UFS Learning and Teaching Strategy

2019 – 2024

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1. Introduction

Developing new approaches to learning and teaching in the 21st century is one of the critical challenges facing higher education globally. Increasing higher education access with success, producing employable graduates with adequate skills to function effectively within the anticipated context of the Fourth Industrial Revolution (4IR), curriculum responsiveness, and providing academic support and development to enable academics to be successful in their teaching roles in the 21st century, are challenges that higher education institutions are faced with both nationally and internationally (Hazelkorn, Coates, & McCormick, 2018).

In the African context, Mohamedbhai (2014) underlined the need for greater access to higher education brought into sharp focus during the #FeesMustFall movement in the South Africa. In response to the need for greater participation, South African higher education has experienced uncontrolled growth over the last two decades. This has resulted in large classes and concerns around the quality of learning and teaching at universities (Hornsby & Osman, 2014). In order to address these challenges, the UFS top management requested that the Centre for Teaching and Learning (CTL) lead the development of a new five-year Learning and Teaching Strategy (LTS) for the UFS.

2. Purpose

The purpose of this strategy is to:

- Articulate an innovative vision and commitment to high quality learning and teaching

Altbach and Salmi (2011) indicate that quality learning and teaching is one of the distinguishing features of international elite institutions. Therefore, quality learning and teaching in a 21st century world is vital to position the UFS as an institution of choice.

- Promote student success and enhance graduate employability

The importance of improving student success is a core focus of higher education locally and globally (Kinzie & Kuh, 2017; Strydom, Kuh, & Loots, 2017). Student success is not only defined as academic performance, but includes the development of graduate attributes that enhance the employability of the students (UFS Student success strategy, 2018).

- Develop approaches for addressing current learning and teaching challenges

The 21st century demands, as well as pressure for massification outlined in the introduction, require the development of approaches that help the UFS to address the challenges faced by institutions internationally and especially in the South African context.

- Provide a framework that can be used to align related policies and implementation plans

In keeping with national integrated planning and reporting requirements, the strategy will provide a framework that furthers alignment of policies and complements the implementation of institutional plans such as the Integrated Transformation Plan (ITP) and the Strategic Plan of the University of the Free State (UFS) for 2018-2022.

3. Philosophy of learning and teaching

The philosophical assumptions or beliefs about learning and teaching that underpin this strategy are *learning-centeredness, caring, inclusiveness, flexibility and quality.*

3.1 Learning is at the heart of a university

Learning has always been at the heart of universities' existence. Both research and teaching are focused on promoting learning. Research is learning for academics and their colleagues through the use of specific methods and criteria, whereas 21st century teaching is focused on facilitating the learning of students using specific methods, media and criteria (Light, Cox, & Calkins, 2009).

A focus on learning is different from a focus on teaching in significant ways (see Table 1). From the early 1990s several authors have highlighted a paradigm shift in higher education pedagogy (Fink, 2013). The paradigm shift is one from a teaching (or an instruction-centred paradigm) to a learning-centred paradigm. In the early 2000's this led to learner- or student-centred teaching approaches (Weimer, 2002).

More recent research has highlighted that student-centred teaching is problematic in developing country contexts due to barriers of material and human resources, interactions of divergent cultures, questions around how power and agency of staff and students shift in the process, and the perennial challenges of implementing reform (Schweisfurth, 2011). Some researchers have proposed that a learning focus can help to resolve the tension between a teacher-centered and a student-centered paradigm (Kirschner, 2018). **Table 1** provides an illustration of how a learning-centred approach helps to integrate the teacher- and student-centered approaches.

Table 1: Comparison of teacher –, student –, and learning-centred teaching

	Teacher-centred	Student-centred	Learning-centred
Learning approach	Teacher centred	Student centred aimed at individual study and collaboration through ICT	Graduate attributes (learning outcomes) and assessment determine flexible learning experiences needed
Teaching assumption	Any expert can teach	Teaching is complex and requires considerable training	Teaching is complex and requires considerable training as well as enabling environments
Lecturer purpose	The lecturer lectures her/his subject and is focused on classifying and sorting students	The lecturer coaches and facilitates (guide on the side) focused on developing students' competencies and talents	The lecturer designs material and experiences that actively engage students in learning and facilitate knowledge, skills and attitude development
Student	Passive vessel to be filled by lecturer's knowledge	Active constructor, discoverer, transformer of knowledge	The learner is a motivated and independent individual
Responsibility for learning	Student expects the lecturer to know and control	Student has responsibility for self-direction and relies on the lecturer when necessary	Alternation between lecturer-control and self-responsibility
Learning design	Focused on Identification, definition and memorisation (lower-order skills)	Focused on metacognitive skills like information search, communication, collaboration (higher-order skills)	Universal design focusing on understanding students, as well as facilitating learning and knowledge transfer focused on identification, definition and memorisation, and metacognitive skills (lower and higher order skills)
Assessment	Norm-referenced (grading on the curve); typically use multiple-choice items; student rating of instruction at end of course	Criterion-referenced (grading to predefined standards); typically use performances and portfolios; continual assessment of instruction	Blend of formative and summative assessment or continuous assessment focused on attaining defined learning outcomes.
Technology use	Drill and practice; textbook substitute; chalk-and-talk substitute	Problem solving, communication, collaboration, information access, expression	Technology enables flexible learning environment enabling various types of learning in various contexts
Knowledge	Transferred from lecturers to students	Jointly constructed by students and lecturers	Blend of transfer and construction between students and lecturers
Power	The lecturer determines the learning goals and criteria	Students determine their own learning goals	Learning goals are determined together based upon practical and societal experiences
Climate	Conformity, cultural uniformity	Diversity and personal esteem; cultural diversity and commonality	Diversity (cultural, etc.); inclusivity; personal esteem; and commonality
Adapted from Kirschner 2018 and Campbell and Smith, 1997 in Fink, 2013, p.22			

3.2 Caring as key to learning, understanding and empowerment

Creating an environment where people (students and staff) feel cared for is essential for effective learning and teaching, but also for sustaining democracy (Swartz, Gachago, & Belford, 2018; Tronto, 2018). Letseka (2012, p57) argues: "Ubuntu reveres human life, dignity, respect, caring and compassion". He indicated that Ubuntu's focus on caring and sharing transcends ethnocentric notions of uniqueness. Learning and teaching at the UFS will be empowering if it is based on the values of dignity, respect, caring and compassion among students and staff.

