

## Elements of Quality Assurance at Institutions of Higher Education: Vaal University of Technology in South Africa

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Doi:10.5901/mjss.2013.v4n14p643

### Abstract

*In higher education worldwide there has been a shift from quality control to quality assurance. Quality assurance in South Africa has been seen as an important element in the democratisation and transformation of education. The emphasis on quality assurance in education and training was seen as emancipatory because under apartheid the education which most of the population had access to was of very poor quality. The 'quality' discourse and quality assurance in higher education in South Africa shows that Quality Assurance (QA) is a focus area which is also relatively a new phenomenon and is still in its formative stages of development. This implies that educational institutions are required to establish their own quality management systems. A triangulation approach consisting of interviews, document exploitation and observations were used to collect the data from multiple sources in this qualitative study. To be able to develop a logical argument, the Social constructivist theory will be discussed first, then National Qualifications Framework (NQF) which is responsible for quality assurance, then Vaal University of technology, concepts like quality will first be discussed and this discussion will be followed by an interrogation of standards. Finally, last but not least, a discussion on relevance will be entered into. Managerial implications of the findings are discussed and limitations and future research directions are indicated.*

**Keywords:** Social Constructivism Theory, National Qualifications Framework (NQF), Vaal University of Technology (VUT), Quality assurance, Quality, Standards, Relevance.

### 1. Introduction

Transformation of Higher Education in South Africa has a particular context and substance (Fataar, 2003; Bundy, 2005; Allais, 2012). It has to do with redressing the historical, socio-economic inequalities within societies, organisations, businesses, government and above all universities as places of work, learning and teaching (Motala, 2001; Lugg, 2009; Allais, 2010). Such inequalities were built into the educational dispensation under apartheid and promoting a commitment, by an institution such as ours, to a new "social order" that reflects our social structure and inadequacies more accurately (www.vut.ac.za). Transformation starts with the assumption that the old order is no longer adequate for the needs of today. This old order would need to be supplanted by a new policy landscape. It is about a new way of doing, thinking and meaning giving. If the macro changes in the political environment were about democracy, participation, consultation, equity and transparency, the accompanying changes in higher education had to follow suit to be about representation, openness, inclusiveness, access, opportunity and collaboration. Changes not transformation has occurred over recent years in South African education in terms of access, quality and equity in higher education (Fataar, 2003; Jansen, 2003; Bundy, 2005; Sehoole, 2008; Oloyede, 2009; Soudien, 2010). The concept of learner-centeredness has emerged as a result of Outcomes Based Education and Training (OBET). Traditional lectures are gradually being replaced with learner-centeredness which refers to concepts such as active learning, self directed learning and autonomous learning (Pillay, 2002). This implies a process of facilitation where learners are actively

engaged in the learning process instead of being passive and being taught everything by the teacher. Here the learner is not passive and the teacher is not the master of knowledge. According to Paul Frere (1972:59), the education system where there is no facilitation becomes an act of depositing, in which students are the depositories and the teacher the depositor. Frère(1972:59) goes on to state that in the banking concept of education, knowledge is a gift bestowed by those who considers themselves knowledgeable upon those whom they consider to know nothing. Quality assurance is the systematic measurement comparison with a standard monitoring of processes and an associated feedback loop that confers error prevention. This can be contrasted with quality control which is focused on process outputs. Two principles included in the quality assurance are "fit for purpose", the product should be suited for the intended purpose in this case the product is education and "right first time" which means mistakes should be eliminated. This relates also to education that it should serve its purpose of cooking students to be better citizens of tomorrow and lifelong learning.

### 1.1 Key Questions

As can be deduced from the introduction above key questions can be formulated such as what is the meaning of equity, how is it that we still have inequity in South Africa and why is inequity a real problem to higher education institutions? Other questions are what is efficiency and effectiveness in higher education? How has inefficiency and ineffectiveness become a problem in higher education in South Africa? What can be done to redress the issues. What is access? Why is education in South Africa still inaccessible to many? What can be done to do away with it?

We needed to consider seriously, the following questions here at VUT as a case in point:

1. Does VUT understand the immediate and future needs of its clients, stakeholders, customers and its operating environment?
2. What is the nature of the competitive environment within the region and what is our competitive edge?
3. How appropriate is the VUT vision, given our new reality, as a university of technology that needs to respond to the nation's call for a skilled, quality and competent labour force to drive our economy?
4. What would be the most strategic route VUT must take to continue to be relevant in this region?

## 2. Literature Review

### 2.1 Theory of Social Constructivism

Social constructivism is whereby students construct their own meanings in education through social interaction to achieve the desired results. Constructivism has a long history in cognitive psychology going back at least to Piaget (1973). Today it takes on several forms which are individual, social, cognitive and postmodern (Steffe & Gale, 1995). All emphasize that the learners construct knowledge with their own activities, building on what they already know. Bartlett (1932) pioneered what became the constructivist approach (in Good & Brophy, 1990). Constructivists believe that learners construct their own reality or at least interpret it based upon their perceptions of experiences, so an individual's knowledge is a function of one's prior experiences, mental structures and beliefs that are used to interpret objects and events. What someone knows is grounded in perception of the physical and social experiences which are comprehended by the mind (Killen, 2002). If each person has their own view about reality, then how can we as a society communicate and/or coexist? (Ileris, 2001).

