Modernity or Reality? The Need for Integrating Indigenous Knowledge Systems in to the Teaching and Learning Processes in Nigerian Universities

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Theme: 10. Indigenous Knowledge and Indigenous Knowledge Systems as Pathways to Integrating Higher Education Research and Curricula Development in a Global Era

The paper reflects on the importance of teaching and learning using African indigenous methods; since the use of colonial languages specifically, English, French and Portuguese as media of instruction in African institutions of higher learning relegated African indigenous knowledge systems (contained in African languages) at the periphery of African education systems. This is largely because current realities of globalization, internationalization and participation dictate that national cultures, traditions and orientations are vital to the socio-economic development of nation-states. In the education sector, consideration of cultural backgrounds of the learners in planning the teaching methods has informed much recent discussions on domestication and making teaching more learner-centered and learner-oriented. In many countries such as Nigeria, formal education continues to be Euro-centric in outlook and academic in orientation, reflecting Western methods and cultures thereby alienating the cultures of learners and the teachers. This situation constitutes a major hindrance to the country’s education system, where formal education does not put into consideration the way majority of learners communicate, think and learn. Learners’ underachievement in school has been attributed to this cultural disconnect between the expectations of school curriculum and those of the environment in which the learners lived and socialized. The study employed Systematic Literature Review (SLR) to establish whether or not there is integration of indigenous knowledge systems in to the curricula of other African countries, and determine the level of infusion within the continent. Content analysis was also used to analyze the curricula of five Nigerian universities located in different geo-political zones and ethnic nationalities: Bayero University, Kano; University of Ibadan; University of Nigeria Nsukka; University of Maiduguri; and Benue State University, Makurdi, to determine its Indigenous-related components vis-à-vis Western-related components being taught in the universities. The study found that apart from Academic Programmes dedicated for teaching of languages of the host communities such as Hausa, Yoruba, Igbo, Kanuri, and Tiv, no any indigenous knowledge component was evident in the curricula of the five Universities. Hence, teaching and learning was solely carried out in western-based languages and methods. The study further revealed that the situation is no different in other African countries such as Niger, Cameroon, Ghana, Zambia, Kenya and Tanzania. The contribution of the study lies in its ability to explore the need for integrating African indigenous knowledge within the formal education in order to contribute to the development of an educational system that is socially responsive to its communities. The study recommends that efforts should be made to align educational curricula of Universities in Nigeria and Africa, as a whole, with indigenous realities, since the interrelationship and balance between these two different ways of teaching and learning remain delicate especially in the context of African continent.

Keywords: Indigenous Knowledge Systems; Nigerian universities; Teaching and learning
Traditional teacher-centred learning is being confronted by an increasing shift towards a more student-centred learning. Despite its acknowledged limitations, including lack of engagement and dropout rates, e-learning approaches have the potential to give students more control and involvement in the learning process. More recently, Massive Open Online Courses (MOOCs) have emerged on the higher education landscape with the promise of making learning more accessible and effective. With the rise of these approaches, higher education is expected to be significantly reshaped in the coming years. However, with students dedicating hours to interactive experiences such as games and social media spaces, it is becoming increasingly difficult, even within e-learning courses to compete for students’ attention. One possible solution is gamification - the adding of a game layer to existing e-learning courses and MOOCs. This study integrated gamification into learning in a 4th year university course. Gamification is defined as the integration of game design principles, game mechanics and game dynamics into real-world contexts to motivate behaviour. Its application domains include education, finance, healthcare and employee and client engagement. By adopting a qualitative case-study approach and Self-Determination Theory as the theoretical lens, the study sought to explore the influence of gamification of e-learning on student motivation. Using the insights of 35 students who completed pre-course and post-course questionnaires, and 12 students who participated in interviews, the study found that gamification positively influenced students’ motivation. Students had experienced e-learning prior to joining the course and believed that e-learning enhances learning and academic performance. However, they were uncertain about its use of gamification. Whilst progression through the game was consistent, students experienced a moderate degree of autonomy. They also reported a high degree of competence and relatedness in engaging with the gamified course. Additionally, students believed that gamification added value, piqued curiosity and was effective for e-learning. However, students also reported experiencing a degree of tension and stated that a high degree of effort and extended time was required by the gamified course. Some students reported detachment due to not understanding the game from the outset, being demotivated by not getting frequent rewards and losing progress in the game due to external factors. Recommendations include adopting a student-centric approach when gamifying, catering for a variety of motivational drivers, onboarding students at the outset and developing an explicit link between student objectives, learning objectives and reward structures. We argue that gamification should serve as a tool for formative assessment and be regularly benchmarked against summative assessments to ensure reliability as reliability and consistency, which are crucial factors influencing motivation. Additionally, cognisance of the overheads and required commitments, especially when considering qualitative content, is crucial for success.

Keywords: Gamification; E-learning; Motivation
Pervasive, persistent poverty has impacted university students’ well-being and their ability to graduate in South Africa. Financial deprivation is a potent barrier to academic success and to the possibility of students finding suitable employment, and this traps students in vicious cycles of poverty. Socio-economic poverty is inextricably linked to food insecurity, which is a real challenge among many students. This study therefore is based on teaching and learning activities in higher education which have the potential to alleviate food insecurity and to create resilience. The study attempts to answer the research question: “How can module activities be designed in order to respond to food insecurity among students”? Nutrition is a topic which students, who are preservice teachers, study in the Bachelor of Education degree with a Life Sciences specialization. This study will be designed to train and enable these preservice teachers to develop food gardens on the campus, in collaboration with students who live at the residences and who are food insecure. Instead of learning scientific facts about nutrition, the preservice teachers will do nutrition, by researching residence students’ nutritional needs, and creating food gardens which respond to these needs. The participants, who will be purposefully selected, will comprise 30 preservice teachers who study the Biological Science for Educators 310 module, and who will collaborate with 12 residence students to cultivate the gardens. A qualitative approach will be used and the preservice teachers will develop portfolios of evidence, to justify their selection of food plants, and document the gardening activities. Each of the participants will keep reflective diaries to record moments of enablement or disempowerment, and the strategies they use to address challenges. Content analysis will be used to interpret ways in which these module activities promote relevance and contribute to resilience and self-sufficiency among participants. Theoretical constructs from the critical paradigm will inform the research design and activities, and concepts from empowerment theory will inform the analysis. This study will be significant because it will yield insights into the potential of crafting learning experiences in higher education which are meaningful and relevant in the lives of students.

Keywords: relevant curricula; responsive curricula; preservice teachers

Graduates’ unemployment has continued to be a problem in Nigeria. Data from the National Bureau of Statistics in Nigeria indicate that 64 million youths are unemployed and 1.6 million are under-employed. The rate of unemployment has been on a steady increase as NBS data revealed that the number of unemployed persons constituted 13.7% in 2006, 14.6% in 2007, 19.7% in 2008, 21.4% in 2009, 23.9% in 2010. In order to find a solution to the scourge of unemployment among graduates of tertiary institutions, Entrepreneurial education was introduced into the undergraduate curriculum of University students in Nigeria in 2006. The focus was to equip graduates with requisite skills for entrepreneurial success after school, and thus make them employers of labour rather than job seekers. The study was carried out to examine the effect and benefit of Entrepreneurship Education at tertiary level in Nigeria. To achieve the purpose of this study, two (2) Tertiary Institutions were selected from Ekiti State. They are Federal University, Oye-Ekiti and Ekiti State University, Ado-Ekiti, Nigeria. The primary Instrument used for data collection was a questionnaire which was distributed to 100 hundred students (200); with fifty (100) to each of the tertiary Institutions involved in the study. The study revealed that emphasis on theory delivery rather than practical, inadequate funding, and lack of exposure to industrial training in which the students would be attached to related functioning business outfits for on-site training, were identified as reasons why entrepreneurial education had failed to a large extent to meet its objectives. In view of the above findings, the study recommended a review of the curriculum for entrepreneurship education in such a way that it would realistically prepare the graduates adequately for life after school. This is to involve more emphasis on practical rather than theory; students should be attached for some time to related established business outfits so as to afford them the opportunity of learning the real life day-to-day running of the kind of businesses or vocations being learnt in school; adequate funding of entrepreneurship training should also be given a priority so as to reduce the scourge of unemployment among graduates of tertiary institutions in Nigeria.

Keywords: Graduates unemployment; Entrepreneurship; Curriculum Review
Responsive Writing Centre Practice: Peer tutor reflections in a UOT

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Theme: 7. Responsive and Innovative Pedagogies in Higher Education

Traditionally Universities of Technology (UoT) focus on education to prepare students for the workplace. The Durban University of Technology as a UoT is currently undergoing a pedagogical transformation with the inclusion of a General Education curriculum that will prepare students for an increasingly diverse and complex globalised work environment. This critical paradigm shift in curriculum design will foreground new ways of teaching, thinking and learning. The introduction of these new curricular offerings has brought forward the importance of academic development provision and in 2013 writing centres were established at DUT. Considering that writing centres have historically been regarded as underrated spaces at universities, it becomes increasingly valuable to understand the role of writing centres and how they are well positioned to further the development of students as critical citizens. This paper explores through the analysis of writing centre peer tutor reflections, how a humanising pedagogy can ensure responsive writing centre practice within our currently changing university context. The philosophy of humanism underpins the curriculum change at DUT which aims to prepare students more effectively for an increasingly diverse and complex work environment. A humanising pedagogy is based on critical approaches to teaching, valuing the individual and taking into account the student voice. Thematic analysis of reflections revealed the peer tutors’ self-awareness of the significance of communities of practice in their work. Communities of practice exist when learning is collective and takes place in a shared domain by a group of people who interact regularly. Teaching-learning are intertwined and must interact; and thus it is in this interaction that a writing centre peer tutor is expected to work. This interaction allows for the building of disciplinary identity, discourse and knowledge. We suggest that communities of practice inherent in writing centres, cultivate a humanising pedagogy which respects the human, inter-personal side of teaching and contribute to the aesthetic, socio-political and cultural environments in which students live and work.

Keywords: Reflection; Writing centres; Humanising pedagogy
pedagogical content knowledge, and pedagogic methodological knowledge) in the task of preparing prospective quality secondary school language teachers.

**Keywords:** educational transition in the tertiary sector; professional teacher education programmes; forms of professional knowledge

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**#7. What Are Students' Experiences of Feedback?: Exploring Email Facilitated Feedback in Business Management Education**

(TLHEC10-033)

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**Theme:** 6. Researching Teaching & Learning Technologies Which Promote the Scholarship of Teaching & Learning

The study is about students’ experiences of e-mail facilitated feedback in Business Management Education at University. Drawing from the theoretical framework of Activity theory, the study observes a well-structured flow of the facilitated feedback method in relating lecturer - to - student pedagogical communication between and at different levels. Using a case study qualitative approach, and convenient sampling method, the student participants at their third and fourth year of study, were found to experience the use of e-mail as convenient and communicative; and its application as pervasive and varied, during and after teaching and learning activities. An outcome of this in particular is the enhancement of their engagement with the teaching and learning of Business Management Education modules. The implications of the study findings is that investments in facilitated feedback leads to enhanced pedagogical communication and promotes teaching and learning outcomes in Business Management Education. This paper concludes that e-mail facilitated feedback integrates the teaching and learning of Business Management Education.

**Keywords:** Facilitated feedback; pedagogical; Business Management Education
Higher Education and Economic Growth in Africa: A Panel Data Analysis (TLHEC10-022)

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Theme: 2. Funding Higher Education – New Challenges, Opportunities and Prospects

In the past few decades, globalisation has played a significant role in engendering a sustainable economic growth in many developing economies. Consequently, in this new information economy, an offshoot of globalisation, higher educated labour (higher-end human capital) is crucial to economic growth. Previous studies on the determinants of economic growth have predominantly focused on developed and emerging economies. However, there seems to be few studies concentrating on vast African countries. This paper analysed the effect of higher education on economic growth in African economies using a panel dataset from 1980 to 2013. The paper argues that, despite the imperative of quality of education at lower levels of schooling, and the presence of other drivers of economic growth (cheap labour, large internal markets, natural resources), much of the possibilities for sustainable growth in Africa, at least in the medium and long-term, depend on their ability to develop and utilise high level human capital for the innovation and organisation required in the present globalised world. The focus is mainly on the quantitative aspects of higher education in assessing whether African economies are allocating enough resources for sustainable economic growth. This study used Granger causality test, under vector error correction modeling (VECM) to test for causality among the variables. The results confirm that higher education and economic growth are co-integrated at the panel level. This is an indication of the presence of long run equilibrium relationships between higher education and economic growth in many African economies. In addition, findings from causality tests also indicate the presence of long run causality running from higher education to economic growth in these economies. Theoretically, this model provides predictive implications on economic growth, given the activities of critical variables manifesting improved higher education in Africa. Consequently, there is urgent need for policymakers in the continent to prioritize higher educational development in order to reap the benefits of sustainable economic growth. The results will be beneficial to many countries in this continent, especially, in the formulation of their higher educational policies. Overall, the paper argues that although the quantitative aspects of higher education (numbers of graduates) are important, the inculcating of critical thinking and innovativeness in students by teachers, and the development of higher education institutions, may be even more important in the future.

Keywords: Higher education; Economic growth; Africa

Using Social Media to Engage Students in Kinesiology and Physical Education Courses (TLHEC10-237)

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Theme: 7. Responsive and Innovative Pedagogies in Higher Education

Meaningful engagement that enhances student learning is a challenge for University instructors. Increasing class size, changing modes of content delivery, and students with diverse needs, all contribute to this ever-present challenge. Kinesiology and physical education instructors who, despite teaching some classes in an active setting, still struggle to engage students and connect activities with intended learning outcomes. Social media is quickly becoming a valuable tool for University instructors to engage their students both inside and outside of the classroom. It can potentially be a way to highlight current issues and develop professional learning communities that will extend beyond their University experience. This presentation will highlight how one instructor used social media applications (Twitter and Group Me) to build a learning community and enhance student engagement, assessment, and reflection.

Keywords: Student Engagement; Social Media; Learning Community
Developing Midwifery Students Clinical Reasoning Skills For Improved Health Outcomes In South Africa: A Grounded Theory Approach

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Theme: 1. Relevance of the Curriculum in Higher Education

The high maternal and neonatal mortality rates, especially in developing countries demands a paradigm shift in the preparation of healthcare professionals, including the midwives. The complexity of maternal and neonatal cases confronting midwives on daily basis requires graduates who are able to interpret client’s cues by relating components of clinical reasoning to the process of clinical judgement, as some of the deaths and complications are preventable. Literature however reveal developing clinical reasoning skills as complex and presenting significant teaching and learning challenges, especially within undergraduate programmes context. This study aimed at analyzing the processes of developing clinical reasoning skills in an undergraduate nursing and midwifery programme. A Grounded Theory approach by Strauss and Corbin was adopted in this study. Data was collected through individual interviews from the nurse educators (6). Focus group interviews with the students (16), observations in the classroom and practice settings, as well as through document analysis. Ethical principles were observed throughout the study. Although this study is in progress, the emerging categories include: Conceptualization of the phenomenon “clinical reasoning”; Conditions to developing clinical reasoning skills (antecedent, contextual and intervening); Process of developing and assessing clinical reasoning skills; and Consequences (short and long term). The emerging recommendations at this stage in the study highlight the need for a framework that may serve as a guide to educators in under-resourced countries who are also using a primary health care approach in teaching and facilitation of learning.

Keywords: Clinical Reasoning; Midwifery Students; Improved Health Outcomes

African Languages in Higher Education: Directions and Challenges

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KEYNOTE AND POST KEYNOTE DISCUSSION

There are two roles in which African languages may be expected to feature in higher education. The first is their role as a subject and the second is their role as a medium of instruction. Their roles as a subject and a medium of instruction are combined when they are taught as a subject, particularly to those specializing in the languages. When, however, the language is taught as a subject in a proficiency course, several strategies may be adopted before the language is properly mastered. The role of African languages as a medium of instruction in the teaching of other subjects is remarkably noticeable by its absence. This constitutes one of the greatest challenges for the development, empowerment and intellectualization of African languages. The earliest occurrence of African languages in higher education was in linguistic research carried out mainly by non-native speaker specialists using informants for their language data. The descriptions which they made in form of grammars and dictionaries helped in laying the foundation for what was to follow. Proficiency courses in African languages naturally followed. Particularly in overseas institutions during the colonial period, there was demand to study the major African languages in order to facilitate contact with the population among whom colonial officers were to work. In fact, some of the earlier descriptions of African languages were carried out by colonial officials. Today, proficiency courses now abound not only outside Africa but also in African universities. They have even dovetailed into heritage and acculturation programmes. The one area in which great strides have been made concerns the teaching of African languages as a subject in higher institutions. From merely doing linguistic research in order to obtain higher degrees in an African language, students now take bachelors and masters degrees in which the instruction is in the language concerned. There are even reports of doctorate theses written entirely in an African language. When it comes to teaching non-language subjects in the medium of an African language, no progress has been made. A look at the UNESCO (2004) Map African Community Languages and their Use in Education accompanying the survey of the same title (UNESCO 1985), shows that no single African country currently teaches any non-language university course using an African language as a medium of instruction. The unsatisfactory situation of African languages in higher education can be traced to a number of factors: inadequate background arising from incomplete use of African languages either as a subject or as a medium of instruction at primary and secondary levels of education; dependence on knowledge conveyed through imported languages; pressure to continue with inherited practices as a result of demands of globalization, inadequate language planning; insufficient language development compared with the demands of an African language medium for teaching non-language subjects; and limited and unattractive job opportunities for graduates in African languages. Until there is full exploitation of African languages in the knowledge economy, the desirable intellectualization of these languages will continue to be a mirage.
#12. Guiding Students into the Optimal Qualification: Patterns of Selecting and Switching Programmes
(TLHEC10-190)

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**Theme:** 4. Institutional Research: Building an Evidence-Based Culture in Higher Education

It is often assumed that a significant number of students do not persist in their first declared major in higher education. In fact, switching majors is considered a natural process of the undergraduate experience, as students at this stage are still trying to find the right fit. While lack of career guidance is often cited as the major causal factor for switching majors, there is also a growing body of research which has established that students often switch because of the conflict they experience in the socio-cultural conditions of their chosen disciplines. The purpose of this study is to examine the patterns of selecting and switching majors among students in the STEM programmes at the University of KwaZulu-Natal. To identify the switching patterns, we will look at the intended major as recorded on the application form, the registered major and any subsequent majors leading to the graduation major. The presentation will first provide descriptive accounts of course switching, followed by logistic regression models to predict the likelihood of switching given the student background characteristics such as application choice, matric results, socio-economic status, academic achievement and help seeking behaviour. Further, through qualitative analyses, the presentation will also look at the discipline specific characteristics and the role of culturally-specific career guidance on academic achievement and persistence within the chosen major. The analysis is informed by three pillars: Tinto’s model of academic integration, Bernstein’s socio-cultural reproduction theory and Coleman’s rational choice theory. These three pillars provide a holistic understanding of the academic, personal, socio-cultural and institutional factors that lead to major switching and or persistence.

**Keywords:** Major switching; persistence; career guidance

(TLHEC10-036)

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**Theme:** 6. Researching Teaching & Learning Technologies Which Promote the Scholarship of Teaching & Learning

According to certain scholars the primary benefit of applying pervasive computing technology for education is due to its ability to supersede the limitations of traditional blended learning which include restricting students to pre-defined times, locations and communication. Additionally blended learning, e-learning and mobile learning has changed the way education is provided all over the world. E-learning enables the ability to electronically exchange, administer, supervise, and assist learning while mobile learning offers prospects for students to engage and collaborate with each other, their peers and lecturers, as well as share the content of a particular subject. Pervasive learning is similar to mobile learning in that it enables students to have access to learning materials at any time and from anywhere. The distinguishing factors between pervasive learning and mobile learning are that pervasive learning environments recognize the identities of individual students and provide them with immediate guidance and feedback. Therefore more information from the students can be obtained in pervasive learning environments compared to other e-learning environments. Major challenges within universities in South Africa are large classes, multilingualism in a first language environment and lack of academic preparedness from high school and university. The use of a pervasive learning could bridge these gaps due to its key characteristics of context sensitivity, adaptability and personalization. While comprehensive work has been carried out proposing frameworks for implementation of pervasive learning environments there has been limited research focusing on the factors supporting pervasive education in a blended learning higher education context. This study aims to address the knowledge gap between academic factors, organizational issues and the Information Communication Technology (ICT) infrastructure at the University of KwaZulu-Natal and suggests how the University can support pervasive education. The proposed framework for the support of pervasive education will be discussed based on the literature and pilot findings of the study.

**Keywords:** E-Learning; Pervasive Computing Education; Blended Learning
#14.
Lessons Toward Community Involvement in Health Professional Education
(TLHEC10-005)

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**Theme:** 7. Responsive and Innovative Pedagogies in Higher Education

Internationally, the development of partnerships between institutes of higher learning and the communities they serve is stressed as a priority. The Umthombo Youth Development Foundation (UYDF) is an educational model developed in rural KwaZulu-Natal, South Africa as a response to scarcity of medical personnel in hospitals. Community involvement with health professional education has become a key strategy in the model; and review of the model may provide lessons for other educators towards implementing community involvement in health professional education.

The study was qualitative and used a social accountability theoretical framework. Data was collected using Appreciative Inquiry method and participants who were involved with the UYDF model were interviewed. Themes arising around community involvement were generated inductively. Community involvement in health professional education grew from a funding requirement and has strengthened over time to become an integral component of the UYDF model. Community involvement occurred mainly at the student selection process but continued during education and after graduation. Participants suggested means by which community involvement could be strengthened. Lessons learnt from the UYDF model are important as community involvement in health professional education is inextricably linked to social accountability. The process of community involvement facilitates a bidirectional flow of responsiveness and accountability. Strengthening community participation could employ strategies such as including student and community-member stories in health professional education pedagogy and curriculum. The UYDF successfully presents a model that facilitates community involvement in health professional education. Lessons learnt could guide other models and the UYDF model could be strengthened by further research.

**Keywords:** Health professional; Education; Community involvement

#15.
What is the Difference, if Any, Between SOTL and Educational Research?
An Interactive Workshop
(TLHEC10-265)

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**WORKSHOP**

The notion of the 'scholarship of teaching and learning' has risen in prominence in the academy in recent times – seemingly offering a perfect solution to the research-teaching dilemma – SOTL can be both scholarly teaching and education research, ticking two boxes with one strike! In this workshop I overview the literature debating this issue, on whether SOTL is a sub-field of education research, or some other kind of scholarly endeavour entirely. I then move to consider a course in which I, at two different periods, adopted firstly the role of education researcher (working in conjunction with the course lecturer) and, approximately a decade later, took on the role of teacher in this same course. In the first engagement, as an education researcher (PhD student at that point), I had an explicit intention to produce education research on student learning. In the second engagement, as a university teacher, my focus was towards the act of teaching focused towards my students’ learning. This comparison thus allows for an interesting comparison of education research, SOTL, and scholarly teaching, all conducted by the same person albeit at different points in time, in the same university course context. In the workshop, participants will be invited to consider their own work – both prior and future plans - and to deliberate on how they might position it. The workshop locates itself in a broader debate on what should be the priorities for teaching in higher education in South Africa, as well as a related debate on research foci in the field.
#16.
Factors Influencing First Year Student Usage of An Online Learning Community: Implications for Teaching Practice
(TLHEC10-039)

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**Theme:** 6. Researching Teaching & Learning Technologies Which Promote the Scholarship of Teaching & Learning

Technology usage and adoption within higher education is becoming widespread. A popular tool used within teaching delivery is an online learning community, defined as a hub that is aimed at creating synergy between the human component (learners & instructors) and that of the system (online course and learning system). Despite the popularity of such online learning communities, their success is dependent on full system utilization on the part of the user. This paper draws on an empirical investigation into the factors that influence the adoption of technology, particularly the adoption of an online learning community amongst a sample of 252 first year students within the Faculty of Management & Commerce at the University of Fort Hare in the Eastern Cape province of South Africa. A positivist approach adopting the survey design method was used hinging on the Technology Acceptance Model (TAM). The results of the study show a positive relationship to exist between online course design and student ratings of perceived usefulness and perceived interaction concerning the online learning community. However, ratings of perceived ease of the online learning community were found to be insignificant with regard to online course design. Concerning the online learning community’s interface design, a positive relationship was found with ratings of perceived ease of use but not with perceived interaction. Based on these findings, we as lecturers propose strategies in which online learning communities can be used to enhance teaching delivery especially amongst the first year cohort of students. Given challenges around large class sizes, online learning community may just be the panacea to deal with this. Our findings highlight those factors deemed important for this to happen.

**Keywords:** Online learning community; Technology Acceptance model; First year students

#17.
Gender Differences in Pre-service Teachers’ Motivation in Learning Biological Sciences
(TLHEC10-200)

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University of KwaZulu-Natal

**Theme:** 7. Responsive and Innovative Pedagogies in Higher Education

An understanding of students’ motivational levels continues to be a focus area in the advancement of teaching and learning in higher education. A gender sensitive focus on student motivation in science is significant because it enables formulation of gender responsive and innovative teaching strategies to optimise learning in and outside the lecture rooms. A mixed methods approach was used in this interpretive study. Data was collected through a survey questionnaires from a convenient sample of 22 female and 12 (n = 34) male Biological Sciences pre-service teachers in their second year of study at a South African university. Four participants were then purposively selected and interviewed. Statistical analysis of the questionnaires using SPSS and content analysis of open ended questions in the survey, as well as of interview transcripts, was conducted. In comparison to their female counterparts, males showed higher intrinsic and extrinsic motivation, personal determination, self-efficacy and the perception that what is being learned is relevant. An unexpected finding was that the males also showed higher levels of anxiety in assessments which was supported by a negative correlation between the aggregated of scores of the motivation categories and final marks in one Biological Sciences module. The disconnection between how the male students rated their motivational levels and their actual performance calls for remedial action programmes to assist them develop more productive and sustainable self-regulatory learning strategies.

**Keywords:** motivational levels; personal determination; self-efficacy
Historically, challenges faced by students with disabilities (SWDs) in accessing higher education institutions (HEIs) was attributed to limited public funding. The introduction of progressive funding models such as disability scholarships has served to widen access to, and participation in, higher education for SWDs. These successes notwithstanding, little attention has been paid to potential flaws in the underlying values informing how public disability funding is allocated to SWDs. Disability funding tends to be seen uncritically as a ‘good in itself’. In this paper, the funding mechanisms of selected developed and developing democratic countries including the United Kingdom, the United States, Canada, Australia, South Africa and India are critically examined to ascertain their contribution to enhancing access, equal participation, retention, success and equality of outcome for current and potential SWDs who are funding recipients. A critical review of the sample countries’ funding mechanisms governing SWDs in higher education and other relevant government documents; secondary academic literature on disability funding; online sources including University World News, University Affairs, newspaper articles, newsletters, literature from bodies such as the Organization for Economic Co-operation and Development (OECD), Disabled World, and Parliamentary Monitoring Group. Data were analysed using a theoretically derived qualitative content analysis in which the capabilities approach to equality was employed as theoretical lens. Barriers which place SWDs at a substantial educational disadvantage compared to their non-disabled peers include bureaucratization of application processes, cuts in disability funding, means-test requirements, minimal scholarships for supporting part-time and distance learning for SWDs and inadequate financial support to meet the day-to-day costs that arise as a result of disability.

**Keywords:** inclusive education; higher education disability funding; students with disabilities

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**University of KwaZulu-Natal's 10th Annual Teaching & Learning in Higher Education Conference**

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**#18.**

**Funding Mechanisms to Foster Inclusion in Higher Education Institutions for Students with Disabilities: A Critical Appraisal**

(TLHEC10-054)

D. Chiwandire
Rhodes University

**Theme:** 2. Funding Higher Education – New Challenges, Opportunities and Prospects

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**#19.**

**A Lecturer’s Experience of Implementing a Flipped Classroom to Improve Teaching and Learning: A Case Study of a Traditional University in the Eastern Cape**

(TLHEC10-179)

L. Cilliers & M. Drake
University of Fort Hare

**Theme:** 6. Researching Teaching & Learning Technologies Which Promote the Scholarship of Teaching & Learning

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Universities across the world are confronted with a variety of problems. One of these challenges include the massification of higher education as more students now have access to universities resulting in larger class sizes and lower throughput rates. Universities have traditionally made use of the face-to-face model of lectures and tutorials as a passive mode of course instruction and delivery. However, due to the massification of higher education, it has become very difficult for lecturers to communicate and collaborate with students. One of the ways that lecturers have attempted to overcome the problem of massification is to make use of technology to improve the delivery of course content. When lectures are made available online while the traditional class time is used to build conceptual understanding and cognitive skills among students, the approach is known as ‘flipping’ the classroom. Several studies have shown that this type of active classroom approach can perform better than traditional lectures when learning outcomes are compared. However, there is still a shortage of research that evaluates the effectiveness of the flipped classroom. There is also a very limited body of knowledge available regarding the implementation of this teaching approach in developing countries, and especially in South Africa. The purpose of this paper is then to investigate the lecturer’s experience of implementing a flipped classroom to improve teaching and learning in a South African university. The study makes use of a interpretivistic, qualitative research approach and constructivism to investigate the lecturer’s experience of implementing a flipped classroom. The flipped classroom was used in one course of the Management and Commerce Faculty at a traditional university in South Africa. An action research approach was used to change the teaching method in the class from the traditional lecture method to a flipped classroom. The research study was divided into three cycles: The first cycle involved 3 weeks of traditional lectures, the second cycle of 3 weeks introduced blended learning into the course, while the third cycle of 3 weeks changed the content delivery method to a flipped classroom. At the end of each cycle a formal evaluation (focus groups and interviews) was conducted with the students to inform the next cycle. Throughout the research process, the researcher also kept detailed field notes to as an account of the planning, execution and reflection for each class. The researcher also observed the behavior of the students during the various research cycles to provide a ‘snapshot’ of the classes. The results of the study suggest that the factors that will influence the researcher to make use of the flipped classroom include their own teaching pedagogy, the type and size of the class, their experience with technology and the support the
Involvement, Fun and Deep Learning: Unusual Suspects in Higher Education Pedagogy

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Theme: 7. Responsive and Innovative Pedagogies in Higher Education

There has been much debate on the use of games to teach economics, but little evidence of how students actually learn from these games. This prompted an investigation, in the form of a case study at the Durban University of Technology (DUT), using a qualitative approach to investigate how and why learning occurs. A sample of 1st year economics students, who had participated in a series of games on micro-economics topics, were selected to participate in the research. This entailed participation in focus group sessions and semi-structured interviews as part of the IQA (Interactive Qualitative Analysis) method. The IQA protocol enabled the development of a visual model to depict the various facets of student learning as well as their inter-relationship. The games emerged as key catalysts which placed ‘involvement and fun’ at the core of the learning process. The findings revealed that this led to a deeper conceptual understanding of the associated micro-economics topics. This has implications for economic education, as contemporary students clearly favouring active participation and involvement and recognize its centrality to an enhanced learning experience. This article offers insights for the development of alternative perspectives on economics curriculum and pedagogy, especially as it relates to the use of games in higher education teaching. It argues that in order to attain deeper conceptual understanding, the learning space needs to be designed and informed by active student engagement linked directly and explicitly to the knowledge and competences expected to be achieved.

