only known from their absence in final examinations and from the registration records of the following year when these students are formally recognised as dropouts. The actual reason for the dropping out is rarely reported to the institution. These factors inhibit the attainment of vital success indicators.
>
> Repeated failures in particular modules hold students back from progressing to the next year level and contribute to 'bulges' where classes have large student numbers, in part because of students repeating courses several times.

Decisions regarding when and whether a student is excluded or re-admitted are not always done in ways that benefit students or contribute to the efficient running of the university, as the three quotes below show.

> Some re-admission rules need to be refined as there are some that exclude students after the first semester of the first year, which is a period when students are still gradually adjusting to the demands of university life.
> Currently, the identification of students who will be refused re-admission takes place before re-examinations, which is problematic, and some adjustment of the process is needed.
>
> The double re-admissions appeal process at [the university] has created unnecessary layers of administration. Students who have been excluded are given the opportunity to present new evidence and a second committee is convened to hear the new evidence. It can over-rule the first decision, and unfortunately, very seldom is new evidence presented, and the work of the Faculty Readmissions Committee is being undermined.
>
> The academic exclusion policy has been changed annually since 2009 and at times towards the end of an academic year. Academic exclusion changes often require system development, a process that needs sufficient time to initiate and finalise. As a result, the university has had to find alternative ways of accommodating some of the academic exclusion changes. This risks the University failing to exclude students who have failed to obtain the minimum credits to proceed with their studies.
>
> The Integrated Tertiary System (ITS) as a source of information for re-admission refusal is not user-friendly and needs to be re-developed to provide accurate information.

Depending on when it is done, re-admissions can impact on enrolment management.

> The re-admittance of students has impacted on first time enrolment management in some departments, especially those with large numbers of re-admitted students.

Enrolment management of continuing students is also affected by students' financial position, which may result in the exclusion of students who are progressing academically and would therefore not be expected to drop out. Many students are excluded for financial reasons, and have to look for financial support or go through an appeals process. In the case of students who are supported by the National Student Financial Aid Scheme, delays in obtaining funding or limitations on the amount of funding linked to students' performance impact on whether and when students can be re-admitted.

7.3.3 Gateway courses

A few universities indicated that the pass rates in some gateway courses are too low. In some cases interventions may be planned or mandated but not implemented, while in others an intervention may not be utilised by the students who need it, for example,

> Although reports and improvement plans for Gateway subjects are tabled at meetings of the Faculty Board and Senate, there is seldom any follow-up or monitoring of these subjects. Minutes of the meetings indicate that the same subjects re-appear on a regular basis. There is, therefore, little pressure exerted on staff to analyse the causes and seek improvement.

> Intervention mechanisms such as the appointment of tutors were put in place to assist students who struggle with Gateway courses; however, they tend not to attend because of the perceived stigma attached to such interventions.

7.3.4 Monitoring student performance and identifying at-risk students

The identification of students who are not doing well academically and are at risk of failing or being excluded requires a concerted, coordinated effort by relevant staff together with suitable IT systems. When either or both of these components are lacking, timeous support for such students is very difficult to implement. A few universities identified problems with obtaining staff support, user-friendly IT systems or both, as the three quotes below illustrate.

> The University lacks a sophisticated tracking system which would be able to provide an early warning to students that their performance falls short of requirements and allow them and their lecturers to put in place remedial action before a student faces exclusion.

> Identifying students that struggle at a modular level before formal examinations…has been less successful. The main reasons for this is that test and assignment marks have not routinely been captured on ITS and the options that ITS offers in this regard do not meet the needs of all the lecturers in terms of the number of marks that need capturing…Without having all the test marks on ITS, some academics have used manual mark sheets to identify students, but the labour intensive exercise for particularly large class groups has resulted in manual oversights or non-implementation and students are sometimes not notified that they have not met the DP (duly performed) requirement to sit for an exam in a module…No formal electronic system to assist academic staff in programmatically identifying students that are struggling at a modular level.