Teaching is not a matter of transmitting but of engaging students in active learning, building their knowledge in terms of what they already understand. So the other underpinning concept of constructivism is that you construct knowledge through activities that are likely to result in achieving the desired outcomes. It is all about what the learner does. It must be an active learning environment, not passive where students are allowed to air out their views and intensively participate in every step of the way. This will consequently result in lifelong learning. The basic point of departure of constructivism is that learning is an active process of constructing meaning (Gravett, 2005). According to constructivism learning is a process during which the learner constructs his or her own understanding and knowledge of the world on the basis of information received, through experience and reflection on experiences rather than the mere absorption of information that is passed on (Taylor, 2002). For this reason constructivists regard the textbook or teachers knowledge that learners acquire as being of lesser importance. Of far greater importance is that learners question their own understanding and discover new understanding (Henson, 2004). Although the importance of contextualism to constructivism is a debatable issue, many constructivists believe that learning should take place in realistic and authentic settings and that testing should not be a separate activity, but should rather be integrated into the task that the learners

are performing (Chalmer & Fuller, 1996; McGriff, 2001). The basic assumption underlying constructivism are that, knowledge is constructed from experience, learning is a personal interpretation of the world, learning is an active process in which meaning is developed on the basis of experience, conceptual growth comes from the negotiation of meaning and the sharing of multiple perspectives and the changing of our internal representations through collaborative learning (Moore, 2009).

Constructivism emphasizes on what students have to do to construct knowledge, which in turn suggests the sort of learning activities that teachers need to address in order to lead students to achieve the desired outcomes (Biggs & Tang, 2007). There are three main types of constructivist approaches, namely: I) the cognitive model where knowledge is acquired, internalized and constructed based on an external reality; II) radical model which focuses on what is or has been experienced in the mind and not the external reality; III) social model is a blend of the cognitive-radical where the "social nature of knowledge is maintained" (Ekeblad 1997:219).

## 2.2 Background of Quality Assurance

After the establishment of a democratic government in 1994, various acts of parliament were passed and national quality agencies constituted, representing part of South African attempt to standardise and legitimise the education and training system. Responsibility for QA at universities was assigned to the Higher Education Quality Committee (HEQC), which was constituted in March 2001 (Singh, 2001). The HEQC is concerned with strategic and conceptual issues of quality in higher education, with responsibility for programme accreditation, quality promotion and institutional auditing (HEQC, 2000; Kraak, 2000; Baijnath & Singh, 2001; 2004a; 2004b). This is well articulated here at Vaal University of technology (VUT) that education should aim to produce quality graduates who can compete globally in terms of employment opportunities and academic advancement. This is in line with the new vision of VUT to be a leading institution in innovative knowledge and quality technology education, computer technology and digital media (Teaching and Learning Model 2012:40). The Distance Education Quality Standards Framework for South Africa (Department of Education 1996), defines necessary QA arrangements for higher education as follows: The management ensures that, in its day-to-day work, the organisation's activities meet the quality standards set nationally as well as the organisation's own policy for the different elements regarding teaching and learning, management and administration, finances, human resources and marketing. Secondly, there is an organisational culture that encourages efforts to improve the quality of the higher education. Thirdly, there is a clear cycle of planning, development, documentation, reporting, action and review of policy and procedures within the organisation. Fourthly, staff development is seen as fundamental to quality service provision. Fifthly, there are clear routines and systems for quality assurance and staff are familiar with those that relate to their work. In addition to this, staff, learners and other clients are involved in quality review. On top of this, internal quality assurance processes are articulated with external processes (Ensor, 2010; Psacharopoulos & Patrinos 2010). The Quality Management Systems (QMS) in this study strongly reflects all the different items above. The above framework has since been revised into the more comprehensive criteria for Quality Higher Education in South Africa (Council for Higher Education 2004). The first step in ensuring ownership and commitment of the instructional designers and project managers who are the users of the QMS is to provide training in the theory of QA. The 'Introduction to Quality Assurance' workshop was presented to the TLEI management team in November 2001 and in small groups to all the members of the E-Education Unit from November 2001 to May 2002 (Boyd 2001b).

## 2.3 The National Qualifications framework

The National Qualifications Framework (NQF) in South Africa was introduced as a key mechanism for creating a more egalitarian education system (SAQA 2000a, 2000b; Steyn 2000; Young 2001; Young 2002). Some of its stated objectives are: to facilitate access to education and training; to facilitate mobility and progression within education, training, and career paths; to enhance the quality of education and training; to accelerate the redress of past unfair discrimination in education, training, and employment opportunities and to contribute to the full personal development of each learner and the social and economic development of the nation at large (RSA 1995). Many hopes were pinned on the NQF. It was regarded as a transformative instrument, which would 'expand the ways in which people are able to acquire learning and qualifications of high quality' (Departments of Education and Labour 2002). It was to be a mechanism for the integration of education and training. Curriculum innovation would be encouraged in response to community and industry demands (Gewe, 2001). Moore (2001:150) showed that " It was characteristic of South Africa's transition to democracy that people of different political persuasions, bodies working within higher education sectors, public servants and organised

business and labour were able to find a strategic patch of common ground ....". The National Qualifications Framework was established as an emblem and an instrument of the single national high-quality education and training system that democratic South Africa aspired to create" (Departments of Education and Labour 2002).

As emphasised in the Universal Declaration of Human Rights, "higher education shall be equally accessible to all on the basis of merit". High quality education results therefore in high quality graduates and teaching staff which will ultimately lead to a better society. Investing in higher education was viewed as a major force in building an inclusive and diverse knowledge society and to advance research, innovation and creativity (Ponte & Gibbon 2006:3). Researches done so far shows that higher quality education and research contribute to the eradication of poverty, leads to sustainable development and to progress towards reaching the internationally agreed upon development goals, which include the Millennium Development Goals (MDGs) and Education for All (EFA) (Oloyode 2009; McGrath 2010; Soudien 2010; McGrath 2011). The majority of South African citizens are concerned about student access, success, affordable education, kind of knowledge produced, curriculum design standards and the type of graduates exiting universities. The higher education system needs transformation to redress past inequalities to serve the new social order and most universities have transformation policies and some are still drafting transformation documents for change to be effective and to respond to new realities and opportunities (Radebe 2013).