Keywords: Games; Involvement/fun; deep learning
#21.
The “Z Men”: The Importance of Postcolonial “Mutations” of Subjectivity for Higher Education (TLHEC10-218)

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Theme: 7. Responsive and Innovative Pedagogies in Higher Education

There are widespread calls for innovation and entrepreneurship in South Africa today, especially around job creation. This paper asks, theoretically and reflectively, whether or not one of the main engines for innovation and original research is being elided in HE institutions today. This is taking place, on the one hand, through a neoliberal capitalist-inspired focus on the instrumentalisation of knowledge and, on the other, through the implicit prescription of an ethical perspective based partly on an Africanist ideological agenda. The engine in question is the subjectivities and subjective desires of students and how these are capable of producing highly inventive nexuses (intimate local knowledge systems) of association and meaning. The paper approaches subjectivity from a Lacanian perspective and re-reads Lacan’s “Kant with Sade” in the context of contemporary discourse surrounding HE in South Africa. It argues that in the first instance, HE is increasingly bracketing “being” in favour of “doing” in accordance with a global capitalist context that suggests subjective desire can be assumed - we all want what everybody else wants – or is irrelevant: “be” on your own time. In the extreme case, commodity capitalism does not even perceive itself as responding to desire as much as creating it and subjectivities/identities along with it. Skills are taught ostensibly as stand-alones that are not already embedded (in bed with?) a particular understanding of human purpose. In the second instance the paper asserts that seeking to instil an already-decided-upon ethical perspective also forecloses the creative potential of subjectivity and subjective desire. In South Africa this perspective largely draws upon assertions concerning a distinct African epistemology along the lines of Ubuntu. The discourse in this case is largely anti-colonial rather than postcolonial. The paper suggests that such discourse is more concerned with securing political and cultural capital than it is with actually responding to student subjectivity or prompting reflection. It tends to be paternalistic in tone and denies the existence of postmodern black African subjects, painting them as race traitors, dupes or basket cases. In HE and in HE research it would be far more productive to allow spaces in which the creative postcolonial bricolage or “mutations” of student subjectivity, subjective desire and identity could speak. Here skills would be free (in the sense of academic freedom) from a career direction or predetermined moral relevance. There are attendant dangers, however. The first is that student desire may have become too transfixed by global capitalism/romanticised African nationalism and emphasis may need to be actively placed on hybridity and liminality. The second concern is that what is produced in such a creative space should not automatically become fodder (like social media) for capitalist marketing machinery. While this space may allow for a degree of empowering entrepreneurship, it should also lead to the creative questioning of whether or not capitalism really has the capacity to answer all instances of human desire.

Keywords: Desire; Subjectivity; Research
This demand placed on generations of students is also an article of faith that what universities deal in is normative, rational and justifiable. Much has happened to normative rationality since its classic formulation in Kant’s Critiques. Today, the pragmatic heir of this project, Robert Brandom, would capture “analyse” and “discuss” within his notion of explication. The force of ‘critical’ is today understood as critical capacity not possessed by individuals but by groups and then only in accordance with particular social practices and alignments. Reason-giving, which is the heir to Kantian judgment or justification has come to be discussed as a rhetorical procedure, as a form of persuasion or marshalling consensus. The mantra of the examiner is in disarray and split across several different custodians in the academy who do not necessarily endorse one another. Can students be expected to submit to performances governed by the form of normative rationality when the academy itself cannot give a succinct account of this any longer? With critique, analysis, discussion and reason giving all orientated on various paths of their own, is there a perspective any longer from which to examine fairly and no longer submit students to demands we (in the academy) cannot coherently and consistently describe.

This paper contends that the default perspectives in which the academy locates itself today are either pragmatic or constructivist. These two broad positions stand in an antinomic relation to one another today. There are a number of factors that influence student academic performance in higher education institutions and the language of instruction is one of the factors that students have to cope with. South African schools practice different languages of instruction such as Afrikaans or English, while at the basic level of education students are taught in various languages depending on the province as well as the location of the schools. It is, in practice, difficult to adopt to changes in language of instructions as it is the case for students coming from basic level education to higher level education.

Therefore, this study examines whether bilingualism (IsiZulu and English) has a positive or negative effect on academic achievement of students at the University of KwaZulu-Natal. The study employs an OLS model with a sample size of 200 first year economics 101 students. Qualitative data was collected using a questionnaire and qualitative data was collected using the final exam mark. A between-group design with two conditions, comparing bilingual tutorials to monolingual tutorials was used. Descriptive analyses using frequencies and cross tabs and calculating the chi square test of significance were used to analyse the relationship between IsiZulu home language students attending English tutorials and IsiZulu home language students attending IsiZulu tutorials attendance and pass rates. An interpretive methodology was adopted for the qualitative data. Overall, the analyses show that the bilingual tutorials had a positive impact on students’ academic performance ceteris paribus.

**Keywords:** bilingual tutorials; IsiZulu; economics
#24.
Transformative Teaching Practice for Developing Students’ Self-Efficacy Beliefs (TLHEC10-035)
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**Theme:** 7. Responsive and Innovative Pedagogies in Higher Education

Transformative teaching practices have the potential to “transform” the students’ learning experience and support the development of strong self-efficacy beliefs. The development of employability skills is in turn strongly related to the individual student’s self-efficacy beliefs. In general, students are mostly motivated by being able to secure employment upon graduation and in the future. As educators it is our responsibility to consider how we can develop the self-efficacy beliefs of our students as well-established self-efficacy beliefs, lays the foundation to secure employment and to embrace continuous learning and self-development after leaving formal Higher Education. When considering a meta-analysis by the HEQC, audit reports evidenced meeting HEQC quality requirements but that pedagogical practices in South Africa have remained largely unchanged. This begs the question as to what should a pedagogy look like that develop strong self-efficacy beliefs in students to have the confidence to take on the challenges of social transformation now and in the future. When taking ownership of their own learning, students essentially take ownership in transforming their own circumstances, and thus have a greater potential to make a valid contribution to transforming and enhancing the societies in which they live. Based on the current literature and research, pedagogy that supports a student-centred approach and the development of self-efficacy has the expectation that academic practice should be centred on at least engaging the student and having research informed teaching, learning and assessment practices. This enables authentic learning experiences with embedded employability enhancement experiences. Therefore, the presentation will explore how current student-centred, research informed teaching and learning teaching practices can be “transformative” in the development of students’ self-efficacy and consequent employability skills. Consideration will be given to the research informing the suggested practices, with particular focus on research informed teaching and learning practices and consider examples of how this has been implemented in practice in the UK and then suggest options of how this can potentially be implemented in any Higher Education environment.

**Keywords:** transformative pedagogy; employability skills; student-centred

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#25.
The Influence of Students’ School Experience on Their Ability to Construct Notes, and Their Performance at University (TLHEC10-010)
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**Theme:** 7. Responsive and Innovative Pedagogies in Higher Education

Students are expected to take notes during class and to revise these notes after class. This paper aims to determine a) the extent to which the first-year students’ note-taking and note-making expectations, and note-making practice, was based on experiences at school, and b) the extent of the relationship between their notes and grades. Data was gathered via a questionnaire, individual interviews, and from the analysis of notes. The study established that students’ experiences at school a) determined their sense of ownership in creating personalised notes in their first year; b) it established their expectations of the assistance they should receive from their lecturer in constructing these notes; and c) it impacted on their note-taking and note-making practice when they enter University. By establishing the link between the transformation of the students’ class notes during the revision stage and their depth of learning, this study shows that note-making affected grades.

**Keywords:** undergraduate preparedness; academic performance; note-making
This paper is based on research that explores youth’s access to higher education as shaped by poverty and socio-cultural factors in Kogi state, Nigeria. It is occasioned by the absence of youth’s voices from the literature examining their access to higher education in Africa, particularly in the Nigerian context. By considering youth’s access to higher education beyond their rational choice, this study takes a Bourdieu’s theoretical arguments and the Lewis’ culture of poverty in explaining the influences on youth’s access to higher education as shaped within their socio-cultural milieu and other relational conditions such as poverty. Through an analysis of quantitative data involving 120 youth (respondents) in the survey; six focus groups (10 participants in each session) and 20 in-depth interviews making a total of 200 participants (100 females and 100 males), aged 18 to 28, the study illuminates the different social factors and contexts that were influential on youth’s access to higher education. Evidence from findings in the study has suggested that youth are confronted with various contradictory norms and social constrains with respect to their gender, economic status and relational positions in gaining access to higher education. For instance, contrary to the social and religious norms within the youth were constrained in many ways that were often in conflict with other expectations held in their religious communities. The study concludes that socio-cultural factors have a major impact on their educational pursuit. Accordingly, the study identifies a need for policies and discourses that are important for the workplace. Health care educators are aware of the limitations of didactic methods for developing critical thinking skills in students. Research on newer approaches grounded in constructivist principles are showing promise in teaching effectiveness. Team-based learning (TBL) is a small-group-based instructional strategy developed in the late 1970s by Larry Michaelsen for teaching a business course to a large class of students, but has since been rapidly employed in other disciplines. The purpose of TBL is to provide an environment where students can work in teams, experiencing the reality and benefits of functioning as part of a team. As a result of the sequence and structure of TBL, high levels of group cohesiveness and trust are developed among students. This presentation will explain the three-phase theoretical process of TBL. During the pre-class preparation, reading assignments are selected (textbooks and assignments) and teams are formed. Teams consist of five to seven students and remain intact for the whole semester or course. Teams should be heterogeneous in terms of skills and ability in order to promote the development of students. Phase two consists of assessment of students’ preparedness through individual and team tests. In the third phase, course concepts are applied in activities designed to enhance student understanding of the course content, to increase team cohesion and the development of skills. This presentation will include a selection of high quality research studies published in various health professions and countries, to highlight empirical evidence found when implementing TBL in higher education. Multiple learning outcomes occur in TBL, including enhancing students’ understanding of and participation in the problem-solving process, require students to exercise professionalism and communication skills, allows students to apply therapeutic principles, contributes positively to workgroup emotional intelligence, improve student performance, increase student engagement and satisfaction, promote teamwork, improved and deeper learning, promote self-development, and ensures better retention of learning. By the end of this presentation, the audience will have a broad understanding of how to prepare and conduct TBL in their classroom in order to move form passive teaching to active student development and learning. TBL provide students with valuable learning experiences that support their learning, assist in developing new language for talking about their learning and provide the opportunity to reflect on the goals and purposes of their education.
Teaching & Learning

The paper reports on a study into the use of audience response activities as an innovative tool for teaching and learning in higher education. The aim of the study was to analyse the use of audience response activities to promote active learning, and to map out strategies for the most effective use of audience response technology. This involved firstly, research into the pedagogical aspects of the integration of audience response technology into teaching and learning. Secondly, using activity theory as a lens, an analysis of audience response technology and the associated learning activities was undertaken. Data collection included observation of lessons, interviews conducted with lecturers and a survey of students. Lecturers from five different disciplines took part in the study: Chemistry, Biochemistry, Logistics, Mathematics Education and English Education. The student year groups included first, second, third and fourth year students, and class sizes ranged from 60 to 240 students. Third Generation Activity Theory was used to conduct the analysis, as it takes into account conflicts found in social practice, and includes the structure of the social world, as well as social transformation, in its analysis. More specifically, Engeström’s cycle of expansive learning was used to map the different learning actions and the corresponding contradictions. This enabled the researcher to investigate the interaction between two systems: those of the lecturer and of the students, and to identify contradictions that were generated as part of the activity. The study highlights several vital issues, most importantly that lecturers’ lesson planning is generally poor when they attempt to integrate new technology because of a lack of adequate consideration of their pedagogical approach. To ameliorate this, the study proposes an integrated framework for the development of audience response activities to promote active learning. This Integrated Question Based Framework for Audience Response Activities builds on instructivism and constructivism, and incorporates both process and design models in an integrated approach to the design of audience response activities. The study also highlights the importance of factors like feedback and motivation, which are important aspects to promote active learning. Another issue that was identified in this study is the lack of meta-level communication between lecturers and students, as far as the learning process is concerned. Explaining to learners how learning takes place and why a new pedagogical approach is being introduced is a crucial aspect of student motivation. Finally, the study concludes that the Integrated Question Based Framework with its focus on effective teaching and learning, and not on technology, can be used in any situation to promote active learning, even when technology is absent.

Keywords: audience response system; activity theory; active learning
Techno-Savvy Tertiary Learners’ Perceptions on the Use of Biometrics in Mauritius

(TLHEC10-229)

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Theme: 4. Institutional Research: Building an Evidence-Based Culture in Higher Education

This paper presents the general perception and acceptance of the new Biometrics National Identity card, among tertiary learners from Universities in Mauritius. Mauritius, a small island, is in the midst of adopting biometrics technology to substitute the traditional National Identity (ID) card. The National ID Card issued to Mauritian citizens, which dates back to 1986, is being replaced by a new smart ID Card through the Mauritius National Identity Scheme (MNIS), as commenced in October 2013. In the wake of this change, a campaign was carried out, for the public, before the implementation of MNIS project. Current statistics reveal that above 82% of the Mauritian population have already complied with MNIS, and registered for the new ID card, despite some initial opposing views and debates about its risks. The objective of this research is to gauge the perception and acceptance of the Biometrics ID card amongst the generation Y learners from Universities. Learners today are typically known as Gen Y students, and are clearly identified as techno savvy. Thus, this paper investigates these students’ views on the use of this biometrics technology for their ‘smart’ ID cards. The study adopts a mixed approach methodology, as the combination of both quantitative and qualitative data provides a more complete understanding of the research problem than either approach by itself. Data is obtained through a questionnaire, distributed to learners through online social media. Traditional tools will be adopted for data analysis. The results will present the target population’s view of Biometrics ID card. An estimated 600 learners will be sampled through this survey. While biometrics technologies for ID cards are perceived as acceptable and effective in improving security in overall management process, they may also be viewed as hard to implement. There is a possibility that respondents may react somewhat differently if presented with questions that would clearly present the issue that biometrics pose, specifically as a threat to personal privacy and ethical concerns. The results will help public to compare views and better understand how the Biometrics ID cards work. Moreover, the output of this study could be a source document that Government of Mauritius can assimilate, disseminate and use to formulate policies and a plan of action on how to improve the management of biometrics ID cards. It contributes to knowledge in field of biometrics systems compared to traditional methods and provides scope for new issues and data which may not have been previously surveyed by other researchers in Mauritius. This is the first study to explore tertiary learners’ perceptions and usage of Biometrics ID cards in Mauritius and in doing so it highlights the distinct lack of research in this area. Since, it focuses only on learner perceptions of Biometrics ID Cards locally, the context is limited. The study can be extended to a general survey in

Mauritius on MNIS project. A comparative study can be envisaged for future needs with another country which will engage into biometrics system technology for ID cards.

Keywords: Biometrics; learners’ perception; Privacy and Security

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**Theme:** 7. Responsive and Innovative Pedagogies in Higher Education

In any university environment there will be an expectation that student academic performance will vary, if for no other reason than statistical variation. However, at the far end of this continuum lie students with whose academic performance puts them at risk to not complete their chosen studies. UKZN has instituted a risk management system (colloquially known as the Stop Light System), through which students are identified and interventions provided. This study attempts to analyze the effect of this system, based on changes in performance following the date at which a risk assessment is given and communicated to the student. Further it explores the performance impact of students who have been provided ongoing academic counselling through the ADO program. Key in this analysis is the use of Large Data to provide a baseline for the analysis. While large data has been used heavily in fields such as advertising, it has had a relatively slow adoption within the more academic Human Sciences. This study also aims to explore the possibility of integrating qualitative data within a large data based study, a mixed methods approach which is relatively novel within the field of pedagogy.

**Keywords:** academic performance; ADO program; Large Data

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Preservice Science Teachers’ Understanding of Gases Using ICT via CMapTools (TLHEC10-256)

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**Theme:** 6. Researching Teaching & Learning Technologies Which Promote the Scholarship of Teaching & Learning

The purpose of the study was to explore preservice teachers’ (PST) conceptual understanding of gases while constructing concept maps (CM) in Gases in learning and teaching Physical Sciences. ICT free software CMapTools—an online electronic software programme was used. A deep understanding of Gases by PST and exploring strategies in learning to teach is essential for Physical Science teaching. We believe that there is limited research focusing on PSTs’ construction of concept maps using ICT in Chemistry. There is evidence that learning via concept maps can enhance the consolidation of knowledge, initiate and promote critical-thinking skills in Science. The research question focused was: What are pre-service science students’ understandings of Gases using CMapTools in constructing concept maps? The theoretical framework used to analyze the data in the study was constructivism. Concept mapping is an activity based on Ausubel’s meaningful learning in which the relationships between the main ideas in a body of knowledge are represented diagrammatically in the form of conceptual hubs linked by connections of arrows. Such hubs and connections serve as a learning tool to clarify the nature of those relationships. Twenty-three fourth-year preservice teachers were enrolled in a Physical Science method III. A questionnaire consisting of 22 statements was given to groups to determine the preservice students’ group conceptions of gases. The statements were documented misconceptions in the literature on gases and PST were asked to agree or disagree with the statements and to correct the statements if they view these statements as incorrect. They were requested to draw a holistic concept map for teaching gases as they were required to work on their computer using CMapTools. PST’s understandings were probed by the lecturers/researchers by asking critical questions. Concept map data for each group was captured. Colour coding was used to mark alternative conceptions of preservice teachers. The three researchers validated the list of conceptions. The results were analyzed by grouping common misconceptions and analyzing the links in the concept maps. The result indicate that there were several misconceptions identified such as collisions by gas particles may result in a change of atomic size, matter exists between gas atoms, hot air weighs less than cold air, heated air weighs more than cold air etc. Analysis of CM was also done by counting the number of propositions, links etc. Analysis of the seven group questionnaires and concept maps drawn via CMapTools revealed several distinct alternative (incorrect) conceptions in Gases and common in all seven groups of preservice teachers. Utilizing concept mapping through CMapTools helped to document, record and identify PST understanding of the important gas concepts in chemistry. The study provides a basis for further engagement with them regarding
conceptual change processes in Gases and using ICT. It has implications for how ICT teaching technologies and free and effective software can be used in Higher Education for cognitive development within content modules.

**Keywords:** Preservice teachers; Concept Maps; ICT

#33. Rural-Origin Health Professional Students’ Perceptions of a Support Programme Offered by the Umthombo Youth Development Foundation (TLHEC10-087)

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**Theme:** 6. Researching Teaching & Learning Technologies Which Promote the Scholarship of Teaching & Learning

Staffing of rural health care facilities is a challenge with literature supporting the selection and training of rural origin students. The Umthombo Youth Development Foundation (UYDF) scholarship scheme supports rural students to train as health care professionals and offers a unique support programme. This programme has not been evaluated and this study sought UYDF-supported students’ perceptions of the programme. The aim is to assess students perceptions of UYDF support programme. The study design was observational and descriptive. Participants were students supported by UYDF and data were collected by a questionnaire with a Likert scale to assess perceptions of various aspects of the support programme. Students perceptions around the UYDF support programme were generally positive with initial orientation and information sharing perceived as useful. Some respondents did not perceive value in holding discussions around English proficiency. Support required appeared to diminish with increasing year of study. A comprehensive, proactive compulsory support system which provides both academic and social support was perceived as useful by UYDF students. Further research is required around aspects such as encouraging English proficiency. In future, the support programme could prioritize students in the early years of their study.

**Keywords:** Student support; rural; health care professional training
E-learning is a commonplace in nursing and healthcare professional education, and generally the importance of Information and Communication Technology (ICT) and the Internet in tertiary education is recognized. The entry visa for e-learning is a computer and an Internet connection. The Government of Rwanda views Information and Communication Technology (ICT) as a key tool for transforming the economy, with the education sector playing an important role in developing the necessary human resources. As a result, both nurse educators and nursing students are being expected to incorporate and use digital technologies to facilitate learning in undergraduate nursing curricula. The use of such technologies in education is known as E-learning. Aim: The aim of this paper is to analyse the utilisation of e-learning in selected nursing and midwifery school campuses in Rwanda. A convergence parallel mixed method was use as recommended by Creswell (2007). For quantitative survey, a total of 275 participants responded to the questionnaires, and for qualitative approach, a total number of 40 participants were purposively selected. Quantitative data was analysed using SPSS 23, and for qualitative data, thematic analysis was used. The finding from this study indicated that participants were ready and eager to embrace e-learning in nursing education due to a number of benefits they reported such e-learning being a student centred approach, being a blended learning method, and a tool for fast track production of nursing workforce taking into consideration the history of Rwanda. However, it was found that a number of challenges were hindering a proper implementation such as: resource constraints, insufficient ICT literacy, challenges with the language of instruction, generational age gap, lack of policies regarding e-learning, resistance to change, issues related to Moodle accessibility. The implementation of e-learning platform in Rwandan nursing and midwifery schools has brought positive impact to nursing education. However some challenges have been reported, thus recommendations were made for the future sustainability of e-learning and they include: continuous support and capacity building for nurse educators and nursing students in ICT, recruitment of more qualified teachers, provision of incentives to nurses educators and ICT managers, increasing internet speed, planning a refresher course in English to assist the nursing students who have difficulties with the language of instruction. An exploratory study to analyse factors that influence students to join nursing and their intentions to stay in the profession upon graduation is recommended, and this inquiry can assist in devising strategies on the selection process, and guidance of nursing schools to guide mature entry in e-learning.

**Keywords:** blended learning, distance learning, e-learning in nursing, ICT in education in Rwanda, web-based learning

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Digitalization of Nursing Education Through E-learning: A Lesson to Learn from Bridging the Gap of Digital Divide in Rwanda

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**Theme: 6. Researching Teaching & Learning Technologies Which Promote the Scholarship of Teaching & Learning**

In recent years, Rwanda has made a remarkable progress in integration ICT in various sectors, particularly in education. Based on Rwanda Vision 2020, digitalisation is being achieved through putting fibre optic cables around the country, and even in remote areas, increasing number telecommunication of companies offering internet services, e-health, e-education through one laptop per child in elementary school, and recently one laptop per student in tertiary education, just to name few those are strong examples of the digitalisation of Rwanda. This paper aims at digitalisation of nursing education through e-learning and lessons to learn from bridging the gap of digital divide in Rwanda. Exploratory qualitative method was used. Three campuses from a selected school in Rwanda participated in this study. The participants included nursing students, and educators, and ICT managers. Purposive sampling was used, and a total number of 40 participants participated in this study (18 nurse educators, 17 nursing students 2 ICT managers, and 3 members’ participants in a focus group discussion). Data was collected using a semi structured interview guide for in-depth interview and for the focus group. Learning Management System and document analysis were also used to get more data. Thematic analysis was used to analyse the data. The results from this study indicate that in 2012 Nursing Education was not left behind in the digitalisation of the country, and e-learning was introduced to increase the quality of nursing education, reduce nursing shortage and increase the quantity of nurses in health sector, increase quality care promote the culture of lifelong learning, and enhance transferable skills via the use ICT. However, a number of factors classified under digital divide have emerged from this study to have an impact on e-learning. The following categories and themes emerged from this study: Category one: Digital divide in nursing education through e-learning: (i) Insufficient ICT literacy (computer/internet/ Moodle); (ii) Generational age of nursing students; (iii) Language of instruction barrier; (iv) Poor accessibility to internet/ LMS (due to limited speed, cost and electrical power disruption, limited electrification of the rural areas); Category two: Bridging the gap of digital divide: (i) Political commitment; (ii) Collaboration with Partners; (iii) Early socialization to IT; (iv) Emotionally matured students. Through the country is classified as a developing country, through partnership with Higher Learning Institutions from developed countries and other stakeholders, the results indicated that there is a positive progression toward filling the gap of digital divide in the area of education in particular e-learning in nursing education, and E-Rwanda is one of these initiatives.

**Keywords:** E-learning in Nursing Education; Digitalisation/ Digital divide; E-Rwanda
Theme: 7. Responsive and Innovative Pedagogies in Higher Education

This paper addresses ways in which innovation in the co-curriculum can inform teaching on gender-based violence in higher education. It reports on action research undertaken in the context of a foundational module at Durban University of Technology (DUT). The Cornerstone module is a course taken by all 1st year students on new programmes of the university, in 2016 around 2000 students. Given the nature of DUT’s intake, students are drawn largely from rural families. Cornerstone aims to achieve critical reflection on the self in the context of social diversity and inequality. Since the course deals with the self and thus touches on personal experience, there is particular attention to creating conditions of safety in lectures and tutorials. The module includes a section on gender, in which issues of gender-based violence emerge as areas of particular contention. As a project within a research partnership, Networks for change and wellbeing, a group of young women Girls against sexual violence was formed, drawn initially from students from the 2015 offering of Cornerstone. A group of young male students then formed a group Amajita that has a strong emphasis on men’s experience of and response to gender-based violence. In 2016 it was decided that the two groups would present their work to classes of Cornerstone, thus drawing co-curricular initiatives into the formal curriculum. The research objective of the paper is to identify the issues that took assess critically the impact of this intervention in the module. It draws for its data on the classroom discussions that took place in four classes, as well as discussions both within the two groups and in meetings of the groups. Data analysis is guided by Kumashiro’s theoretical framework for anti-oppressive education, while the conceptual framework draws on Galtung. One finding is that the intervention provided the opportunity for contestations over issues of power and gender, with some male students taking defensive positions while women and other male students articulated positions that reject patriarchy and assert the need for men to rethink their gender relationships. Issues of intersectionality also arose, with a focus on the relationship of gender to race. One aspect of the contestations has been the development of leaders focused on issues of power and gender, who then led the campus dialogues on rape and rape culture. The intervention had the effect of stimulating discussion of gendered experience, in turn provoking disquiet amongst academics outside the course over the ethics of dealing with actual experience. The issues raised have raised major questions over what constitutes transformation in the curricula of higher education in a context of high levels of violence.

Keywords: Gender-based violence; pedagogy; transformation

The Contribution of Critical Friends and Collage Portraits in Developing Responsive and Innovative Pedagogies in Higher Education (TLHEC10-220)

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Durban University of Technology

Theme: 7. Responsive and Innovative Pedagogies in Higher Education

I am a teacher educator of Accounting Education at a University of Technology. I am undertaking a doctoral self-study on my role modelling as a teacher educator of Accounting Pedagogy. The purpose of my study is to investigate what I role model for my students, why I role model in a particular way and thereby better understand my teaching practice so I can develop as a more productive role model. I developed a collage portrait to help me understand what I implicitly role model for my students. A collage portrait is a research tool that allows the researcher to cut images using texts from data collection sources, newspaper articles and photographs and paste them together on a canvas to form a whole. By blending images and text, collage portraits provide authentic and innovative ways of analyzing and reflecting on data. One of the defining features of self-study research is the emphasis on purposefully seeking out colleagues who will provide provocative questions and feedback that goes beyond technical advice that enhances self-reflection and makes ones thinking explicit. Therefore I shared my work on a collage portrait with my critical friends and through rich discussions and insights they helped me step outside myself and gain new perspectives and dig deeper beneath the surface of the meanings that the collage portrait revealed to me. I found that critical friends’ dialogue provided me with new findings, new actions and new questions to explore the collage portrait. This created feelings of openness and learning together where I found myself reframing and reframing my understandings of the collage portrait in relation to my pedagogical explorations because I listened to the voice of others. This is a key component of self-study research. I found that the physical process of creating the collage portrait was very meaningful for me because certain themes emerged that bridged my past history with the immediate. Piecing together fragments of my experiences brought richer and deeper understandings of who I am personally and professionally. The critical friends’ views helped me to better understand how my own views were being played out in my pedagogical practice; they assisted me to clarify and test ideas and to generate a deeper understanding of my pedagogy within a safe place. To respond to the call for authentic, innovate and responsive pedagogies in higher education, the valuable and enriching experiences I gained from my explorations with collage portrait and critical friends will guide me to compliment my traditional methods of teaching with this teaching strategy as a responsive and innovative pedagogy.

Keywords: Collage portraits; critical friends; self-reflection
Community-based learning is rooted in the theories of constructivism and is a form of experiential education with a collaborative teaching and learning strategy designed to promote academic enhancement, personal growth, and social responsibility. Students render relevant and meaningful services at certain service providers and in community settings that provide experiences related to academic contents (credit bearing and curricular). Through guided reflection, students examine their experiences critically and determine whether they have attained the learning outcomes, thus enhancing the quality of both their learning and their service, and helps foster social responsibility. "In essence, community engagement is about civic responsibility and citizenship, and linking the best of research and teaching skills of the staff and students to the specific needs of this diverse community, thus giving effect to the ‘public good’ of universities. In turn, student life and the attributes developed while students are at university are enriched through their service and engagement. Service learning has a reciprocal process whereby students participate in an organised service activity that meets identified community needs and in turn learn from the community. Ideally, both the community and students gain from the activity. Successful service learning necessitates the identification of real community needs, structured experiences whereby students grow and learn from it and an assessment of outcomes and completion of the experiences. This paper will report on a compulsory module that must be passed in order to successfully become a B Admin: Option (Public Administration) graduate. These students are all adult learners and employed in various positions, mostly in the South African government. It is expected from students to compile a number of tasks, including the full management of a project within the disability sector. Students need to keep a reflection journal detailing personal growth in respect of the competencies required. The course follows a constructivist approach which focuses on knowledge, skills, and attitudes of learners, the process of learning, as well as on the final outcome/result/product of learning. Students are expected to take full responsibility and ownership of the learning process whilst the module leader is the facilitator of the learning process. There is critical need for capacity building, skills development, and strengthening of competencies. This paper will report on the teaching methodology used well as provide an overview of the reflective experiences of the students in the disability sector as a learning space and environment. Universities need to develop constructive service learning programs to foster cooperation and partnerships between higher education institutions and sectors of the wider society in order to give effect to all spheres of development.