3.3 Inclusivity to embrace diversity and create a sense of belonging

Universal Design for Learning (UDL) offers an approach to designing curriculum and learning that prioritises accessibility and inclusivity. At the heart of UDL is the belief that a classroom designed for students at the margins is better for all students (Rhodes, Barone, & Dean, n.d.). UDL was initially developed for students with disabilities (students at the margins) but has developed into a mainstream approach for curriculum design and learning and teaching. It creates learning environments that embrace the diversity that students bring to universities and that assists them to thrive. In addition, Universal design principles align well with a learning centred approach (Al-Azawei, Serenelli, & Lundqvist, 2016). Therefore, a learning and teaching approach that is based on UDL principles can create inclusive learning environments (face-to-face or digitally) that both embraces diversity and creates a sense of belonging.

3.4 Flexibility to enable resilience and adaptability

Research on class attendance at the UFS highlighted that class attendance is affected by many factors ranging from socio-economic challenges (money for travel vs money for food), to concerns regarding the quality of teaching, to individual learning preferences that are not aligned with those of the lecturer (Centre for Teaching and Learning (CTL), 2018c). In light of these challenges, the report recommends the development of a blended (hybrid) learning environment that makes use of innovative course design to create a flexible learning environment where students can learn in different ways at different times. Blended learning is defined as "the provision of structured learning opportunities using a combination of contact, distance, and/or Information and Communications Technology (ICT) supported by opportunities to suit different purposes, audiences, and contexts" (Department of Higher Education and Training (DHET), 2014). The development of a flexible, blended learning environment will create resilient students that are able to learn at different times in different ways. Furthermore, the learning and teaching environment should be adaptable in the face of

interruptions to the academic programme (such as political disruptions and load shedding). The main challenge, however, to implementing this model is the prohibitive cost of data.

In addition to a blended learning strategy, the UFS, as a dual-mode institution, has also committed itself to distance education as a distinct sub-set of provision (UFS, 2015), because of its potential to:

> *1. Open access to post-schooling education opportunities for those who cannot or who chooses not to attend traditional campus-basedprovision.*
>
> *2. Lower costs per student by amortising curriculum design, materials development and some teaching costs across larger numbers of students and by obviating the need for continuing investment in physical infrastructure (DHET, 2014).*

In distance education provision, entire programmes are mediated through distance-based methodologies, and designed based on fitness of purpose. Although online education cannot be conflated to distance education, since online methods are also used in a blended learning approach, fully online programmes can be designed to meet the needs of distance delivery. Geographical distance and transactional distance are important considerations in programme design. Distance education at the UFS is thus based on a "diverse and geographically distributed student body, a high level of independent learning, and decentralised support for students who may never attend the central campus or even a satellite centre" (CHE. 2014). The distance approach at the UFS aligns with the CHE requirements of creating :

> *…a quality learning environment using an appropriate combination of different learning resources, tutorial support, peer group discussion, and practical sessions (real or virtual or a combination of both).*

3.5 Quality, which embraces evidence, innovation, and excellence.

In 2004, the Higher Education Quality Committee (HEQC) conceptualised quality as fitness for purpose, value for money, and transformation within a framework based on national goals, priorities and targets (Lange & Strydom, 2018). Although this conceptualisation still holds true, changes in the global and local environment require a much greater emphasis on the use of evidence. More specifically, the use of data analytics is necessary to a understand how students think, behave and learn, as well as what they are able to do after completing their qualifications (Kuh, G. D. et al., 2015; Strydom et al., 2017). The performance and accountability pressures around delivering more graduates that are employable is a global

reality. Therefore, the definition of quality and excellence has changed significantly as indicated by Hazelkorn, Coates, & McCormick (2018, p6) who define quality as follows:

> *Educational quality usually refers to teaching and learning, although it also refers to research, engagement and institutional leadership…Thus, quality considers such matters as: the production of new knowledge and capacity for innovation; student learning outcomes; the educational or learning gain in both declarative knowledge and more diffuse 'soft skills'; student performance, retention, graduation and employability; support for student success; the production of suitably trained and demographically representative graduates at different educational levels; the breadth and depth of the curriculum and its responsiveness to contemporary needs; pedagogical methods, training and academic support and development; and links to societal practice and working life, including graduates' preparedness as citizens and lifelong learners.*

A focus on quality in learning therefore has to embrace evidence (data and data analytics), as well as innovative curriculum and learning design to enable the UFS to offer a learning experience that provides graduates with value for money, but also a transformative experience. Achieving excellence will require commitment to continuous improvement of learning and teaching (scholarly teaching), as well as initiatives that enhance the Scholarship of Teaching and Learning (SoTL).

4. Learning and teaching context

Quality, performance, and accountability are critical for universities to not only survive, but also thrive in the 21st century. The above-mentioned section on quality outlined contemporary quality demands for learning and teaching. Performance and accountability (from a learning and teaching perspective) for higher education institutions globally and in South Africa, relates to the effectiveness and efficiency with which students succeed and become part of the economy. In the 21st century, this includes being adequately skilled to thrive in a society functioning in the sophisticated integration of various scientific systems and technologies characterised by the 4IR.

In addition to these pressures, South African higher education institutions continually experience pressures due to uncontrolled growth, which require increasing enrolments and expanding participation to help meet the development goals set out in the National Development Plan (National Planning Commission (NPC), 2011). Providing access with success remains a significant challenge despite universities' efforts to develop diversified access routes in an attempt to improve participation rates. This is due to the problematic quality of education provided by the secondary school system. The fact that the World Economic Forum (WEF) placed South Africa at 137 out of 139 countries for the overall quality of its education system, speaks to this challenge (Baller, Dutta, & Lavin, 2016).

Recently, South African higher education was deeply disrupted by the #FeesMustFall protest movement. The main demands of this movement were: lowering/ doing away with tertiary education fees, and decolonised, quality higher education (Langa, 2016). In response to these demands, state financial aid was improved and higher education institutions have started processes of engaging with curriculum decolonisation as well as bolstering the quality of learning and teaching at universities. The effect of the disruptions is still felt by higher education institutions in South Africa today. During the disruptions, most institutions turned to technology in an effort to save the academic year. Research sponsored by the Carnegie Corporation of New York highlighted not only the traumatic impact of the disruptions at the UFS, but also proposed that the UFS should adopt a more intentional and expansive approach to blended learning to enable the institution to support students and learning during times of disruption (Meintjes, 2018).

As indicated in Section 3, a learning centred approach assumes that teaching is complex and requires considerable training as well as enabling environments. Hunt and Chalmers (2012) indicate that in the UK and Australia, there is recognition for the fact that academics need to be trained to facilitate learning. In South Africa, the importance of training academics in how to teach is acknowledged by "a national framework for enhancing academics and university teachers" (Department of Higher Education and Training (DHET), 2018). The framework highlights the importance of national and institutional recognition for quality teaching and for the promotion of the scholarship of learning and teaching. Additionally, the UFS Annual Teaching and Learning report highlighted that the UFS needs to strengthen internal quality assurance and enhancement processes (Centre for Teaching and Learning (CTL), 2018a).