> A lot of institutional information is kept on staff members desktops and is not captured on the ITS system. The SMS [Strategic Management and Support] directorate therefore cannot report on such data. Efforts to integrate data into a single reporting unit have so far not been successful…Training schedules on MIS have been developed and communicated to the [university] community but the turnout has been low.

From the staff point of view, the MIS systems that produce data at the institutional level do not necessarily provide data in a form that is useful to departments or course coordinators for the purposes of monitoring student performance, as illustrated below.

> …academic departments often require information in formats not meant for the high level reports generated by various support departments. Acquisition of the drilled-down information and customised reports is often a challenge, since such information needs to be accessed from [several departments and systems].

> Various attempts over the years to develop a system easily to interrogate student data to confidently describe various student success parameters have proven to be more complex than anticipated. One of the difficulties faced is the movement of students between extended and mainstream qualifications (and between qualifications) as well as a uniform interpretation by various role-players as to what data are required and in what format – to answer which specific questions.

One institution wrote about how a planned tracking system did not get implemented for several reasons, both human and machine related.

> The Institutional Operating Plan identified the need for a tracking system that will provide management information to college managers in an accessible and useful manner. The tracking system project, however, did not materialise as planned. DISA [Department of Institutional Statistics and Analysis] had progressed well with a system of providing dashboard information for each module, including mapping out how early warning systems will be generated to each stakeholder to ensure there is timely interventions for students at risk. According to DISA, the server capacities required for such intensive computation were not available and the process was aborted. In addition, DISA could only provide for a section of the processing required by a fully-fledged tracking system and there was no owner for this process to galvanise the resources required for such a huge project.

Another institution introduced a tracking system for students at risk, but the implementation was not successful.

> The reasons for the failure of its implementation may be categorised under four headings – development issues, currency of information, data input and training:
>
> - Development issues – the system was developed on a particular version of ITS that was later upgraded, making the system redundant. The University has since upgraded to a higher version of the ITS system requiring further modification of the tracking system and adding still more delays to its full introduction;
> - Currency of information – the tracking system was designed to alert course leaders of students at risk. However, course leader information on the ITS system tended to be incorrect or outdated. Thus an additional data set requiring ongoing updating had been introduced;
> - Data input – a multiplicity of factors were involved here. In some instances, the capturing of assessment marks was done by course leaders but the more usual approach was to pass this task on to Faculty Managers as some lecturers either did not wish to take on this task, or were unable to do so due to low levels of computer literacy. There was (and still seems to be) a poor understanding of how to edit the capture spreadsheet in the set-up phase. There also appears to be reluctance to preset the number of tests and assignments that have to be written, despite the possibility of introducing flexibility in this regard; and,
> - Training – the ICT department had no in-house ITS trainer for a number of years; training was therefore dependent on the availability of the Pretoria-based developer.

8. EVIDENCE FOR SUCCESS PROVIDED IN THE SUBMISSIONS

In each of the focus areas of the QEP institutional submission, institutions were asked which aspects of their strategic plans were related to the focus area. They were then asked which current activities (or facilities in the case of Focus Area 3) related to the focus area could be considered to be successful, and requested to indicate *what evidence was used to judge that success*. Institutions were asked not to give detailed evidence but to describe the type of evidence that was collected. The descriptions of this evidence form the body of this section, taking evidence at its general meaning, from the Oxford Dictionary of English, "The available body of facts or information indicating whether a belief or proposition is true or valid" (2011).

The 23 institutional submissions were analysed to obtain an overall picture of the ways in which evidence of success has been described across the four focus areas. They were read with particular focus on the second question asked in each focus area of the submission, supplemented in a few cases by the third item on lack of success and the final section on other activities not covered in the four focus areas. Elements of text relating to evidence of the success of specific activities were identified. In total, 107 extracts from the text were saved and then sorted into groups, aiming to give definite similarities within each group and distinct differences between groups. On the basis of this analysis three different types of evidence were identified that will be discussed. They have been called Types A, B and C, constituted of Purpose, Act and Outcome, and illustrated by extracts from the submissions. Table 8.1 summarises the features of the three types of evidence.