**Keywords:** Community-based learning; Teaching methodology; Reflection
Teacher Transformation Through Curriculum Innovating in Environment and Sustainability Education

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Theme: 7. Responsive and Innovative Pedagogies in Higher Education

Teachers of Life Sciences and Natural Sciences are expected to adapt and to implement curriculum changes that are designed by the Department of Basic Education. The new Curriculum and Assessment Policy Statement (CAPS) for Life Sciences and Natural Sciences stipulates that teachers are expected to integrate environment and sustainability content knowledge in their science teaching. In order for environment Transformation and sustainability content knowledge to be integrated into the science curriculum, a specialised multi-pronged approach is necessary. Teachers work in diverse contexts and need to be innovative in order to teach science which is relevant to the lives of learners. We argue that effective professional development incorporating innovation can enable implementation of environment and sustainability education meaningfully. We drew on theoretical constructs from Rogan’s Zone of Feasible Innovation (ZFI) and Vygotsky’s Zone of Proximal Development (ZPD) to engage with teacher learning in curriculum innovating. Teachers were required to examine their contexts, and consider teacher factors, learner factors and the support from school management, in order to determine the type of innovation which was feasible in their schools. They networked with other schools, and learned from their peers’ presentation of projects related to curriculum innovating. In this way, teacher knowledge was constructed first socially (inter-psychological learning), and later appropriated into personal cognitive frameworks (intra-psychological learning). This interpretive study, which was underpinned by a qualitative methodological paradigm, involved ten practicing science teachers who were purposively selected to form the research sample. These participants studied a module in the B.Ed Honours programme, which required them to engage with the idea and practice of curriculum innovating. Multiple data generation strategies were employed but for the purpose of this presentation, we will focus on participants’ lesson plans, reflective journals and interview transcripts. Content analysis of these data sets resulted in the emergence of four themes, namely, the value of outside support in science teachers’ capacity to innovate, the importance of effective professional development in the transformation of the teaching approaches of science teachers, the value of focusing on context when innovating in environment and sustainability education, and the factors which motivate teachers to sustain innovative practices. The study provides insights into how a professional development module can provide teachers with strategies for critically appraising their context, thinking deeply about the type of support they need and how this can be leveraged, planning lessons in order to prepare for curriculum innovating, engaging more knowledgeable others to critique their lesson plans, and implementing new strategies and reflecting on their experiences. The participants reported feeling renewed, refreshed, re-invigorated and intrinsically motivated to experiment with new ideas in order to engage in curriculum innovating. Recommendations from this study will be significant to curriculum designers, department officials involved in teacher professional development, teacher education institutions and school teachers.

Keywords: Curriculum innovating; Transformation; Professional development
Foundations programmes are defined as special programmes for students whose prior learning has been adversely affected by educational or social inequality. The history of these programmes, in South African higher education, can be traced back to the early 1980s, which was a time of economic hardship and educational disparity. These programmes were implemented with the goal of bringing students up to par with their peers in first year as is the fundamental to students' success at university. In this study, focus group interviews were conducted with 21 of 39 students (53%) enrolled in the BA Hons (AAC) programme to gain insight into student perceptions about the programme they were enrolled for. This was to determine their engagement in the programme and how this could be improved taking into consideration the results and further technologies the learners proposed. A biographical questionnaire provided information on students’ age, place of residence, computer literacy skills as well as their experience and use of technology, such as smartphones, tablets, computers/laptops and their use of the internet. The recorded focus group interviews were transcribed verbatim and the data transferred into an Excel spreadsheet for data analysis. A deductive qualitative data analysis was done through mutual agreement by three researchers focusing on the five elements of the Engagement Framework as categories. Apart from these five categories, another category was identified namely “external”, highlighting challenges such as poor internet access or loadshedding as contributing factors in students’ engagement of
their online learning. The full results will be discussed during the paper presentation. The outcome of this study could inform developers of hybrid learning programmes in similar adult learning contexts in terms of various aspects to be considered for curriculum design.

**Keywords:** adult learner; hybrid learning; engagement framework

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**Cultural Music in and out of Pre-schools in Zambia: Perspectives for Education Research and Practice (TLHEC10-251)**

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University of Zambia

**Theme:** 10. Indigenous Knowledge and Indigenous Knowledge Systems as Pathways to Integrating Higher Education Research and Curricula Development in a Global Era

In an effort to counter the Western dominance on curricula and schooling practices in Africa, discourse on Africanising the curriculum through embrace of Indigenous Knowledge Systems (IKS) has often taken extreme positions of complete rejection of other knowledge. In as much as these standpoints are justified by the urgency to salvage IKS and propagate their epistemological right on the global front, they may in the long run equally promote polarisation of knowledge whilst negating the transformation that such knowledge forms have undergone.

This paper presents research on cultural play songs as IKS found in and out preschools. In arguing for an eclectic approach to research, it draws on both the African education philosophy and the socio-cultural theory as theoretical frameworks. Data collection strategies for the study included two forms of observation; non participant and complete participant supplemented by video recordings and interviews. The study involved 30 teachers in 20 pre-schools and 18 children and an expert in Zambian folk and children’s songs. The paper argues that what is assumed to be a purely Western theory – the socio-cultural learning theory – does have significant meeting points with the African theory of education. The meeting points are suggested as those emphasising cultural contextualising, enculturation and socialisation and collaboration in learning. The paper recognises the integration of Western and African views of learning as significant in informing a rich and varied view of knowledge and for enhancing interaction between knowledge emanating from the West and Africa in curriculum development. The study has important implications for higher education research and practice.

**Keywords:** Indigenous; Knowledge; culture
### #44.
**Creating a Pedagogically Useful List of Multiword Combinations in Applied Linguistics Research Articles: Combining a Corpus-Based Approach and Qualitative Analysis**

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University of Warwick  

**Theme:** 7. Responsive and Innovative Pedagogies in Higher Education

Currently, there is increasing pressure on university lecturers and graduate students to publish their research work in prestigious journals. Although often used in research articles, multiword sequences seem to be challenging for novice writers and graduate students struggling to make their manuscripts convincing and interesting for potential readers in their research communities. This study reports on the frequency and use of multiword combinations in applied linguistics research articles. Using corpus linguistics methodology in combination with qualitative analysis, the present study identified multiword combinations frequently co-occurring words in research articles, their structural types, and pragmatic functions in contextual environments. To begin with, two, three, and four-word n-grams were extracted from a corpus of the internal section of 50 research articles indexed in the TCI database (equating to approximately 214,543 running words) to identify the suitable n-grams to focus on. Based on their semantic and grammatical relations, three-grams appeared to be pedagogically interesting, and thus were further investigated. Five instructors were invited to select the strings identified, contributing to a pedagogically useful list of 289 multiword combinations. The results of the structural analysis of these strings indicated that the majority of writers employed amount of noun-based structures most, followed by other structures, verb-based and prepositional-based structures. Meanwhile, functional analysis clearly revealed that the use of certain phraseological patterns is strongly associated with the communicative functions of a given section of the texts. Pedagogically, this study sheds light on language use in this particular writing research genre and provides more evidence-based instructional practices, especially advanced language courses targeted at scholarly reading and writing.

**Keywords:** writing for publication; phraseological patterns; corpus linguistics

### #45.
**Bridging the Gap of What it Takes to Adapt to a Digital Teaching and Learning Environment**

**LM. Khoza; KS. Sikonkwane & BB. Monnanyane**  
University of Stellenbosch  

**Theme:** 6. Researching Teaching & Learning Technologies Which Promote the Scholarship of Teaching & Learning

It is assumed that first year of university is a critical year that provides the foundation for subsequent years of study and persistence. There is body of knowledge on first year students' adjustment in making transition from high school to university environment. However, there is a gap in knowledge of the adjustment of students from the use of learning technologies in the military units to the use of such technologies for teaching and learning in higher education. This paper investigates the extent to which students from four the Arms of Service in the South African Department of Defence adapt to technology learning environments at the Faculty of Military Science. Questionnaire survey and interviews were used to collect data from first and second year students. Preliminary findings reveal that students perceive the use of learning technologies for teaching and learning and is almost the same to how they are used for communication purposes in their military units. In students' opinion, the use of learning technologies suit the teachers' way of teaching. To them digital learning environment appears to replicate military discipline, in that it ensures that students acquire knowledge that enables rapid response to command and less on the way they prefer to learn. The digital learning environment appears problematic to students whose expectations have been set by military, where they are taught to think and act jointly and their training and daily responsibilities are group oriented.

**Keywords:** adapt; digital; technologies
#46.
Introducing a Learning Management System to First Year University Students Through Training: A Case of the University of the Free State. (TLHEC10-213)
YDK. Khumalo & M. Thukane, M.
University of the Free State

Theme: 7. Responsive and Innovative Pedagogies in Higher Education

A Learning management systems (LMS) is at the heart of technological innovation in teaching and learning at the University of the Free State, similar to many higher educational institutions around the globe. LMS's offers a number of advantages for education such as affordability, accessibility and participation. At the UFS the use of a LMS has facilitated e-learning as well as provided opportunities for lecturers to manage and deliver content with ease. Previous studies indicate that students are underprepared when it comes to the use of LMS's. Many of the students who enter university for the first time have never heard of or used an LMS before, it is therefore essential to train students on how to use the system, seeing that it has become one of the main learning platforms used by the University of the Free State. Currently, the University provides LMS (Blackboard) training to students at the beginning of each academic year. These training sessions are targeted mainly at first year students and it is aimed at familiarising the students with basic knowledge of Blackboard in order to carry out their daily learning tasks. The purpose of this paper is twofold: The paper first highlights the practical benefits of Blackboard training in various faculties. Secondly, it reports on how the lack of basic computer literacy skills hamper the successful absorption of the skills transferred in the Basic Blackboard training. The findings of the study informs the Curriculum Delivery and Innovation focus area on ways to improve future training sessions by employing innovative methods that ensure students benefit sufficiently.

Keywords: Learning Management System; Computer Literacy; Training

#47.
Developing Career Identities Using Real-World Assessment Tools (TLHEC10-238)
JD. Kiley
Cape Peninsula University of Technology

Theme: 7. Responsive and Innovative Pedagogies in Higher Education

Higher Education Institutions (HEI’s) aim to produce employable graduates, an outcome enhanced through course content, and the pedagogic processes used to deliver this. With most students being in late adolescence/early adulthood, an understanding of the nature and challenges of this stage of psycho-social development, is important in improving this process. Erik Erikson’s theory of ego-identity formation is valuable in understanding the students’ stage of psycho-social development. Ego-identity comprises consolidating childhood skills, beliefs, and identifications into a coherent identity. A key task is creating a career identity in which the individual links his own motivation, interests and competencies with acceptable career roles. The greater the access to various sources of identity capital, the more successful the negotiation of this process. The Cape Peninsula University of Technology’s Bachelor of Technology in Human Resource Management/Development (HRM/D) is a vocational programme aimed at equipping students with competencies required to master HRM/D practices in the workplace. The subject Advanced Management of Training endeavours to develop student’s career identities by providing them with the essential identity capital to enhance their employability. A concurrent challenge is that the programme has in excess of 200 registered students. Assessment processes are used to clarify the student’s career identity and provide them with tangible products that contribute to their employability. The assessment strategy requires students to developed three products, namely: (i) a Personal Development Plan (PDPs) necessitating the use of various resources to examine motivational drives, interests and competencies, culminating in a structured career development plan with measurable goals; (ii) an edited, professionally presented video based on the key hi-lights of the PDP in which the student ‘sells’ him/herself to prospective employers; and (iii) a comprehensive, well-structured LinkedIn profile to enable them to network professionally and find employment opportunities.

Keywords: Employability; Career identity; Assessment
#48.
Reflective Tasks and Their Role in Changing Practice and Perceptions Amongst Staff: An Analysis of Responses to a Certificate in the Scholarship of Teaching and Learning (TLHEC10-159)

RN. Kizito & J. Clarence-Fincham
Nelson Mandela Metropolitan University

Theme: 9. Alternative Paradigms, and Emerging Directions in the Scholarship of Teaching and Learning in Higher Education

This presentation is based on a research study which examines the lived experiences of participants in a Scholarship of Teaching and Learning certificate (SoTLC) programme at a South African University – Nelson Mandela Metropolitan University. It begins with a brief overview of debates about the nature of SoTL which includes an exploration of a social justice informed approach whose aim is to achieve participatory parity for staff engaged in this type of professional development activity. It also draws from emancipatory approaches routed in transformative learning theory and critical theory. The study’s aim is to examine how academics who have attended the SoTLC programme perceive the reflective tasks and whether or not these tasks have contributed to changed teaching practice. The primary source of data is a set of interviews with members of the 2014 -2015 cohort as well as some present participants of the programme. A content analysis of the interview transcripts was undertaken in order to identify emerging themes, to evaluate the current tasks and to make recommendations for future courses. The results will offer important insights for understanding how reflective tasks manifest in a SoTLC based professional development program and how an improved future design of these reflective tasks can help improve university teaching practice.

Keywords: Reflective tasks; Professional development; University teaching practice

#49.
Design and Re-design of an On-line Discussion Forum for Informal Learning of Aspects of Pedagogical Content Knowledge in Foundation Phase Student Teachers (TLHEC10-173)

L. Kok
University of Zululand

Theme: 6. Researching Teaching & Learning Technologies Which Promote the Scholarship of Teaching & Learning

The purpose of the paper is to describe the possibilities of informal learning through on-line discussion forums and engage with fellow researchers with similar interests in student learning through group discussions. The current Bachelor of Education (Foundation Phase) programme at the University of Zululand (UNIZULU) includes a module which focuses on how children learn science concepts. The study, based on Design Based Research principles was conducted at UNIZULU. The participants in the study were the 2015 second year foundation phase (FP) student teachers. One of the objectives of the study is to describe FP student teacher learning about how science concepts develop in young children. I argue that how student teachers view child learning will be part of their pedagogical content knowledge (PCK) (a branch of teacher knowledge as described by Shulman, 1986). Because FP student teachers do not typically have science schooling backgrounds, it was necessary to design a learning environment that would develop the FP student teachers’ interest in science and engage them in learning about how young children learn science. Informal learning places special emphasis on providing entrée to and sustained engagement with science. The informal learning environment I designed was an on-line discussion forum in which the student teachers discussed their understanding of science concepts developed by science activities, what they thought young children knew about these science concepts and what the misconceptions could be about the science concepts. The transcripts captured the participants’ understanding of science concepts and conceptual development in young children. A model proposed by Ziegler for meaning making in an on-line discussion was used for discourse analysis. It was found that at least one student in most discussion groups reach the third level of meaning making of the four level meaning making model of Ziegler et al. This means that students not only write their own views (level 1), but engage with the views of others (level 2), and start to theorise about the information discussed (level 3). No groups made meaning to the fourth level, which refers to challenging own and others assumptions. Only the most highly engaged group formulated an assumption about the science concept under discussion. The ability to make assumptions appears to be the ‘missing link’ to the highest level of meaning making. On-line discussions can be used to facilitate discussion about aspects of PCK, but must be designed in such a way that student teachers become fully engaged in the discussion as it is through engagement that higher levels of meaning making will be reached. Findings from this study will be used to re-design the on-line learning space which aims to increase the engagement of students in discussion groups, and
Recreation and Reinterpretation at the Point of Infidelity: Using Theory and Principles from Adaptation Studies in the Adaptation of F2F Materials for Online Study
(TLHEC10-055)

B. Kooyman
Australian College of Physical Education

Theme: 7. Responsive and Innovative Pedagogies in Higher Education

Australia’s student population has expanded in recent years due to the introduction of policies to widen participation at tertiary institutions, opening higher education to a broader public. External/online modes of study help this shifting demographic to manage and accommodate their studies alongside their pre-existing professional, cultural and familial responsibilities. Moreover, the growing pervasiveness of technology in students’ lives makes studying online a natural fit. However, the transformation of materials from face to face (F2F) to online delivery is frequently an afterthought; often academics are not intimately acquainted with online teaching pedagogy or possess fairly basic technological skill sets, meaning online materials can be either carbon copies or poor translations of F2F content, with little consideration for the needs of online students. Adaptation studies is a field of scholarship in the Humanities analysing the adaptation of texts from medium to medium, most commonly from literature to film. In grappling with the transferral of literary works to film, scholars grapple with issues of media-specificity, the needs of creators and consumers across different media, and the complex processes involved in adapting materials from one medium to another. In earlier years, scholars in the field adhered, as Thomas Leitch has noted, to conservative models of analysis that perpetuated the notion that adaptations should be faithful and show fidelity to their source material. However, recent scholarship has shifted from this preoccupation. For example, Linda Hutcheon asserts that adaptation must entail both re-interpretation and re-creation, while Julie Sanders suggests that infidelity to the source is a virtue, enabling more creative and productive acts of adaptation to occur. The pragmatic approaches of current scholars in Adaptation studies provide models of good practice for academics tasked with adapting their materials for online delivery. Robert Stam contends of adaptations from literature to film that fundamental differences between literature, a single-track medium, and film, a multi-track medium, make literal adaptation both impractical and undesirable. This same principle applies to translating teaching materials from single-track F2F to multi-track online formats. In addition, many other working principles adopted by contemporary Adaptation scholars can be utilised in developing pragmatic guidelines and frameworks for academics adapting courses from one medium to another. This presentation argues that lessons derived from Adaptation studies can be applied to online teaching and learning pedagogy, that transferrals of courses from F2F to online modes should be treated as “adaptations”, and that academics should adopt key theories and principles of Adaptation studies in their adaptation processes. Following a brief overview of relevant literature and theory, the presentation identifies some key operating principles that...
can be applied in the adaptation of courses for online cohorts. It then discusses the adaptation of some pre-existing F2F course content for an online cohort, chronicling the application of adaptation theory in the re-development of this content and measuring its success.

**Keywords:** Adaptation; Online study; Adaptation studies

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#51.
**Teaching Creativity and Collaboration to Online Learners** (TLHEC10-247)

J. Kutaka Kennedy
National University

**Theme:** 7. Responsive and Innovative Pedagogies in Higher Education

Today’s world requires a new type of workforce, one in which critical thinking, communication, collaboration and creativity are expected entry level skills. Considered 21st century skills by the National Education Association and the National Research Council, students too often are not given explicit instruction or practice on these skills. Education today cannot adhere to the stagnant, recipient-based transfer of knowledge model where experts lecture novices like in the past. In 2012 creativity and collaboration have been identified by numerous professional organizations like the National Education Association and the National Research Council as critical 21st century skills. Creative collaborations can provide THE competitive in today’s global market to produce innovations like the iPad, virtual reality headsets, and self-driving cars. Institutions of higher education must be at the forefront of preparing teachers who in turn will educate current and future students in these 21st Century skills. Teacher-educators, no longer merely content experts, now must model, nurture, promote and try to teach these more nebulous skills of creativity and collaboration to prepare the next generation of classroom teachers. This presentation will describe ways that creativity and collaboration can be built into an online class as well as review methods of individual and group assessment.

**Keywords:** creativity; collaboration; online education
Exploring of Registered General Nursing Students’ Perceptions on Soft Skills Training in a Selected Nursing Institution in Northern Ghana (TLHEC10-192)

L. Laari & B. Dube
University of KwaZulu-Natal

Theme: 1. Relevance of the Curriculum in Higher Education

The quality of nursing care rendered today, is markedly reducing and the amount of time spent with the patient listening and explaining issues concerning their conditions are gradually diminishing. The therapeutic touch and the listening ear of the nurse are no longer accessible to the patient. What do students think can be done that would affect the quality of nursing care positively? Understanding what non-technical skills or Soft Skills are and their relevance for health care practitioners has become a new area of consideration. Although recent literature has highlighted the necessity of introducing non-technical skills training and assessment within medical education, nursing education is still to fully embrace these skills training. The question that may be posed is: what is the students’ perception on Soft Skills training in promoting quality nursing care in Ghana? The aim of the study was to explore the Registered General Nursing Students’ understanding of the Concept Soft Skills and to get their perception on the need for Soft Skills Training to promote quality nursing care. A quantitative research design with descriptive and explorative strategies with systematic random sampling techniques was used. Eighty-five (85) Registered General Nursing Students were interviewed after Permission to conduct the study was requested and obtained from the University of KwaZulu-Natal Ethics Committee. A questionnaire was administered, that sought for information including, understanding the concept Soft Skills, the need for Soft Skills training to promote quality nursing care and students perception regarding communication and listening skills, behaviour and attitudes among others. A statistical package for the social sciences version 23 was used to analysis the data that indicated that Majority (68.8%) of the respondents had an understanding of the concept Soft Skills and did agree with the definition of Soft Skills. They furthermore agreed that Soft Skills should be part of the training that student nurses receive during their professional training, because more than half (55%) agreed that teaching Soft Skills in the classroom would help them to care well. The study revealed student nurses agreed that there is a need for registered general nurses students to be trained in soft skills and that this will enhance the job performances in the clinical environment and improve the way they communicate with their clients. Regarding participants’ perception of attitudes and behaviours, verbal communication and listening skills, respondents had positive perception, however, there was insufficient knowledge regarding what a nurse will need as far as these concepts are concerned.

Keywords: Soft Skills; Quality Nursing Care; Training, Attitudes, Communication and Listening Skills

Perceptions of Senior Academic Instructors to the Scholarship of Teaching and Learning in Anatomy (TLHEC10-178)

L. Lazarus; R. Sookrajh & KS. Satyapal
University of KwaZulu-Natal

Theme: 7. Responsive and Innovative Pedagogies in Higher Education

Reflecting on teaching is frequently cited as a fundamental practice for personal and professional development. There is on-going debate about the perceived decline in standards of anatomical knowledge of medical students and postgraduate trainees. Educational research into the scholarship of teaching and learning anatomy includes engaging in discipline specific literature on teaching, reflecting on individual teaching methods and communicating these findings to peers. This paper is designed to be included in Theme 7: Responsive and innovative pedagogies in Higher Education track of the forthcoming conference. The aim of this paper is to formally assess the opinions of senior anatomy instructors regarding the state of anatomical knowledge at their respective institutions. An open ended questionnaire was devised consisting of eight direct questions seeking opinions on anatomy teaching, knowledge, and potential educational developments and general thoughts on the teaching of anatomy to medical students. These were distributed to senior anatomy Faculty (identified by the author by their affiliation with the Anatomical Society of Southern Africa) based at national medical schools within the country. A number of key themes emerged. Most senior faculty felt that the standard of medical education at their respective institutions was “good.” However, emphasis was also placed on the “quality of teaching” incorporating clinical scenarios. There were also indications that staff are split into those that are keen to do research and those that are happy to provide teaching to medical students as their primary function. Several “challenges” were also highlighted such as time constraints within the medical curriculum, the lack of cadavers to reinforce knowledge and gain depth perception and lack of appropriately qualified staff. Recommendations included fostering partnerships with both clinicians and medical scientists into the anatomy curriculum thus improving teaching and research. In addition newer technologies such as 3D printing and radiological imaging can be utilized to supplement student knowledge.

Keywords: educational research; teaching and learning anatomy; pedagogy in higher education
The focus on the decolonisation of knowledge is an event of major significance and is receiving attention – in South Africa and internationally. In this talk I argue that cognitive justice must be accompanied by social justice, and at a transformative, not merely ameliorative level. Nancy Fraser’s account of social justice and participatory parity, being based on three interrelated domains: recognition, distribution and representation – are all relevant and are evident in students’ calls for the decolonisation of the curriculum. I discuss the hegemonisation of knowledge which is referred to as colonisation, since the hegemonisation of knowledge has occurred partly or largely in sync with colonisation, and with power relations of the developed ‘North’ v the ‘undeveloped’ ‘South’. The hegemonisation of knowledge serves the powerful. It is fundamental to the way we understand the world, is entrenched and often taken for granted and unnoticed by the dominant. We should be cautious about seeing knowledges as divided according to one binary opposition eg settler-non settler, as they are interconnected and even within dominant societies there are more and less dominant knowledges. Knowledges should be seen as existing along a horizontal plane, rather than within a hierarchy of value.

I survey some of the consequences of the global hegemonisation of knowledge, in particular that of the alienation of knowledge and knowledge practices amongst scholars and students. I list the benefits that accrue to knowledge production when we attempt to decolonise knowledge, before arguing specifically for the decolonisation of knowledge in the curriculum – in order to facilitate learning and to create a critical mass of informed citizenry. I explore different approaches to decolonisation and cognitive justice, which pose interesting strategies for curriculum design. However, there are pedagogic challenges that cannot be ignored. A challenge facing educationists is that one cannot just assume that non-hegemonic knowledge systems will be more accessible to students. There are many boundaries around knowledge systems which render them less accessible to students. These include those posed by class divisions; divisions of expert v. non-expert; culture; school or institutional v. popular; youth v. age; settler v. non-settler; exposed to travel and other cultures v. not so exposed. Some of the implications of this discussion for pedagogy involve questions such as: how to encourage students to learn from the unknown, which in some instances does require material and other opportunities? How is a lecturer responsible for creating opportunities for students to learn whilst remaining a ‘learner’ and not a gatekeeper or transmitter of one received wisdom? How can good practice principles can be generated and shared? How can we learn from collaboration across settings and disciplines? To return to the work of Fraser, what can educationists can do to promote transformative rather than ameliorative approaches to social justice?
e) Interest in implementing the CLASSE. The workshop will move from a brief orientation session on using data, student engagement, the CLASSE as well as expectations and outcomes. The format will then engage the group in discussions on CLASSE data and intervention strategies. We aim to have an informal discussion as well as practical application through participatory methods, where participants could explain the strategies they would choose to implement and draw from their own experiences to raise and discuss issues pertaining to practical implementation of data. Since we aim to use participatory methods, a group of approximately 20 to 30 participants would be manageable.

**Keywords:** Student Engagement; CLASSE; Data-driven interventions

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**#56.**

**The Learning Conference: Postgraduate Supervision as a Scholarship of Teaching and Learning (TLHEC10-119)**

I. Louw
University of Pretoria

**Theme:** 8. Re-envisioning SoTL for the Student-Centred Research University

Academic conferences, like all conferences, draw together people and their ideas. They create the venue for people who attend to ‘confer’ with each other – to consult, to compare opinions, to discuss and deliberate their ideas. In this way conferences provide the setting for learning and knowledge creation among all who participate. Yet while all academic conferences create the venue – in person or electronically – I argue that some do not engender a culture that encourages participants to continue their engagement to complete a publishable product. To maximise opportunities for learning and knowledge creation through publication, postgraduate supervisors need to design thoughtful programmes and support for their postgraduate students to secure participation that will potentially lead to publication. This type of supportive culture readies the conference soil so that all who attend can participate actively and constructively with each other, both at conference and subsequently through networks formed and in publishing revised conference papers. This participatory culture is the hallmark of what have been referred to as a ‘learning conference’. Part of the scholarship of teaching and learning for a postgraduate supervisor means that you should empower your students to become proper scholars that present and publish their research. The culture and practice of Action Learning and Action Research (ALAR) are fully consistent with the culture that sustains learning at conferences. The 2015 ALARA conference was seen as an opportunity to evaluate the effectiveness of the learning conference cycles by taking ten postgraduate students through the process. ALAR advocates and researchers are aware that they need to deal collaboratively with a complicated and messy reality, whatever is under their research lens, and they always have an eye to collective remedial action. In this paper I therefore explore how the principles of ALAR have worked in the last world congress of the international ALAR Association (ALARA) such that postgraduate students were taken through a learning conference cycle as part of their supervisor’s scholarship of teaching and learning. The supervisor incorporated me as an academic developer to co-design the learning conference experience. In this qualitative case study I report on the journey the postgraduate students had by briefly touching on the characteristics of a ‘learning conference’ and models used to support them during all three the phases. During the pre-conference phase when they prepared their presentations, we build up their confidence. During the 2015 ALARA conference they attended and presented and shared deep reflections daily. During the post-conference phase they received support to prepare their papers for publication. I will share data from their reflections at every phase as well as ours. The lessons learnt by us, the presenters, and the reflections from the participants on their growth as researchers will occupy centre stage.
The introduction of the Curriculum Assessment Policy Statement Natural sciences and technology education for the intermediate phase in South African highlights the intrinsically intertwined relationship between natural sciences and technology education. The illumination of the innate relationship between science and technology together with the integration of natural sciences and technology education into a single learning area in the intermediate phase has foisted great pedagogical demands on teacher educators who train pre-service teachers for the foundation and intermediate phase. The integration of natural sciences and technology education confirms that science concepts are an essential part of the knowledge required to teach technology education. Teacher educators are expected to be au fait with both natural sciences and technology education content knowledge as well as the pedagogical knowledge as learners are expected to apply science concepts during the design process when they solve technological problems. To succeed, they need conceptual understanding of science concepts and the ability to recognise the abstract rules that apply to new situations. For the teaching and learning of science concepts to occur, teaching, learning and assessment of these concepts must occur. Often teacher educators are ill-equipped in terms of pedagogical context knowledge to teach an integrated-Natural sciences and technology learning area. This paper reports on a study that sought to explore lecturers’ experiences of teaching the integrated natural sciences and technology education (EDNS 310) module at a selected university. The research questions that framed this study were: What strategies do lecturers’ use to integrate Natural Sciences and Technology? And What are lecturers’ experiences of teaching integrated Natural Sciences and Technology? For the purpose of this paper, lectures experiences embraces aspects such as, their qualifications, training received, teaching experiences, attitudes, feelings and their understanding of the knowledge of Natural Sciences and Technology as well as their practices. A case study approach was used to collect qualitative data from three lecturers teaching the EDNS 310 module. Purposive sampling methods was used to collect data via questionnaires and focus group discussion. Data collected was subjected to content analysis. My findings reveal that past teaching experience and qualification specialisation or a lack there off impacts how and the degree to which natural sciences is integrated with technology education. It therefore indicates that even practitioners at higher levels of education do need some developmental training on how to teach integrated curriculum in order to equip pre-service teachers to implement the curriculum effectively.
This paper reported on how the Teaching and Learning Development Centre of a university used design-based research methodology to conceptualise and implement an academic staff development programme for new academics at a university of technology. Design-based research (DBR) refers to research that is specifically undertaken to support the strategic design and development of educational programmes or interventions. This approach revolves around the designing, testing and refining of an educational intervention. Design-based research is an important methodology for understanding how, when, and why educational innovations work in practice. The academic staff development programme, that we designed, was made possible through funding from the Teaching Development Grant (TDG) and was conceptualised by the Teaching and Learning Development Centre. It is provisional because, in line with the research approach that was adopted, the programme is on trial experiment and its configuration might change in accordance with emerging realities that come to the fore during the various phases of its implementation. This programme is part of the university’s broader goal of trying to professionalise academics as university teachers so as to influence the students learning outcomes in the institution. This paper examines three key aspects of the programme namely, the preliminary phase, the teaching experiment and the retrospective analysis. The preliminary phase is the stage in which the problem identification takes place. The problem that this research sought to address relates to the unsatisfactory academic performance of the majority of the students in the institution. We therefore hypothesized that the problem could be dealt with by professionalising new academics through engagement in an academic staff development programme. The teaching experiment phase afforded researchers and participants in the programme the opportunity to test and refine the proposed intervention and the design principles upon which it was based. The teaching experiment phase revolved around the testing of the new academics professional development programme. This phase created a platform for researchers and academics in the programme to experiment with various activities and instructional strategies such as case studies, observations, discussions and portfolio building. The teaching experiment phase was followed by the retrospective analysis stage in which the research team looked back and tried to give a trustworthy account of the teaching/learning process that had taken place. This is a reflective stage in which we had to ask the question “How did it go?” As it was practically impossible for this question to be answered sufficiently by any one person, we had to engage the views of many stakeholders in the process. We administered a questionnaire and focus group discussions to collect data from participants that helped us to evaluate the programme and its implementation. The study established that this initiative, while necessary, was not sufficient on its own to make an impact of the magnitude that is required given the enormity of the problem of student low throughput rate. An eclectic approach to the problem is therefore recommended.