#### 2.4 Vaal University of Technology (VUT)

The vision for VUT is "We are a University that leads in innovative knowledge and quality technology education" and the mission statement is "to produce top quality employable graduates who can make an impact to society by adopting cutting edge technology and teaching methods, producing a scholarly environment conducive to learning and innovation and developing a Product Quality Management (PQM) that meet the needs of society in Africa and beyond" (Teaching and Learning Model 2012; Radebe 2013; www.vut.ac.za). VUT is creating new knowledge that will be more meaningfully applied and commercialized, through technology transfer and diffusion for example our programmes and qualifications have to change and keep up with the changing and complex world of today. This is all about adjusting to the new policy landscape. Over the past three years a number of challenges forced this University to make serious introspection in an attempt to ask questions like what, now, why us? There are problems with issues of equity, efficiency and effectiveness at VUT and a lot is being done to eradicate the problems through policy changes and modifications of the Teaching and Learning Model and Transformation document.

Issues of redress, access and success have become the underlying principles for "gain sharing" in terms of the benefits of education. In looking back, for the first time in its 45 years of existence, VUT has grown from 6 000 students to 17 000 last year. First term 2010 has seen VUT grow to a staggering 21 000 heads (Radebe 2013). Sadly enough, without the commensurate upgrade in infrastructure, accommodation and human resources. Added to this, we have almost 3 000 students who are not covered by government subsidy to continue their studies at VUT. To transform, VUT had to target the learning environment access and success.

VUT is about to produce a patent in this regard and last but not least Fluid-Thermal Systems, VUT ambition is to become the leading research centre of thermal energy and engineering education. The VUT's Engineering and Technology Division is also investigating an innovative way of improving the efficiency of wind turbines. Such a high performance configuration may drop operational costs by about 60%. This breakthrough research could have national significance. This will contribute to VUT as a "University of Choice" and a catalyst for our region (Radebe 2013:4).

#### 2.5 Quality

This study asked the question "What is quality?" While the difficulty of establishing an exact definition of quality is apparent, like Glasser (1990) noted, "We almost always recognise it when we see it". Quality is an elusive concept which is hard to define, but you recognise it when you come across it (Rollinson 1999). Like beauty it is in the eyes of the beholder. This paper reviews the meaning of quality as applied in Higher Education. There are many definitions as to what quality is and many disciplines have tried also to define it differently. Green (1994) has argued that a single definition of quality in Higher Education is not possible and that we need a multiplicity of definitions of quality in order to accommodate the differing perspectives that exist within society. Stubbs (1994) illustrates this well by showing how the notion of quality in Higher Education will vary between a university academic, a secretary of State for Education and an industrialist, each of whom will measure quality in a different way. Quality, therefore, is neither an absolute nor a unitary concept, although this does not absolve us from the responsibility of pursuing it, maintaining it and enhancing it (Green,

1994). As a starting point, a number of definitions of quality are offered, compiled from Chalkley (1994) and Green (1994), in order to illustrate the divergent views on quality in Higher Education. Quality in Higher Education may be defined as: i) providing a product or service that is distinctive or special: this traditional concept of quality implies an exclusivity which is unworkable in most parts of the world, for increasingly Higher Education is for the many, not the select few; ii) the achievement of standards: that is, meeting certain expected standards of performance. This concept of quality has its origins in the manufacturing industry. Its major flaw is that there is no information given about the criteria by which the standards are set (Green 1994:6). How can you compare a poor quality Mercedes Benz with a high quality Mazda 323? Clearly the concept of quality is wider than that of standards; iii) fitness for purpose: earth science departments have differing aims depending upon their institutional and societal context. In this definition, a quality course is judged by the extent to which it achieves its stated aims. This definition is adopted by many policy makers, since it is developmental and allows institutional aims to evolve. Nevertheless, it begs the question of what is the overall purpose of Higher Education? Clearly different sectors of society have differing and sometimes conflicting views of quality in Higher Education; iv) effectiveness in achieving institutional goals: a version of the 'fitness for purpose' definition of quality is the extent to which an institution fulfils its stated mission. This implies that there is no such thing as a 'gold standard' in Higher Education; v) value for money: this is normally a measure of how cheaply a course can be delivered effectively; vi) value added: a measure of the difference in skills, abilities and knowledge between the student joining and leaving the course; vii) customer satisfaction; this is measured by the extent to which the course meets the needs of the customer. The customer may be the student, industry or society at large. What is not clear is which 'customer' is the one who defines quality, for, as briefly mentioned above, each customer has a different perception of quality. Each of these definitions has strengths and weaknesses and it is clear that in order to encompass this range of definitions opens up the differing possible purposes that Higher Education may serve and allows individual educational departments to adopt a mission appropriate to the needs of their own society and economy.