Table 8.1: Types of evidence, in terms of Purpose, Acts and Outcomes

	Purpose	Act	Outcome
Type A	To assure of implementation	Noticing, Counting, Observing	Assurance of success, Effect of the Activity
Type B	To understand, to become informed	Surveying, Evaluating, Collecting feedback	Assurance of success, Planning activities and developments
Type C	To provide an ongoing or deeper understanding	Monitoring, Investigating, Benchmarking	The utilisation of understanding as a basis for further development

At the end of this section, a table is provided in which the number of instances of each type of evidence is summarised per focus area. Based on the analysis and categorisation of evidence, the significance of the types of evidence for the potential enhancement of quality in the focus areas is then discussed.

8.1 VARYING WAYS OF INTERPRETING THE REQUEST FOR EVIDENCE

Two somewhat different ways of addressing the request for evidence can be seen among the submissions. A small minority of institutions wrote entirely or partly about whether or not activities or facilities had indeed been implemented, or the extent to which they had been implemented. Implementation can here be seen as evidence of satisfying the strategic plan successfully. This is valuable information in the context of the QEP, but ways in which the successful implementation was considered to be successful in practice were not given. The second way in which the request was addressed, the intended and expected way, was to offer facts or information that spoke of the ways in which the implemented activity or facility were successful. Across the board, most institutions gave evidence of the second kind, and there were examples of submissions with different interpretations of the request for different focus areas.

In the extracts that illustrate the three types of evidence, the identification of the originating institution has been removed, replaced by, for example, [institution] or [faculty].

8.2 THE THREE TYPES OF EVIDENCE

8.2.1 Type A evidence

What is to be considered evidence of success here is distinguished by the Act – noticing or counting. There is a range of Purpose, mainly to assure that an activity has functioned well or taken place at all, while the Outcome of the activity – the essence of what constitutes success – might be touched on, though without further evidence of its success. This description of a certain sort of evidence is reduced, intended to distinguish it clearly from the other two Types, but will now be elaborated to show the nuances of its structure.

In Focus Area 1 many activities involve seminars, courses and programmes of professional development for academic staff, whether at different career levels or involved in different innovations. Here are some examples of the evidence provided in the form of facts:

> A high proportion of staff in the Faculty attends the seminars.
>
> These were attended by a total of 353 academics in 2013 alone, including most of the newly inducted academic staff.
>
> By the end of 2012, 99 HODs had attended an intensive retreat.

Although each of these statements is embedded in a more extensive description, they express the core of Type A evidence of success: the activities were well attended by the target groups. In focus area 1 the Purpose of offering such evidence is to assure that the activity was taken up and the Act is one of noticing or counting.

Within this Type of Evidence there is a range of the sense of Outcome, from the uptake by the target group, as described above, to satisfaction with the result of an activity, as in the elaboration of the third of the extracts above:

> By the end of 2012, 99 HODs had attended an intensive retreat. The primary focus was on curriculum alignment – in particular, helping academics to align their curricula with [the institution's] Charter of Graduate Attributes. These HODs then returned to their faculties and rolled out similar programmes.

This reports on success in the intended outcome – albeit without evidence of that success: Were the similar programmes equally well attended and were curricula aligned as planned?

A triangulation of pieces of evidence can strengthen the structure, as shown below:

> Programme attendance increased from 28 in 2010 to 59 in 2013. Evaluation data reveals that the programme encourages academics to engage with the [institution's] context and to adopt a scholarly approach to teaching and learning. The usefulness rating for 2013 was 82%.

A similar collection of evidence is put forward for the success of the support of SoTL:

> Measured by the number of projects funded; the amount of funding disbursed; the number of academics supported; publications generated; and meeting the Senate norms for Research Productivity Units. Attendance at seminars or conferences and participant evaluations.

The extract above shows that the Purpose is to introduce and support scholarly work on teaching and learning, there are several Acts that produce evidence – counting and noticing – and mention is made of Outcomes in terms of publications.