Keywords: academic staff; higher education; pedagogy
Bullying is common in secondary schools and it is a psychological or physical violence that forms a pattern of coercive and controlling behaviour on the victims, which may have a long-time effect in them if not addressed earlier enough. The commonest type of bullying is general name calling, spreading rumours about one, verbal attacks, to more serious acts like hitting with fist or pulling one's hair, slapping, kicking, pushing, grabbing, threatening with or attacking someone with any type of weapon, and any other actions that keep others uncomfortable or humiliated in schools. Evidence exists of considerable problems with bullying and bullied children in secondary schools. What has not been considered enough is how these acts of bullying can cause long-lasting effects for the victims. The psychological damage and pain caused by bullying can become almost indelible and affect ones future. This paper using 50 undergraduate students of Michael Okpara University of Agriculture, Umudike, who reported anxiety, depression, and low self-esteem as result of bullies they suffered in secondary school, examines the effects on their present endeavours, the tertiary education. The participants were randomly selected from four colleges of the university. The study indicates that bullying experienced in secondary school could adversely affect the self-esteem and performance of the victim at tertiary education level and suggests how to deal with such menace much earlier in order to improve learning. For this conference, the presenter would use selected cases to demonstrate how early intervention and proper management resulted in improvement of the condition of some victims. That is, proper and timely management leads to reversing negative emotions and depressive states for higher academic achievements. Secondly, the audience would also see how lack of assistance and mismanagement made situation far worse (chronic low-grade depression becoming a way of life).

**Keywords:** Bullying in school; Higher education; Improve learning
#61.
Exploring the Cognitive Complexity of Assessment Activities in Higher Education Accounting Texts (TLHEC10-145)

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Theme: 1. Relevance of the Curriculum in Higher Education

Driven by requirements set by professional bodies, the accounting curriculum in most higher education institutions demands high cognitive attributes from exiting graduates. Many studies have argued that assessment shapes learning. Thus, the development of students’ cognitive competence can be inferred by analysing the assessment tasks in students’ textbooks. However, few studies in the developed world have considered this issue. Furthermore, most used Bloom’s taxonomy somewhat narrowly as their sole analytical lens. In recent times, this taxonomy has been extended to add new dimension which includes the knowledge dimension which takes into consideration metacognitive skills. This paper reports on a study that used a complex framework, a hybrid of Bloom’s revised taxonomy and the Leong’s levels of difficulty to analyse the cognitive demand of assessment tasks in selected level one Financial Accounting textbooks used in South Africa and Nigeria. It further explores the potential differences that might exist in the way cognitive demand is portrayed in assessment tasks in the two books. The article offers new insight to professional bodies that expect high cognitive attributes among graduates; accounting academics who seek to enhance their pedagogical engagement; and the authors / publishers who review / publish textbooks. It also suggests an alternative approach to assessing cognitive skills, specifically within the discipline of accounting to ensure a closer fit between training and the demands of the workplace.

Keywords: Accounting curriculum; Assessment task in textbooks; cognitive competence

#62.
Peer Assisted Learning Programme: Supporting At-Risk Students at the Mechanical Engineering Department at Walter Sisulu University, Butterworth (TLHEC10-122)

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Walter Sisulu University

Theme: 7. Responsive and Innovative Pedagogies in Higher Education

This study was designed to establish if a Peer-Assisted Learning (PAL) programme could support at-risk students in the Mechanical Engineering Department at Walter Sisulu University (WSU), Butterworth. The majority of the students who enroll at the WSU are not equipped with the necessary academic skills and capacity to cope with the offered programmes. The PAL programme aims to develop the knowledge and skills of at-risk students in Mechanical Engineering through a peer support programme. The programme is student-driven in that senior students assist junior students with their academic work. The programme is designed to encourage collaborative and cooperative learning approaches during group sessions, as well as active engagement to support peer learning. In this qualitative case study, data collection was undertaken through open-ended questionnaires of 20 first-year at-risk students and interviews with 8 senior student PAL leaders to elicit their perceptions and experiences of the PAL. Questionnaires were analysed using a thematic approach. Findings indicated that at-risk students and PAL leaders (senior students) had positive perceptions of the effectiveness of this PAL programme. They reported that the PAL programme enhances their knowledge and skills. Aspects mentioned were improved ability to calculate problem statements, better time management, and improved communication, problem-solving and presentation skills. They were more confident in dealing with Mechanical Engineering courses, achieved better marks for assignments, and felt they understood things better during PAL sessions than in a lecture.

In conclusion, the study suggests that the PAL programme also creates a safe, comfortable and conducive environment for first-year students’ learning. While the programme was implemented to assist first year students, senior student PAL leaders claimed that their knowledge and skills also developed.

By enlisting more senior peers as PAL leaders for at-risk students, both junior and senior students reported learning benefits. This study is significant because it reduces student dropout and increases throughput rate through PAL programme support. The study contributes to our understanding of aspects of peer-assisted learning for first year Mechanical Engineering students.

Keywords: peer assisted learning; peer assisted learning leaders; at-risk student
Graduate Writing Across Disciplines: The Case of a University of Technology
(TLHEC10-115)

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Theme: 5. The Intellectualisation of African Languages in Higher Education Through the SOTL

Writing skill for graduate students is often neglected and research often focus on the development and support of undergraduate students. This paper seeks to address issues around writing in the discipline for university of technology students in a multidisciplinary setting. More often than not, graduate students are expected to be expert academic writers of a variety of specialized genres such as academic articles, conference proposals and papers and sometimes grant applications. Niven attributes problems of under preparedness of students for writing at university to the wide gap between writing expectations and demands between school and university. Chokwe further states that in South Africa there are growing concerns about the high levels of poor student writing in schools and higher education. Three departments from three faculties were targeted in order to ascertain student writing development of postgraduate students in the report writing skill which is of paramount importance in preparing students for the workplace. Writing models will be explored however in constructing a writing framework for the purposes of this research paper; I intend to draw from the sociocultural theory. According to Duncheon and Tierney this perspective does not deny the importance of cognitive processes, but situates skill development within the broader social, cultural and institutional contexts that shape student’ acquisition of academic literacy. Sociocultural theory is especially useful for investigating the writing development of students from non-dominant cultural backgrounds. The study is located at a University of Technology in Durban in KwaZulu Natal Province; the student population is approximately 10 500, 99.6% students of African origin predominantly. The writing framework for postsecondary education also formed basis for framing the study. In support of the intellectualization of African Languages in Higher Education; proposed strategies for addressing academic writing challenges of graduate students in a UoT environment proved fruitful.

Keywords: academic writing; discipline-specific terminology; UoT graduate student

Towards Cognitive Justice in Science Teacher Training in a South African University
(TLHEC10-108)

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University of Johannesburg

Theme: 1. Relevance of the Curriculum in Higher Education

The prevalence of cognitive justice in teaching and learning is regarded as one of the most profound ideals that education should address. In countries such as South Africa which have a history of racial segregation and injustice, cognitive justice should be promoted in higher education to address these past issues. For teachers to be familiar to cognitive justice during their teaching, they should have been familiarized to it during their training. In one South African university, effort has been placed on how science teacher training may foster cognitive justice. This qualitative study aims to explore black pre-service science teachers’ perceptions of cognitive justice in their training. These students are enrolled for a Bachelor of Education degree specialising in Physical Science Education. There are higher incidences of failure in their science core modules. Semi-structured interviews and focus group interviews were used to collect the data. The interview data were then analysed using content analysis. The pre-service science teachers indicated that their training disregards cognitive justice to the extent of being discriminatory. The researcher concluded that the teacher training system in the university disregards cognitive justice, irrespective of the policy’s stipulations.

Keywords: Cognitive justice; Pre-service science teachers; Training system and policy
Towards Integrating Indigenous Knowledge (IK) in Life Science Teacher Training in a South African University (TLHEC10-109)

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University of Johannesburg

**Theme:** 10. Indigenous Knowledge and Indigenous Knowledge Systems as Pathways to Integrating Higher Education research and curricula development in a Global Era

The relevance of science teacher training in South Africa has been under debate. One of the contentious issues is the failure of the training to equip the pre-service teachers with Indigenous Knowledge (IK), skills and attitudes. Indigenous knowledge is regarded as the local knowledge that is unique to a given culture or society which the local people use as a source of their survival. Topics and issues related to IK are not well-taught in South Africa. Consequently, the learners’ understanding of IK is superficial. This would make Life sciences not very grounded in the day-to-day lives of the learners. The aim of this qualitative study is to explore pre-service Life Science teachers’ perceptions and understanding of Indigenous Knowledge (IK). The study used critical discourse analysis (CDA) as the theoretical framework. The use of CDA is characterised by the researcher’s use of their judgments and comments based on their analysis of the conversations they would have held with the participants. Semi-structured interviews and focus group interviews were used to collect the data. The interview data were then analysed using content analysis. The results indicate that pre-service Life Science teachers regard IK as secondary knowledge that they do not need to regard very highly for their teaching. The pre-service teachers expressed the view that they regard both their core Life Science modules and their Teaching Methodology modules in education as disregarding the integration of IK. The researcher concluded there is need to restructure the Life Science teacher training modules so as to include IK modules.

**Keywords:** Indigenous Knowledge (IK); Critical Discourse Analysis (CDA); secondary knowledge

Key to Success or Just Another Hurdle? Assessing the Impact of Curriculum Reform in Managerial Accounting on Subsequent Student Performance (TLHEC10-052)

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University of KwaZulu-Natal

**Theme:** 1. Relevance of the Curriculum in Higher Education

Higher education in South Africa is characterised by high dropout rates. This is particularly true of Accounting-based programmes where under-prepared students and increasing content volumes are seen to drive low pass rates. Recently, a premiere South African university undertook a reform within the managerial accounting and financial management curriculum by creating a semester long introductory module in the second year of study. This module was intended to bridge the knowledge gap between second and third year modules as well as provide students with contextual knowledge before being introduced to the topics for the first time in their third year of study. This study investigates the influence of this second year introductory module on student success in the third year managerial accounting module. Multiple regression is performed on a sample of 81 students based on the Pietermaritzburg campus who studied the introductory module in 2013 and the third year module in 2014. The study finds that students who did not take the introductory module were less likely to write the final third year exam. However, for those students who did write the third year exam, if they had not taken the introductory module, they were likely to outperform those who had taken the introductory module.

**Keywords:** Accounting education; prerequisites; student performance
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#67.
"Don't Steal My Words; They Are Already Stolen": Strategies to Avoid Plagiarism at University (TLHEC10-113)

R. Marumo & M. Stander
University of the Free State

Theme: 7. Responsive and Innovative Pedagogies in Higher Education

Students on one of the rural university campuses in South Africa experience difficulties with reading comprehension and academic writing in English and subsequently resort to plagiarism as a coping mechanism. The best strategies to avoid plagiarism are paraphrasing and summarising, but due to low English language proficiency, our students struggle to apply these strategies. The majority of these students are from rural areas and do not have English as a home language. They test low in the National Benchmark literacy test and is an obstacle in their academic development and achievement of success. The Admission Point scores of approximately 80% of these students are too low to enter a mainstream degree programme and therefore they are enrolled in a four-year extended programme. Only 0.9% of first-year students show proficient academic literacy to be successful in degree studies on our campus. Therefore, the Academic Facilitation Sessions (AFS) and the Write Site (WS), as part of the Centre for Teaching and Learning on our campus, embarked on a research project in conjunction with the Department of Political Science. This project will be conducted in the form of a scaffolding process and interventions to contribute to students’ academic development. These interventions are done through consultations, tutorials and relevant exercises to address academic writing and plagiarism that is a problem particularly prevalent to our students. Students are obliged to sign a pledge of no plagiarism when they submit essays, but it is evident that many students don’t understand what plagiarism is or how to avoid it. During the interventions, students are guided on the basics of essay writing, focusing on paragraphs, summarising and paraphrasing. We also introduced a less familiar strategy, namely translation. Students translate a passage into their home language and then rewrite it into English. The aim is to assist the students in understanding what they read first and then paraphrase or summarise it in their own words in English. The students did a pre-test and a post-test of the same paragraph; one at the start of the semester and one at the end. Interventions were done in between, for example, online quizzes on referencing and plagiarism, online tutorials on plagiarism, summarising and translation exercises as well as consultations through the WS. Turnitin, as part of our Learning Management System called Blackboard, was used to detect plagiarism and Respondus was used to do the online quizzes and tutorials. The results were compared to see whether these interventions play a role in avoiding plagiarism. This paper will report on the findings and consider whether these strategies are sufficient to assist students in academic writing. This project examines the efforts of students in order to enhance our teaching methods.

Keywords: plagiarism; scaffolding; interventions

#68.
Student Evaluations of Available Academic and Non-Academic Support Programmes in the Faculty of Education at a University of Technology (TLHEC10-069)

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Cape Peninsula University of Technology

Theme: 3. Collaborative Quality Enhancement for Systemic Change in Higher Education: Prospects and Possibilities

Graduation and pass rates in the South African Higher Education sector remain low despite the availability of a number of interventions that have been put in place to support student learning and to improve the quality of teaching and learning. Most recently, the CHE’s Quality Enhancement Project (QEP) was established to drive quality issues in Higher Education. This report is part of a larger Teaching Advancement at University (TAU) research project which investigated the perceived effectiveness of academic support and development programmes that are available in a Faculty of Education at a South African University of Technology to support and enhance student learning. The participants are B.Ed (GET and FET) lecturers and second year students. The sample included second year at-risk students enrolled in high-impact subjects from the second year cohort. The case study employed survey questionnaires, focus group discussions and semi-structured interviews to collect data from students and lecturers. This paper reports on findings generated from the student questionnaires and focus group discussions only. The data revealed that most of the students were aware of their learning needs and available faculty-level academic support and development programmes aimed at addressing the identified learning needs. The students also identified interventions that the faculty could have put in place to address learning needs that they felt had been overlooked or were not being addressed adequately. Although the faculty offered a variety of useful, important and value-added academic and non-academic support programmes, there was uneven provisioning of these in the two phases. Some evaluations of externally- provided interventions were not positive and raised questions about the continuity, quality assurance and long-term sustainability of these programmes. The induction of ‘external’ service providers at faculty-level and institutionally- was identified as crucially important to ensure a seamless integration of their services with internally-provided academic support. Not all the programmes were fully operational or communicated to students effectively and this impacted on their sustainability. The study findings suggest that an integrated academic support and development system that is provided collaboratively- by faculty staff and external providers, can be beneficial to student learning. It would have to take into account the student profiles and needs, curriculum and delivery standards, impact and outcome indicators to ensure that students have a stimulating learning experience that promotes ‘epistemological access.’ Most importantly, the interventions should be sustained throughout the programmes, monitored and evaluated regularly for quality assurance purposes, responsiveness and effectiveness. These
findings would be valuable for academics, support staff and providers located outside of the faculty, e.g. part-time support staff, Teaching-Learning Centres, and Quality Assurance Units.

**Keywords:** student evaluations; academic and non-academic support programmes; student retention and success, Quality Enhancement Project, graduation and pass rates.

**Theme:** 1. Relevance of the Curriculum in Higher Education

Education is a mechanism to empower graduates with the knowledge and skills relevant to pursue the career paths of their choice and to cope with the workplace demands. Graduate surveys enable education institutions to plan their programmes strategically in response to market demands. Literature however reflects growing concerns over the mismatch between graduates produced and workplace demands. Nursing education programmes in particular are designed to respond to the national health priorities, population and health care systems needs. This study was aimed at tracking the professional and academic career paths of Bachelor of Nursing graduates from the School of Nursing, the 2010-2014 cohort. A quantitative and descriptive approach was adopted in this study. The sample comprised of 126 graduates who could be reached using the contact details that were available from the graduates’ database. Data was analyzed using descriptive statistics. The findings revealed that the majority of the graduates were working in the public sector, with a few working in the private sectors, research institutes and non-governmental organizations. Their work experience was predominantly in Primary Health Care settings, Maternal and Child Health Care Units, HIV management Units and Research Institutes. In terms of furthering their studies a number of them had additional qualifications in leadership and management, primary health care nursing, advanced midwifery, public health and community health nursing, with a few having a specialization in Trauma and Critical Care Nursing. In this presentation I will discuss the career paths of Bachelor of Nursing graduates with the aim of flagging the career paths that the BN graduates follow with the aim to determine if they are responding to the key health priorities of South Africa. To analyze if the trends may be associated with the BN programme they undertake which has primary health care as an underpinning philosophy and strong community based learning orientation

**Keywords:** Graduate Tracking; Career Paths; Professional Nurses
#70. 
International Students Experiences of Lecturing in the University in KwaZulu-Natal
(TLHEC10-222)

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University of KwaZulu-Natal

**Theme:** 6. Researching Teaching & Learning Technologies Which Promote the Scholarship of Teaching & Learning

Cloete, Sheppard and Bailey argue that between 2000 and 2015 the percentage of International postgraduate students in South Africa has increased by over 370 percent and most of these students are involved in tutoring or lecturing in the institutions in which they find themselves. Hesa confirms this by arguing that international students are allowed to work for a maximum of 20 hours weekly. Literature reveals that research has been done on international students experiences of learning and adapting to the new environment but relatively nothing has been done to their experiences of lecturing in South African universities. This paper steps in therefore to explore their experiences of teaching in a South African university. Using the qualitative approach to research and the interpretivist paradigm, the paper purposively samples 10 international students and explores their experiences using semi-structured interviews. Keys findings from the data analysed using building theory indicated that international students experience a lot of challenges lecturing in South African universities ranging from language, communication barriers, behavioral patterns, context and dressing. Also their wealth of experience in terms of travel, cultural contact and diversity goes a long way to enhance the teaching and learning experience. The paper concludes that international students lecturing in South African universities require vital support (both human and material) to meet the demands of their task. Secondly, it advocates for training and skills development workshops to help lecturers in general deal with diversity in their lecture rooms.

**Keywords:** lecturing; international students; experiences

#71. 
The Question of Quality in a South African School of Education: A Spider-Web Analysis
(TLHEC10-221)

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University of KwaZulu-Natal

**Theme:** 3. Collaborative Quality Enhancement for Systemic Change in Higher Education: Prospects and Possibilities

In recent times educational institutions in South Africa have faced a lot of challenges which has affected the quality of education offered. The constant student demonstrations and the constant call for “FEES MUST FALL” has made matters worse. These has led to the reduction of lecture time as well as the impact of the lectures. This brings to bear questions about the quality of teaching and learning in the face of such challenges, especially when the second cycle quality assurance framework developed by the Council on Higher Education (CHE), which speaks more particularly to teaching and learning is concerned. This paper therefore explores the quality of education along the lines of the framework in a school of education using the qualitative case study approach to research. The data was generated using semi-structured interviews with ten students and focused group discussions with five lecturers. The data generated was made sense of through the lens of the curriculum spider. To ascertain the quality of education at such levels and make recommendations on how to improve quality. The study reveals that quality is gradually becoming an illusion as classes are overcrowded, lecturers are few, assessment is undidactic, and no resources are available. The paper concludes with an articulation of quality guidelines as postulate by the CHE and stake holders within the school of education (students and lecturers) and recommends restructuring and transformation of the system.

**Keywords:** quality; education; spider web
Towards More Effective Quality Enhancement Approaches: Lessons Learnt from Effects of Institutional Audits on Three Universities (TLHEC10-017)

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University of Pretoria

Theme: 3. Collaborative Quality Enhancement for Systemic Change in Higher Education: Prospects and Possibilities

This paper presents lessons learnt from the effect of institutional audits that were conducted by the HEQC as a basis for developing sound quality enhancement approaches. The HEQC’s institutional audits were conducted from 2004 to 2011 and focused on institutional policies, systems, procedures, strategies and resources for managing the three core functions of teaching and learning, research, and community engagement as well as academic support services. Due to the HEQC’s seemingly superficial mechanisms for monitoring progress made by higher education institutions in the implementation of their improvement plans, this study conducted an in-depth investigation of three universities so as to get an indication of the effect of institutional audits on a variety of areas at South African universities. A case study design was therefore the most appropriate research design for this investigation. The universities were taken from each of the three South African public higher education institutional types to ensure a wide variation of coverage, and thus comprised a traditional university, a comprehensive university, and a university of technology. Interviews were held with senior management, academic staff and students at each of the three universities. The study’s findings indicate that the HEQC’s institutional audits have had largely positive but limited and variable effect on relevant aspects of teaching and learning, and support functions across different types of higher education institutions. Contextual factors seem to have played a role in the efficacy with which the universities respond to the HEQC institutional audit recommendations. Some of the recommendations based on the study’s findings are that the HEQC should put in place more robust follow-up and monitoring mechanisms which include compulsory follow-up site visits pertaining to institutional audits and that further research should be conducted on a similar topic covering more institutions and a wider spread of participants at each institution. This study thus proposes that more substantive follow-up mechanisms on the progress made by the institutions since the audits were conducted should be strategically used to provide solid bases for engagements on the Quality Engagement Project.

Keywords: Institutional audits; Quality enhancements; Universities

Explanatory and Predictor Variables for Entrepreneurship Interest Among Tertiary Students in Swaziland (TLHEC10-123)

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Theme: 8. Re-envisioning SoTL for the Student-Centred Research University

In the difficult times when educated university graduates cannot find jobs, self-employment and entrepreneurship have been identified as alternatives to the challenges of unemployment. Tertiary institutions in Swaziland, with a strong support of Government and business enterprises, have introduced the teaching of entrepreneurship education (both theory and entrepreneurial projects). Therefore, this study determined factors influencing entrepreneurship interest among tertiary students. The population comprised tertiary students who have taken an entrepreneurship course(s). Stratified random sampling was employed to ensure representativeness of the institutions. For data analysis the study employed correlation and regression analysis to identify the influence of independent variables on the dependent variable, and also ascertained the rate of change in the independent variable. Findings revealed that self-employability qualities of respondent students influence their interest the greatest, followed by expectations, intentions, and age of students. These were explanatory and predictor variables for entrepreneurship interest among tertiary students. Subsequently the following recommendations were drawn: (a) Tertiary institutions should place emphasis on inculcating self-employability qualities of successful entrepreneur in the teaching; some of these are more of a skill and thus can be taught particularly in the entrepreneurial project component (Practicum) of the course; (b) Students expectations to acquire the ability to of changing a business idea into reality or actin whiles at college/university must be supported by tertiary institutions in the teaching and practice (entrepreneurial projects); (c) Students with intentions to be entrepreneurs should be afforded mentorship, and start-up capital be mobilized through partnerships/collaborations with business enterprises, and financial institutions.

Keywords: Entrepreneurship interest; Tertiary institutions; Self-employment
SOTL as a Means Towards Establishing a Socially Just Pedagogy (TLHEC10-249)

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University of Johannesburg

Theme: 7. Responsive and Innovative Pedagogies in Higher Education

The Scholarship of Teaching and Learning (SOTL) Towards a Socially Just Pedagogy Project at University of Johannesburg, began as a discussion and seminar forum two years ago under the auspices of Prof Brenda Leibowitz Chair of Teaching and Learning. The aim was to stimulate SOTL towards social justice at UJ and to provide an interdisciplinary community of practice amongst staff. Whilst there might not be one clear definition of what a socially just pedagogy is, for the purposes of the project three conditions of a socially just pedagogy as characterized by Nancy Fraser were used. These were that: it should pay adequate attention to matters of distribution of resources; it should pay adequate attention to matters of recognition of social status; and it should pay adequate attention to voice and framing. In this paper we report on the workings of the UJ project and reflect on the first data gathering activity of the group. This was undertaken to reflect on the project; give a voice to participants in the project; see what it has or could achieve and how it could support the flourishing of teaching for social justice amongst members as well as non-members of the project. 22 interviews were conducted and recorded half with members and half with non-members of the project. Interviewers asked each other six questions based on what constitutes socially just teaching, their pedagogical practice and the joys and challenges encountered. This segment of the project was conceived in an attempt to consider what members understood or meant by a socially just pedagogy and what this requires of academics in their teaching roles. Three members of the project cooperated to code and analyze the first round of interviews from the transcripts and to write up the findings. What emerged from the analyses of the interviews was that some of the academics have yet to examine and question their own assumptions and practices deeply and in relation to theory on social justice and learning. This is an important component of transformation as Kumashiro points out, that we have not engaged in a measure of learning and unlearning, if we have not reflexively reconsidered our own assumptions, our views of our students or the practices we share with students. Furthermore, while the notion of socially just pedagogies as addressing inequalities resonated with many of the research participants, there were many cases of interviewees feeling constrained to engage in transformative pedagogy to bring about change. There is evidence however of affirmative and hopeful work being done in class and some joys were reported by all interviewees despite the restrictions and challenges reported.

Keywords: socially just pedagogy; scholarship of teaching and learning; project

Research Preparation as a Curriculum? (TLHEC10-121)

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Theme: 1. Relevance of the Curriculum in Higher Education

Research preparation generally involves formal coursework as well as less formal guidance by a supervisor. Typically, students are required to pass at least one Research Methods (RM) course as a formal requirement to commence postgraduate research study. However, formal research preparation lacks an underpinning educational framework. This paper argues that formal research preparation in coursework modules can helpfully be conceptualised as a curriculum. This enables the application of the lens of curriculum to RM courses, yielding some insights into the various influences on a specific instantiation of an RM course. A specific curriculum framework, devised by Lattuca and Stark, is used as the specific lens to explore the phenomenon of formal research preparation. The pragmatic framework is discussed as well as its epistemological limitations. Use of the framework in data analysis of documents and interviews provides illustrative examples of the utility of conceiving formal RM modules as a curriculum.

Keywords: Research preparation; Research methods; Curriculum; framework
Linguistic Rights and Conceptual Incarceration in African Education (TLHEC10-264)

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KEYNOTE AND POST KEYNOTE DISCUSSION

Education comprises imparting knowledge that relates to various facets of societal life. These include cultural values, religious beliefs and practices, politics, morals, artistic or technical skills, (appropriate) technology, etc. Learning involves shifts in ways of understanding, thinking about concepts, and solving problems, as well as cognitive processes of problem solving, transfer, reflection, prior knowledge, and the development of expertise. The context determines the local conditions of learning and the nature of optimal knowledge. Research in educational theory shows that “learning always involves an interplay between individual cognition and a socially and culturally organized learning setting, where learning is, in part, indexed by changing relations between people and increasingly sophisticated use of available tools for problem-solving” as stated by Nasir. Language is crucial to learning and expression of culture and conceptual systems. It is central to human interaction, societal cohesion and, to education. Language facilitates knowledge representation and transmission. The “null hypothesis” would be that education is imparted to learners in the language of their society. Indeed, this is the standard practice in much of the world. In a document on vernacular languages UNESCO recognized the right to literacy and to receive education in one’s own language as a basic human right. The organization stated, “the best medium for teaching is the mother tongue of the pupil”. Colonialism resulted in African education departing from the implementation of that human right. Formal education, introduced as a crucial component of colonialism, was patterned, however imperfectly, on European models. This affected both the content and language(s) of instruction (LoI). The Eurocentric curriculum focused on Western systems of knowledge, values, history, culture, etc. African education contributed to the politics of acceptance of the colonial dispensation, the superiority of the white races in general, and of Western knowledge systems and culture. As noted, European arrogance during the colonial period had two major components: the premise of a superior race and the premise of a superior culture. The eminent African American scholar Wade Nobles spoke of “conceptual incarceration” to characterize the emphasis on European knowledge systems and values in the education of Africans, both in Africa and the diaspora (cf. Nobles, 1986). The term refers to “the state of intellectual imprisonment in European value and belief systems occasioned by ignorance of African and Native American philosophical, cultural and historical truths” (Hotep, 2003: 6). While conceptual incarceration is about the content of African education, the proscription of African languages in education, in favor of ex-colonial languages, constitutes what the notable Harvard based Kenyan scholar, John Mugane, has termed “linguistic incarceration”. This is the situation where the “first language of the child is incarcerated, reducing education to the pursuit of fluency in English mediated by markedly non-proficient instructors. Whenever the switch is made from the child’s first language to the language of the school there is always an instructional blackout. For the vast majority of children, the blackout is total and final. Learning is then reduced to verbatim memorization (and in numerous cases good hand writing)! This paper is concerned with conceptual and linguistic incarceration of African education. Education is crucial to the empowerment of society. Learning and knowledge are situated within the context, culture, and activity in which they develop. Knowledge systems of the society and the cultural context of learning constitute crucial aspects of education. This work advocates the incorporation of culturally relevant curricula and the use of African languages as basic rights in African education.
#77.
Attitudes towards Mathematics and Achievement of Various Groupings of Pre-Service Accounting Teachers (TLHEC10-103)

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**Theme:** 7. Responsive and innovative pedagogies in Higher Education

The purpose of the study was to determine the impact attitude towards mathematics have on mathematics achievement of various groupings of pre-service accounting teachers at the University of KwaZulu-Natal. Eight of nine Fennema-Sherman Mathematics Attitudes Scales was used for this study. A cross-sectional data set containing demographic details and attitudes towards mathematics were collected and quantitative responses of 255 first, second, and third year pre-service teachers were analysed using Statistical Package of Social Sciences. The results of the study revealed that English, Indian and Suburban students reported more positive attitude towards success in mathematics, perception of their mother, father and teacher as sources of encouragement, support and affirmation of their efforts in mathematics, positive attitude towards effectance motivation in doing mathematics and positive overall attitudes towards mathematics than Zulu, African, township and rural students. Based on the findings it was concluded that the differences in attitudes towards mathematics domains reflect a cultural racial split, English, Indian and Suburban students versus Zulu, African and Township and Rural students. This paper offers pedagogical insights for the teaching of Accounting with special emphasis on how to navigate the competences of students with mathematics challenges as they study the discipline of Accounting.