5. Strategic Priorities

5.1 Fostering the development of Graduate Attributes

More than ever, with the emergence of the 4IR, the onus is on higher education institutions to produce graduates who are employable and work ready (Barrie, 2006; de la Harpe & David, 2012; Butler-Adam, 2018; Griesel & Parker, 2009, World Economic Forum (WEF), 2016). One way to articulate the contribution that graduates are able to make in the workplace is through graduate attributes. Graduate attributes are the qualities that are developed through the acquisition of a university degree, and are seen internationally as critical outcomes of higher education (Barrie, 2006; de la Harpe & David, 2013). Increasingly, universities are moving towards clearly defining the quality of education they provide. This includes the skills, knowledge and attributes that graduates will develop and demonstrate, beyond their studies, in order to manage employability in a world that is rapidly changing and requires attributes that

are supplemental to, and extend beyond, disciplinary knowledge (Barrie, 2007; Coetzee,2014; de la Harpe & David, 2013; Griesel & Parker, 2009).

Therefore, the development of graduate attributes at the UFS is paramount to position the institution and its graduates uniquely in both the South African context and globally. Furthermore, the definition and assessment of graduate attributes will serve as a measure for how these skills are developed at the UFS, and at which level these skills are offered throughout an undergraduate programme. The purpose of clear and implementable graduate attributes at the UFS, is to enhance graduate employability and position UFS students in the job market in a manner that makes them stand out.

Graduate attributes need to be developed in an integrated way that is mutually reinforcing. International best practice shows that leading universities used an evidence-based approach, which includes assessments within disciplines to develop these attributes (Jankowski & Marshall, 2017). This approach allows graduate attributes to further enhance the quality of undergraduate education.

5.1.1 Proposed UFS graduate attributes

It is important to mention that the World Economic Forum identifies the following specific foundational core skills that underpin graduate attributes: literacy, numeracy, scientific literacy, ICT literacy, financial literacy, and cultural and civic literacy (Soffel, 2016). The UFS already offers these skills through foundation courses (academic literacy, lifelong learning skills, and mathematical literacy), UFS101, and other faculty-specific courses. Building on this foundation work, the updated eight UFS Graduate Attributes are provided in **Table 2**.

Table 2: Proposed attributes with definitions

Attribute	Definition
Academic competence	Academic competence refers to the knowledge, skills and attitudes (including values) that students develop through their interaction with discipline-specific content. Critical to academic competence is lifelong learning, which is an all-purposeful learning activity, undertaken on an ongoing basis with the aim of improving knowledge, skills and competence. Lifelong learners are curious, take initiative, learn independently, transfer knowledge, and reflect on their learning.
Critical thinking	Critical thinking is a habit of mind characterised by the comprehensive exploration of issues, ideas, artefacts, and events before accepting or formulating an opinion or conclusion.
Problem solving	Problem solving is the process of designing, evaluating and implementing a strategy to answer an open-ended question or achieve a desired goal.
Oral communication	Oral communication is a prepared, purposeful presentation designed to increase knowledge, to foster understanding, or to promote change in the listeners' attitudes, values, beliefs, or behaviours.
Written communication	Written communication is the development and expression of ideas in writing. Written communication involves learning to work in many genres and styles. It can involve working with many different writing technologies, and mixing texts, data, and images. Written communication abilities develop through iterative experiences across the curriculum.
Community engagement	Community engagement is working to make a difference in the community life of our communities and developing the combination of knowledge, skills, values and motivation to make that difference. It means promoting the quality of life in a community, through both political and non-political processes. In addition, community engagement encompasses actions wherein individuals participate in activities of personal and public concern that are both individually life enriching and socially beneficial to the community. Finally, community engagement includes an understanding of the social and cultural diversity in our country, whereby students value and respect different cultures and are able to analyse and solve problems with people from different backgrounds and cultures.
Ethical reasoning	Ethical reasoning is reasoning about right and wrong human conduct. It requires students to be able to assess their own ethical values and the social context of problems, recognise ethical issues in a variety of settings, think about how different ethical perspectives might be applied to ethical dilemmas and consider the ramifications of alternative actions. Students' ethical self-identity evolves as they practice ethical decision-making skills and learn how to describe and analyse positions on ethical issues.
	Association of American Colleges and Universities (AAC&U), 2010
Entrepreneurial Mindset	Entrepreneurial mindset as the set of attitudes, skills and behaviors that students need to succeed academically, personally and professionally. These include: initiative and self-direction (leadership), risk-taking, flexibility and adaptability, creativity and innovation, critical thinking and problem solving. Other definitions include the ability to see opportunities, marshal resources and create value. An entrepreneurial mindset applies to all spheres of life. It enables citizens to nurture their personal development, to actively contribute to social development, to enter the job market as employee or as self-employed, and to start-up or scale-up ventures which may have a cultural, social or commercial motive.

(Network for Teaching Entrepreneurship (NFTE) (https://www.nfte.com/entrepreneurial-mindset/; Bacigalupo et al., 2016; Yorke, Knight, Enhancing Student Employability Co-ordination Team, & Higher Education Academy (Great Britain), 2006)

5.1.2 Propositions for the operationalisation of this strategic priority:

1. **Deep Contextualisation of the VALUE rubrics:** The newly established Graduate Attribute and Skills Development Forum (GASDF) needs to contextualise the VALUE rubrics for the South African and UFS context. The aim of this exercise is to ensure the relevance of the rubrics in the UFS context, while remaining cognisant of the validation work that has gone into the development of the rubrics for international use. The contextualised rubrics must thus remain comparable to the international version of the rubrics to enable international benchmarking.

2. **Curricular and co-curricular mapping:** a mapping exercise is viewed as the best way to create institutional alignment and an evidence-based approach to the development of graduate attributes. There will be different stages in the mapping exercise, with the aim to identify specific activities in the curriculum (on a programme level) and co-curriculum space.

3. **Intentional assessment development to enhance quality:** In this multi-year phase, various stakeholders, including academics, will be capacitated and supported to develop assignments that assess the different graduate attributes. This process can help to improve the quality of learning and teaching by benchmarking and making use of assessment and assignment libraries that are being developed in the United States and elsewhere.

5.2 Student learning and success as the focal point

Expanding access to higher education and increasing students' chances of success are two of the critical challenges facing global higher education (Kinzie & Kuh, 2017; Strydom et al., 2017). The UFS Student Success Strategy (UFS-S³) adopted a definition of student success as:

> Increasing the numbers of graduates from diverse backgrounds (while decreasing achievement gaps) participating in high quality learning that results in attributes that are personally, professionally and socially valuable.
>
> (CTL, 2018b, p.2).