Quality is not an absolute. This means that differing definitions of quality apply in different political and social settings. Thus, individual African educational departments need to define their own understanding of quality, derived from their own particular setting. England's very rigorous quality assessment method is currently under review (Lu, 2009). One possible option is that it is replaced by a strong external examiner system. Such a system in Africa could lead to a greater comparability of academic standards between African states. In the South African context, the term quality is being applied in a very eclectic way. There is a need for consensus on quality, to accept that it has normative and descriptive criteria, and to extend the notion of quality as adding value, as empowerment and as epistemological access. Of particular importance has been the attempt to understand that redistributing resources must lead to a redistribution of the conditions of learning (Bloch 2005). Redress is linked not only to physical and infrastructural reform and inputs, but to creating conditions for the equity of learning achievement. In the South African context one of these conditions must be more attention to improving pedagogical and epistemological practice (VUT Teaching and Learning Model 2012). Much of the South African literature has focused on effective higher institutions of learning (Jansen 2003), ineffective higher institutions of learning (Chisholm & Leyendecker, 2008) and resilient higher learning institutions (Chisholm, 2007). In order to broaden our notions of appropriate outcomes, it is necessary to move away from the distinction between good and bad higher institutions and to create a more nuanced understanding of the overall purpose of higher institutions of learning and of the values they are promoting. A tension continues between education for the purpose of serving the global economy and local economic growth and education which services the broader goals of citizenship and democracy. A key question continues to be posed: "Given similar resources and conditions, why do some Universities do better than others?" Innovative research within the South African context is beginning to create a more encompassing approach to quality, redress and equity by attempting to link poverty indicators, level of university resources and university outcomes (Enslin, 2001; Ensor, 2010). It is apparent that the decline in education quality, the decline in the quality of the inputs into the system and the widening of inequalities in the provision of university opportunities are ongoing concerns not only in South Africa but in Africa as a whole (Fataar, 2003). It is suggested that although there has been political change, the process of establishing a transformed education system has been slow to occur. Ways have to be found to support these two related processes of political change and education transformation. It is increasingly clear that information-gathering and research are only some of the ingredients in policy-making in South Africa and that what actually happens "depends on the areas of interests, ideologies and institutional procedures in the political domain and the political will to make things happen" (Oloyode, 2009). The study argues that there continues to be a linear conception of the policy process, in which there is an expectation that development, adoption and implementation follow each other quite smoothly. However, the actual process of policy implementation has pointed to a more complex and untidy reality linked to the "fragile state"; the process has been characterised by a context of fiscal and capacity constraint and marked

by a series of contestations, disjunctures and some continuities with pre-1994 visions.

The achievement of quality thus far has been pursued through the establishment of regulatory frameworks and legislation. However, the “quality chain” from national through provincial to district and university level is not in place as yet. This continues to reflect the tension between good national frameworks and poor local implementation. Moreover, it has been difficult to move from the symbolic view of quality to a programmatic approach to quality improvement (Ramsden, 1991; Psacharopoulos & Patrinos, 2010). The establishment of the Chief Directorate: Quality Assurance in the Department of Education is positive, however, in practice its focus remains largely on assessment and curriculum change rather than a more holistic approach to achieving quality in institutions, many of them dysfunctional and scattered across the system (Fresen & Boyd, 2005). In this regard, it is necessary to recognise the transversal nature of quality and for dialogue to occur across the various departments and projects engaged in quality improvement. Greater articulation and co-ordination is required between the two main thrusts in education change that is, curriculum development and institutional development. Such an approach would lead to greater coherence in any strategy to achieve quality across the system.

Various research paradigms on higher education institution performance had influenced research on quality. It was suggested that it was not useful to polarise quantitative and qualitative work; examples of research were provided to illustrate a mixed approach, using both dominant methodologies (Meyer & Hofmeyer, 1995). The current trend to the measurement of quality through indicators and the piloting phase is extremely important in creating a more useful application of indicators in South Africa. Indicators are also contributing to the creation of a culture of accountability and efficiency and are an important component of a monitoring and evaluation system. Vroeijenstijn (2001) draws attention to the fact that most indicator studies focus on inputs and evaluating processes, but deal insufficiently with learner outcomes. Internationally, there is also a shift to place the learner much more at the centre of the education change and transformation process. Very little research has been done in South Africa, however, that places the student experience at the centre of education change. The enormous value of qualitative research must not be underestimated. Not only does it provide insider perspectives on teaching and learning processes, but as Chisholm (2007) notes it is also a validity check on statistical data and the opportunity to examine the unanticipated and contradictory outcomes of policy. Conceptually, even in South Africa there appears to be a divide between the “classroom culturalists” and the “policy mechanics” (Lugg 2009:110). Both approaches are limited in that of the policy mechanics for attempting to find universal remedies across boundaries, they ignored the influence of different cultural and contextual settings and that of the classroom culturalists for focusing narrowly on the social norms of classroom behaviour without looking at how institutions of higher learning effects can be measured.

By reviewing current research and development strategies, the paper critically illustrates how strands of these approaches are currently being used in South Africa. Non-Governmental Organisations (NGO) partnerships with higher institutions of learning on whole university strategies are being put in place, indicator systems are being piloted and capacity-building for university management is being prioritised. At the same time restoring the culture of teaching and learning, ensuring that children and teachers are getting to school and benefiting from being there therefore remain goals that are only partially attained. While fiscal and capacity constraints have been identified, how to establish a credible and workable system of education renewal at university level remains an enormous challenge. Thus, while university policies have emphasised democratic governance and adequate resourcing, these need to be linked to pedagogical concerns with quality improvement (Rollinson, 1999). Building a sense of agency, responsibility and accountability within the university appears to be a major factor in “working universities”. The crucial issue is for universities to utilise whatever resources they have within themselves and within the local community. This would also counter the “deficit” notion of quality and allow for change to occur at universities organically within their own settings and from their own resources and experiences (Fresena & Lesley, 2005).