**Keywords:** Attitudes towards mathematics; pre-service accounting teachers; mathematics achievement

#78.
Is Funding Counterproductive to Academic Success? Experiences of ‘At-Risk’ Students in a South African University (TLHEC10-233)

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University of KwaZulu-Natal

**Theme:** 2. Funding Higher Education – New Challenges, Opportunities and Prospects

In the last 15 years, the South African higher education system has expanded student enrolment considerably. However, a substantial number of students fail to complete their degree in the minimum time required or drop out of programmes completely despite the government and other funders providing financial assistance. The growing student funding crisis gave birth in 2015 to the #FeesMustFall movement. This is a campaign where students protested over tuition fees and conditions of learning. The Fees Must Fall movement resulted in fee increases being stopped for 2016. This paper examines intently on funding and its propensity to impact conversely students’ academic success. The data draws from a qualitative ethnography drawing from interpretive methods undertaken in the School of Education in a South African university on ‘at-risk’ students’ academic experiences. Bourdieu’s theory highlight the crisis of student alienation, having to navigate unfamiliar and sometimes hostile environments. It further points out that cultural capital considers the family’s influence on students’ academic activity across the historical, evolving, and institutional systems. It makes it possible in this study to analyse effectively the socio-economic and sociocultural contexts that may impact on individuals. Weiner’s Theory of Attribution was also used to explicate students’ preferences in meeting with conflating, yet mutually conflicting needs. In that same line, to understand and explain how choices in the use of funding can become a “compromising” decision to academic success for funded students. Leading to onset of ‘at risk’. In this way, funding on its own, while not a risk factor, can be an infringement to academic success depending on students’ perceptions of their needs and prioritizing how these are met. The research fulfils the purpose by means of qualitative study whereby semi-structured interviews, content analysis and focus group interviews were conducted on 6 students that are targeted as ‘at risk’. In this way, funding on its own, while not a risk factor, can be an infringement to academic success depending on students’ perceptions of their needs and prioritizing how these are met. The research fulfils the purpose by means of qualitative study whereby semi-structured interviews, content analysis and focus group interviews were conducted on 6 students that are targeted as ‘at risk’, to better understand the reasons for their poor academic performance and how poor socio-economic status impacted on their success. The findings indicate not only lack of budgeting skills, financial illiteracy that compromised their academic performance but also poverty as a contributing factor to misdirect bursary funds in Higher Education Institutions. The findings further indicate that sometimes a positive factor such as funding may result in a devastating academic consequence. This means that there is a need for higher institutions to design interventions to curb financial illiteracy. This imply that it is important for policy, practice that further research is done to strongly examine the nexus of funding, ‘at risk’ and academic success in South African Universities.

**Keywords:** scholarship fund; students ‘at-risk’; academic performance
#79.
Possible Role of Student-Lecturer-Community Nexus for Teaching Agricultural Sciences
(TLHEC10-246)

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**Theme:** 8. Re-envisioning SoTL for the Student-Centred Research University

In the past 12,000 years, humanity has gone through the semi-nomadic era, the era of city-states, the era of empires and the current global era. Throughout this time, there has been evidence of linkage between learning and civilisation that was supported by sustainable agriculture. Although at the initial stages learning was largely based on local knowledge, significant amount of progress in human civilisation occurred. Thus, agriculture has always been at the centre of human civilisation. In a global system where knowledge must contribute to the goal of a sustainable livelihood, it is imperative that an integrated approach in teaching and learning is favoured, especially in agricultural sciences. That way, a combination of advances in agricultural sciences and local or indigenous knowledge can be used. The problem that needs to be addressed is how to design a higher education approach to learning which creates a working student-lecturer-community nexus to make education directly relevant to the needs of a target community. Whereas some communities, e.g. industry and service employers, may have indirect contribution to curriculum development to shape their future employees, poor communities who need to be uplifted have no contribution. The objective of this study was to investigate the effectiveness of using research-based teaching in agricultural science for the benefit of the student, rural communities and the lecturers. Highlights of how to design and investigate the effectiveness of using research-based teaching in agricultural science for the communities who need to be uplifted have no contribution. The objective of this study was to have indirect contribution to curriculum development to shape their future employees, poor communities who need to be uplifted have no contribution. The objective of this study was to have indirect contribution to curriculum development to shape their future employees, poor communities who need to be uplifted have no contribution. The objective of this study was to have indirect contribution to curriculum development to shape their future employees, poor communities who need to be uplifted have no contribution. The objective of this study was to have indirect contribution to curriculum development to shape their future employees, poor communities who need to be uplifted have no contribution. The objective of this study was to have indirect contribution to curriculum development to shape their future employees, poor communities who need to be uplifted have no contribution. The objective of this study was to have indirect contribution to curriculum development to shape their future employees, poor communities who need to be uplifted have no contribution. The objective of this study was to have indirect contribution to curriculum development to shape their future employees, poor communities who need to be uplifted have no contribution.

**Keywords:** Curriculum; Participatory lessons; Research

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#80.
Undergraduate Research Training: A Tool to Address the Pipeline Challenge in STEM
(TLHEC10-151)

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**Theme:** 8. Re-envisioning SoTL for the student-centred research university

The South African PhD project has the ambitious goals of training 5000 PhD students per year by 2030. Several acute challenges, particularly in the areas of STEM, are likely to prevent this goal from being reached. In the physical sciences the problem is severe, with the quality of undergraduate training and the pipeline from undergraduate study to postgraduate research being two key factors. We have initiated a pilot project to address the quality of undergraduate training, and the pipeline into postgraduate research. The project is targeted at undergraduate students in the physical sciences, and is based on the idea that undergraduate research provides a novel approach to addressing the above challenges. The project is comprised of a core programme of multidisciplinary activities that include undergraduate mentoring, advanced problem solving and critical thinking exercises, and research training through exciting yet accessible research projects. The closely knit interaction of postgraduate students, postdoctoral researchers and academic staff with undergraduate students in these activities diversifies and enhances the level of training, and socialises undergraduate students to the research career path. A systematic evaluation of the programme, through a pilot project funded by the UKZN UTLO, will enable an evidence-based research study of the programme’s effectiveness over a three-year period. The study will track measures such as course marks, pass rates of participating students, and throughput statistics of undergraduate students into postgraduate study in the Physical Sciences. Course evaluation questionnaires and student evaluations will assess the influence that the pilot project has on undergraduate students and their postgraduate, postdoctoral and faculty mentors. Impact indicators for staff and mentors will be measured by determining the number of project-related publications, conference presentations and student graduation rates. It is expected that the project will enhance the quality of undergraduate training and improve the pipeline from undergraduate study to postgraduate research. Postgraduate, postdoctoral and faculty researchers will undergo professional development in terms of teaching through their participation in the project. It is envisaged that a training and interaction model with associated resources will be developed such that it can be adopted in other disciplines and by other institutions that face similar challenges.

**Keywords:** Undergraduate research; STEM postgraduate pipeline; Mentoring early-career academics
Higher education worldwide is facing major challenges in its socio-economic milieu with changes in curriculum, new forms of governance structures, widening access, technological advancement and reduced funding. At the same time there is increasing public concern about the quality of higher education. National quality agencies and higher education institutions are implementing various approaches to quality evaluation and assurance. There is a high level of public accountability demands placed on higher education institutions especially with respect to the quality of teaching and learning. This study focuses on quality reviews as one of the mechanisms of external evaluation used at a selected university to enhance the quality of teaching and learning. Through a qualitative, interpretative approach using case study methodology, this study draws on retrospective data produced over the period of 2013 to 2015 from four cases selected from external review reports, and improvement plans developed after review site visits by external peers. It aims to understand the areas of good practice and areas of targeted improvement in teaching and learning. The data explores the competing conceptions and purposes of the quality review process, focusing specifically on what is considered to be those factors which activate or impede quality teaching and learning. The data reveals the following recurring themes: leadership and management; staff development; curriculum development, pedagogical practices, resource allocation and student support. The paper explores whether the present review quality process operates at a level of theoretical, intellectual, systematic reflection and engagement aimed at informing and promoting quality in teaching and learning, or is merely a technicist exercise fulfilling an administrative or bureaucratic imperative. The insights drawn from this study could inform the methodology employed in future quality review processes, as well as policy and practice in teaching and learning.

Keywords: quality reviews; quality teaching and learning in higher education; conceptions and purposes of reviews

To Infinity and Beyond: The Passage of Teaching and Learning Through Time and Technology

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Theme: 7. Responsive and Innovative Pedagogies in Higher Education

The speed of technological innovation and development is quite unrelenting. However high the ladder of technology has been scaled, it is evident that technological developments and advancements can never be exhausted. Within an educational context, technology is seen to be changing the landscapes of teaching and learning in education, particularly in higher education sectors. Of late, innovative practices are infused into teaching and learning methods in order to enhance the quality of teaching and learning in higher education. This is evidenced by what is currently known as the scholarship of teaching and learning and technological prescripts in the form of blended learning and collaborative learning. In light of these technological developments, the North West University (Mafikeng Campus) has adopted a computerised reading programme called Read-On for first year students. The programme is a step away from the ‘pen and paper’ age aimed at making reading interesting instead of it being just another routine task, while simultaneously enhancing students’ language skills and speed in drawing meaning from any text. Through the use of voice prompts and commands, it is very interactive and different from the traditional method of reading. The study sought to explore the relationship between technology and reading competence in relation to improving reading abilities for first year students. The mixed method approach was employed through the use of open/closed-ended questionnaires, un/structured interviews and pre- and post-tests on the reading comprehension to collect data from first year students registered with the reading component of AGLE 111 and 121. The conclusion derived from the study affirms the importance of technology in the advancement of reading strategies.

Keywords: Technology; Innovation; Reading
Reading is an essential part of all academic tasks that students come across, particularly those in institutions of higher education. At this level, students are exposed to a large number of texts that require independent reading. However, many students entering higher education are not adequately prepared to meet these requirements. Reading incompetency is prevalent in most South African schools as students read to memorise facts and figures without understanding, thus they get into the habit of regurgitating information. The problem this study identifies is persistent reading incompetence in students of the North West University (NWU), Mafikeng Campus. A significant number of students have demonstrated lack of reading skills that are expected of tertiary level students. The institution introduced a systematic reading programme called Read-On in an effort to alleviate the problem of inadequate reading strategies. There are many contributing factors that lead to reading incompetency; however this study will only focus on how the students’ reading skills relate to cognitive development.

The aim was to investigate the relationship between reading competency and cognitive development by means of a systematic reading programme, in order to achieve the targeted strategic reading skills amongst first year students of NWU. Cognitive ability takes into consideration several mental dynamics. However, for the current study only the following will be highlighted; factors that affect reading (biological and environmental) and the role of memory games and problem-solving activities based on prescribed texts on the students’ cognitive development. Data collection was conducted through qualitative and quantitative methods (mixed methods). Stratified random sampling was used to select the students that took part in the study. Questionnaires with closed-ended and focused interviews were administered to the selected students. Data obtained was analysed using SPSS for the questionnaires and ATLAS.ti 7 for the qualitative data. The results showed that there is a positive relationship between reading competency and cognitive development.

The Read-On programme provided a wide range of activities such as skimming, scanning and detailed reading which helped the students acquire the necessary reading strategies and techniques that were required of them. The results of the memory games and problem-solving activities in the form of quizzes also indicated an improvement in the memory, reading speed and problem-solving techniques of the students. All these improvements form part of the mental processes that make up cognitive development. Therefore, the systematic reading programme is an effective tool for cognitive development amongst first year students in NWU. The systematic reading programme needs to be modified in order to enhance cognitive development and reading competency amongst first year students. This can be achieved through the addition of subject-specific texts since students will be much more familiar with the jargon and context of the prescribed texts. Data obtained was analysed using SPSS for the questionnaires and ATLAS.ti 7 for the qualitative data. The results showed that there is a positive relationship between reading competency and cognitive development.

**Keywords**: Cognitive development; Systematic reading; Reading competency

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**Theme**: 7. Responsive and Innovative Pedagogies in Higher Education

**NG. Morule & R. Matsie**
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**Theme**: 4. Institutional Research: Building an Evidence-Based Culture in Higher Education

South Africa before 1994 was one of racial discrimination and unequal distribution of services. Post 1994 transformation created educational landscapes with institutional focus on distance education. For the developing world, Open Distance Learning (ODL) is an encouraging and practical approach in addressing challenges of broadening access and participation in higher education. The paper emanates from a doctoral study examining higher education with particular reference to distance education and open distance learning at the University of South Africa as the largest distance education provider, and is presently the largest open distance learning provider in Africa. The University adopted an open learning approach on student centeredness, life-long learning, flexibility of learning provision, broadening access to learning and delivering learner support systems. The research problem is centered on impact of learner support in the enhancement of learning, development of skills and throughput rates in Unisa, and explores the level of preparedness of students for the world of learning. Key questions include: role of Unisa’s policies for implementation of effective learner support activities? Are students coming into the system of ODL ready for new environments, and their experiences in ODL?; and is the quality of learner support initiatives effective in enhancing students’ learning and throughput rates? Surveys and interviews with staff and tutors informed the study. Location is the regional hub in Durban and learning centres in Newcastle, Richards Bay and Wild Coast. Learner support initiatives were evaluated to determine influences on students’ experiences and learning progress. To conclude, ODL is increasingly seen as a cost-effective educational mode of delivery without forfeiting quality. Sufficiency and effectiveness is crucial to enhancing teaching and learning in this first regional study focusing on current learner support initiatives and necessity for stronger academic support. It is hoped that learner support structures in place would influence positive experiences of students.

**Keywords**: Open Distance Learning; access to learning; learner support systems

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In recent years, a burgeoning research output in teacher education has sought to explore the knowledges that student teachers should possess as the transit from student to beginner teachers. Although, attention has been paid to the knowledges such as content, pedagogical, pedagogical-content, psychological and philosophical knowledges that are foundational to student teachers’ tasks as both professional and subject specialists, more researchers are now giving prominence to dispositional knowledge. The argument in focusing on dispositional knowledge is that student teachers need to be responsive to the human quality of teaching–they need to exhibit certain dispositions that build, nurture and develop learners’ holistic learning. However, few, if any studies have been carried out to explore the dispositional characteristics that student teachers require for the South African context. Realising this gap, in this conceptual paper, we make a case for the need to intentionally weave dispositions into the fabric of teacher preparatory curriculum, pedagogy, programs, and policies of our institutions. Furthermore, from existing literature on dispositional knowledge, we indicate dispositional characteristics that might be included in teacher preparation programs in South Africa. The paper is underpinned by Dewey’s constructivist-developmental perspectives, Bandura’s social learning and self-efficacy theories which in the context of our study helped us understand teacher dispositions as socially constructed, developed in a complex stages and contextually influenced. The critical questions we answered in this paper were: How is dispositional knowledge defined? What are the characteristics of dispositional knowledge? and What are the implications of the previous findings in dispositional knowledge for teacher preparation programs in South Africa? To answer these questions, 10 journal articles on the Thomson Reuters list 2015 were selected using the following criteria: focusing on defining dispositional knowledge; providing characteristics of dispositional knowledge; representing an international context; published in the past 10 years (2005-2015). From the analysis of the journal articles, dispositional knowledge is a subjective, natural, ethical, attitudinal and emotional quality that influence the teachers’ behaviour and relationship with learners, colleagues, parents and the whole school community. Dispositional knowledge is demonstrated in the actions that student teachers use when interacting with learners, parents, colleagues and subject material. From a review of literature student teachers need the following dispositional qualities to be effective teachers: caring shown by their emotional attachment to their learners, resilience spirit, reflective nature and intentionality; motivational and committed to their learners and work and sensitivity to diversity. Most researchers were able to define and provide the dispositional qualities for student teachers but were silent on how these qualities could be taught in preparation programs. Similar to both Dewey and Bandura, researchers favoured mentoring and induction as a way of transmitting dispositional qualities in teacher education. Based on the findings of the study, teacher training institutions and schools may consider strengthen their mentoring and induction programs for students and beginner teachers as it through these activities that they acquire teaching dispositions.
The Rationale of Using Technology as a Learning Resource in Teaching Undergraduates: Lecturers’ Reflections (TLHEC10-185)

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Theme: 6. Researching Teaching & Learning Technologies Which Promote the Scholarship of Teaching & Learning

The use of technology as a learning resource has gained vogue in many higher education institutions globally. Similarly, South African Higher education institutions have adopted these technologies (Blackboard and Moodle) as a learning resource. Whereas, this adoption has been embraced and warmly acknowledged by students (digital natives), the lectures (digital immigrants) on the other hand have had a somewhat lukewarm reception to the same. Several studies have discussed barriers to the adoption of technology as a learning resource by lecturers. As a result, this empirical study presents a critical action research of two out of eight lecturers, teaching within the education studies discipline, who reflected on the rationale of using Moodle as a learning resource in teaching undergraduates at a South African university. This study was conducted with a focus to explore lecturers’ reflections in order to get an in-depth understanding of their rationale in the use or non-use of the said technology. Reflective activity, one-on-one semi-structured interviews and focus group discussion were utilised for data generation in answering the research questions. Purposive and convenience samplings were used in selecting specific lecturers who would provide a rich source of data. This study was framed by the concepts of curricular spider-web. Lecturers’ reflections indicate that, their reluctance to adopt technology as a learning resource emanates from their inexperience with regard to training, exposure to adequate support during use, time constraints in preparing online materials. These reflections touch on their personal, societal rationales as opposed to a pedagogical rationale. This article therefore recommends that lecturers should be driven by pedagogical rationale when using technology as a learning resource to complement the other rationales that they are currently using. This will facilitate the implementation of the intended curriculum and achieve positive results (achieved curriculum).

Keywords: lecturers’ reflections; technology as a learning resource; rationale

Transgressive Teaching in Post-Apartheid Higher Education Institutions (TLHEC10-266)

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KEYNOTE

There is very little doubt that higher education in South Africa is under threat. The #RhodesMustFall movement, together with the #FeesMustFall movement have placed serious questions on the nature of access and the decolonisation of teaching and learning in South African higher education institutions. At the heart of the tensions are questions on teacher identity and positionality, as well as responsive knowledge and pedagogies that speak to South Africa’s historical and political contexts. For many academics, the response to these tensions has been to either engage in an “ostrich” approach, i.e. pretending as if problem doesn’t exist while maintaining the status quo in teaching, or “finger-pointing”, i.e. launching biased criticisms against students, without responding substantively to the questions being raised. Not only have both these approaches been failed, not least due to the fact that they present higher education institutions as perpetually resistant to transformation, they also have halted innovation in teaching and learning in higher education. This paper responds to these challenges by calling for transgressive pedagogies in higher education, i.e. teaching that responds to diversity, assists students and teachers to rethink what they know, while also deconstructing outdated epistemologies and theoretical positionings. By drawing on examples of how transgressive teaching may be enacted in higher education teaching, the paper argues that academics have an ethical and moral responsibility in responding actively to the questions of the moment, if higher education is to remain relevant and be truly transformed.
Plagiarism has always been a constant worrying offence in higher education institutions, more particular on academic writing. Stealing intellectual property and presenting it as one’s own work is punishable before the policies governing the academic sphere. It seems to be the case that for professionals who are significantly involved in academics, fully understand and are conscious of the repercussions if found guilty of transgressing the scholarly code of conduct. On the other hand, for students, the significance of a non-plagiarism behaviour is not entirely understood. This attitude of the latter is attributed amongst other factors by learning about plagiarism late in their schooling years (normally at higher institutions), little or no prosecution of offenders especially at undergraduate level and lack of knowledge about the importance of academic integrity. With the introduction of the instant plagiarism detection software, Turnitin, students are immediately aware of their suspected plagiarism percentage committed. This active interaction between the technological system and the students has considerably changed the traditional writing, submission and assessment of assignments at institutions of higher learning. Prompt feedback and continuous learning are the ultimate aims sought. Turnitin has rightfully been identified as one of the major pedagogical techniques to be implemented in higher learning. The objectives of this study are therefore to firstly, assess the students’ experiences with using Turnitin. Secondly, examine the lecturers’ perception of the software. And lastly, to outline the advantages of Turnitin as observed by the lecturer and the students. In conclusion, for a small and rural QwaQwa campus of the University of the Free State, which boasts a majority of students who are from disadvantaged backgrounds and are exposed to a mere computer for the first time at tertiary; this study forms an interesting research as it unravels the perspective and experiences of students from technologically disadvantaged communities as they navigate and respond to the high sophisticated Turnitin software.

Keywords: Turnitin; Plagiarism; Assessment
#90
Online Submission of Assignments:
Students Experiences in Business Management Education (TLHEC10-064)
M. Mtshali; SM. Maistry & D. Govender
University of KwaZulu-Natal

**Theme:** 6. Researching Teaching & Learning Technologies Which Promote the Scholarship of Teaching & Learning

Traditional methods of submitting assignments over the counter are associated with approaches to teaching and learning that engage the use of face-to-face methods of communicating learning. The integration of information and communication technologies (ICTs) into teaching and learning, and the implementation of computer-mediated methods of instruction in the form of e-learning in higher education have led to the emergence of new methods of submitting assignments electronically. One of these methods employs the use of a learning management system (LMS) for teaching, learning and assessment. While significant research has been conducted on this phenomenon in developed countries, very little and more is yet to be known on how students experience and perceive this method of submission in a developing country like South Africa. The study on which this article is based engaged the use of the Moodle LMS where students in a business management education (BME) course had to submit assignments via Turnitin. This mixed-methods study had a qualitative component where data was collected and analysed, and the sample of 15 participants was selected from 156 students using phenomenography as a methodological approach. Personal reflective journals, focus group discussion and individual interviews were qualitative data sources. A questionnaire was used to collect quantitative data that was analysed using the statistical package for social sciences (SPSS). The study found that participants felt that this method of submitting assignments was used as a conduit for monitoring plagiarism in BME.

**Keywords:** Learning Management System; Business Management Education; Plagiarism

#91.
Student Support: Using Storyboarding to Gaze Inwards and to Gaze Outwards (TLHEC10-040)
R. Mudaly & V. Mudaly
University of KwaZulu-Natal

**Theme:** 4. Institutional Research: Building an Evidence-Based Culture in Higher Education

The concept of “academic Darwinism” which loosely translates into students’ resilience and/or environments which enable them to graduate, can be linked to the current instability in South African higher education institutions. Epistemological deprivation, social capital deprivation and financial deprivation are barriers which need to be made visible, if academics are to craft experiences which they create for students more consciously. In this study, five higher education teachers from diverse disciplinary backgrounds worked collaboratively to reflect on students’ need for support, how these needs may be identified, and the possibilities for support to be provided by the higher education teachers. Storyboarding, which is an innovative visual method, and draws on intuition and imagination in an environment where creativity abounds, informed our work. A storyboard is a visual representation, of pre-planned drawings, which enables collaborative engagement to make meaning of critical issues in social science research. This qualitative methodological tool enabled us to incubate ideas and augment our understanding of student support through critical reflection on our practices and experiences. We used storyboarding to reflect on two issues which influence students’ ability to survive in academic institutions. The first, which we titled “Teaching Matters”, involved creating drawings which reveal how academics are unintentionally disinviting to students, and in this way, we gazed inwards on our complicity in depriving students of enabling teaching and learning experiences. The low levels of pedagogical content knowledge and subject matter knowledge, possibly due to the higher education teacher’s focus on research and not on teaching, and how this influences students’ experiences, were revealed. The value of peer support and peer evaluation of higher education teachers, as a way of improving their teaching practice, emerged as a crucial way of addressing this challenge. The second storyboard, titled “Money Matters”, enabled us to look outwards at the effects of financial deprivation on student performance. Food insecurity and its influence on the mental and physical health of students were underscored. Students’ efforts to address issues of financial strain, such as finding employment opportunities which often co-inside with tuition times, and the effect of these on student performance, were reflected on. Undergraduate reform efforts in higher education cannot ignore student needs. Currently, financial constraints lie at the eye of the higher education storm of protests. Our research reveals students’ challenges which emanate from extraneous factors, such as financial constraints, and how these may be addressed. Our study also makes visible another critical source of student challenges, which is the teaching practices of higher education teachers. Storyboarding enabled a deep level of self-reflexivity on the teaching-
learning interface, and the importance of knowing our practice in order to design and execute effective teaching programmes.

**Keywords:** student support; teaching practice; storyboarding

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#92.

**Unpacking Tutorial Session Attendance: Appreciating Tutees Perspectives**

(TLHEC10-227)

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University of the Free State

**Theme:** 2. Funding Higher Education – New Challenges, Opportunities and Prospects

The massification of higher education has resulted in universities experiencing growth in student numbers per classroom. This, in turn, has called for need for student support in the form of supplementary instruction. Supplementary instruction in the form of peer-led tutorials are designed to scaffold student learning, whilst assisting them in reaching their zone of proximal development. Although universities provide these peer-led tutorials, tutee attendance and/or participation remains low. At the University of the Free State Qwaqwa Campus, the relatively low attendance of tutorial sessions prompted an investigation into the low attendance phenomena. The aim of this study was to explore and address the contributing elements to poor tutorial session attendance based on the faculty Natural and Agricultural Sciences students’ perspective. The study followed a qualitative approach, appreciative enquiry, in which a group of semi-structured interviews were conducted. A purposive sample of five groups from five science courses consisting of 10 tutees each, formed the data source. A set of questions, structured according to the Strengths, Opportunities, Aspirations and Results (SOAR) framework, were posed to the target group during the interviews. The research findings identified several contributing factors that were causing poor tutorial session attendance. These factors include; course credit overload, perceptions towards tutorial sessions, underprepared tutors, timetable clashes, tutorial clashes, learner fatigue, residence distance from university, tutor absence, non-mandatory nature of tutorial sessions and timetable instability. With compliments to the SOAR framework, the participants provided possible solutions to the tutorial attendance dilemma. They identified a clash free and stable timetable, well prepared tutors, early tutorial sessions, fortnightly sessions, off campus sessions, better tutor monitoring systems. Noteworthy, the participants shied away from advocating for compulsory tutorial sessions. This study’s results enabled the tutorial administration team to think strategically about enhancing tutorial attendance and thus made recommendations in the form of an Attendance of Tutorial Improvement Plan (A_TIP). This study contributes and adds value to the tutorial programme administration body of knowledge. The study can assist tertiary institutions and student learning support practitioners in making decisions about strategic approaches towards tutorial programme delivery. The model followed in this study, can be adapted, with simplicity to any higher education context.

**Keywords:** tutee, appreciative inquiry; supplementary instruction; tutorial administration, SOAR
The issue of the relevance of the curriculum in higher education continues to occupy academic discourse. Graduates sometimes find themselves torn between two positions of both; acquiring knowledge and skills which is specifically relevant to their future responsibilities, and that of acquiring knowledge and skills that will help them master the subject area in all its depth without continually adjusting it to the volatile and unpredictable global markets. This paper grew out of a mixed method research that was conducted using the convergent parallel design among two final year consecutive cohorts of student teachers at a College of Education in Zambia. The study arose out of a concern, observed by the researcher, that although students on the English Language Bachelor of Arts with Education (BA.Ed) programme spent four strenuous years of study, they did not seem to have acquired the required knowledge and skills that were vital for their future responsibility of teaching. The study was thus aimed at analysing the extent to which the BA.Ed English language teacher education curriculum was relevant to the secondary school curriculum in Zambia. In this study both qualitative and quantitative data were collected from lecturers and student teachers, respectively. Qualitative data was analysed using the constant comparative method while descriptive statistics, t-tests and analysis of variance (ANOVA) were employed to analyse quantitative data.

Using the research findings, the researcher concluded that student-teachers lacked relevant knowledge and skills for their future roles and duties of teaching owing to the fact that the teacher education curriculum designing process, at the institution in question, did not align itself with the school curriculum. The core function of any teacher education programme is to help student teachers acquire appropriate knowledge, skills, values and attitudes so that they can offer quality teaching learning experiences to their learners (Futrell, 2010). If the curriculum does not allow this to happen, student-teachers can experience learned helplessness, the end result of which could be that expected quality outcomes will not materialise. In the case of the findings in this study it is unlikely that student teachers graduating from the programme will effectively facilitate the process of learning in Zambian schools. Based on the findings of this study the researcher has made four clear recommendations on how an effective teacher education curriculum should be designed and how the BA Ed programme in question can be improved so as to save the purpose for which it was designed. Finally, the researcher has shown the importance of the theoretical perspectives of curriculum design for professional programmes in higher education to the findings of this study.

**Keywords:** Curriculum Relevance; Teacher Education; Knowledge and Skills
measures for all countries: implementation will largely depend on the unique situations and constraints of individual countries. However, governments should be wary of the likely controversies and dissatisfaction arising from some of the funding reforms or solutions. At the same time developing countries should be cognisant of globalization, and not operate in isolation.