This definition commits to not only increase the number of graduates but to also reduce historic and contemporary achievement gaps between different races and genders. This definition also commits the institution to providing high quality learning that enables students to develop graduate attributes that will improve their chances of employment and enable them to

contribute to the advancement of South Africa as well-rounded democratic citizens (Centre for Teaching and Learning (CTL), 2018b).

The success strategy commits the university to the following primary drivers of success:

1. **Development of a comprehensive, integrated approach to student success**, which requires the identification, and elimination of scattershot, isolated, or boutique programmes for student success, and bringing together stakeholders and efforts to ensure collaboration. All responsible stakeholders should streamline their efforts to enable student success through curricular and co-curricular activities.
2. **Implementation of literature-informed empirically based approaches** to student enrolment, transition, student learning and success, and assessment of outcomes to ensure quality and effectiveness.
3. **Develop a cultural system of student success** between different centres, departments, units institutionally and between post-school stakeholders such as schools, universities, TVET and community colleges, provincial government, and employers, also relating to different modes of provision.
4. **Application of clear pathways** for student learning and success that guide students to completion and is monitored with real-time data systems that identify when a student is off track.
5. **Enactment of a student success mindset** that employs an asset-based narrative for students and institutional belief in talent development.

5.2.1 *Propositions for the operationalisation of this strategic priority:*

1. **Greater consideration of evidence about the quality of student experience, and programmes that facilitate student success:** The integration of data analytics, SASSE and other institutional data into academic staff and leadership development, performance management (for academic and support staff) and quality assurance, can help to entrench the notion that student success is everybody's responsibility. This will play a role in creating a more integrated approach to address this multi-faceted challenge.

2. **Strengthen existing scaled student success initiatives:** The UFS should strengthen scaled initiatives that position it as a leader nationally such as: UFS101, Academic Advising, A_STEP, and Academic literacy development, across modes of delivery.

3. **Constitute the Graduate attribute and skills development forum (GASDF)** to create a space within which all relevant stakeholders can be involved in the development of graduate attributes and the alignment of skills development at the UFS. The forum could ensure the sharing of knowledge and expertise in skills development across faculties and support services. This will help to ensure that skills development initiatives complement each other. The GASDF will also serve as a critical resource in the development and alignment of graduate attributes nationally and internationally.

4. **Participation in regional initiatives:** The aim would be to initiate conversations regarding promoting student success in school (primary & secondary), Technical and Vocational Education and Training Colleges (TVETs), community colleges, and in universities. The stakeholders can explore how they articulate expectations of learners and students, but also whether it is possible to create platforms that would support students' transition from school to higher education.

5. **Develop a Career Development and Employability Plan.** The plan will be developed through a career development and employability workshop convened by the Career Development and Employability task team. The workshop needs to showcase relevant institutional practices and national benchmarking perspectives as well as research expertise on how an innovative system can be developed.

6. **Develop a comprehensive co-curricular plan to support student learning in all spheres:** Students success should be viewed holistically and include the development of co-curricular initiatives that are aligned and integrated with other institutional student success initiatives.

5.3 Curriculum responsiveness

Transforming the curriculum is one of the critical challenges facing South African higher education (Lange, 2017). Curriculum can be defined as consisting of different parts: the explicit curriculum for example reading, assessments, practicals, etc.; the hidden curriculum, which is the dominant university culture and values; and the null curriculum, which is what a university chooses to leave out of the curriculum (Le Grange, 2016).

Calls for the decolonisation of the curriculum during the #FeesMustFall protests highlighted how students question what they are learning and how it relates to them and their context. Therefore, curriculum transformation requires the careful exploration of 'the relationship between curriculum, knowledge and identity' (Lange, 2017). Mbembe, (2015) indicates that a transformed curriculum can help to create a non-racial university, characterised by radical sharing and universal inclusion.

Le Grange, (2016) indicated that decolonisation "does not necessarily involve destroying Western knowledge but in decentring it or perhaps deterritorialising it (making it something other than what it is). Building on Ubuntu and the work of Chilisa (2012) he suggests that a decolonised curriculum should be based on the 4Rs, namely:

- Relational accountability - All parts of the curriculum, where applicable, (explicit, hidden and null) are connected and has to be related to the South African context.
- Respectful representation – The curriculum needs to acknowledge and create a space for the voices and knowledge of Indigenous peoples i.e. inclusion of researchers from Africa and other developing contexts.
- Reciprocal appropriation – Universities, and more specifically academics, need to ensure that learning, teaching, and research further the development of communities and society.
- Rights and regulation – Academics need to observe ethical protocols that ensure that the ownership of knowledge (where appropriate) is attributed to the Indigenous peoples of the world.

Other demands on the curriculum include that it should promote inclusivity and enhance the academic success and employability of students, while developing them as responsible citizens that can contribute to society. The integration of UDL principles in curriculum renewal is essential to promote inclusivity and an awareness of diversity. The intentional integration of graduate attributes at programme- and within specific module-level assignments will furthermore help to promote employability. It is essential that curriculum renewal processes involve various stakeholders, such as students and advisory boards.

5.3.1 Propositions for the operationalisation of this strategic priority:

> 1. **Development of a Curriculum Enhancement Framework (CEF):** The CEF should include a map of the different stages and levels of the curriculum development process. The programme needs to clarify the roles and responsibilities of academics, heads of departments, faculties, DIRAP and CTL. The CEF will improve alignment between external and self-review processes.
> 2. **Development of a Curriculum Renewal Institute (CRI):** A 5-day CRI will be offered by CTL and will support academics to reconceptualise their courses making use of Backward Design. The institute will empower academics to make use of a learning centred approach, to reflect on how to engage with decolonisation, and how to create a learning environment that will engage students in significant learning that promotes the development of graduate attributes (Fink, 2013).\
> 3. **Faculty-specific plans for addressing decolonisation:** While decolonisation will be addressed on an institutional level through the development of the CEF and CRI, it will be addressed differently in different disciplines. Therefore, decolonisation needs to be addressed more specifically in each faculty's faculty plan.

5.4 Flexible learning and teaching design

Developing a blended (hybrid) learning environment, as well as distance provision, that makes use of innovative course design to create a flexible learning environment where students can learn in different ways at different times, is critical if the UFS is going to produce graduates that are equipped with digital literacy skills needed for the 21st century work environment.

Therefore, the adoption of blended learning, which is the integration of both face-to-face and technology-enhanced learning and teaching methods, is strongly encouraged. Blended learning is an internationally recognised learning and teaching approach that, if implemented effectively, is empirically proven to increase academic achievement and student engagement. The following are identified as key principles of effective blended learning design:

- Blended learning should support and enable outcomes-based learning through backward course design;
- Instructional methods should integrate face-to-face and technological approaches in a meaningful way that considers both the type of content and the pedagogical affordances of available educational technology;

- Courses should be designed using a UDL framework as a guide that facilitates a flexible learning environment that can accommodate the learning needs of a diverse student population;
- Technological and face-to-face components should be integrated into a comprehensive whole, as opposed to standalone, disconnected segments;
- Effective blended learning design, in a South African higher education context, requires instructional approaches that are resilient in times of disruption; and
- Academics should be adequately skilled to enable effective blended learning course design, while students should have the necessary skills to navigate both technological and face-to-face components of their courses successfully.