Crudely put, the South Africa notion of quality assurance as realised in the bulk of SAQA structures is that once ‘skills, knowledge, attitudes and values’ have been defined (by stakeholders), providers must deliver programmes against them. Quality assurance is the technical process of evaluating the extent to which providers assist learners in achieving them; in other words quality assurance is underpinned by the idea of ‘production to a standard’ (Powell 2012:645). Key quality indicators for providers are, among others, that providers use the standards, integrate theory and practice, and utilise suitable processes for the prescribed learning outcomes. In this process, issues concerning technical or theoretical content can easily get lost or treated as of secondary importance. It is important to note that ‘Quality’ is a far more complex concept in education than it is in industry, and industrial quality assurance systems cannot easily be applied to education (Vroeijenstijn, 2001:40). Industrial quality assurance systems are about the quality of the ‘product’, but in education, it is not clear what this is; it could be seen as the graduate, or the course, or an improved economy, or a better

society. It is equally not clear who the client is, is it the learner, the employer, the taxpayer? Quality assurance in industry is not primarily about accountability, and industrial systems are not designed with accountability in mind. Quality assurance based on delivery against unit standards is essentially a managerialist approach, which measures success in a circular fashion, has the target which we set been met? In other words, the question becomes, 'Was the system applied according to plan?', and ignores the effects of the plan on reality (Young, 2002). Focusing on measurable outputs can have the effect of suppressing learning; one often does not see that the model isn't working, until one steps out of the paradigm. The important point here is that "the achievement of planned outputs does not inevitably lead to the intended outcomes ... ".Attempts to capture delivery by breaking it down into measurable units often lead to perverse outcomes' (Sehoole, 2008). Although the 1970s and 1980s saw a massive increase in African enrolments (massification), state control limited the kinds of research that could be conducted in universities; research efforts were further limited by heightened political conflict in many communities which strengthened the poor quality of education (Motala, 2001). Things are now changing in the institutions of higher learning they are now focusing more on research because it brings income to the university, knowledge and monetary value to the person who publish a paper. Even here at VUT lecturers and students are publishing a lot.

## 2.6 Standards

Many authors have defined standards differently. Soudien (2007) defined it as an idea, or a measure, norm or model in comparative evaluations. SAQA (2005) on the other hand sees it as a document that provides requirements, specification, guidelines or characteristics that can be used consistently to ensure processes or services are fit for the purpose. Enslin (2001) views it as an agreed, repeatable way of doing something. He also believes in that it's a document that contains technical specification or precise criteria. I agree with all the definitions above and standard is just synonymous with quality, level, caliber, merit or excellence. This paper suggests that the South African National Qualifications Framework (SANQF), designed to meet the needs of non-compulsory, pre-tertiary industrial training, is at odds with formal education and training, which rests upon a different social base and generates different knowledge structures. This makes common membership within a single qualifications framework of the South African type ultimately unworkable (Ensor 2010). The South African National Qualifications Framework (SANQF) was implemented with the intention of integrating education and training, in order to boost skill and productivity levels, promote stronger economic growth, as well as addressing issues of equity and social justice.

The aims of the NQF were first set out in the documents of the National Training Strategy Initiative (National Training Board, 1993, 1994a, b) and have remained substantially unchanged since that time. They have shaped educational policy development through establishing guidelines which emphasise relevance to national development; the benchmarking of standards nationally and internationally; expanded access of students; and flexibility and portability of qualifications to allow learners, on successful completion of accredited prerequisites, to move between components of the delivery system. Career mobility was an overriding concern: for organised capital in order to overcome skills shortages and produce a more flexible market for labour, and for the labour movement, to improve the life chances of its members. How was this to be achieved?

A mechanism was needed which:

- certified existing competence;
- allowed this certification to count towards further qualifications;
- allowed these qualifications to be matched against others, to allow for progression through a career;
- allowed workers to work towards qualifications over periods of time, and which allowed them to work towards these in a range of settings.

The mechanism selected was the National Qualifications Framework, the basic building block of which is the unit standard. Even though we now have a hybrid framework that recognises both unit standards and whole qualifications, this framework is built upon a unit standard methodology that has determined its organisational form. There are a number of crucial features of a unit standard that suggested it might be able to achieve the aims set out above.

This framework requires a set of structures to set it in motion (see South African Qualifications Authority, 2000a, 2000b, 2001). The South African Qualifications Authority (SAQA) was set up in 1995 to register qualifications and oversee the implementation of the NQF. Responsibility for standards generation within each organising field was vested in a National Standards Body (NSB). The generation of unit standards for, say, grilling chefs, falls under NSB 11 (Services). However, under this jurisdiction fall a whole range of other occupations for which people require training. Each NSB, therefore, authorises substructures, Standards Generating Bodies (or SGBs), to generate unit standards for

different job fields within the organising field of 'Services'. Legislation does not specify how many SGBs should function under each NSB: this is left for NSBs to decide. From the perspective of training, the number and scope of SGBs should be shaped by industrial sectors and job specifications within them. SGBs, working under the umbrella of an NSB, generate unit standards. That is, they produce sets of outcomes and modes of assessment, for a range of job categories and these are duly registered by SAQA.