**Keywords:** Higher education funding; human capital theory; educational opportunities

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### The Implementation of Competency-Based Curricula in Undergraduate Nursing and Midwifery Education in Rwanda

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**Theme:** 1. Relevance of the Curriculum in Higher Education

Undergraduate nursing and midwifery education in Rwanda has been undergoing a transformation of curriculum since the beginning of the 21st century, with a shift from traditional curricula to competency-based curricula (CBC) to bring this training into line with societal needs and produce competent graduates for the labour market. This article analyses the implementation of CBC to establish whether or not the standard of undergraduate nursing and midwifery education has improved. Corbin and Straussian grounded theory approach guided this study. Ethical clearance was obtained from University of KwaZulu-Natal and research clearance was given by the Rwanda Ministry of Education. Prior to data collection, permission was obtained from the School of Nursing and Midwifery at the University of Rwanda and from two campus coordinators at the sites where this study took place. The 29 administrators, teaching staff and students who voluntary participated in this study all signed informed consent forms. Interviews, observation and document analysis were used to collect data which were analysed inductively. A range of categories emerged from the data. Positive factors included staff commitment to implementation of CBC and support from regulatory bodies. In addition, CBC was found to attract high student enrolment, using student-centred teaching and learning methodologies and leading to teaching and learning outcomes that include the acquisition of lifelong learning, critical-thinking and problem-solving skills. Use of CBC in undergraduate nursing and midwifery education consequently bridges the gap between school and workplace by transforming the students into agents of change. However, controversies around the conceptualisation and implementation of CBC also emerged, specifically in relation to infrastructure and equipment, readiness of implementers, teaching methodologies, teaching and learning processes, and the assessment of learning. From the data collected in the study, processes for successful implementation of CBC and strategies to address the related controversies are put forward. Transformation of undergraduate nursing and midwifery education in Rwanda has been ongoing since the beginning of the 21st century, with significant support from the regulatory bodies concerned. This study contributes to the transformation by recommending strategies that may strengthen the implementation of CBC in a resource-constrained country and by addressing some of controversies that arise in the practice of CBC.

**Keywords:** Competency Based Curriculum; Undergraduate nursing/midwifery education; Curriculum implementation
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Theme: 7. Responsive and Innovative Pedagogies in Higher Education

This paper was aimed at addressing implementation challenges of responsive and innovative pedagogies comprising of educational technologies including social media in Higher Education. This was done by reflecting perceptions of Higher Education (HE) practitioners on the implication blending the level of ICT competency of HE practitioners with their knowledge of application of cognitive, behavioural and constructive theoretical perspectives during the implementation of technological pedagogic practices so as to ensure improved quality of teaching and learning outcomes. This follows international research arguments, debates and opinions as to why converting traditional teaching approaches into ICT instructional approaches is a challenge despite availability of diversified technological and social networks in the form of computer devices, Internet, Facebook, Twitter and YouTube. While many researchers associate lack of knowledge and skills of application of modern technological devices among lectures as a driving force for resorting back to traditional methods of teaching, others associate insufficient knowledge and application of cognitive, behavioural and constructive theoretical perspectives during pedagogical practices with poor teaching. Although others have attempted to classify computer assisted-Learning into paradigms (instructional, revelatory, conjectural and emancipatory) in line with these theoretical frameworks, implementation is still a nightmare. This study then established an intergrated link between teachers’ level of understanding and application of modern technology and knowledge of pedagogical processes as aligned to cognitive, behavioural and constructive theories with quality of teaching and learning in the South African context with the objective of advancing and building on findings of previous researchers regarding responsive and innovative pedagogies in Higher Education. The data was collected through 2 focus group interviews each comprising of 10 purposefully sampled facilitators from Da Vinci institute, one of the private universities in the Gauteng province of South offering Certificates, Diplomas, Masters and Doctorates in the Management of Technology, Innovation, People and Systems (TIPS). Although the institute focuses on complying with the global changes in social, political and economic transformation characterised by ever developing information technology, the analysis of the data revealed that while quite a good number of the younger HE facilitators/lecturers have embraced ICT including social media technology as part of their modern day social and professional life, they lacked understanding of effective pedagogical practices that complied with behavioural and cognitive theories of human development. On the other hand, while knowledge and understating of cognitive, behavioural and constructiveness approaches was found high among old lectures/facilitators, resistance to this new technology was due to lack of skills of operating technological devices with agility, attentiveness, precision and swiftness as compared to their young counterparts. Students were comparatively far ahead of their facilitators in technological operations. Generally, the perception from the findings was that a combination of good teaching and learning skills in application of ICT and understanding of pedagogic practices aligned to teaching and learning theories ensures positive implementation of responsive and innovative pedagogies. The study therefore recommends that the responsible HE authorities focus on thorough training of ICT upon all levels of HE employees by linking to relevant educational theories.

Keywords: innovative pedagogies; learning theories; educational technology
#97. 
Including Aspects of Indigenous Knowledge to Transform Mathematics Education in South Africa (TLHEC10-100)

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**Theme:** 10. Indigenous Knowledge and Indigenous Knowledge Systems as Pathways to Integrating Higher Education Research and Curricula Development in a Global Era

Since 1998, South Africa has acknowledged the importance of Indigenous Knowledge by encouraging Curriculum Planners and Implementers to incorporate aspects of Indigenous Knowledge within the various learning areas. Within the context of mathematics, possibilities for this incorporation exist in various settings outside the classrooms. This paper discusses the extent to which pre-service teachers use aspects of Indigenous Knowledge within their classrooms. The paper reflects on research that has been conducted with Post Graduate Certificate in Education students studying Mathematics Education at one University in KwaZulu-Natal, South Africa. This research exhibits mathematical concepts taught by these pre-service in rural schools and how these pedagogies may be adapted in any mathematics classroom. The study was framed by the theory of Mathematics Knowledge for Teaching. Qualitative data was collected using a pre-service teacher questionnaire, lesson observations at rural schools and one on one interviews with each participant. This study is aimed at assisting educators to close the gap between classroom activities and activities outside the classroom. This study proposes that mathematics concepts learned in classrooms is not learnt in isolation but takes into account daily experiences of learners in various settings, including rural schools in South Africa. An interpretive analysis of the data gathered demonstrates the positive changes brought about as a result of using aspects of Indigenous Knowledge within the observed mathematics classrooms. The study aims to showcase the transformation in rural mathematics classrooms by exploring Indigenous mathematical worldviews and understanding the contribution of these worldviews to mathematical knowledge.

**Keywords:** Indigenous knowledge; Mathematics; Teaching

#98. 
Research Discourses: Towards an Understanding of Masters Students’ Developing Conceptions of Research (TLHEC10-114)

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University of KwaZulu-Natal

**Theme:** 7. Responsive and Innovative Pedagogies in Higher Education

Understanding research is a key outcome of postgraduate study at Higher Education Institutions both locally and internationally. Well-developed and diverse texts on teaching research at postgraduate level exist to assist lecturers in teaching about research. However, there is a dearth of literature on postgraduate students’ developing conceptions of research. This research reports on the conceptions of research of postgraduate students enrolled for a Masters in Education (MEd) degree and how their conceptions of research evolved as a result of studying the MEd module: Research Discourses and Methodology. We develop a conceptual framework to provide further insight into how postgraduate students conceptualise ‘research’. Drawing on data generated from a research activity completed by 34 MEd students, we examine how they understand and make meaning of ‘research’ at the beginning and at the end of the module. The study identified competing and contesting research discourses, highlighting similar and diverse notions of ‘research’. Within the context of greater focus on through-put rates, postgraduate supervision and graduated students at higher education institutions, findings suggests that this conceptual framework can contribute to understanding postgraduate students’ engagement with ‘research’. To conclude, we argue that such a conceptual basis may not only enhance students’ understanding of research but may also advance teaching and supervision of postgraduate students.

**Keywords:** Research discourses; Conceptions of research; Understanding research
Health professional education requires alignment to the needs of a population, that demand graduates with competencies, that are beyond the sole domain of medical expertise. Insufficient collaboration between the health and education sectors, has seen a mismatch between medical education and the realities of health service delivery. Recently qualified medical graduates are thrust into this environment. Assessing both preparedness and perceptions of competency using a comprehensive framework has not been fully understood amongst recently qualified medical graduates especially in a high disease burdened environment. This pilot study evaluates the changes in perceptions of competency in medical interns in both the ‘soft skills’ of communication, interpersonal skills, confidence and self-directed learning compared with core medical expertise. Use is made of a well validated survey instrument. The Australian, Hill et al questionnaire, utilizing a Likert scale is modified to the South African scenario and a scoring rubric is added together with a focus to highlight a paediatric care. Aggregate scores of perceptions of competencies in both the core medical skills as well as the so called ‘soft skills’, are compared at the start and end of internship in paediatrics. 42 recently qualified medical interns from seven South African universities were sampled at three hospitals in KwaZulu-Natal, an area of high childhood disease burden. The paper will present the findings of this work based assessment. The aggregate competency scores were analyzed using SPSS Version 23 and related to various demographic factors including gender, race as well as university background. Results presented will highlights significant changes in perceptions of competency from the start to completion of pediatric internship. The multiple- competency scale used displayed an excellent internal consistency in this pilot, the Cronbach alpha coefficient being 0.968 with the mean inter –item correlation of 0.282. The paper will present the results of the mean competency scores in the various competencies assessed and align this with the Can MEDS Competency framework that guides undergraduate medical education today. The results shown will indicate that significant changes occur in both the ‘soft skill’ competencies as well as the core medical expert competencies. Relatively poor changes in self-directed learning are however reported. This poor development of self-directed learning competencies is compared with perceptions of workload and disease burden. Gender differences are noted and the influence of various demographic and background university training will be presented. Competency frameworks now underpin undergraduate medical higher education attempting to give an equal focus to ‘soft skills’, which are seen as essential for a well-functioning health professional, as core medical skills. This pilot study shows that perceptions of competency show improvement in both the ‘soft skills” as well as the core medical skills after graduation in the workplace. This requires further verification with further multi-source feedback assessment that include peer and supervisor assessments. These findings however corroborate efforts to level the playing fields in the medical training of all aspects of competencies. The study also highlights the concern that workload and disease burden may erode self-directed learning.

Keywords: Competencies; medical education; practice
The challenges of context and representation are central to the constitution of knowledge and knowledge systems, and to the activities of research and curriculum development, particularly in a globalized world. (This is axiomatic, and prior even to addressing the needs and challenges of existing indigenous knowledge and indigenous knowledge systems.) Such a global systems approach exposes an ontological and epistemological gap: that Western and other forms of intellectual scholarship, as well as contemporary discourses on Africa (from wherever they originate), continue to fail to deal with decades of evidence that human life and culture originated in Africa. This is a powerful and generative challenge that must be addressed by African scholars, societies and cultures, as well as a reality that must be tackled by all scholars, societies and cultures, from their contexts, perspectives and subject positions. For all the curriculum development structures, careers and policies that have advanced in higher education and at universities like UKZN, many imperial/ apartheid/ settler colonial/ neo-imperial structures, curricula, and dispensations persist, like disciplines, curious cognates, mishmashes, and even more curious gaps (notably African studies, which should be transdisciplinary and also intersectional). To focus on an axiomatic colonial/ neo-imperial discipline, and one in which I work, English Studies is itself a relatively recent colonial fiction (of about a hundred years old), which nevertheless remains entrenched in the new South Africa. So it is not surprising that African indigenous knowledge and African indigenous knowledge systems rarely inform intellectual (ontological, epistemological, axiological, and methodological) work, much less are translated into pedagogical work, so their social, cultural and contextual value and significance is neglected in a field that is ironically meant to focus on subjectivity. The challenges of context and representation go largely unaddressed, as though nothing has changed. However, despite being rarely deployed in English Studies to disrupt Anglophone/Western imperialist and neo-imperialist subject positions, a range of literary texts by African writers advance African ontologies and epistemologies. Studying how African artists and creative writers draw on indigenous knowledge and indigenous knowledge systems (such as literatures, philosophies, and histories) serves not just to develop the field but also serves the processes of integrating research, teaching and learning, and reciprocal community engagement, for academics and students. To illustrate this contention, attention will be paid to prose narratives (stories and novels) and poetry. Both are core to human life, activity, interaction, and development. So where are the South African educational institutions that engage such key social resources, particularly as the continent is well known for the depth and magnitude of its poetic and dramatic production? To challenge the culture, values and impositions of neo-imperialism concepts such as subjectivity, agency, resistance and transformation (developing empowered African voices, and effective activism) have been addressed in the analysis and teaching of contemporary African literature. This will be supported by references to the scholarship underpinning these adventures in African studies, literary studies, pedagogy and curriculum development.

**Keywords:** indigenous knowledge research; literary studies; curriculum development
Embracing African Languages as Indispensable Resources: The Case of LLB Part Time 2nd Language Learners of IsiZulu at the University of KwaZulu-Natal (TLHEC10-172)

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University of KwaZulu-Natal

This paper reports on the perceptions of a small group of LLB Part time students regarding the learning of isiZulu as a second language at the University of KwaZulu-Natal. The LLB Part Time students who participated in this study are professionals that are employed in different public and private companies/organisations in KwaZulu-Natal. isiZulu, for non-mother tongue speakers of Nguni languages, has become a compulsory requirement for all degree programmes in line with the university language policy and other national imperatives that support the promotion of multilingualism and the elevation of African languages in Higher Education. The study established an acknowledgement of the resourcefulness of isiZulu as instrumental in fostering social cohesion, breaking communication barriers and dispelling misconceptions about the value of these languages. Data for the study was collected through the administration of an open ended questionnaire that was aimed at ascertaining students’ views. Theoretically, the study is situated within the ‘language as a resource paradigm’.

Keywords: African languages; resource; multilingualism

Bridging the Gap: The Role of Assistive Technology at North West University (Mafikeng) (TLHEC10-175)

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Students with disabilities are faced with numerous challenges to which assistive technology can be a potential aid for compensating their educational needs. Assistive Technology Act of 1988 stresses the positive correlation between assistive technology and academic performance of students with disabilities. This correlation is intensified by the ability of lecturers to meaningfully use these assistive technologies for purposes of teaching and learning. Assistive technologies are available to help students with different forms of disabilities - from mental problems to physical impairments. Students with learning disabilities often experience greater success when they are allowed to use their abilities and talents to work around their disabilities. Assistive technology devices are compensating where students’ abilities lack, but this compensation can be optimised by lecturer knowledge in the use of assistive technology. Students with disabilities at the North-West University (Mafikeng) are no exemption to difficulties such as visual, hearing, mobility and sensory impairments. They are usually referred to the disability unit at the Academic Development Centre (ADC) because a majority of lecturers do not know how to use the assistive technologies that the university has availed at the centre. Assistive technology devices are available in a variety of categories to address functional capabilities of students with disabilities. This study looked at some of the devices used at the North-west University to help bridge the learning gap between abled and disabled students. It also identified other advanced assistive technologies that can be employed at the university. It is evident that despite the constitutional prescripts that mandate equal access to technology yesterday, a gap in the educational system still exists. The aim of the study was to highlight the value of assistive technology and the importance of training lecturers on how to use these technologies in order to assist students with disabilities. This study used a qualitative, interpretive approach and employed interviews and observation to collect data. The conclusion is that lecturers are inadequately proficient in the use of assistive technologies for students with disabilities; therefore training in using these technologies is necessary. The recommendation coming from the study is that, universities must procure various assistive technologies to assist students with different forms of disabilities and train lectures in using these technologies.

Keywords: Assistive technology; Disability; Students
Theme: 10. Indigenous Knowledge and Indigenous Knowledge Systems as Pathways to Integrating Higher Education research and curricula development in a global era

The contribution of Africa to the development of sustainable agricultural practices has been well-noted. Africa has been a rich source of data for the development of sustainable agricultural systems and theories. Academic scholarship has a mandate to recognize these local cultural practices and knowings as legitimate sources of knowledge for several reasons. Foremost is to recognize African people as producers and creators of knowledge and also that cultural practices and knowings as legitimate sources of knowledge for several reasons. The contribution of Africa to the development of sustainable agricultural practices has been well-noted. Africa has been a rich source of data for the development of sustainable agricultural systems and theories. Academic scholarship has a mandate to recognize these local cultural practices and knowings as legitimate sources of knowledge for several reasons. Foremost is to recognize African people as producers and creators of knowledge and also that cultural practices and knowings as legitimate sources of knowledge for several reasons.

Keywords: Indigenous knowledge; agriculture; curriculum and contextualize
To set, or not to set, Shakespearean plays for first-year Drama students who are predominantly isiZulu-speaking is not the question. The question is how a lecturer in a department which currently includes a heavy syllabus of Shakespeare in first year ensures that this induction into the dramatic arts does not only put students off Shakespeare for life but also off acting as a career. This paper deals with a pilot study which is the prelude to PhD research in Drama Studies, and which tests out the use of digital resources on Moodle to facilitate interpretation of Shakespearean plays by English Second Language (ESL) students. While these are technosavvy “Millennium” students, they are culturally and linguistically unprepared for the syllabus. Three strands are involved in the PhD study: transformation of colonial syllabus content to accommodate all present day students, the curricular issues involved, and the use of digital media to enhance teaching and learning. It is the last-named strand which is the focus of this paper, which describes a teaching/learning project aimed at facilitating interpretation of Shakespearean texts using a Moodle course accessed mainly by means of students’ tablets and smartphones. The teaching/learning aspect is being treated as a pilot study so that the researcher can test out some of the actual (as opposed to anticipated) results of using digital learning. While current studies indicate that use of tablets assists learning by giving students quick and easy access to both professional and amateur dramatic interpretations, the sheer volume of diverse aspects involved in interpreting Shakespeare by novice thespians requires a planning and focus which go way beyond the “YouTube hype”. The teaching/learning project is designed to culminate in a Moodle wiki celebrating student dramatic performances online. A Moodle course, Shakespeare Centenary Project 2016, has been set up to carry out within a constructivist approach using participatory action research with a group of 15-20 student volunteers. It is anticipated that the results will include conclusions as to the relevance of setting Shakespearean plays in the current context (i.e., ascertaining whether “the Bard still rocks”), evidence of the ingenuity and creativity of students in achieving meaningful interpretations, and the outcomes of using digital learning to facilitate dramatic interpretation.

**Keywords:** Shakespearean drama; interpretation; digital learning
Students as Partners in Research: Does Their Participation Matter? (TLHEC10-085)

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Theme: 8. Re-envisioning SoTL for the Student-Centred Research University

Students are rarely included either as individuals or group in the development of solutions to their own education. Although at times they are consulted about their experiences, they are seldom asked to participate in research meant for the development of programs or models that directly or indirectly affect their lives. The very individuals, whom the policies, curriculum and programs are meant for, do not have a voice in these important decisions that determine their lives. Literature on student participation in educational research informing this paper highlights positive outcomes from engaging students as researchers for and research participants in their education. The aim of this conceptual paper is therefore to advocate for student participation in research that affect them as individuals, institutions and/or communities. It further recommends that attention be given to teacher preparatory research programs and that students be more involved as active researchers and research participants rather than passive beneficiaries of higher education. This strategy paths students’ greater participation when decisions about education at local, provincial and national levels are made.

Keywords: Research in higher education; Students as research participants; Students as research partners
#108.
Exploring Lecturer Experiences of the Use of ICT in Blended Learning: A Case of Online Journals as Tools for Reflective Practice. (TLHEC10-230)

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University of Fort Hare

Theme: 6. Researching Teaching & Learning Technologies Which Promote the Scholarship of Teaching & Learning

Journals are used in teaching and learning in various forms. In this instance they are used in education by student teachers as reflective tools for their teaching and learning experiences. With the availability of ICTs, manual paper journals were replaced by online journals in this regard. The online journals were used in a blended learning approach. This came about as a result of late submissions and non-response by students to traditional paper journals. This study explores the experiences of one lecturer in her approach to infuse blended learning through a shift from use of traditional paper journals to online journals by her student teachers. The study draws and reports from a bigger study that investigated 6 lecturers' experiences of blended learning at a university in the Eastern Cape province of South Africa. The research design was that of an interpretative paradigm within a qualitative research approach using a case study methodology. The data was gathered through interviews, a follow-up questionnaire and document analysis was employed. The use of Critical Realism as meta-theory and aspects of Activity Theory as substantive theory to understand particular experiences of blended learning environments and identify conditions which enable and constrain engagement in these environments was explored. Issues of time were reflected on as constraining factors and overwhelming response by students as positive and enabling engagement. Potential lessons that informed the kind of educational support which could be offered to facilitate uptake of these initiatives was realised.

Keywords: Online Journals; Reflective Practice; Blended Learning

#109.
Disrupting Power Discourses in PhD Supervisory Relationships in the Nigerian Context (TLHEC10-111)

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Theme: 7. Responsive and Innovative Pedagogies in Higher Education

Research supervision has been an integral part of the teaching and learning processes in postgraduate education. Yet, until recently, this important pedagogy has received little or no attention in the African context. This recent awareness of the centrality of research supervision in the development of new generation researchers capable of placing countries in competitive advantage has sparked off debates about how to ensure quality learning experiences and high productivity. Thus, the search light is now beamed on what has hitherto been regarded as a secret-garden relationship – the supervision relationship. However, a lot still needs to be known about students’ supervision and learning experiences, especially in non-western contexts. This paper reports on a study that sets out to explore the research supervision experiences of doctoral students in Nigeria. To this end, the study used a qualitative, interpretive research design which specifically employed the phenomenographic approach to explore the experiences of fifteen doctoral students. The findings presented were based on the analysis of interview transcripts across the whole group of participants. Key among the findings in this article is the discourses of power in supervision relationship and the impact on students’ learning and development. While issues of power in supervisory relationships and ways to leverage power has been a topic of debate in most advanced countries for the past two decades; it is yet to receive such attention in developing countries. These findings therefore have important implications for opening up debates on the subject of power in supervisory relationship within the African context. The article concludes that in order to improve students’ learning experiences and productivity; and to align with international good practices, there is need to disrupt the way supervision happens within the Nigerian context. By institutionalising and operationalising policies that empower postgraduate student to become more active in the supervision’s proximal processes, the ultimate personal, institutional and national goals of doing a doctorate would be realized.

Keywords: Supervision; Experiences; Power
WORKSHOP

The aim is to sensitize participants to the drivers for institutional change (e.g. pedagogical; political; financial; reputational), and to prepare them to effectively drive, negotiate, and participate in the process. Additionally, being able to evaluate the need for change; identifying stakeholders; how to initiate it; involving those concerned; seeing changes in the context of the bigger picture; recognising and overcoming obstacles; identifying interconnections and consequences; and planning for review and revision.

The workshop will introduce the notion of the FOUR Ps that constitute a successful approach to managing change in HE. Using a flipped classroom method, participants will be given advance sight of a presentation that captures a case study of institutional change that encompasses Purpose; Participation; Principles; and Practice. This will set the scene for directed group discussion on the identification of real-world resistance to change, including distinctive cultural and political barriers. Cross-group work will then focus on potential solutions. The workshop will conclude with the voluntary formation of a post-conference virtual group designed to provide support for the ongoing institutional work of the participants. The workshop will be of interest to senior figures in higher education institutions, and those aspiring to influence positive institutional change, either from bottom-up, top-down, or using mixed methods.

Keywords: Leading Institutional Change; TLHEC10-257; S. Olivier; Abertay University

#111.
Exploring the Social and Economic Factors that Affect Scholarly Performance in Chemical Engineering Students: Preliminary Findings (TLHEC10-038)

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University of KwaZulu-Natal

Theme: 4. Institutional Research: Building an Evidence-Based Culture in Higher Education

This project concerns a quantitative analysis of student backgrounds and perceptions of Chemical Engineering, and aimed to link them to their motives and strategies as Chemical Engineering Students. It has become increasingly common that academic staff, support staff and tutors offer much criticism and complaints regarding the lack of deep learning and effective learning strategies, and the strong presence of surface motives and strategies of students, which ultimately limits student achievement and performance in the workplace. The factors often assumed to contribute to the above concerns include the changing curriculum and teaching methodology at the high school level, social factors, economic factors and non-scholarly responsibilities of students. These assumptions however were not substantiated by quantitative or statistical evidence, but rather by personal evidence by academic staff interaction and assessment of their students. A more scientific approach was thus required to investigate the changing attitudes, perceptions and backgrounds of students, and this has formed the broad aim of this research. A survey was conducted in the second semester of 2015 on Chemical Engineering students in all levels of study (1st year to 4th year). The survey addressed students’ backgrounds, race, home language, source of fees, transport mode and distance, and computer access. Lecture attendance, time management and personal responsibilities were also addressed. The survey also aimed to quantify and identify students’ motives and strategies based on Surface, Deep, and Achieving approaches. 61 Multiple choice questions were asked. Lastly the survey asked five questions requiring written responses. These questions pertained to student perceptions of Chemical Engineering as a career, perceptions of tertiary education and student aspirations. A total of 212 students were surveyed, accounting for 76% of the total registered students at the time. Due to the size of the questionnaire, the data obtained has been extensive. The preliminary results of this study are to be presented.

Keywords: Engineering Survey; Questionnaire; Scholarly Performance
Effective Student Support Practices as Evidenced Through Credible Assessment at UKZN
(V. Paideya, University of KwaZulu-Natal)

Incorporating Social Networking into Higher Education to Enhance Learning: A Case to Include the Use of Facebook into Courses Design
(F. Petersen & T. Joyi, University of the Western Cape)

#112.

This research is part of a current project which seeks to identify Student Support practices that show evidence of credible assessment practices and have a positive impact on student success to generally create consistent good practice and evaluation within Student Support programmes at UKZN. A Systematic Review of literature pertaining to Student Support programmes at UKZN was conducted. A Systematic review of literature allowed for a summarisation of key research evidence with respect to the main focus of the study which is student support at UKZN. This permitted for a development of a macro-picture of evidence based support at UKZN. Three types of data were extracted, firstly, data from published and peer reviewed journal articles, dissertations and papers were extracted into tables and the evidence was synthesised into the broader project focus. Data from Surveys from Academic Leaders of Teaching and Learning in the different Colleges formed the second source of data and lastly Focus group Interviews with academics and professionals identified as key role players involved with successful and credible Student Support programmes. Data is analysed using a mixed methodology. The results of this review will highlight gaps and areas of over-subscription in the provision of Student Support at UKZN, new types of practices with assessment capabilities and the most likely points of integration in developing a coherent Student Support Programme at UKZN.

Keywords: Student support; Academic Support; UKZN

#113.

In this learning landscape, it is essential to reconsider the methods of teaching and learning in order to substitute outdated closed classroom methods, which place emphasis on the delivery of information by a lecturer and a textbook rather than being learner-centric. Lecturers must think of ways to meet the needs of their students by making use of social networking tools. An initial study at the University of the Western Cape (UWC) conducted in 2013, aimed at investigating the impact of the Facebook social network site in higher education learning. Research questions were thus: Does Facebook enhance learning in terms of encouraging interaction between students and lecturers? Does Facebook enhance learning in terms of encouraging collaboration between students? What are the potential challenges that Facebook-supported learning present to higher education? This was followed by a subsequent study in 2016 to expand on the initial findings. A literature review was conducted and found that to date, there has not been a consensus about educational use of Facebook and other Social network sites (SNSs) as reactions are mixed towards the use of these tools for educational purposes. In order to answer the research questions, the initial study used qualitative research. A case study was utilised as participants were examined in their natural setting employing multiple methods of data collection. The researcher conducted interviews with 20 participants, namely students, lecturers and tutors, from the Economic and Management Sciences faculty, in the Information Systems department. Data for the subsequent study utilised student surveys and interviews. Different views about whether Facebook is good or not for educational use were expressed. Some found the platform beneficial in terms of collaborating with other students for tutorials and assignments but was not good for interacting with lecturers. Others felt that it was not beneficial due to aspects such as Internet connectivity, privacy and causing distractions. These were reinforced in this study as challenges associated with the use of Facebook. A new finding of airtime costs was reported as a challenge in the initial study. SNS, particularly Facebook, have the potential to enhance learning by encouraging interaction and collaboration. However, higher education institutions have not yet realised the benefits of social networking as lecturers still have limited usage.

Keywords: Social networking; Course design; Innovative pedagogies
Improving the Design and Delivery of Information Systems Undergraduate Course Design: A Case for Large Classes in the Western Cape, South Africa (TLHEC10-075)

F. Petersen & C. van den Berg
University of the Western Cape

Theme: 7. Responsive and Innovative Pedagogies in Higher Education

In classes with student numbers in excess of 200 students (many of whom are marginalised) there is a need to improve the design and delivery of undergraduate Information Systems (IS) courses. The course design for two compulsory second year IS courses, Business Analysis and Systems Delivery Management were analysed to assess whether technology could be incorporated to assist in achieving course outcomes. In addition, alignment with the University’s Graduate Attributes was examined to identify areas for improvement. Research questions were thus: Which changes can improve the design and delivery of the second year Business Analysis and Systems Delivery Management courses at the IS department? How can these changes be implemented though the use of technology? A literature review was conducted to establish existing ‘standards’ at other universities, locally and internationally. Findings enabled the creation of a benchmark to which the existing course design was compared. The research questions prompted qualitative research because it is more appropriate for the understanding of social and cultural contexts and organisational functioning as is the case in a higher educational institute. A case study was utilised as the courses were examined in its natural setting, two undergraduate IS courses at a University in the Western Cape. In addition, employing multiple methods of data collection to gather information from one or a few entities (people, groups, or organisations). Primary data was obtained from course feedback and student surveys. Experiential learning was identified, from literature, as a way to improve courses. The alignment to Graduate Attributes highlighted the importance to go beyond the disciplinary expertise or technical knowledge that has traditionally formed the core of most university courses. They are qualities that also prepare graduates as agents of social good in an unknown future. Therefore, Service Learning was introduced as a way to allow students to work with Non-government organisations (NGOs) or Non-profit organisations (NPOs) and apply their learnings to a real world experience. Students identified organisational problems, such as no internet presence, in their Business Analysis course in the first semester. Then implemented technological solutions, such as a website, to address those problems in Systems Delivery Management in the second semester. As a result, course module descriptors were updated and alignment between two undergraduate IS courses as well as Graduate attributes were achieved. This was positively received by colleagues in the department, students and the communities in which the students worked.