The UFS has a responsibility to provide a learning and teaching environment that includes both physical learning spaces and infrastructure that enables a flexible learning and teaching design. This should also take account of the provisioning of appropriate educational technologies.

The provision of distance education at the UFS also requires the establishment of an enabling environment for the design and implementation of programmes delivered at a distance. In contrast to a blended approach, distance education programmes are often fully technologically dependent, and because of geographical and transactional distance, require a specialised approach to programme design, quality assurance, as well as support and retention of remote students.

Key principles and criteria of effective distance programme design and delivery are:

- There is a clear rationale for choosing to deliver a particular programme through a distance mode.
- Programmes are flexibly designed to align with national needs and the needs of students who are unable to enter into traditional face-to-face education.
- The choice of media and technology is justified as fit for purpose, and considers the capacity of students to access and use the technologies, where appropriate.
- Distance provision reflects a clear sense of purpose and direction, based on national priorities and the quality demands of learning at a distance. Planning for distance education is done through careful and sound planning processes and informed by institutional strategies.
- Where entry to programmes are open, sufficient technical and academic support is available to students.
- Design for distance provision is based on a collaborative approach, and intensive training of stakeholders in all facets of distance education is a pre-requisite.

- As indicated in paragraph 3.1, learning and teaching is guided by a learning-centred approach, integrating formative assessment, and focusing on constructivist, active learning. In the case of a remote student body, this calls for conscious design decisions and raises different challenges than when students access technology through a Wi-Fi network or on a central campus.

5.4.1 Propositions for the operationalisation of this strategic priority:

1. **Establish a meaningful minimum presence on the institutional learning management system (LMS):** A meaningful minimum presence should be established for especially undergraduate modules at the UFS, but also postgraduate modules with a significant coursework component.
2. **Empower staff and students with adequate digital literacy skills:** Staff and students should have opportunities to develop digital literacy through focused training initiatives.
3. **Capacitate academics in flexible learning and teaching design:** Training and development initiatives aimed at developing skills in backward course design, effective technology-enhanced teaching capabilities (including LMS use, developing and facilitating online learning, and the use of audio-visual technologies), and UDL should be implemented.
4. **Blended learning guidelines:** The success of a blended learning approach relies on effective implementation of sound principles. The UFS should therefore develop blended learning guidelines, that consider both best practice and contextual challenges, to guide the effective implementation of this approach.
5. **Distance Education guidelines, also including a framework for the design and delivery of fully online programmes:** should be developed and aligned with good practice for distance education, as indicated by policy DHET (2014), and relevant documents such as the CHE (2014); and NADEOSA Quality Criteria for distance programmes
6. **Establish requirements for appropriate infrastructure and physical learning spaces** that will enable flexible learning and teaching design for contact and distance education, as well as fully online programme design and delivery.

5.5 Empowering academics for 21st century teaching

Academics are expected to balance their role as disciplinary experts and researchers with their role as university teachers. These roles are equally important and should both be developed, incentivised, and rewarded (DHET, 2018; Kamel, 2016; Sorcinelli, Austin, Eddy, Beach, 2005; Subbaye, 2018). University structures should be in place to strengthen university teaching through appropriate professional development opportunities and reward systems for excellent teaching.

In line with the Framework for Enhancing Academics as University Teachers (DHET, 2018) the UFS will prioritise the following in order to empower academics for university teaching:

- **Enable continuous professional development (CPD) for university teachers:** This includes, but is not limited to, opportunities to develop skills to effectively design their courses and use blended learning approaches. In addition, academics should have opportunities to develop a sound understanding of curriculum decolonisation and be equipped to be effective teachers in the context of the 4IR.

- **Establish and maintain university teacher development structures, organisations and resources:** The UFS should maintain centralised structures that prioritise the professional development of academics (such as the CTL and the HR Department), as well as decentralised structures (such as faculty-based teaching and learning offices).

- **Ensure that academics are recognised and rewarded for the work that they do as university teachers:** Good quality university teaching should be incentivised and rewarded through both support and recognition. This should be reflected in university promotion and performance management policies. In addition, awards systems such as the Annual Teaching and Learning Excellence awards should be maintained and promoted on an institutional level.

- **Advance university teaching through leadership development:** Initiatives that are aimed at developing leadership qualities, such as the Academic Leadership Programme, should be in place for both academic staff and professional staff who support learning and teaching.

- **Promote knowledge production and knowledge sharing about university learning and teaching:** Research on learning and teaching should be supported on an institutional level. In addition, forums should be available at which knowledge on learning and teaching can be shared. The development of capacity for researching learning and teaching should be prioritised.

- **Develop expectations of academics in their role as university teachers:** Expectations for academics' role as university teachers should be clarified and stipulated in institutional documents such as employment contracts, performance management plans, and the workload model. Teaching should also be regularly evaluated through self, student, and peer review mechanisms.

5.5.1 Propositions for the operationalisation of this strategic priority:

1. **Recruiting and retaining quality staff:** Institutional recruitment and selection procedures should recognise teaching as an important role of an academic.
2. **Learning and teaching portfolios should be used as one component of measuring teaching excellence:** Learning and teaching portfolios should reflect each individual's teaching philosophy and approaches, and include an evaluation of initiatives and practices. The CTL and faculty Teaching and Learning offices should provide support to academics in the development of learning and teaching portfolios. These portfolios should be used for rewards and recognition such as Teaching Excellence awards and promotion (see Section 5.6.1).
3. **Allocating an appropriate portion of time to learning and teaching activities:** The workload model and academic performance framework should reflect the importance of academics' teaching role through appropriate weight allocation for these activities.
4. **Required staff development initiatives:** Although it is not recommended to impose all professional development opportunities upon academic staff members, in recognising their agency to seek out development opportunities, their responsibility in this endeavour should also be highlighted. Certain baseline, staff development initiatives should, however, be compulsory to ensure that all academics (permanent and contract staff) are developed to have adequate teaching skills.

5.6 Quality focused, research-led learning and teaching

As indicated earlier in this document, quality is one of the central drivers ensuring universities' survival in the 21st century (Hazelkorn et al., 2018). Quality in learning and teaching has increasingly become focused on the evidence that helps us to understand how students think, behave and learn, as well as what they are able to do upon completion of their higher education qualifications (Coates, 2014; Kuh, G. D. et al., 2015). The evidence (qualitative and quantitative) are generated through institutional data warehouses, an early warning system, a student tracking system, as well as surveys and teaching and module-level evaluation forms.