Skills development in South Africa, trade unionists naturally demanded representation on standards-generating bodies. Stakeholder representation is crucial to protect the interests of their members and to ensure that skills development increases their life chances (Rollinson, 1999). Stakeholder representation upon the structures of the NQF became a significant feature and as we shall see, a point of friction with the higher education sector. A significant feature of the framework is standards generation. All providers need to be accredited as appropriate providers of unit standards (or whole qualifications) and this accreditation is supplied by another range of stakeholder structures called Education and Training Quality Assurance (ETQA) bodies. These bodies decide which providers are satisfactorily equipped to offer unit standards and develop a curriculum that will produce the appropriate outcomes (Soudien, 2007; 2010). These bodies also accredit assessors who are authorised to assess outcomes achieved by learners in any site of learning. Standards setting, accreditation and provision are thus rigidly separated in this system and vested in distinct sets of structures. The structures named above comprise most but not all of the players in the NQF scene. The remaining players are the Sector Education and Training Authorities (SETAs) which took over many of the functions of the old Industrial Training Boards under the apartheid system and were set up to actively promote skills development. Since South African industry has a poor record of promoting industrial training, the Skills Development Act imposes a levy on company payrolls, a certain percentage of which can be reclaimed if firms organise training for their workers. SETAs, which have access to very significant amounts of money derived from the skills levy, promote training programmes through sponsoring standards generation and quality-assuring the courses which employers offer. It is for this reason that SETAs are designated as industry-based ETQAs. This set out the logic of the NQF and its many structures: SAQA sets out the logic of the NQF and its many structures: SAQA, the NSBs, SGBs, ETQAs and SETAs. To restate the key elements of this framework:

- it is intended to apply to all education and training;
- standard setting (by NSBs and SGBs) is separated from curriculum development (by providers);
- standard setting is separated from quality assurance and accreditation;
- the building block of the system is the unit standard, a statement of learning outcomes and modes of assessment. Qualifications are regarded as a clustering of unit standards to achieve a specific competence or purpose. It is assumed that the same outcomes can be achieved through different learning programmes. All structures are stakeholder driven. Furthermore, there are no standardised rankings or equivalences between different qualifications issued in different sectors (schools, vocational education and training, and higher education) as these qualifications recognise different types of learning reflecting the distinctive educational responsibilities of each sector (Ponte & Gibbon, 2006).

Where the same qualifications are issued in more than one sector but authorised differently by each sector (Diploma, Advanced Diploma) they are equivalent qualifications, although sector-differentiated. (Australian Qualifications Authority, 1998) In other words, the Australian NQF recognises the distinctiveness of different sectors and their qualifications and fosters equivalence and exchange through institutional negotiation. On paper, the Scottish framework looks much like the Australian from the perspective of 'the labour market', the system appeared to provide a simple, flexible mechanism to extend training and improve its quality, across South Africa. Yet for formal education (schools, technikons and universities) the system appeared incomprehensible and hostile. Although SAQA conceded early on that whole qualifications as well as unit standards could be registered on the NQF, it remained adamant that a 'one-size-fits-all' approach would be pursued and any manifestations of higher education exceptionalism would be actively resisted (Ensor 2010:2). The problem was that although whole qualifications were permitted, the structural form of the NQF continued to rest on a unit standard methodology. This separated standards generation from quality assurance, separated these from curriculum development, and emphasised stakeholder presence on all key structures. This resulted in a large, unwieldy, expensive, complex and somewhat unstable system which required constant oversight and management, and which was out of line with the *modus operandi* of the formal education sector.

## 2.7 Relevance

This concept of relevance is studied in many different fields including cognitive sciences and library information systems. Most fundamentally is that it is studied in epistemology (Teaching and learning Model 2012). It is important to note that

relevance is an important but elusive concept. It's important in the sense that solution to any problem requires prior identification of the relevant elements from which a solution of any problem requires prior identification of the relevant elements from which a solution can be constructed. Looking on the other side of the coin, it is elusive in the sense that its meaning appears to be difficult or impossible to capture within the conventional logical systems. However despite the arguments above relevance is something that increases the likelihood of the accomplishment of the goal (Ensor, 2010). A lot of research that has been carried out revealed that South African education is not relevant to its recipients and is still very poor because the education system is a borrowed one from other countries, Australia in particular. The dimensions of South Africa's educational quality challenges have only recently come into clear perspective and have emerged out of the following: The Third International Mathematics and Science Study (TIMSS) carried out in 1994/ 1995 (Howie, 2001). The Southern and Eastern African Consortium for Monitoring Educational Quality (SACMEQ) (<http://www.sacmeq.org>) tests carried out, in two waves, first amongst a number of countries in the region in the late 1990 without South Africa and between 2000 and 2003 (SACMEQII) with South Africa. A national Grade 3 cohort analysis looking at attainment rates for literacy and numeracy (Department of Education 2002) and Four iterations, two for Grade 3 and two for Grade 6, of attainment tests in the Western Cape between 2002 and 2005. Both the TIMSS and the SACMEQ studies involved scientifically determined groups of learners in their samples. With respect to the TIMSS study, South Africa, as one of the 41 countries and the only African country in the list, had tests carried out on approximately 15,000 students in over 400 schools distributed around the country. The study was repeated in 1998 in 37 countries (The Third International Mathematics and Science Study Repeat, TIMSS-R). While an important core of countries remained from the first phase of the study, the second involved, significantly, a number of countries with similar developing-economy profiles to South Africa. The Western Cape tests were more comprehensive and involved every school in the province where there were more than 50 students in a grade. In each wave over 30,000, the findings of the various tests were remarkably similar and all showed exceedingly low levels of competence across the nation for both mathematics and reading. Therefore the reality is an uncomfortable one, one has to come to the conclusion that the impact education is making on the quality of the learning experience of young children is questionable.

South African debates have tended to rigidly juxtapose outcomes-based education and input or knowledge based education, with the latter being labelled as undemocratic and untransformatory; this reflects the extent to which the previous (apartheid-based) education system was so highly input-driven, often by centrally written textbooks which openly pushed the narrow ideological agenda of the apartheid state (Soudien, 2007). There was also vehement opposition to rote learning, which was widely equated with apartheid education and contrasted with critical thinking. Thus the introduction of outcomes based education can be seen as closely associated with the democratisation of South African society.