Keywords: Experiential learning; Information Systems courses; Large classes

Have Moodle, Can Assess – Experiences With Online Assessment in a First Year Information Systems Module (TLHEC10-177)

CS. Price & R. Raghavjee
University of KwaZulu-Natal

Theme: 6. Researching Teaching & Learning Technologies Which Promote the Scholarship of Teaching & Learning

In the 2nd semester of 2015, the discipline of IS&T implemented three online summative assessments using the Moodle learning management system (LMS) over two campuses. The assessment used the Moodle learning management system (LMS), and the assessment was invigilated. The tests were run in the IS&T LANS, and occurred at the same time on both campuses. In previous years, the module had used MCQs and sometimes narrative questions to assess this module. In the 2015 assessments, questions were MCQs, fill-in-the-blanks, true-false and matching types. To prepare the students for the online test, students were given formative tests on the same LMS. Many articles talk about e-assessment from a student perspective, but few give the faculty perspective. Not many papers report on using a LMS to deliver summative assessments; most papers using LMS report on formative assessment. In the literature, online assessments are favoured because they help to reduce lecturers’ workloads. This paper reports on the faculty perspective of preparing for and running online tests, from a module co-ordinator and lecturer point of view. The authors have been using LMS for eight years or more, and have used quizzes for formative assessment in the past. Test security was also an issue, since the Internet was being used to record the students’ answers on the server. The normal test procedures had to be changed due to the online nature of the assessment. The authors also found that running an online test was not just a matter of copying the questions into the online tool – there were other pedagogical and technical issues which had to be addressed. The lecturing staff did not have experience in setting the alternative question types. However, these question types could be used to ask higher order questions. The authors found some difficulties with the LMS user interface. Test security was also an issue, since the Internet was being used to record the students’ answers on the server. The normal test procedures had to be changed due to the online nature of the assessment. The authors also found that while the marking of the test was much faster (immediate), implementing the online test took longer than implementing an equivalent paper version. This paper highlights lessons learned and offers advice for those wanting to implement similar online assessments.

Keywords: Online summative assessment; Moodle LMS; Information Systems
#116.
Technology in Higher Education: Less About Technology and More About Teaching - A Distinguished Teacher’s Perspective (TLHEC10-250)

R. Quilling
University of KwaZulu-Natal (2015/2016 Distinguished Teacher Recipient)

WORKSHOP

Theme: 6. Researching Teaching & Learning Technologies Which Promote the Scholarship of Teaching & Learning

Use of technology forms the fundamental knowledge and skill set within the discipline of Information Systems & Technology and thus the area within which I teach. It has also formed a substantive part of the innovation of my pedagogy, which in 2015 led to a Distinguished Teachers Award. The use of technology and any pedagogical innovation in teaching presents both an opportunity and a risk. Technology is often represented as a solution to many of the challenges faced in lecture halls; a utopian fairytale if you like, where large numbers of students can be meaningfully engaged in interesting and stimulating learning conversations and activities. In contrast, the reality experienced by practitioners is often that technology represents a number of technical, social and professional challenges that should best be avoided. The argument I will present, based on my own journey, is that innovation in pedagogy comes from asking the questions - What, How and Why I teach? The answer to these questions, even as an IS&T academic, is not “technology” per se. It does however demand that you challenge the assumptions, which underlie your individual, current practice. Seeing these assumptions for what they are i.e. as opportunities to rethink how I teach, can technology be taught without any technology present? Why would you do that? Why not? Can innovative pedagogies be used at first year when students have little discipline knowledge/ skills to call on? – Throughout the curriculum? - and in postgrad? Equally effectively? While some of the solutions to pedagogical challenges are technological others are manual. Where I focus on technology I challenge myself to consider what it can bring to my pedagogy: Serving the needs of teaching and learning rather than colonising it. This presentation will thus provide examples at numerous levels of the curriculum, using a variety of manual techniques and technology tools, to illustrate how innovation is a process rather than a goal. In essence, innovation and the use of technology in teaching are seldom a “one size fits all”, rather they are like a fine bespoke suit, tailored to fit an individual situation. To illustrate the potential of this approach on a larger scale the presentation will conclude by providing a practical example of how Higher Education teaching (and learning), enabled by technology, can stretch beyond the boundaries of individual modules, disciplines and institutions.

Keywords: Educational technology; Innovation; Pedagogy

#117.
The Decolonial Turn (TLHEC10-104)

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Cape Peninsula University of Technology

Theme: 1. Relevance of the Curriculum in Higher Education

This paper, which speaks to Theme 1 of the conference - Relevance of the Curriculum in higher education, draws from a doctoral study called Exploring Doctoral Students Theory Choices in Education. This qualitative study, located at the Faculty of Education at a selected university in South Africa, focused on five doctoral students who completed their doctoral theses in Education, in the period 2006 to 2011. The study asked the key questions, how do doctoral students choose their focal theories for their study, and why do they do so? The data suggests that there is a theoretical reliance on continental, Eurocentric theorists, fostered by institutional and disciplinary allegiances, but that there is also an emerging critical move in the periphery to disrupt these categories by engaging with alternate knowledge – a trend that emphasizes what is known as the Decolonial Turn, an epistemic shift which sees coloniality of power as central to structures of power, control and hegemony, symptomatized also by the decolonization movements sweeping South African universities. It is proposed that these trends indicate an arising of student consciousness and a means to delink from the status quo. It is suggested that universities should confront assumptions about culture and history, re-conceptualize research in the context of sensitivity to difference, and facilitate a change in consciousness of students towards disrupting particular epistemic gridlocks on theory choices.

Keywords: coloniality of power; critical border thinking; epistemic delinking
#118.
An Exploration of Social Networking Site Use and Academic Performance Among Social Work Students at UKZN (TLHEC10-030)
T. Raniga
University of KwaZulu-Natal

**Theme:** Researching Teaching & Learning Technologies Which Promote the Scholarship of Teaching & Learning

In contemporary times the use of virtual social networks has gained popularity mainly amongst tertiary students than regular citizens. Although some empirical evidence has shown a negative relationship between social networking site use amongst university students and academic performance, more recent research suggests that this relation is likely mitigated through peer support, enhancing bonding social capital and multitasking. Researchers argue that the number of logins and the excessive amount of time that students spend on social network sites is a major contributing factor to poor academic performance. In the United States and European contexts, empirical evidence revealed that Facebook was the most popular social media site used by higher education students for personal purposes. In a review by Manca and Ranieri four main educational uses of Facebook; namely, support class discussions, helping students engage in collaborative learning, delivering content to expose students to extra-curricular resources and to support self-managed learning were identified. These writers conclude that the positive impact on learning outcomes included improvements in English writing skills, knowledge and vocabulary. This study qualitatively examined the experiences of first year social work students engaging in social network site use and its relation to academic performance. Two focus groups were conducted with 10 male and 10 female students. The findings show that whatsapp and Facebook was the most popular social networking site use amongst students. In addition, the use of these virtual networks helped facilitate peer support, multitasking and enhanced communication with lecturers which contributed to positive academic performance. Some of the negative influences of the use of social networking sites included poor academic writing skills, distraction in class and a lack of focus on academic work. The results are discussed in relation to social learning theory and suggestions for future research are provided.

**Keywords:** social networking; academic performance; multitasking

#119.
A multi-institution approach to promoting student success: An Artificial Intelligence platform for modern Higher Education Institutions (TLHEC10-267)
R. Rawatlal & R. Dhunpath
University of KwaZulu-Natal

**WORKSHOP**

This workshop invites participants from UKZN and other universities to engage with the Autoscholar Advisor project, a system designed for the management of student success and curriculum design. It uses methods from the field of Artificial Intelligence to determine progression paths for success and auto-generates advice to programme managers and students in natural language. It involves datamining student records and developing predictive models that determine the likelihood of students passing or failing a course when given the course records and student biographical information. The evidence generated also has the potential for curriculum design and planning. An outcome of the curriculum equivalence module of the Autoscholar is the ability to benchmark academic programmes and hence ease the process of credit transfer for students who wish to change the programme or even institution of study. The Autoscholar Advisor is a central platform that is not hosted or owned by any Institution in particular. The intention is to implement the service at Institutions with a zero net funding requirement; models of participation in the project are outlined. The audience is invited to discuss the suitability of the models for inception at institutions currently not connected to the system, together with interests in additional functionality.
The Technological Pedagogical Content Knowledge model (TPACK) is a recent model which was an extension of the Pedagogical Content Knowledge (PCK) model proposed by Shulman in 1986. The TPACK model developed by Harris, Mishra and Kohler in 2009 extended PCK to incorporate the use of technology in the learning environment. In the 30 years since Shulman developed the PCK model, technology has provided many new possibilities and with those possibilities, the notion of 21st century literacies. It is the author’s belief that the TPACK model insufficiently accommodates the current environment, as it does not make allowance for the preparation or curation of material, the creation of which is so much easier today. The creation, though, must also ensure the correct message is conveyed. The presentation proposes that the TPACK model be updated with a fourth element (Material) to accommodate the shifting environment.

**Keywords:** TPACK; 21st Literacies; Technology

Theme: 6. Researching Teaching & Learning Technologies Which Promote the Scholarship of Teaching & Learning

Assessment is used universally and logically to monitor students’ knowledge and academic abilities. Many lecturers pose questions though about when students will learn to analyse. The honest response must be, “When will you teach them?” The student does not at a certain age suddenly acquire analytical skills. There is no rite of passage that announces that they are capable of analysis. The presentation proposes that assessment can serve a formational purpose, forming the academic mind. By creating a series of well scaffolded assessments which require progressively higher order thinking skills along a cognitive outcomes taxonomy such as Bloom’s or SOLO, it is suggested that assessment can not only serve to assess students current levels of understanding and skill, but significantly can also serve as a tool to promote cognitive development. The presentation discusses this and demonstrates how such a series of formational assessments may be structured.

**Keywords:** Assessment; Development; Formation
#122.
Gender Differences in Mobile Learning: Evidence from Emirati Students at Zayed University (TLHEC10-118)

S. Roy
Zayed University

Theme: 6. Researching Teaching & Learning Technologies Which Promote the Scholarship of Teaching & Learning

This research examines the role of mobile devices in helping students become active learners. The main research question is to what extent mobile learning impacts differently male and female students. If there is a difference in its impact, then what can the instructor do as a practitioner to reduce such variations. There are several studies in the literature that men and women exhibit differing perceptions regarding the use of mobile devices. Ong and Lai studied employees of Hsin-Chu Science-based Industrial Park in Taiwan and revealed that men have higher levels of computer self-efficacy, perceived usefulness, perceived ease of use, and behavioral intention to use e-learning, than women. Contrary to those findings, Snell conducted a study of 141 tertiary education institutions in New Zealand and found that there is no significant difference between men and women as far as the use of technology is concerned. These contradictory findings make this issue highly intriguing. The proposed study is an intervention involving my classes at Zayed University, Abu Dhabi – one only male students and other only female students. In this course we teach them about people, places and traditions. This is essentially a history-oriented course under general education curriculum. The selection was random, as instructors are not allowed to choose their courses or classes in Zayed University. I have therefore, applied action research to my present semester courses. To assess students’ perception of mobile learning, a survey questionnaire will be distributed to both classes at the beginning of the semester (pre-intervention), and towards the end of the semester (post-intervention). The intervention will take place during the semester. Two apps will be used for the dissemination of teaching and learning materials and in-class activities. I have designed class materials using Nearpod. The advantage of this application is that it facilitates the bundling of all the materials – powerpoints, texts, audio-visual – in one lesson. All students can access all the materials from anywhere. The expectation is that the use of Nearpod will improve students’ engagement with the course and also their sense of responsibility. I will also use Google Docs, Google Slides, and other activities embedded in Nearpod for the classroom activities. These apps allowed me to view student activities in real time and give them on-going feedback. This will help me to work with the students on content and writing in a formative way. I will not have to wait until a summative assessment takes place as this leaves very little room for helping the students. Student learning is assessed using the common assessments that are standardized for all sections of the same course. Data is collected from the assessment scores – both formative and summative. Comparisons between the two groups/genders will be made with regards to attainment and perceptions (since we have not yet finished the semester).

Keywords: mobile learning; Emirati students; SoTL
WORKSHOP

Theme: 10. Indigenous Knowledge and Indigenous Knowledge Systems as Pathways to Integrating Higher Education Research and Curricula Development in a Global Era

Research on African indigenous knowledge (AIK) is seldom integrated into higher education curriculum development. Legal education and public administration education, not unlike other disciplines are yet to reflect the teaching and learning attributes and dictates that prepare lawyers and public servants as change agents in African society and elsewhere. Similarly, curriculum development for health care professionals, engineers and other practitioners leaves much to be desired in terms of incorporating African ways of knowing into teaching and learning modalities. In this interactive workshop, delegates will explore the oneness of how to (1) design AIKS research, (2) extract AIKS research outcomes for curriculum development, and (3) improve indigenous methodologies during future fieldwork; all in an emancipatory way. Through workshop participation, delegates will draw implications for the scholarship of teaching and learning in light of AIKS research-driven curriculum development.

#124.
Doing Institutional Research: Understanding Resistant Participation (TLHEC10-223)

MA. Samuel; M. Pillay; LM. Campbell & P. Govender
University of KwaZulu-Natal

Theme: 4. Institutional Research: Building an Evidence-Based Culture in Higher Education

Whilst the value of institutional research to generate better quality analysis of operational and theoretical conceptualisations of the university higher education system is usually uncontested, this paper explores the methodological challenges confronting the setting up and producing of data to guide such a reflective agenda. This paper reports on the early stages of an institutional project aiming to explore the relationship between the world of academia and the world of work. The overall project is set against the backdrop of the repeated anecdotal and reported critique of the under-preparedness of graduates for the day-to-day pragmatics of workplace from prospective employers. The project foregrounds the university staff’s conceptions of what informs the design, delivery and distance of their curriculum practices to effect a more aligned relationship between these two worlds using an online questionnaire survey. This survey is intended to provide a sequential unfolding into the second stage which probes more qualitatively the research phenomenon. What graduate attributes did the programme practitioners hope to promote and why, is the overall focus on this first stage of the project. In particular the article seeks explanations (contextual, theoretical and methodological) for the relatively limited response rate of academic and support staff to provide feedback on the kinds of strategies and preferences of graduate attributes which they target for growth and development via their practice interventions. Possible reasons include the staff’s suspicious belief of managerial surveillance through institutional-wide surveys (power matters); a hesitance to engage in survey methodologies where the researcher/project team’s credentials are not seen to be known, officially sanctioned or ethically approved (contested positionalities); the institutional climate of increased critique of unauthorised/official surveys which promote beneficence or maleficence to particular causes (managing diverse voices); the fear of exposure of under-developed curriculum responsivity to the world of the marketplace (perceived inadequacy, relevance and externally defined worthwhileness); indifference noted in the limited response from non-professional programmes where the vocational dimension of their particular disciplines or fields are not prominent features of curriculum intervention (curriculum matters); disregard for the marketisation and instrumentalisation of university education (resisted co-option); and the timing of the survey at the end of an academic year (operational matters). The paper suggest that alternative ways of providing more expansive data sets to engage institutional research cannot be reduced to only methodological operational considerations, but also be re-appropriated to gauge the climatic ethos of an institutional university site. The moments of disruptive resistance provide opportunities to gain insight into the lived world of university sites as contested spaces, engaging capitulative and normativising tendencies, and generating agentic potential for
extending beyond pre-formatted constructions. The alternative strategies have to work both within and against the hegemonic discourses which prevent deeper access into the worldviews of staff, managers and collaborating partners.

Keywords: institutional graduate attribute research; increasing online survey response rates; theoretical and methodological agency.

Investigating Experiential Learning for Recreation Education in Higher Education

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North-West University

Theme: 7. Responsive and Innovative Pedagogies in Higher Education

“Experiential learning stimulates original thinking and develops a wide range of thinking strategies and perceptual skills which are not called forth by books or lectures”. Still many lecturers rely on a behaviouristic approach with books and lectures to teach students in a practical field such as recreation and leisure studies. The varied field of recreation requires that graduates who want to excel in their careers need a wide range of knowledge and skills. Researchers identified the most desired skills and competencies for entry-level professionals in the recreation field as communication skills, patient, ambitious; adaptability; responsibility; supervisory skills; organizational behaviour skills; leadership skills; passion; experience; teamwork; and problem solving skills. Current traditional lecturer-focused teaching methods will not support students in developing these skills. According to Dewey experiential learning is rather “a process whereby the individual reacts to, learns from, and builds on experiences”. It can be described as “knowledge being created and recreated in the personal knowledge of the learner” as stated by Kolb and Kolb, and not just pre-existing ideas that are conveyed to the learner. According to various authors, the advantages of experiential learning are that it develops students who are better prepared for the workforce such as enhanced multicultural understanding and sensitivity. Students also demonstrate better ethical reasoning, higher levels of creativity, and improved lateral and critical thinking skills. In this study, I will investigate how Bergsteiner and Avery’s “Twin Cycle Experiential Learning Model” (TCELM) can be applied as a teaching foundation for this research by contextualizing it with the input of experts in the field of recreation education in order to create a suitable experiential learning-teaching model for recreation modules. I will explain how the model is adjusted so that it can be applied and evaluated in terms of effectiveness and workability in a recreation module. A multi-phase method design will be applied, as the study will be implemented over three phases. Quantitative and qualitative research methods will be conducted sequentially across phases and also concurrently within some phases. For this paper, I will report on phase 1 and phase 2 of the study. Phase one is a literature review on experiential learning and recreation education in the context of higher education. Phase two consists of the Delphi method, where three iterations will be used. For the purpose of this phase, experts in the field of recreation from universities in South Africa that offer recreation as a specialization field will be recruited. For phase three (which is not part of this paper) a holistic single-case, exploratory case-study design employing qualitative and quantitative research methods will be used. The case records will consist of Review of Personal Effectiveness and Locus of Control (ROPELOC) questionnaire data, participants' marks, personal reflections and focus group discussions' data.

Keywords: Experiential learning; Recreation; Higher education.
#126.  
In Search of Critical Thinking in a Wired World (TLHEC10-140)  
A. Sewchurran  
University of KwaZulu-Natal  

**Theme:** 7. Responsive and Innovative Pedagogies in Higher Education  

Many tertiary education scholars have reflected on the changing higher education landscape in South Africa. While some scholars have focused on structural transformation, others have focused on the changing technological landscape. It is clear that the new globalized marketplace is complex, diverse and mutable. It has resulted in the transformation of many traditional workspaces. In the modern workplace jobs are conflated as a result of dematerialization and old technological knowledge is rapidly rendered obsolete with traditional jobs being eroded from the work-scape. This climate coupled with the economic downturn has raised interesting questions around tertiary education particularly for the Human Sciences (within which Media and Cultural Studies resides). Media and Cultural Studies as a discipline is perhaps the most affected by a rapidly changing technological landscape. Alongside this the work of media graduates is also rapidly changing. In preparing graduates for this changing workplace one needs to consider both critical thinking and engaged citizenry as necessary conditions to survival of the individual and the larger democratic order however fragile. The imperative for critical thinking is strong in both national (the center for higher education) and institutional policy discourses (UKZN policy on teaching and learning). The paper explores the idea of critical thinking while reviewing ways of embedding ‘criticality’ in the current Media and Cultural studies undergraduate program. Tertiary level teaching is in a manner of speaking, under siege by a range of pressures from globalization, competition from private entities, rapidly changing work environments requiring newly and differently skilled graduates and the intensified appropriation of attention by the social media. It is vital to re-establish notions of criticality as they apply in new contexts. This is centrally what the paper attempts to address. The paper also problematizes superficial digital solutions as means of engagement. It reflects on some of the digital imperatives upon a university teaching context and explores alternate ways towards authentic learning within and alongside a digital environment.  

**Keywords:** critical thinking; social media; teaching methods

#127.  
Tell Him You Love Me!:  
Rediscovering The Great Gatsby Through Reader Response Theory (TLHEC10-160)  
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University of KwaZulu-Natal  

**Theme:** 7. Responsive and Innovative Pedagogies in Higher Education  

Roland Barthes famous aphorism, “the death of the author has resulted in the birth of the reader” constitutes an interesting nexus to investigate student perceptions of The Great Gatsby today as opposed to the narrator, Nic Carraway “brooding over the old, unknown world”. This study reports on the use of reader response theory in an explication of The Great Gatsby by English major students. The timeless splendor and flawed dreams that drive Fitzgerald’s narrative, its plot of intrigue and subterfuge, its unerring quest for idyllic love, its subtle waltz between appearance and reality assume an explosive immediacy when students co construct meaning from their own habitus and cultural capital. The growing realization that the staid, unblinking eyes of Dr T. J. Eckleburg is an alter ego gazing over a moribund wasteland of physical decay and moral bankruptcy is a cognitive jolt into the hypocrisy and internecine greed that pulses the modern world. Stepping into the personas of lover, criminal, pompous socialite and iridescent judge, students confront raw choices and ethical dilemmas that beguile, distress and simultaneously elate them. The novel becomes a theatre of “lived experience”, the classroom an arena of open debate and self examination, as students realize the joy, pain and difficulty of being human. These findings, will be used to illustrate how meaning is contingent upon the unique relationship between author, text and reader. Moreover, this study, especially within an African oeuvre, will contribute to the growing corpus of critical literature and pedagogical innovation pertaining to this acclaimed novel.  

**Keywords:** Great Gatsby; reader response; pedagogy
In its effort to develop a culture of evidence and institutional capacity for analytics at UKZN, the University Teaching and Learning Office has brought together a group from the institutional Intelligence Office and Colleges within the University for training in data analytics. In the process of training, four projects have been identified. This fourth project looks at outcomes after graduation seeking to answer the question: Are we training undergraduates to fulfil South Africa's needs for capacity building and its development? Currently the project has looked at one outcome after graduation: the students that enrol for postgraduate studies at UKZN after they complete their undergraduate studies. We have analysed 2012 – 2014 data for the College of Agriculture, Engineering and Science and will shortly be analysing data from the other Colleges. The Department of Higher Education and Technology has identified a shortage of skills in Maths and Science hence the priority on this College. Overall findings showed that in the 3-year degree programmes 55% graduants went into postgraduate studies, 45% being Honours. However the proportions going into Honours declined over the three year (50.7% in 2012, 44.8% in 2013 and only 38.5%). In the 4-year programmes, 15% graduants proceeded to Masters degrees. A larger proportion of females (48%) proceeded to post graduate studies compared to 40% male graduants. A higher proportion of under 25 years of age (46%) proceeded to postgraduate studies while only 25% of those over 25 did so. Home language was not a significant factor for progression to postgraduate studies in the College of Agriculture, Engineering and Science.

**Keywords:** undergraduate students; postgraduate studies; data analytics
The purpose of this paper is to illuminate the exceptional academic success of four female undergraduate students at the University of KwaZulu-Natal. Highlighting these students’ exceptional academic success is important in light of a current discourse of underachievement in South African higher education; and foregrounds a discourse of empowered women in a transforming higher education context. Data for this paper was drawn from an overarching transformative mixed method study. The qualitative phase of the study employed an auto-photographical data production method (Photovoice) where participants participated in individual photo-elicitation interviews with the researcher so she could explore the meaning each participant attributed to the people, places, structures, and processes that significantly contributed to their exceptional academic success. The key findings from the participants’ interviews illuminated the holistic nature of their exceptional academic success. Themes that emerged included inspirational role models, strong family support, academic and peer support, and physical and psychological boundaries being challenged. A theme that was strongly identified throughout all four participants’ interviews was a deeply rooted spiritual foundation and a belief in God that they attributed to their exceptional academic success. The holistic nature of the participants' exceptional academic success refers to an all-encompassing view of the support systems each participant had access to that positively supported them to excel academically, e.g. Academic, physical, social, spiritual, psychological and family support systems. The findings of the study could inform policy makers of the necessary support systems and learning environment that are the most conducive to female students attaining high academic levels. Further research could direct university officials and policymakers towards developing policies and programs aimed at increasing the exceptional academic success of female students with the goal of transforming and empowering lives.

**Keywords:** exceptional academic success; women; empowerment
Employability skills are general skills which play a critical role in gaining employment as well as in successful performance at the workplace. Lack of employability skills has implications for the relevance and responsiveness of the higher education curricular and instructional delivery mode to the ever-changing social and economic realities, and employer expectations. Determining critical workplace employability skills for tertiary agriculture graduates to enhance curriculum relevance and instructional delivery is of utmost importance. The study identified employability skills from the perspective of agriculture enterprises with which agriculture trainees are placed for their internships. The study was descriptive-correlational, employing correlations and regression analysis to identify factors contributing to employability of agriculture graduates. Findings revealed the following as explanatory variables of tertiary graduate employability: (a) Agriculture internship experience (37%), Attitude (9%), and (c) self-beliefs (2%). The implications are that internship programs must be revamped and prioritized with a view to extending the duration of eight weeks to twelve weeks, one semester. The curriculum must be revisited with a view to placing greater emphasis on soft, behavioural, and psychological knowledge and skill acquisition. People skills and culture must be an integral part of tertiary agriculture curriculum. These findings are in line with global trends that impact the world of work.

**Keywords:** Employability skills; Employer perspective; Tertiary agriculture

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Higher Education and (its) transformation has been at the forefront of debates for over two decades, starting with the appointment of the National Commission on Higher Education by the late President Nelson Mandela in 1995 to the recent student protests. The disturbing visuals of angry students, destroying buildings, lashing out at police and security forces, and going on a rampage, has made a resounding statement about the current state of affairs in higher education – which is of an emphatic disapproval on the lack of transformation in the Higher Education sector.

As is evidenced in the title, the paper is intended to highlight the role of the academic in this conundrum of political wrangle, general discontentment and student dissatisfaction and to address what it means to be an academic in South African Society. This raises the question – about what does transformation mean? Transformation refers to a radical and a profound change from the apartheid system to the type of the democratic constitutional order that is epitomised in the Constitution. The South African Constitution embraces all aspects of life, which includes, but is not restricted to, the economy, internal relations, the health sector, the education sector, politics and the law. The focus of the paper is therefore twofold, in that: 1. it interrogates the constitutional mandate to shed light on the meaning of transformation; and 2. it explores the role of the academic to address the challenges in higher education, in a transformative constitutional society – as is South Africa. It is acknowledged, that the role of the academic in the current South African context needs to reflect a more transformative approach that is consistent with constitutional values. How the approach identified is envisaged to shape the landscape of higher education forms the crux of the discussion.

**Keywords:** Transformative Approach; Role of academic; Higher Education
Undergraduate curricula development has received much attention in recent years with the focus being on building competency through knowledge and skills in critical thinking; professionalism; communication and interpersonal skills; health promotion; practice management and patient care. There is however no evidence at present to suggest that the curriculum has been interrogated at a level where graduate competencies are linked to role modeling and self-care practices. The broad aim of this workshop is to stimulate debate on whether a relationship exists between the intended curriculum and students’ attitudes and perceptions towards oral health self-care practices. This relationship between the impact of the curriculum in shaping and affirming the graduate’s attitudes and perceptions towards his/her own health care practice is of particular importance, given the role that health practitioners play in selecting and prioritizing health interventions. A case study approach will be used to understand the contextual influences of clinical teaching on oral health self-care practices among undergraduate health science students at UKZN. The interrogation of the curriculum will examine the following: 1. What is the intended curriculum towards self-care practices?; 2. Does self-care practices form part of the null curriculum?; 3. How does the intended curriculum and the null curriculum contribute towards the desired graduate competencies? What are gaps? How can these gaps be addressed? This study hopes to make a contribution in understanding the complexity of the acquired knowledge on health behaviours and could inform undergraduate curriculum development and create awareness of self-care practices among health science students. The project also aims to stimulate dialogue and debate into wider curriculum issues such as transformation of the curriculum and alignment to local contextual needs. The research findings could allow for all other vocational training programmes in the institution to interrogate the relationship between the curriculum and the desired graduate competencies. Thus this project has the potential to stimulate an institution-wide debate on the development and review of undergraduate curricula.

**Keywords:** e-assessments; isiZulu second language; e-quizzes

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**Article #135.**

**Implementing E-assessments in an IsiZulu Second Language Course (TLHEC10-050)**

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University of KwaZulu-Natal

**Theme:** 6. Researching Teaching & Learning Technologies Which Promote the Scholarship of Teaching & Learning

The use of e-assessments at higher education institutions has rapidly permeated into various teaching and learning domains. At the University of KwaZulu Natal (UKZN), the use of technology through the Learning Management Software (LMS) platform, Moodle, has gained much attention. The prescribed LMS, Moodle encourages all academics to incorporate technology into their teaching and assessments, and not to use it as a mere repository tool. In this study, the quizzes tool within Moodle has been adopted to create formative and summative assessments for specific purposes with isiZulu second language students in mind. The behaviourist and structural views of language learning, the cognitive approach and the constructivist theory were used as a framework for this study. Both formative and summative e-quizzes were created and all first year MBChB students enrolled for the isiZulu module attempted the quizzes. Content of the quizzes were moderated as with traditional assessment methods by isiZulu L2 specialists. Questionnaires were then used to survey students’ experiences and perceptions on the implementation of the quizzes tool in Moodle for both e-assessments in a language module. Ethical permission was approved by UKZN, and consent was obtained from all participants. Students expressed overall benefits of e-assessments in the isiZulu language module. They also commented on the convenience, accessibility, prompt feedback response on completion of the e-assessment and made recommendations for further improvements on question styles, format and layout of the e-quiz. The move towards technology driven teaching, especially in isiZulu language teaching and learning cannot be overemphasised. The learning experience described by the students is indicative of this and relates well to the framework adopted in this study. The e-quiz provided a platform for students to draw attention to specific language structures and help them generate new knowledge. It also reinforced what was learnt in class. The e-quiz motivated students as it provided immediate feedback, convenient and simple to navigate through questions and it placed emphasis on learner involvement. E-assessments in isiZulu language teaching and learning represent an innovative way to assessing a language module. They are relevant to the digital natives we teach in our classrooms. Challenging as it might be for academics, but it can be enjoyable and rewarding nonetheless. Experiments with more innovative and interactive question types could be the way forward.