Externally sourced evidence of success is apparent in three universities where lecturers have been recognised with CHE-HELTASA national awards, for example:

> An important indicator of [the institution's] growing excellence in teaching and learning has been through external recognition of individual academic staff. For three years in a row (2010-2012) a [institution] staff member was awarded the Council on Higher Education (CHE)/HELTASA National Excellence in Teaching and Learning Award, and in 2013 another [institution] academic received an HELTASA commendation for their work.

In Focus Area 2 we again find uptake of activities intended to support students given as an indicator of success, in this case in an extended degree programme:

> There are 25 extended programmes. Results indicate that students in the Extended Programmes (EP) are increasingly achieving better results in their studies. In 2013 the post examination success rate of the EP in the first year of foundation courses for 2013 was 81% which represents an increase of 10.4% against 2012 and 75% in regular courses representing an increase of 6.8% from 2012.

While the Purpose is to assure of the successful functioning of the activity, there is a recurrencein the act of counting, which enables a quantitative outcome to be offered as information about growing success.

But for the most part, the number of participants was offered as evidence of success in focus area 2, for example,

> In 2013 192 mentors were trained and 7252 mentoring sessions undertaken.
>
> The impact of the lab can be seen in the growth in student number over the last 2 years.

Evidence of this Type was not found for many activities and facilities to enhance the learning environment, focus area 3, or in enhancing course and enrolment management, focus area 4, and where they exist they are brief observations:

> The availability of these technologies was identified by lecturers as a success indicator.
>
> Evidence of the success of these admission and placement procedures can be seen in the fact that the University is generally able to hit enrolment targets for first year students fairly accurately. Students arrive for registration on time and are invariably in class on the first day of term.

Of the 107 extracts on evidence taken from the submissions, 46 were categorised as Type A, by far the largest number coming from Focus Area 1. In total, 33, 11, 1 and 1 extracts came from Focus Areas 1, 2, 3 and 4, respectively.

8.2.2 Type B evidence

The second Type of evidence is somewhat more complex that the previous one, largely because there is a clear intention to offer information about the nature of the success, rather than only offering facts. The Purpose is to gather information (at the same time assuring of function) through Acts of surveying stakeholders and evaluating activities, possibly on a number of occasions, with an Outcome that ranges from offering assurance, as in Type A, to planning further activities or developments. For example,

> These initiatives are evaluated on an individual basis using evaluation forms and the feedback is then used to improve these initiatives.
>
> 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.

Here, multiple sources of evidence are referred to as evidence of success of activities aimed at supporting academics as teachers, with evidence of repercussions for other stakeholders:

> An extensive set of data and evidence that includes feedback from students enrolled in the programme, students who have already completed the programme and employers, is used.

In Focus Areas 2 and 3 there are also references to formal surveying instruments, for example LIBQUAL surveys of library quality, OMEGA surveys of graduate experience, and the *International Universum Student Survey*.

> The student feedback and external evaluation of the Library and Information Services division support the claim that it has been successful. […] Further evidence is captured by the LibQual system, student satisfaction surveys, usage statistics, etc.

> We use the OMEGA Graduate Survey to measure, amongst other things, the satisfaction levels of final year students in terms of their "[institution's] experience". The Centre for Institutional Research analyses the trends (since 2004) with regard to student engagement, cognitive and affective development, changing values, attitudes, the development [of] wellness factors, and future goals and plans;

> The *Universum Student Survey* 2013, which includes responses from all SA universities, shows that the satisfaction levels of [the institution's] students and alumni are higher than those for other universities' students and alumni for lecturing, tutoring, course choice, reputation, student life, environment, quality of education, access to services, administration, student accommodation and financial assistance, amongst others, and that 97% would recommend [the institution] to anyone as a place of study.

These three indicate deliberateness, or intention, in the Act of choosing to implement surveys or gather stakeholder feedback as evidence of success, with the purpose of both assuring that the activities had been successful and, in the second and third statements, taking the results further to contextualise developments.