Data analytics in higher education enhances the evidence-based focus. Student data can be used to develop algorithms and software solutions to provide individual feedback to students on their progress and refer them to the relevant support systems. (Parnell, Jones, Wesaw, & Brooks, 2018).

The impact of both data analytics, module evaluations and other evidence depends on scholarly teaching and the SoTL.

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

Whereas SoTL is:

> the systematic study of teaching and learning, using established or validated criteria of scholarship, to understand how teaching (beliefs, behaviours, attitudes, and values) can maximize learning, and/or develop a more accurate understanding of learning, resulting in products that are publicly shared for critique and use by an appropriate community (Potter & Kustra, 2011, p2).

Internationally, the importance of strong institutional quality assurance systems is critical to develop a culture of quality that can engage with national regulatory systems (King, 2018). Therefore, the UFS needs to ensure the development of well-aligned quality assurance systems.

1. **Alignment of a quality assurance framework and procedures:** Current quality assurance procedures need to be articulated clearly to the institution and the newly proposed Curriculum Enhancement Framework (CEF) needs to be integrated and aligned with existing frameworks and procedures.

2. **Revitalisation of an institutional-level module evaluation system:** The current faculty-based approach needs to be revisited and reviewed. The UFS needs a centrally run module evaluation system that can be used to assess the quality of learning and teaching across the institution. Evaluation methods can include surveys; peer-evaluation and student focus groups.

3. **Requirement of Portfolio of learning and teaching for promotion:** As part of the review criteria for academic promotion, academics need to be required to submit a Portfolio of Learning and Teaching. This will help to facilitate the development of scholarly teaching across the institution and enhance the SoTL for academics specialising in the teaching of their discipline.

4. **Data analytics need to be integrated in quality assurance systems:** Data analytic **s**ystems, developed in the Siyaphumelela project, need to integrate into quality assurance frameworks and procedures to promote data-driven decision-making.

6. Resourcing

Resources for the implementation of this strategy include the following:

Government subsidy: Both the input and output subsidy is directly related to learning and teaching. Budgeting should ensure that efforts to improve learning and teaching are appropriately resourced.

University Capacity Development Grant (UCDG): Although the grant has been reduced by 42%, the remaining funds should be spent in accordance with the UFS intuitional strategic plan and this strategy. A total of 23% of UCDG learning and teaching funding is used for CTL salaries while 77% is spent on supporting student success and academic staff and leadership development in faculties. Student success support of students in faculties include the A_STEP tutorials, Academic Advising, Academic Literacy development, supporting Blended learning through Blackboard and E-assessment support through Questionmark. CTL trains all new first years on how to use Blackboard. Academic Staff development include new staff orientation, workshops on module(course) design, facilitating learning and teaching, improving assessment within modules as well career development for academics. CTL also hosts   the

Annual Learning and Teaching Conference and the Excellence in Teaching and Learning awards, which are funded by the grant. CTL organises leadership development workshops for HODs to empower them to lead their departments. The research component of the UCDG funds the support of academics to complete their PHDs, research capacity development workshops, supervision training and mentoring, and academic mobility initiatives.

Foundation Grant: The increases in the foundation grant has made it possible for the UFS to absorb the 42% decline in the UCDG, by moving foundation work that was covered by the UCDG into the foundation grant in accordance with the policy. The foundation grant is used to fund extended programmes at the UFS. This includes all staffing and operational costs, as well as the training costs, the costs of the development of materials, and minor equipment costs. All expenditure is directly linked to foundational provision such as academic literacy, numeracy, life skills development etc.

Donor funding: The Kresge Foundation is a funder that is continuously approached by the UFS, since it has a focus on improving access and success. The Dell Foundation and FNB might be other possible funding sources. Included in this section is any other philanthropic donations from corporations committed to improving student success.

7. Related policies and documents

7.1 Institutional policies and documents

- Academic Performance Framework
- Graduate Attribute Framework
- Integrated Transformation Plan
- Quality Enhancement Framework
- Towards Quality, Performance and Accountability: UFS Annual Teaching and Learning Report 2018
- UFS Strategic Plan: 2018 - 2022
- UFS Student Success Strategy 2018
- Workload model
- UFS Distance Education Policy 2015

7.2 National policies and documents

- Policy for the Provision of Distance Education in South African Universities in the Context of an Integrated Post-school System. Department of Higher Education and Training (DHET, 2014).

- A national framework for enhancing academics and university teachers. Pretoria, South Africa: Department of Higher Education and Training (DHET, 2018).
- White paper for post-school education and training (DHET, 2013).
- Higher Education Act 101 of 1997
- Distance Higher Education programmes in a digital era: Good practice guide (CHE, 2014).
- Designing and delivering Distance Education; Quality Criteria and Case Studies from South Africa (NADEOSA, 2004).
- Open Learning Policy Framework for post-school education and training (DHET, 2017).
- Strategic Policy Framework on Disability for the Post-School Education and Training System (2018)
- White Paper on the Rights of Persons with Disabilities (2016)

Summary of goals and key performance indicators

Goal/ KPA		KPI	As Is 09/2019	Target 12/2020	Target 12/2024
1. Foster the development of Graduate Attributes	Develop graduate attributes in curricular and co-curricular interventions	• Clarify graduate attributes • Implement Graduate Attributes at programme level	• 80% • 0%	• 90% • 50%	• 100% • 100% (UG level)
2. Improve student success	Increase student success and throughput rates and reduce the achievement gap	• UG Success Rate • UG throughput rate • B/W student achievement	• 80% • 13%[1] • 12%	• 81% • 14% • 11%	• 85% • 19% • 6%
	Deployment of High Impact practices	• UFS101 success rate • Nr of UG modules using tutorials • % of UG students using tutorials • % of UG students using advising • Academic literacy modules success rate • % of UG and PG<M using write site	• 83% • 249 • 43% • 57% • 83% • 66%	• 85% • 250 • 50% • 65% • 84% • 67%	• 87% • 260 • 60% • 85% • 87% • 70%
3. Ensure a responsive curriculum	Revise the structure of the curricula in terms of pathways and graduate employability.	• Graduate employment (GES) • Employment-qualification match (GES)	• 44%[2] • 92%[3]	• 45% • 92%	• 50% • 92%
	Transform the pedagogic relationship between students and lecturers	• % of students reporting good quality of interactions with academic staff[4] • % of academic staff with a positive perception of student-lecturer interactions[5]	• 62% • 54%	• 63% • 55%	• 65% • 57%
	Identify different stages and levels of the curriculum development process		• 50%	• 100%	• 100%

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[1] As reported in Statistics on Post-School Education and Training in South Africa 2017 (audited data).