**Keywords:** e-assessments; isiZulu second language; e-quizzes
Theme: 7. Responsive and Innovative Pedagogies in Higher Education

The shifting roles and responsibilities of pharmacists to become more clinical and patient-focused in society have important implications for higher education, the curriculum and academics’ pedagogical practices. This research explores how academics prepare pharmacy students for these changing roles, what informs selections for curriculum redirection in the SA context and the pedagogical practices that are ultimately implemented. Pharmacy is a field rooted in the sciences and applied sciences and featuring clinical sciences. This research argues that an understanding of this professional curriculum and pedagogy can benefit from the insights offered by adopting a theoretical discourse of professional education and the concept of recontextualisation (how knowledge is transformed from one context to another) which explores the changing curriculum at a much deeper level. This qualitative research focuses on rotational hospital ward-rounds covered during experiential learning in fourth year Pharmacology (one of the four major disciplines featuring within the undergraduate Bachelor of Pharmacy curriculum at the University of KwaZulu-Natal) and is based on curriculum policy documents, academics’ interviews and observations. While there are a variety of pedagogical approaches such as case-based learning, theme-based learning, interprofessional team based learning and experiential learning to prepare students for their interaction with patients and their involvement in patient diagnosis, treatment and education, this focus on the use of ward-rounds only as pedagogical approach will provide a deep understanding of the process whereby pharmacists are developed for their clinical roles and patient involvement.

Keywords: Pharmacy education; pedagogy; ward-rounds

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Theme: 4. Institutional Research: Building an Evidence-Based Culture in Higher Education

This presentation arises from a project which explores “the support seeking behaviours of male undergraduate students at a selected university”. Globally, studies have revealed that attrition in educational institutions is higher among male than females, while the quality of academic achievement among males is lower than that for females. Male students’ relatively poorer academic performance, together with their aversion to seek academic support, is a neglected area of social science research and requires greater exploration. The objective of the project is twofold. First to establish male undergraduate students’ perceptions about academic support provided at the selected university and second, to gain a deeper insight into the social norms and ideologies influencing male undergraduate students’ support-seeking behaviour. We believe that many male undergraduate students at universities struggle with masculine gender role strain. Their compliance with traditional norms of masculinity result in multiple forms of strain, including discrepancy strain (stress which arises when one perceives a gap between perceptions of one’s actual self and one’s ideal self), dysfunction strain (negative consequences arising out of adherence to socially constructed norms of masculinity) and trauma strain (physical or psychological disorders occur as a result of adhering to traditional masculinity norms). Therefore our intention is not to merely describe what enables male students to, or what disables male students from seeking help. We seek to engage them in deep reflection about help seeking, with a view to creating spaces for them to articulate changes that they wish to see in order to benefit maximally from institutional support. In light of the preceding point we embrace critical theory to raise consciousness about how gendered constructions influence support seeking behaviours, and possibly, impact on academic performance. The overall methodological approach of the project comprises mixed methods. Data will be generated in three phases. Phase one entails the use of surveys, phase two individual interviews and phase three involves storyboarding. The survey will provide insights into male students’ perceptions and evaluation of existing support structures. Male students’ engagement in individual interviews will enable us to explore this research area in greater depth, based on findings from the survey. The data generation process will culminate in storyboarding, which will raise students’ consciousness about support (in the Freirean sense) and enable deep reflection by giving meaning to experiences. We expect that the analysis of the findings will yield novel insights based on the sequence of methods for generating data, and the combination of qualitative and quantitative methodological and analytic constructs. We are currently engaged with phase one of data generation.

Keywords: support seeking behaviour; male students; academic performance
#138.
Insights into Pre-service Technology Teachers’ Reflective Practice of their Teaching
(TLHEC10-042)

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**Theme:** 7. Responsive and Innovative Pedagogies in Higher Education

Reflective practice is part and parcel of a teacher’s pedagogy. Pre-service teachers are required to observe and teach lessons at school during teaching practice (TP) and then “reflect” on those lessons. Additionally they are expected to design lesson plans for TP as well as their method lectures which include a component on reflective practice. We argue that reflective practice is at the risk of being taken for granted by pre-service teachers as pre-service teachers are writing about their TP experiences to meet the course requirements rather than for the objective of deeper analysis and critique of their practice. In addition a disjuncture exists between what pre-service teachers do during reflective practice and what method lecturers expect. So, what contributes to or undergirds this disjuncture? What do we know about pre-service teachers’ reflective practice? These are a few of the perplexing questions that confront method lecturers.

We postulate that this disjuncture arises from the lack of a “common definition” of what reflective practice is and what it entails. Furthermore we maintain that the aforementioned disjuncture impacts pre-service technology teachers’ ability to realise their best teaching practice. In this study we explore pre-service technology teachers’ reflective practice pertaining to their teaching experience. The study sought to address the following research questions: 1. What are pre-service technology teachers’ understandings of reflective practice?; 2. What types and methods of reflections are used and perceived as most effective by pre-service technology teachers?; 3. Is there a disjuncture between what pre-service teachers do, lecturers require and pre-service teachers perceive as reflective practice? If so, what is the nature of this disjuncture?

Schon’s framework of reflective practice, comprising of 3 phases namely reflection in practice, reflection on practice and reflection for practice as well as Freese’s notion of reflective conversation is used as the conceptual framework for the study. These three phases are used to define how pre-service technology teachers think about their teaching, how they examine and act out their sense of agency thereby imagining the best possible teaching. Freese maintains that reflection can be enhanced when conducted with another individual. A case study design was used to collect data from pre-service technology teachers and method lecturers, who were both purposively selected. A mixed method approach was used to collect data via questionnaires and reflective writing exercises. The questionnaire comprised of open and closed ended questions on respondents understanding of reflective practice, the methods they use to engage in reflective practice. The purpose of the reflective writing exercise was to encourage pre-service technology teachers to think critically and deeply about their beliefs on teaching and learning. The results from this study reveal that a lack of congruence does exist between what pre-service teachers do, lecturers require and pre-service teachers perceive as reflective practice. The article concludes by recommending that pre-service teachers can benefit from a more explicitly defined framework for reflective practice.

**Keywords:** reflective practice; pre-service technology teacher; evaluate
Nexus, a non-formal leadership programme at the University of Pretoria’s business school, provides an interesting case for exploring an alternative paradigm of teaching and learning at an institution of Higher Education. Preliminary findings from a case study of Nexus point to deep personal learning involving critical reflections on self and society, accompanied by strong influences of emotions and relationships on learning. This evidence suggests life changing transformative learning taking place in the context of a country in transition. Nexus was first launched in 2002 at a time of change and rebuilding of relationships in South Africa. It aimed to support emerging leaders from business, NGO and government sectors to lead beyond boundaries in order to create positive professional and societal impact. Participants on the programme are exposed to the larger South African societal context through: experiential field trips; focused dialogue sessions in working groups; projects that integrate learning with workplace applications; and seminars with influential citizens and leading thinkers. Nexus has no formally assessed tasks and a certificate of attendance is issued at the conclusion of the programme. This early stage of a case study of Nexus has generated data from interviews with the programme management team and focus group discussions with participants of the programme. Transformative Learning Theory serves as the theoretical lens for this study. Nexus can be seen as an alternative paradigm because of its deeply experiential and dialogical pedagogy in a university programme where learning about oneself and one’s beliefs take priority over a taught formal body of knowledge. Findings indicate profound learning at a personal level and an undoing of perspectives that have been garnered from South Africa’s divided past as reflected in the following statement: “all of a sudden you are free and your baggage is gone. It [Nexus] has made me a light traveller.” Metaphors of journey and space being redefined abound in the data. When prompted to reflect on their learning during their year on Nexus, many participants responded by contrasting this learning with a more formal programme. Transformative Learning Theory is considered an alternative paradigm because of its deeply experiential and dialogical pedagogy in a university programme where learning about oneself and one’s beliefs take priority over a taught formal body of knowledge. Findings indicate profound learning at a personal level and an undoing of perspectives that have been garnered from South Africa’s divided past as reflected in the following statement: “all of a sudden you are free and your baggage is gone. It [Nexus] has made me a light traveller.” Metaphors of journey and space being redefined abound in the data. When prompted to reflect on their learning during their year on Nexus, many participants responded by contrasting this learning with a more formal programme.

**Keywords:** transformative learning; leadership; experiential learning
Higher education institutions around the world are increasingly under pressure to produce more post-graduate students while at the same time facing intense pressure to increase their undergraduate enrollments. This tension is arguably felt most intensively in the context of undergraduate research modules where larger class sizes place ever increasing demands on the resources of staff to supervise and facilitate substantive research projects. As a result, how to structure undergraduate research modules to try and develop meaningful research skills within students whilst realistically managing the demands on staff is an increasingly pressing question for many higher education institutions. This question is even more challenging in the context of programmes where the majority of the students are not first language English speakers. This study takes place within an action research framework and reports on the introduction of several changes to the format of the 4th year Honours research project within the Finance discipline at a South African university, including conducting first time research in a group environment, and reducing the length and style of the traditional thesis to that of a journal article. Staff and students involved in the program were surveyed by means of questionnaires administered at the end of the academic year to elicit their opinions of the changes. This paper describes the changes implemented, the perceptions of staff and students of the success, or otherwise, of these changes and the lessons learned for future implementation. Both staff and students expressed positive responses regarding the use of the group format although several challenges were identified. In particular, some staff expressed misgivings regarding the negative impact of the group format on students’ ownership of the process while students clearly identified the free-rider problem as a major concern. Students found the more structured format helpful and clearly indicated a preference for even greater scaffolding of the research process. Student responses also clearly highlighted several benefits they identified arising out of doing the research project. The results of this study indicate that undergraduate research projects can successfully be implemented using a group format but that several challenges arise which require careful management. Possible ways in which these challenges can be addressed are discussed. Recommendations include the importance of proactively assisting students in managing the group process and that first time research courses build increased student guidance and greater scaffolding of deliverables into the course design as a means to encourage engagement with the course and timely completion of the research project. Specific suggestions are made for ways in which these recommendations can be implemented. The paper concludes by summarizing the lessons learned through the process of redesigning this undergraduate research module and proposing areas for further development.

**Keywords:** undergraduate research; action research; group work
Various student voices have recently been raised in the media starting from #RhodesMustFall, #FeesMustFall to #RhodesShutdown. These events and movements have not only highlighted issues of decolonisation, the cost of higher education and sexual assault, but have emphasised the need for greater understanding of the student experience. In the debates around these events issues of equity relating to who gets access to higher education and more importantly who is successful in higher education have been raised. A Department of Higher Education and Training (DHET) cohort analysis from 2000 to 2008 of first time entering undergraduate students in public higher education institutions found that African and Coloured students fared very poorly when compared to their Indian and White counterparts and that females outperformed males. Moreover, the DHET estimates the average graduation rate for undergraduate degrees at 16%, while the Council for Higher Education (CHE) estimates that only half of students gaining access to higher education will ever graduate. This paper will argue that institutional research (IR) has a greater role to play in understanding students and their experience of South African higher education. It will illustrate how quantitative and qualitative data can be used to better understand the experiences of different students in higher education to help refocus institutional research on understanding the student experience and creating environments that promote greater equity and are responsive to student needs.

The quantitative data will consist of data from the South African Surveys of Student Engagement (SASSE) while the qualitative data stems from research on transition to university. The aim is to show the potential benefit of the use of mixed methods within a pragmatist research paradigm to further the understanding of the student experience in practice. The paper will also illustrate the potential and importance of intersectional analysis to show how multiple dimensions of students’ identities such as race, gender, socioeconomic status, and being a first generation student influence their experience. The results illustrate that there are significant differences in how engaging first year versus senior students experience public higher education to be. The complex ways in which race, gender, socioeconomic status, generational status intersect will also be explored. Both of these findings point to the need for a more nuanced understanding of students and their experiences, which will give way to more effective interventions to promote student success. Examples of institutional responses that are addressing some of the challenges that different students are facing will be shared. The paper will conclude by illustrating how focusing on a more complex understanding of the student voice can help IR to avoid the trap of a “…sense of urgency to do something to fix things, an urgency that is pushing...higher education towards developing simple solutions for complex problems” as stated by Terenzini.

Keywords: Student engagement; Institutional research; equity
#143. The Shrinking Professoriate: Academic Promotion and University Teaching  
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**Theme:** 4. Institutional Research: Building an Evidence-Based Culture in Higher Education  

The rank progression intentions of South African associate professors is important given the declining numbers of full professors in the country. By focusing on a large South African research university where both research and teaching criteria are recognised for promotion to full professor, this article explores associate professors’ perspectives on academic promotion and the role of teaching as a criterion. Key findings from an on-line survey and interviews are that; age and the number of years spent in the rank play a significant role in influencing intentions to become a full professor (or not), there is dissatisfaction with the level of support for promotion applications and, more women than men expressed positive perspectives about teaching as a criterion in promotion. The study points to how academic promotion processes, criteria and support could be enhanced to increase the number of full professors in South Africa.  

**Keywords:** academic promotion; higher education; professoriate; teaching

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#144. An Exploration of Self-Regulated Learning and Learning Styles Among High Academic Achievers at University  
KP. Surmon  
University of KwaZulu-Natal  

**Theme:** 8. Re-envisioning SoTL for the Student-Centred Research University  

Education is a key factor that contributes to the achievement of economic and social development objectives. Higher education institutions therefore recognise the importance of providing quality education to all students through the use of a student-centred approach. In the past, research efforts directed toward improving the quality of education have focused on academic underachievement and failure, and have inadvertently established a deficit discourse in South African higher education. This study responds to this deficit discourse by shifting the focus to high academic achievers at a South African university. Specifically, this study sought to gain insight into elements which facilitate and enable high academic achievement in order to provide practical suggestions to better the learning and educational attainment of both high and low achievers. This study focused on the elements within the individual student’s control in order to gain insights that could be used to empower students to excel regardless of their context and background. In order to do this, this study drew from the social cognitive theory of self-regulated learning as well as theory on learning styles. The goals of the study were to explore the ways in which high academic achievers self-regulate their learning; explore how high academic achievers understand and use learning styles; and provide high academic achievers with an opportunity to suggest ways to improve learning in a university. This study fell within the qualitative paradigm. Semi structured interviews were conducted with seven high academic achievers currently studying at the University of Kwa-Zulu Natal. Thematic analysis was conducted in order to determine themes and patterns within the responses of these high academic achievers. Findings demonstrated the importance of the ability to self-regulate ones learning, and gave insight into specific learning strategies used by high academic achievers. Motivational and management strategies proved to be particularly important to high achievers academic success. This paper concludes with the practical implications of the findings which serve as suggestions for universities to enhance the learning of both under-performing as well as high academic achievers.  

**Keywords:** Self-regulated learning; Learning styles; high academic achievers
Multilingualism highlights a significant superiority in the level of competency of a vernacular language and a language of instruction in Mathematics performance. The aspects of bilingualism greatly influence the cognitive growth of a child if a certain level of competency is attained in both languages and the achievement of arithmetic proficiency foregrounds the linguistic universal intelligence as well as arithmetic skills. This endeavour shifts the perception and the use of appropriate integrative language that links other concepts in the multidisciplinarity of Electrical Systems and Mathematics. Functional multilingualism refers to a practical function of using several languages with a specific purpose of executing normal activities in a systematic, coherent and comprehensive manner. This paper explores the significance of Mathematics language in Electrical Systems. A general policy practice advocates the use of English as a medium of instruction and a language of communication when Electrical Systems yields to a symbolic use of Mathematics language. Language plays a vital role in removing barriers to teaching and learning of Technology and Mathematics. Electrical Systems is foregrounded in numerical science that requires specific information and comprehension of complex instruction and further demands an ability of an individual for task orientation interaction. This topic reassembles an adequate coherent body of knowledge that students would have to develop a relevant approach to critical thinking and creativity. Thus increasing and encouraging an integration of Mathematics and Technology.

**Theme:** Functional Multilingualism in Southern Africa and Significance of Mathematics Language in Electrical Systems

**Keywords:** Multilingualism; Mathematics language; Conversation
therefore aims to determine whether tutorials significantly impact on students’ academic performance within the School of Management at the University of KwaZulu-Natal.

Keywords: Impact; Tutorials; Law and Management

#147.
Motivation Factors to Pursue Post-Graduate Studies:
Implications for Scholarship of Teaching and Research (TLHEC10-210)

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Theme: 4. Institutional Research: Building an Evidence-Based Culture in Higher Education

In general, students enter post-graduate programmes for a variety of intrinsic and extrinsic reasons. For example doctoral students, vocational concerns may appear to be out-weighed by personal development and intellectual interests, to include research skills and interest in a particular area. In the recent past there has been a dramatic increase in post-graduate study not only for enrolment at the University of Swaziland, but also else, in particular, University of Kwa-Zulu Natal (UKZN) for Swaziland. UKZN has attracted a few students from Swaziland particularly those in the teaching profession. The Government of Swaziland does not provide resources to support post-graduate students. Furthermore, Government does not recognize post-graduate degree holders in terms of increased remuneration (salary). Despite all this, there has been an increased interest in pursuing post-graduate studies. The purpose of the study was to determine factors that explain and predict motivation to pursue post-graduate studies. The design of the study was ex post factor employing correlations and regression analysis. The population of post-degree holders who graduated from the University of Swaziland constituted the population. Respondents were both intrinsically and extrinsically motivated to pursue post-graduate studies. Three factors were found to explain and predict motivation: a) Education advancement, b) Family environment, and c) Age. Recommendations: a) University of Swaziland should consider expanding programmes at the Masters’ and doctoral degree levels; b) Teaching faculty at the university must develop mentorship programmes with a view to attract good students and become part of faculty; c) Graduate student support services and structures must be revamped; d) Consideration be made of establishing collaborations with neighbouring universities who have offered post-graduate studies, in particular at the doctoral level, for much longer.

Keywords: Post-graduate studies; Motivation for post-graduate study; Professional development
Factors Affecting Students’ Decision to Pursue Higher Degrees in Finance at the University of KwaZulu Natal (TLHEC10-084)

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University of KwaZulu-Natal

Theme: 2. Funding Higher Education – New Challenges, Opportunities and Prospects

Fewer students enroll for higher degrees after completing their undergraduate studies and this can be attributed to a number of factors. The article will explore these factors by engaging UKZN students who are enrolled for undergraduate studies in Finance using a questionnaire. The aim of the questionnaire is to ascertain what the students think would hinder them from pursuing a higher degree. We have however identified a couple of factors affecting their decisions to pursue higher degrees which are, student preferences, Qualification requirements (selection criteria), lack of supervision, lack of finances, exhaustion/fatigue from studying, eagerness to join job market, competition for spaces in higher degrees, fear of being overqualified, pressure from families to find a job and scarce resources for enabling a healthy livelihood whilst pursuing those higher degrees. This study will profile students in their final year of study in the form of a survey to find out whether they are interested in enrolling for higher degrees or not and also find out their reasons for their preferred choices.

Keywords: enroll; higher degrees; Financing

Organizational Commitment of Teacher Educators at University and Tertiary Institutions in Swaziland (TLHEC10-141)

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Theme: 4. Institutional Research: Building an Evidence-Based Culture in Higher Education

Lack of commitment by employees is behind much of the behaviour blamed for high costs and poor service delivery. Organizational commitment constrains the extent to which employees identify themselves with the mission, goals, and values of the organization. Committed teacher educators in the university and tertiary institutions serve as a model of values, attitudes and behaviours to teacher trainees. Such institutional research has implications for the scholarship of teaching and research. The purpose of the study was to determine factors influencing organizational commitment of university and tertiary teacher educators in Swaziland. Population of study was teacher educators at the university and tertiary institutions. The study was descriptive-correlational employing regression analysis. Findings revealed the following high positive correlations (highest to lowest) between organizational commitment (dependent variable) and the independent variables as factors influencing commitment: (a) Job satisfaction, (b) Professional development, (c) Remuneration, and (d) Burnout. Explanatory and predictor variables of organizational commitment were: (a) Job satisfaction (64%), (b) Professional development (8%), and (c) Highest academic qualification (2%). Recommendations for the improvement of the scholarship of teaching and learning with implications for influencing organizational commitment: (a) strengthen continuous professional development programmes to enhance professionalism; (b) review working conditions (remuneration, promotions structures, etc.) particularly at the colleges to be comparable with those in similar institutions in the neighbouring states; (c) reduce heavy teaching, practice teaching supervision loads, and student research project supervision which conditions may be attributable to the high attrition rate, particularly at the University of Swaziland.

Keywords: Organizational commitment; Professional development; Institutional research
Disrupting the Domain of Instructional Paradigm Through Power Centred Pedagogy: An Alternative Approach to Teaching and Learning (TLHEC10-235)

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University of KwaZulu-Natal

**Theme:** 9. Alternative Paradigms, and Emerging Directions in the Scholarship of Teaching and Learning in Higher Education

The instructional paradigm for teaching and learning has been designed in such a manner that the teacher is ‘trusted’ to be the sole bearer of knowledge whilst a learner is ‘expected’ to ‘reciprocate’ such trust by absorbing the knowledge that is being given from a teacher. Trust and reciprocity have been found to be important in building meaningful relationships between groups (learners, teachers and peers in the context of teaching and learning). On the contrary, a recent survey conducted in South Africa reveals that trust and reciprocity on their own are not adequate to build honest and effective participation between individuals in a group. The conclusion of the study is that foregrounding power analysis is important to transform trust and reciprocity into ‘Critical Trust and Critical Reciprocity’ to ensure that participation occurs within an environment honest engagements that are embedded in the analysis of power dynamics within groups including relationships between teachers, learners and peers. The argument in this paper is that power centred pedagogy is essential to disrupt the dominant instructional paradigm in teaching and learning to ensure that relationships between teachers and learners are embedded on the kind of trust and reciprocity that is shaped by critical exchange of ideas about pedagogy that shifts power away from a teacher and redistributes it amongst all involved including learners and peers. The paper presents a model that seeks to facilitate a power centred pedagogy. The model suggests that it is important to place trust and reciprocity into a reality test by creating “ideological centres” [IC] and “a critical centre for constructive dialogue” [CCCD]. The ICs and CCCDs ensure that various interests and agendas are declared openly and honestly and negotiated in a teaching and learning space to ensure that any action that ensues is based on a critically negotiated settlement where teachers, learners and peers know what to expect from and offer into a teaching and learning space. The model provides for a critical dialogue that is foregrounded on power consciousness; which enables the surfacing of schemas that are often layered on power and class and any other nuances within a teaching and learning space, to ensure that various interests have received adequate attention and will be catered for within a group without prejudice or disregard that is biased based on any form of difference and/or diversity that characterises a teaching and learning space. It is important to mention that the ICs and CCCDs are not limited to power and class consciousness, but that they can also include other variables and associations like race, gender, sexual orientation, gender presentation, social status and so on depending on the context in which they are applied. The model is intended to ‘disrupt’ the dominant instructional paradigm and permits innovation for all parties that are involved in a teaching and learning space.

**Keywords:** Power pedagogy; Innovative Teaching; Reflexivity
#151.
Importance of Training Nurse Managers: A Lesson to Learn from First-Line Nurse Managers in District Hospitals in Cameroon (TLHEC10-194)

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Theme: 1. Relevance of the Curriculum in Higher Education

Being appointed to a managerial position because of one's clinical skills seems to be prestigious, even powerful. Being a First-Line Nurse Manager (FLNM) in a district hospital characterised by limited financial, material and human resources can be a daunting task. Being a unit manager with no previous training in leadership and management can be very challenging and can compromise the health care organisational goals. The aim of this paper is to describe the FLNMs’ lived experiences in two selected district hospitals in Yaoundé, Cameroon then question the extent of their training as FLNMs. A constructionist, reflexive and descriptive Husserlian phenomenological approach was used to identify what it is like to be a FLNM in a district hospital. Data were collected through semi-structured interviews from nine FLNMs, then audio-recorded and transcribed verbatim. The seven-steps of Colaizzi’s qualitative data analysis method were used to bring out meaningful themes and sub-themes. The data analysis revealed that managing a district hospital unit is like “being a mother of a family”. The transition to this role happened by surprise and with no formal training preceding it. The role includes providing, teaching, controlling, correcting, and planning. This role implies making some sacrifices and facing some difficulties. It requires assistance from others and specific characteristics in the role-players. Based on this, the health care organisations should foster, support and strengthen the roles of unit managers in Cameroon. They should dedicate financial and material resources to education and training in order for unit managers to acquire the necessary leadership and management skills. These skills could help them be transformational leaders in a context where staff are in need of supervisors who not only facilitate an environment that allows them to be productive, but who also demonstrate their concern for the staff’s wellbeing as individuals.

Keywords: FLNMs in Cameroon; lived experiences; training of nurse managers

#152.
Who is Responsible for Preparing Law Graduates for the Profession? (TLHEC10-101)

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Theme: 1. Relevance of the Curriculum in Higher Education

The legal profession is often heard to be lamenting the fact that law graduates coming into the profession are underprepared in terms of lawyering skills needed to practice as an attorney. Universities argue, on the other hand, that it is primarily (although not exclusively) the role of the Legal profession to prepare graduates in terms of the practical skills needed as a lawyer. The University, the debate goes, only has a limited time (time which has contentiously already been reduced from five years to the current four year offering) to teach substantive knowledge to equip students to be proficient in the law. Prior to 1998, when the four year LLB was introduced, the debate started around which generic skills law graduates should attain. There was a nuanced agreement on the specific skills and these are identified and discussed in this paper. More specifically, this paper looks at the role of the 4th year University module “Professional Training” at the University of KwaZulu-Natal (Pietermaritzburg campus) as well as the role of the University Law Clinic in exposing Law students to lawyering skills that will be needed to become effective practitioners. The connection between one section of “Professional Training” (Moots) and the University Law Clinic is that students are intended to be better equipped to research client’s problems and write opinions, as well as articulate themselves in the clinic setting. This premise is explored. Other South African University Law Clinics are examined (UKZN - Howard College campus - and WITS) and compared to what is being offered at the Pietermaritzburg campus. A qualitative data collection method is used. Interviews conducted with the director of the UKZN (Pietermaritzburg) Law Clinic, as well as lecturers are analyzed to understand their respective roles in assisting graduates to get “work ready”. Data from interviews with recent graduates and lawyers who have been practicing for approximately 10 years (all graduates of UKZN – Pietermaritzburg campus) is used to gain a better understanding of what the perceived “gaps” were when they graduated. The paper therefore focusses broadly on the concept of graduate readiness of Law students and quite specifically on the perceived role of the UKZN Pietermaritzburg Law Clinic and the module “Professional Training” in relation to preparing graduates for the profession.

Keywords: law graduates; skills; law clinics
One of the lasting testaments of the existence of Apartheid in South Africa has been the unequal development of languages in education. To this day, only Afrikaans and English have been used as languages of scholarship in institutions of learning, even though majority of South Africans are not English or Afrikaans speakers. In 2002, as a means of dealing with language issues in higher education, the government’s then Department of Education released the policy titled, the ‘Language Policy in Higher Education, 2002’. One of the requirements of the policy is that institutions develop their own institutional language policies in order to address language problems they are facing but their policies need to be informed by this national language policy. Based on the current uprisings in Higher Education Institutions such as the University of Pretoria and the University of Free State, the implementation of this policy and the policy itself needs to be explored. The students fear that former Afrikaans universities are using the Afrikaans language as a means of blocking their access and success in their studies and the policy itself needs to be explored. The students fear that former Afrikaans universities are using the Afrikaans language as a means of blocking their access and success in their studies and that Afrikaans speaking students have an advantage over those that are not. Some institutions have taken steps in tackling the language issues in their institutions, for example, following the often violent protests at most of the Higher Education Institutions, the University of Pretoria announced in February that it has adopted English as the official language of tuition and the University of Free State followed suit in March, announcing that following the University’s council review of the institution’s language policy, the decision was taken that beginning of 2017, the official language of the University is going to be English and that no courses are going to be offered in Afrikaans except for a few exceptional cases. In 2014 the University of Kwa-Zulu Natal made taking IsiZulu as a subject compulsory for all first year students. This paper focuses on the implementation of the Language Policy in Higher Education, 2002, and particularly the development of African languages to be used as medium of instruction at the University of Pretoria, the University of Johannesburg and the University of Kwa-Zulu Natal. A mixed method approach that includes document analysis and interviews are utilised to determine how the institutional language policy is implemented as well as the challenges these institutions face in implementing the policy. The paper reports on the progress that has been made by these institutions and the strategies adopted to tackle the language issues.

Keywords: African languages; Higher Education Institutions; Policy

In an effort to revitalize a Zulu language, communities may have unknowingly adopted or assimilated colonized ways of thinking as they invest interest and attempt to repair or restore ties to a wide range of arts, business, culture, custom, design, innovations/inventions, fashion & style, medicine/pharmacy/chemistry, science/engineering, mathematics/ geography, media, religion, tradition and language, including a myriad of representatives from more than 500 educational institutions around the world. Indigenous languages represent one of the darkest ways in which ethnocide and genocide have occurred. It is expected in the next twenty-five years over 700 of the worlds indigenous languages will be forgotten or unrecognized. In the Zulu province alone, the language is considered critically endangered; Zulu people are risking their lives to protect the ecosystems that all of us depend on. Decolonizing Zulu Language Revitalization aims to put forward perspectives of shifting values, cultural understandings, and impacts on community. It is the stories we tell ourselves (as a people) that impacts who we believe we are, and then who we become. But if the stories -- even including, or especially the indigenous ones -- are filtered through colonialism, we have become a different people because of it. Decolonizing Zulu revitalization is an interdisciplinary presentation that grapples with the racial and ethnic politics of knowledge production and indigenous activism in the Zulus. It analyses the relationship of language to power and empowerment, and advocates for collaboratives between community members, scholars, and activists that prioritize the rights of Zulu people to decide how their knowledge is used. The contributors—academics and activists, indigenous and non-indigenous, from disciplines including history, anthropology, linguistics, and political science—explore the challenges of decolonization. These wide-ranging case studies consider how language, the law, and the archive have historically served as instruments of colonialism and how they can be creatively transformed in constructing autonomy. The presentation highlights points of commonality and solidarity across geographical, cultural, and linguistic boundaries and also reflects deep distinctions between East, West, North and South. Decolonizing Zulu revitalization looks at Zulu histories and narratives in an internationally comparative context, with the hope that international collaboration and understanding of local histories will foster new possibilities for Zulu mobilization and an increasingly decolonized future.

Keywords: Zulu; Language; Decolonization