It can be added that among the evidence of success that was presented by institutions as aggregates across a focus area or group of activities, such phrases as "student surveys" and "attendance statistics" occur frequently, identifying them almost entirely as being of this Type.

Twenty-four of the 107 statements on evidence have been categorised as Type B, with 6, 11, 7 and 0 items in Focus Areas 1, 2, 3, and 4, respectively. Type B contains the smallest numbers of extracts of the three evidence Types, which might be explained by its intermediate position – evidence of Type A, primarily facts, can well be a starting phase of a shift to Type B evidence where information is being garnered and such information that is collected as Type B evidence can well be the initiating phase of a monitoring activity that falls into Type C to enhance understanding of the activity as it matures.

8.2.3 Type C evidence

Type C evidence can be distinguished from Types A and B in that there is a deliberate and intentional process of understanding what has happened in an activity and building for future development. The Purpose is to provide an ongoing or deeper understanding of activities and their effects. The acts are largely those of monitoring, implying a recurrent gathering of information which can also be related to commissioned investigations or processes of benchmarking. The outcome is, or is potentially, the utilisation of the understanding as a firm basis

for further development of the activity or facility itself, and of related activities both in the home institution and elsewhere.

An indication of the intention to understand is illustrated in the quote below for focus area 1:

> The feedback loop to the Committee for Learning and Teaching affords us the opportunity to collect evidence and reflect on and evaluate the initiatives at different levels within the institution with regard to teaching and learning.

In the following extract, targets are set and revised annually, and evidence for their attainment, again in Focus Area 1, can provide the basis for improvement:

> Measurement of performance through setting targets in the institutional scorecard with regard to academic and professional qualifications has resulted in these targets remaining in the foreground. Evidence is reported yearly in the [institution] Annual Report (now externally audited) in the review of targets set and to be set for the following years. This has led to interventions within faculties where necessary.

The intention to understand the outcomes is clearly expressed in the following extract, from Focus Area 2:

> Findings of a seven-year longitudinal study in [the faculty] on students' learning experience have a direct impact on decisions about teaching annually. [The faculty] looks carefully at student feedback and lecturers particularly value the open comments rather than the scores. Peer review is predominantly summative for promotion purposes or as part of a cycle of quality reviews of departments, disciplines or Faculties.

The purpose in this Type is illustrated in relation to the functioning of a professional development unit:

> One of the strategic objectives of the [PDU] relevant to this focus area is to research, plan, implement, evaluate and network student academic development and support, to promote student learning and success.

The outcome may be an action, such as the roll-out of a pilot project referred to in Focus Areas 2 and 3, related to targets for uptake of an activity intended to enhance the learning environment and illustrated below:

> Experiences in the pilot year with a group of selected students, as well as during the first year of its roll-out as part of the undergraduate curriculum for all programmes, have been built on to adjust, replace and change some of the content, modify the level of demand and introduce variations and improvements where necessary. The overall outcomes of this module have been very positive.
>
> Currently there are Pathfinder Projects which are trailblazers that test out different, potentially beneficial aspects of e-learning. These will be evaluated to assess their effectiveness and, if successful, rolled out to the wider university community.The [institution] Strategic Plan calls for metrics that show the proportion of [institution] qualifications that include an element of e-learning. The target for e-learning is 50% of academic qualifications (programmes) to have an online component by the start of 2015. Subsequently, reports integrating data drawn from the ITS system and the [institution centre] database will be submitted to Executive Deans to monitor the attainment of targets.

There is a considerable reference to Type C type of evidence in Focus Area 4, as shown in the following two quotes:

> The [institution] has started putting out monitoring reports and status reports of the institution that help faculties and senior management to focus on areas in need of attention both at enrolment and performance level. For the time being, evidence is the existence of reports when before there were none, as is the increased use of data for decision-making at management level.

> Very relevant to this focus area is that successful enrolment management is accomplished by a commitment to clearly defined strategies aimed at student success. [The institution] has embarked on a number of activities in this area such as a well-coordinated student selection process, the monitoring and evaluation of performance of students through relevant and effective management information systems and early detection of 'at-risk' students.