[2] GES Pilot 3 data: Share of students who report that they have already accepted a job offer at the time of graduation

[3] GES Pilot 3 data: Share of graduates who report that the job offer that they have accepted at the time of graduation is related to their qualification (sum of students who indicated that it is directly related and partly related)

[4] SASSE 2018: Share of students who reported that their interactions with academic staff was of excellent/ good quality

[5] LSSE 2018: Share of academics who have reported that they perceive the quality of students' interactions with lecturers and academic staff to be excellent/good

Summary of goals and key performance indicators

	Goal/ KPA	KPI	As Is 09/2019	Target 12/2020	Target 12/2024
	Clarify roles and responsibilities in curriculum development process	Approved Curriculum Enhancement Framework (The CEF will improve the clarity of roles, responsibilities, alignment between external and self-review processes).	• 50%	• 100%	• 100%
	Improve alignment between external and self-review processes		• 50%	• 70%	• 100%
	Support academics in reconceptualising / redesigning their courses	Curriculum Renewal Institute	• 0%	• 50%	• 100 %
4. Develop flexible learning and teaching designs	Meaningful minimum presence on institutional LMS	Percentage of UG modules registered on the LMS	• 85%	• 90%	• 100%
	Digitally literate staff and students	• % of first-time entering first year students who attended Bb training	• 97%	• 97%	• 97%
		• % of new academic staff members who attended Bb training	• Unknown	• 80%	• 90%
		• % of QM users trained in QM	• 5%	• 30%	• 100%
	Lecturers who are adequately skilled in blended learning	Training attendance (Blended learning workshops and CRI attendance)	• N/A	• 5%	• 25%
		Annual BL colloquium	• Yes	• Yes	• Yes
	General consensus and awareness of good blended learning practice among academic staff	Approved blended learning guidelines	• No	• Yes	• Yes
	Adequate infrastructure and physical learning spaces to enable blended learning	• Establishment of Educational Technology & Learning Spaces Committee	• 0%	• 100%	• 100%
		• LMS downtime	• <1%	• <1%	• <1%

Summary of goals and key performance indicators

Goal/ KPA		KPI	As Is 09/2019	Target 12/2020	Target 12/2024
5. Academics who are empowered to teach in the 21st century	Recruitment of quality academic staff	% of interview processes that include a learning and teaching presentation	• N/A	• 10%	• 50%
	Good teaching is objectively measured	% of Annual Teaching and Learning Award entries with learning and teaching portfolios	• 100%	• 100%	• 100%
	Teaching valued as one of the roles of an academic staff member	Workload model/ academic performance criteria reflecting international best practice in learning and teaching	• unknown	• 100%	• 100%
	Academic staff are adequately equipped for their teaching roles	• Percentage of academic staff members who attended baseline training	• unknown	• 10%	• 25%
		• Percentage of academic promotions with learning and teaching portfolio	• unknown	• 30%	• 100%
6. Quality focused, research-led learning and teaching	Clearly articulated quality assurance procedures	Approved Curriculum Enhancement Framework	• 50%	• 100%	• 100%
	Regular student feedback is obtained	• UFS101 evaluation	• Yes	• Yes	• Yes
		• Tutorial evaluation	• Yes	• Yes	• Yes
		• SASSE	• Yes	• Yes	• Yes
		• BUSSE	• Yes	• Yes	• Yes
		• CLASSE	• Yes	• Yes	• Yes
	Teaching excellence appropriately contributes to academic promotions	• Nr of faculties that make use of learning and teaching portfolios as part of promotion	• Unknown	• 2	• 7

Summary of goals and key performance indicators

	Goal/ KPA	KPI	As Is 09/2019	Target 12/2020	Target 12/2024
		• Academic promotion criteria includes internationally benchmarked criteria for learning and teaching	• N/A	• 100%	• 100%
	Institutional learning and teaching decisions are data-driven	• Annual L&T report • Percentage of modules on PeopleSoft with grades uploaded within Tsehehetsa deadlines • Student tracker rolled out	• Yes • ? • N/A	• Yes • ? • 30%	• Yes • ? • 100%

8. References

Al-Azawei, A., Serenelli, F., & Lundqvist, K. (2016). Universal Design for Learning (UDL): A Content Analysis of Peer Reviewed Journals from 2012 to 2015. *Journal of the Scholarship of Teaching and Learning*, *16*(3), 39. https://doi.org/10.14434/josotl.v16i3.19295

Altbach, P., & Salmi, J. (2011). *The Road to Academic Excellence: The Making of World-Class Research Universities*. Washington D.C: The World Bank.

Bacigalupo, M., Kampylis, P., Punie, Y., Brande, G. V. den, European Commission, & Joint Research Centre. (2016). *EntreComp: the entrepreneurship competence framework*. Retrieved from http://dx.publications.europa.eu/10.2791/593884

Baller, S., Dutta, S., & Lavin, B. (2016). *The Global Information Technology Report 2016*. Retrieved from World Economic Forum (WEF) website: www.weforum.org/gitr

Barrie, S. C. (2006). Understanding what we mean by the generic attributes of graduates. *Higher Education*, *51*, 215–241.

Barrie, S. C. (2007). A conceptual framework for the teaching and learning of generic graduate attributes. Studies in Higher Eduaction, 32(4), 439-458.

Butler-Adam, J. (2018). The Fourth Industrial Revolution and education. *South African Journal of Science*, *114*(5/6). https://doi.org/10.17159/sajs.2018/a0271

Centre for Teaching and Learning. (2018). *UFS Student Success Strategy (UFS-S³)*. University of the Free State.

Centre for Teaching and Learning (CTL). (2018a). *TOWARDS QUALITY, PERFORMANCE AND ACCOUNTABILITY - UFS annual teaching and learning report 2018*. Bloemfontein, South Africa: University of the Free State.

Centre for Teaching and Learning (CTL). (2018b). *UFS STUDENT SUCCESS STRATEGY (UFS-S³)*. Bloemfontein, South Africa: University of the Free State.

Centre for Teaching and Learning (CTL). (2018c). *WHERE IS THE REST OF THE CLASS? A study of class attendance at the University of the Free State*. Bloemfontein, South Africa: University of the Free State.

Chilisa, B. (2012). *Indigenous research methodologies*. Thousand Oaks, Calif: SAGE Publications.

Coates, H. (Ed.). (2014). *Higher education learning outcomes assessment: international perspectives*. Frankfurt am Main: Peter Lang GmbH.

Coetzee, M. (2014). *Measuring student graduateness: reliability and construct validity of the Graduate Skills and Attributes Scale*. Retrieved from http://hdl.handle.net/10500/21842

de la Harpe, B., & David, C. (2012). Major influences on the teaching and assessment of graduate attributes. *Higher Education Research & Development*, *31*(4), 493–510.