Bloch (2005) shows that in South Africa many aspects of what have been referred to elsewhere as 'critical pedagogy' or 'progressive methods' have been linked to outcomes-based education; examples are the emphasis on learners being actively engaged, critical thinking, learner-centredness and relevance. This explains part of their appeal to South African educationalists in the liberation movement. However, as Woodhouse (2000) has shown, in the United Kingdom the incorporation of progressive methods into vocational education schemes has not been based on any inevitable relationship between progressivism and liberation. Problems are becoming increasingly evident. These include the time taken to register standards and qualifications, the complexity of the systems, and a general feeling of alienation from the proliferation of jargon and the burgeoning bureaucracy (Departments of Education and Labour, 2002).

### 3. Methodology

A single case study approach of VUT is utilized in the current research to analyse the effects of quality, standards and relevance on the Higher education in South Africa. A case study is an empirical enquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident and it relies on multiple sources of evidence (Yin, 1994). According to Cavaye (1996), a case study research investigates predefined phenomena and does not involve explicit control or manipulation of variables but rather the focus is on in-depth understanding of a phenomenon and its context. Typically, case studies combine data collection techniques such as interviews, observation, questionnaires, and document and text analysis (Darke, Shanks & Broadbent, 1998). Qualitative data collection and analysis methods (which are concerned with words and meanings) have been used in this study.

This study employed an interpretative, qualitative methodology to examine the higher education in South Africa. A single case study approach is adopted in this research. This is because a single case approach has been an increasingly

popular methodology and it has enabled various authors to provide some very important new insights into the subject area (Clarke & Rimmer, 1997; Wrigley, 2000). Furthermore, field researches that involve investigating the views and opinions of organisations directly and indirectly involved in the decision-making process by means of interviews, observations or otherwise are receiving increasing support within the literature (Palmer and Quinn, 2003). Owing to the limitations of relying on one source of information (VUT) when collecting data on this case, the study adopted data triangulation approach. Data triangulation refers to the use of multiple sources of data. Multiple and independent sources of evidence, including observations, interviews and document exploitation such as use of higher education research reports (Yin, 1994). In this study observations and document exploitation were used to corroborate the interview data and, by so doing, developed convergent lines of inquiry. The case of VUT was chosen for three reasons. First, VUT is the one of largest University in Gauteng province and therefore, it is argued that the significance of VUT as an institution of higher learning makes it an appropriate focus for case study analysis. Second, VUT has been chosen as the premise for this study because it is the leading institution of higher education in Gauteng province. Moreover, VUT success in South Africa has remained an under-emphasized case within the contemporary academic literature. Lastly, VUT having been recorded as one of the early technikons that have transformed into universities ([www.vut.ac.za](http://www.vut.ac.za)), it is deemed to provide useful insights of practical strategies adopted by higher education in South Africa. Perhaps, both practitioners and academics may benefit from a spotlight on this special case. The researcher interviewed ten (10) VUT students, ten VUT lecturers and ten (10) VUT management staff who are VUT authenticated Card holders. The respondents were chosen for the purpose of providing inside information about quality, standards and relevance at VUT. The researcher managed to conduct the interviews while at the same time recording the interviews and taking short notes for future coding. The general observation was that each interview would trigger the necessity for another interview as the themes began to unfold. The convergent in-depth interviewing used in this study allowed the researcher to develop, clarify, verify and refine the core issues of the interview protocol. During the early stages, the content of the interview was unstructured and flexible in order to allow the interviewees to communicate freely their experiences and considered views concerning quality assurance in higher education. The process used in the interview became more structured as the interviewer converged in specific issues of the research problem and sought further clarifications on certain issues. Finally after conducting a total of thirty (30) interviews the researcher felt it was enough but needed to further corroborate the findings with the data from five more informal conversations. For the purpose of the informal conversations, security staff and general hand workers were chosen in order to reduce biases of the information got. During the informal conversations, field notes were also taken and memos developed thereafter. Unlike in quantitative research, qualitative research views literature review as an ongoing process and serve as a source of data (Goldkuhl & Cronholm, 2003; Glaser & Strauss, 1967). As put forward by Turner (1983), literature from documented material should be viewed equally the same as field notes. The same point was buttressed by Glaser (1998, 1992) who referred to documented literature as "everything is data" and Strauss and Corbin (1990) who asserted that a "cache of archival material" is equivalent to a collection of interviews and field notes. In this article the researcher reviewed documents with literature on VUT policies, National qualifications framework, South African government regulations on higher education, Teaching and Learning model for VUT (2012), VUT transformation document (2013), information posted on VUT official websites. These documents served two purposes. Firstly, they were treated as another source of data collection. Secondly, as noted by Goldkuhl and Cronholm (2003), prior reading provided models to help the researcher make sense of the data gathered on VUT through strategies in the field and probe further the interviewees where necessary. Finally, the researcher had an opportunity to observe VUT students and lecturers whether they are contributing to quality education in South Africa. Again memos were developed from the notes taken and used to augment the data collected by means of interviews, informal conversations and documented material. Data collection and analysis were simultaneous. Analyzing data involved categorizing and triangulating the evidence from the multiple perspectives. Based on the field notes, problems were identified and the solutions were deduced. The remainder of the paper now reports the findings from the in-depth interviews, document exploitation and observations made. For confidentiality reasons, the identities of respondents will not be disclosed in subsequent sections. Conclusion, limitations of the study and suggestion of future research direction crown up the current study.

#### 4. Discussion of Findings and Conclusion

The existing spate of literature proves beyond reasonable doubt that there is a problem in the South African education system. Quality and standards are still below required level and the education system is one of the poorest among African countries owing to its apartheid regime (Meyer & Hofmeyer 1995:355; Enslin 2001:282; Soudien 2004:182). The

education given to students is not relevant to its recipient (Bundy 2005:86). A lot needs to be done to have efficient and effective education which results in global competitiveness and lifelong learning.