There are also reports of ongoing investigations and research projects, either in place to enhance the monitoring results or about to be implemented, for example:

> The [Faculty] performed an extensive statistical investigation of the ability of various selection criteria to predict graduation success. This investigation is informing current decisions on admissions and selection, but the statistics is also being updated each year to identify trends.

> The [institution] is struggling to persuade academics of more productive ways of using NBT data than placing students in language or science development courses. A large research project on the NBTs in partnership with [another institution] is about to start that should provide data to effect more pointed curricular interventions.

While the value of collecting statistics and analysing them is indicated in the first extract above, pointing to the need for better evidence for decision-making, the second extract indicates an expectation that the collection and investigation of evidence will be more widely and more wisely used to enhance curriculum development.

In Focus Area 4, the evidence of success reported in the submissions falls almost wholly into Type C, which is not surprising given that the institutions are mandated to report on enrolment and progress and a degree of maturity of evidence collection, monitoring and investigation has been reached.

Thirty-seven of the 107 statements on evidence have been categorised as Type C, with 7, 13, 4 and 13 items in Focus Areas 1, 2, 3, and 4, respectively. This seems to point to a maturity of activities that have sought to enhance student learning opportunities over the years.

8.3 DISCUSSION

This section is based on a qualitative analysis of the QEP institutional submissions, aiming to offer an overview of the ways in which evidence of success is being described across the institutions and across the Focus Areas. It is not possible to claim that individual institutions do not have more or less elaborate evidence collection procedures in place than those referred to here; one can merely say that this is what was written in the submissions.

The grounds for a quantitative analysis are slight, as the submissions took so many different forms – institutions gave anything between 2 and 20 activities for a focus area for which they could give evidence of success.

Of the 23 institutions two gave as evidence of success only information on the fact that activities or facilities had been implemented and have therefore not contributed to the analysis at all. So both the qualitative and the quantitative analyses rest on the submissions of the 21 institutions which gave clear statements of forms of evidence related to specific activities. Of these 21 institutions, seven also briefly summarised and collected descriptions of evidence around certain groups of activities, as illustrated below on student support:

> The following evidence is used to assess the success of these activities:
> statistics of utilisation of services, percentage increase in attendance, attendance registers, evaluation forms, departmental surveys, *My* [institution] *Experience* Student Survey, departmental meetings, Heads of Departments (HoD) Meetings, One-on-One meetings, formal reports and internal quality reviews.

These aggregates have been scrutinised to ensure that their elements also fit into the evidence categories. It is observed that they are highly skewed, through their many short and aggregated statements, toward Types A and B, with phrases such as "attendance statistics" and "student surveys" that typify them. In such aggregates there is only one indication of monitoring or investigation of Type C evidence. Omitting the aggregated statements of evidence, the distribution of extracts that constitute the categories with respect to each focus area can be summarised in Table 8.2.

Table 8.2: Number of statements on evidence of success across the 3 categories and the 4 focus areas, grounded in the qualitative analysis and omitting the aggregated evidence.

	Type A	Type B	Type C
Focus Area 1	33	6	7
Focus Area 2	11	11	13
Focus Area 3	1	7	4
Focus Area 4	1	0	13
Total	46	24	37

It can be seen in Table 8.2 that evidence of success in focus area 1, enhancing academics as teachers, is predominantly of Type A; relatively little evidence has been obtained by surveying or systematic monitoring of Types B and C. In contrast, for focus area 4, enhancing course and programme enrolment management, the evidence tends to be of Type C. Two potential reasons can account for this: there is a government requirement for monitoring of registration, enrolment and throughput in terms of different demographics, and the systems for doing this are well established, while support for academics as teachers is in its relative infancy, still finding its feet and identity. One positive outcome of the Quality Enhancement Project would be to see the evidence put forward for all four focus areas moving towards maturity and rigour.