Department of Higher Education and Training (DHET). (2014). *Policy for the Provision of Distance Education in South African Universities in the Context of an Integrated Post-school System.* Department of Higher Education and Training (DHET).

Department of Higher Education and Training (DHET). (2018). *A national framework for enhancing academics and university teachers*. Pretoria, South Africa: Department of Higher Education and Training (DHET).

Fink, L. D. (2013). *Creating significant learning experiences: an integrated approach to designing college courses* (Revised and updated edition). San Francisco: Jossey-Bass.

Griesel, H., & Parker, B. (2009). *Graduate attributes: a baseline study on South African graduates from the perspective of employers*. Pretoria, South Africa: Higher Education South Africa & the South African Qualifications Authority.

Hazelkorn, E., Coates, H., & McCormick, A. C. (2018). *Research handbook on quality, performance and accountability in higher education*. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&scope=site&db=nlebk&db=nlabk&AN=1855634

Hornsby, D. J., & Osman, R. (2014). Massification in higher education: large classes and student learning. *Higher Education*, *67*(6), 711–719. https://doi.org/10.1007/s10734-014-9733-1

Hunt, L., & Chalmers, D. (Eds.). (2012). *University teaching in focus: a learning-centred approach*. Victoria, Australia: ACER Press.

Kamel, A. (2016). Role of faculty development programs in improving teaching and learning. *Saudi Journal of Oral Sciences*, (3),61-68.

Kinzie, J., & Kuh, G. (2017). Reframing Student Success in College: Advancing Know-What and Know-How. *Change: The Magazine of Higher Learning*, *49*(3), 19–27. https://doi.org/10.1080/00091383.2017.1321429

Kuh, G. D., Ikenberry, S., Jankowski, N., Cain, T. R., Ewell, P., Hutchings, P., & Kinzie, J. (2015). *Using evidence of student learning to improve higher education*. San Francisco: Jossey-Bass.

Langa, M. (2016). *#Hashtag: An analysis of the #FeesMustFall Movement at South African universities*. Johannesburg, South Africa: Centre for the Study of Violence and Reconciliation(CSVR).

Lange, L. (2017). 20 Years of higher education curriculum policy in South Africa. *Journal of Education (University of KwaZulu-Natal)*, (68), 31–58.

Lange, L., & Strydom, J. F. (2018). Fit for purpose: intellectual, political and operational struggles in South African quality assurance. In E. Hazelkorn, H. Coates, & A. C. McCormick (Eds.), *Research handbook on quality, performance and accountability in higher education* (pp. 347–357). Retrieved from http://search.ebscohost.com/login.aspx?direct=true&scope=site&db=nlebk&db=nlabk&AN=1 855634

Le Grange, L. (2016). Decolonising the university curriculum. *South African Journal of Higher Education*, *30*(2). https://doi.org/10.20853/30-2-709

Letseka, M. (2012). In Defence of Ubuntu. *Studies in Philosophy and Education*, *31*(1), 47–60. https://doi.org/10.1007/s11217-011-9267-2

Light, G., Cox, R., & Calkins, S. (2009). *Learning and Teaching in Higher Education: The Reflective Professional* (2nd ed). London: Sage Publications.

Mbembe, A. (2015). Decolonizing Knowledge and the Question of the Archive. Retrieved April 26, 2019, from https://wiser.wits.ac.za/system/files/Achille%20Mbembe%20-%20Decolonizing%20Knowledge%20and%20the%20Question%20of%20the%20Archive.pdf

Meintjes, A. (2018). *The Aftermath of #FeesMustFall: An Activity Theoretical Analysis of Blended Learning at the UFS*. Bloemfontein, South Africa: University of the Free State.

Mohamedbhai, G. (2014). Massification in Higher Education Institutions in Africa: Causes, Consequences and Responses. *International Journal of African Higher Education*, *1*(1). https://doi.org/10.6017/ijahe.v1i1.5644

National Planning Commission (NPC). (2011). *National Development Plan: Vision for 2030*. Retrieved from http://www.npconline.co.za/medialib/downloads/home/NPC%20National%20Development%20Plan%20Vision%202030%20-lo-res.pdf

Parnell, A., Jones, D., Wesaw, A., & Brooks, D. C. (2018). *INSTITUTIONS' USE of DATA AND ANALYTICS for STUDENT SUCCESS - Results from a National Landscape Analysis*. Retrieved from National Association of Student Personnel Administrators (NASPA),

Association for Institutional Research (AIR) and EDUCAUSE website: https://www.naspa.org/images/uploads/main/DATA2018_DOWNLOAD.pdf

Penprase, B. E. (2018). The Fourth Industrial Revolution and Higher Education. In N. W. Gleason (Ed.), *Higher Education in the Era of the Fourth Industrial Revolution* (pp. 207–229). https://doi.org/10.1007/978-981-13-0194-0_9

Potter, M. K., & Kustra, E. (2011). The relationship between scholarly teaching and SOTL: Models, Distinctions, and Clarifications. *International Journal for the Scholarship of Teaching and Learning*, *5*(1). Retrieved from http://academics.georgiasouthern.edu/ijsotl/v5n1.html

Rhodes, K., Barone, J., & Dean, B. (n.d.). Universal Design for Learning Guidelines for Inclusivity & Personalization. Retrieved April 26, 2019, from https://www.rubicon.com/udl/

Soffel, J. (2016). What are the 21st-century skills every student needs? | World Economic Forum. Retrieved August 26, 2018, from https://www.weforum.org/agenda/2016/03/21st-century-skills-future-jobs-students/

Sorcinelli MD, Austin AE, Eddy PL, Beach AL. (2005). *Creating the Future of Faculty Development: Learning From the Past, Understanding the Present.* Bolton, MA: Anker Publishing

Strydom, F., Kuh, G., & Loots, S. (2017). *Engaging students: using evidence to promote student success.* Bloemfontein, South Africa: Sun Media.

Subbaye, R. (2018). Teaching in Academic Promotions at South African Universities: A Policy Perspective. *Higher Education Policy*, *31*(2), 245–265. https://doi.org/10.1057/s41307-017-0052-x

Swartz, B. C., Gachago, D., & Belford, C. (2018). To care or not to care - reflections on the ethics of blended learning in times of disruption. *South African Journal of Higher Education*, *32*(6). https://doi.org/10.20853/32-6-2659

Tronto, J. C. (2018). Higher education for citizens of caring democracies. *South African Journal of Higher Education*, *32*(6). https://doi.org/10.20853/32-6-2710

Weimer, M. (2002). *Learner-centered teaching: five key changes to practice* (1st ed). San Francisco: Jossey-Bass.

Yorke, M., Knight, P., Enhancing Student Employability Co-ordination Team, & Higher Education Academy (Great Britain). (2006). *Embedding employability into the curriculum.* Heslington, York: Higher Education Academy.