The literature shows that quality assurance is the technical process of evaluating the extent to which providers assist learners in achieving them; in other words quality assurance is underpinned by the idea of 'production to a standard'. In many of the newly established quality assurance structures operating in various sectors of the economy what appears to be happening is that individuals with subject expertise in the area to be 'quality assured' are not involved in the quality assurance processes; instead, people who are experts in 'quality assurance', who understand the 'quality assurance system', will evaluate programme delivery.

Quality, standards and relevance are terms that have been defined differently by different authors. There is still need to improve our educational system in order for it to be of high quality, up to standard and relevant to the South African citizens. Universities alone cannot do the change on their own it requires participatory approach from all angles. This will make the transformation efficient and effective. It results in no criticism from other sectors of society because everyone will have been given room to participate. Though a participatory approach is so laborious and takes too much time it's really necessary to have the transformation in institutions of higher learning (Radebe 2013). No quick fix solutions or borrowed models can rescue higher education in South Africa it should be original and from within the country. It is important to note that neither political nor academic egoistic monopoly can transform universities, only teamwork and a spirit of togetherness can change the higher education sector.

At VUT there is need to come up with new policies and a mindset transformation for our students to be the cream of the country and internationally. Literature has reviewed that there is far reaching implications for quality competencies and capabilities as well as generic skills that VUT students would have attained on completing their studies to enhance their potential for future employment, contribution to economic growth, poverty eradication, social justice and lifelong learning (Teaching & Learning Model, 2012). So a lot needs to be done in changing teaching practices and go for learning facilitation which is effective learning through active participation of the learner. Constructivism should be at the heart of all higher education institutions. The basic point of departure of constructivism is that learning is an active process of constructing meaning (Gravett, 2005). According to constructivism learning is a process during which the learner constructs his or her own understanding and knowledge of the world on the basis of information received, through experience and reflection on experiences rather than the mere absorption of information that is passed on (Taylor, 2002:15). For this reason constructivists regard the textbook or teachers knowledge that learners acquire as being of lesser importance. Of far greater importance is that learners question their own understanding and discover new understanding (Henson 2004:38). Although the importance of contextualism to constructivism is a debatable issue, many constructivists believe that learning should take place in realistic and authentic settings and that testing should not be a separate activity, but should rather be integrated into the task that the learners are performing (McGriff 2001:22). The basic assumption underlying constructivism are that, knowledge is constructed from experience, learning is a personal interpretation of the world, learning is an active process in which meaning is developed on the basis of experience, conceptual growth comes from the negotiation of meaning and the sharing of multiple perspectives and the changing of our internal representations through collaborative learning (Neville, 1999:7).

To sum up, as shown above, this study has looked at the three elements of quality assurance, namely quality, standards and relevance. Many authors have tried to define these most important concepts differently. From the literature it is evident that quality assurance results in deep and meaningful learning and this is true in real life situations. Quality is in the eyes of the beholder because what is quality to me might not be quality to another person. Standards help in making quality measurable and relevant to higher institution of learning and I agree with all the authors on this issue. For positive change to be realised around these three aspects there is need for all stakeholders to come together have an input such that all the views will be included. Greatest challenge facing higher education institutions worldwide is the need to improve the quality of learning and teaching for its students and also the shift from teacher centred approach to a more learner centred approach, this involves putting the learner's needs at the core of activities. As noted above, for effective results to be realised constructivism approach should be used to produce quality results and quality graduates. Learning facilitation is a tool to deep learning as opposed to surface learning. It is also important to note that students are not empty vessels they are very brilliant some of them. They should be allowed to make their own decisions and learn on their own.

#### *4.1 Implications of the study*

The ever-increasing importance of quality, standards and relevance to South African high educational institutions for

student lifelong learning, active learning and meaningful learning cannot be over-emphasised. High quality of education and also high standards and relevance of education can lead to institutions of higher learning have quality graduates who can be employable everywhere and have a sustainable advantage everywhere. The current study is an attempt to undertake a research in an often most neglected context (VUT) but yet an important sector of the South African higher institution of learning. Therefore, the findings of this empirical study are expected to have to provide fruitful implications to both practitioners and academicians.

On the academic side, this study makes a significant contribution to the organisational behaviour literature by systematically exploring the impact of absence of quality, standards and relevance in the context of university staff members and students. On the practitioners' side, communication across the all stakeholders in South Africa's tertiary institutions are highlighted. All people need to be involved in decision making including the parents for efficacy to be realised. This study therefore submits that educational leadership that formulates policies that lead to high quality education makes institutions of higher learning enjoyable places to work for and for students to enjoy learning.

VUT top management will change in the way they are doing their things and focus more on student learning and research. Staff development programmes are run at this university to train lecturers to be of high quality but a lot is needed in providing adequate resources for this dream to be realised.

#### 4.2 Limitations and Future Research

In spite of the contribution of this study, it has its limitations which provide avenues for future researches. First and most significantly, the present research is conducted from the staff member and students' perspective VUT university in South Africa. Perhaps if data collection is expanded to include other tertiary institutions employees and students, the research findings might be more insightful. Future studies should therefore consider this recommended research direction. This study also excluded top management employees and future research can also try and interview the top management which include the Vice Chancellor and her deputies. There is also the problem of common method bias. Qualitative was purely used in this study. It was going to be more robust if the study included both qualitative and quantitative methods.

All in all, these suggested future avenues of study stand to immensely contribute new knowledge to the existing body of social media and recreation activities literature, a context that happen to be less researched by some researchers in Africa.

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