As one moves from Type A to B to C forms of evidence a development is apparent in terms of rigour, depth of understanding of the outcomes of the activities, and potential for future development. There is a strong case to be made for basing decisions on well-grounded evidence, whether to enhance academics as teachers, to enhance student support, to enhance the learning environment or to enhance the systems for managing the enrolment of students in courses and programmes. A second development through the categories is from data and information of the first two to the knowledge that the third category potentially produces. While there is indisputably a case to be made for each of the types of evidence and their characteristics according to the activity being examined and the maturity of the activity, the third type of evidence is the category of choice for underpinning good decision-making and potential application and dissemination to further activities and other institutions.

Decisions made by institutions in respect of strategy need to transform policy into viable practice, a transformation that has been termed "Knowledge Mobilisation" and which has been applied widely across the fields of social sciences and services, including education, for example:

> The rationale for the use of evidence is obvious. Using research evidence should lead to more informed policy, higher-quality decisions, more effective practices, and, in turn, improved outcomes. As has been demonstrated many times in various areas of social policy, when practices based on custom or ideology are replaced with practices based on evidence, better results follow (Cooper, Levin & Campbell, 2009, p 160).

Knowledge mobilisation is a contribution to addressing the vexed question of how to effectively apply research to practice, when research has been produced in universities and practices are in the world of work. In the case of the QEP, however, it is the practitioners who have the opportunity to produce the research, or produce the knowledge that is typified by Type C evidence collection, analysis and reflection, that can form the basis on which decisions can be made.

8.4 CONCLUSION

A variation in types of evidence of success that has been offered as part of the QEP institutional submissions has been identified and described, both in quality and quantity. The QEP process document asked for only a brief statement of evidence, without detail, which means that the statements given possibly under-represent the actual evidence that is collected and available at individual institutions. But the picture offered here is intended to give an overview, a map, of the potential for collecting and reporting evidence that casts light on the opportunities for building knowledge on enhancement activities. That, in turn, can lead to further discussions between institutions on possible effective strategies for collecting and collating evidence as the basis for decision making in the enhancement of quality in efforts to promote student success.

References

Cooper, A., Levin, B. & Campbell, C. (2009). The growing (but still limited) importance of evidence in education policy and practice.*Journal of Educational Change, 10*, 159-171

Stevenson, A. (Ed.). (2011). *Oxford Dictionary of English*. Oxford: Oxford University Press

APPENDIX: Template for the institutional submission

The sections that should form part of the institutional submission are listed below, together with the recommended page length. Up to a total of five pages of appendices may be included if further elaboration is needed on particular points. Please refer to Section 2 for a description of each focus area.

While the QEP is a national project, it is recognised that the contexts within which individual HEIs operate in South Africa are very diverse. Section 1.1 therefore provides each institution with an opportunity to indicate aspects of its context that are particularly noteworthy, challenging or salient in relation to student success. These might include, for example, historical background, geographical location, available resources, staff characteristics and student profile. It is not necessary to provide detailed information to which the CHE has ready access.

1. Introduction (2-5 pages)

1.1 Briefly describe the features of your institutional context that are most salient to the success of your students.

1.2 Indicate how the submission was prepared, included the names and designation of the people involved with producing various sections of the submission.

2. Focus area 1: Enhancing academics as teachers (3-6 pages)

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

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

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

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

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

3. Focus area 2: Enhancing student support and development (3-6 pages)

3.1 Which aspects of your institution's Strategic Plan relate to this focus area?

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

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

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

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

4. Focus area 3: Enhancing the learning environment (3-6 pages)

4.1 Which aspects of your institution's Strategic Plan relate to this focus area?

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

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

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

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

5. Focus area 4: Enhancing course and programme enrolment management (3-6 pages)

5.1 Which aspects of your institution's Strategic Plan relate to this focus area?

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

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

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

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

6. Other areas that affect student success (2-5 pages)

6.1 Areas that do not fall within the four focus areas.

6.2 Briefly describe other activities your institution is undertaking to promote student success (beyond the four focus areas).

6.3 What other challenges or problems does your institution face in promoting student success?

Notes

Notes

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