Building a puzzle of Higher Education Institutions (HEI) in South Africa

Competencies, graduateness and employability

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ABSTRACT

A picture paints a thousand words. Higher Education Institutions (HEI) are under constant pressure to prepare students for the world of work. Competencies that make students more employable are needed, but in a changing world more and more are expected from those entering for example government departments. This requires that those leaving universities should be individuals epitomising the elements of graduateness. It is imperative that university programmes incorporate competencies into curricula that will make students more employable as well as embody graduateness. This article provides an overview of the concepts* graduateness*,* employability *and* competencies*. An exploration of the literature reveals how these concepts can be incorporated into the curriculum of HEI programmes. It can be concluded that if a university leaver needs to be more than just employable, a different competency skill base needs to be part and parcel of the curriculum. This article explores specifically the various competencies required for graduates entering the world of work.

INTRODUCTION

The process of building a puzzle can be a tedious one. One needs to sort all the pieces and then painstakingly start to build the puzzle that will represent for example a picture. One does not need to go in blind as the picture is provided and one can mimic the picture provided. Essential in building the puzzle is to understand what the end result should look like and within the context of this article the final picture will be a graduate characterised by

particular competencies, attributes and skills. The question that needs to be addressed in this article is that if universities must produce well-rounded graduates, what are the competencies that are required to meet the challenges in the 21st century and how should curriculum be designed to incorporate employability and graduateness. However, it is imperative that tertiary programmes are designed in such a manner that it will build competencies that will enhance graduateness and employability.

According to van Dijk in Coetzee, Botha, Eccles, Holtzhausen and Nienaber (2012:201) the original Latin for the concept of *graduate* creates a picture of a person (student) willing and able to step up (*graduare* = step up) to what society and they themselves require. Stepping up does not imply only a step up in qualifications, but also a willingness to accept responsibility for one's own learning and being held accountable for what is done with the learning acquired is to enfold or to involve. The word *employ* stems from the Latin *implicare, t*he Anglo-French *empleier, emploier, emplier,* which means to entangle, to apply, to make use of. To make use of, conjures up the image of someone that is functional, usable, useful. It implies that a person will have specific skills or competencies to apply. Competence (or competency) is an individual's ability to do a job properly and competencies are often identified through job or task analysis, making use of techniques such as the critical incident technique, work diaries, and work sampling (**http://www.merriam-webster.com/thesaurus/competency**).

In 1999 the South African National Commission on Higher Education provided the following clarification for the concept of *programmes:*

> *The sequential learning activities leading to the award of particular qualifications can be called programmes. These are almost always invariably trans-, inter- or multidisciplinary. … the demands of the future of South Africa as a developing country require that programmes, while necessarily diverse, should be educationally transformative. Thus they should be planned, coherent and integrated; they should be value adding, building contextually on learners' existing frames of reference; they should be learner-centred, experiential and outcomes-orientated; they should develop attitudes of critical enquiry and powers of analysis; and they should prepare students for continued learning in a world of technological and cultural change (NCHE in SAUVCA 1999:7).*

The above definition focuses on a number of aspects that are reflected in a number of Higher Education Institutions' (HEI) learning programmes. *Firstly,* the notion of *trans-, inter- or multidisciplinary* [activities] relates to the incorporation of multi-, intra- and interdisciplinary (MIT) approaches in for example research activities and curriculum practices. Public Administration and Management does not function in a silo and is influenced by for example history, politics, the economy as well as society. *Secondly,* it addresses the developmental state aspects of South Africa in creating programmes that are diverse and transformative, placing the student at the centre of the learning experience, where critical skills can be developed so that the student is more employable. *Lastly,* the development of skills such as critical thinking, analytical thinking, and the ability to function in an ever-changing world –graduateness – is mentioned. The aim of this article is to explore employability and graduateness (and the competencies associated with it) in the design of curriculum in a higher education environment, an environment that will create

graduates who engage in lifelong learning and scholarship, and contribute to society as well-rounded citizens.

EMPLOYABILITY, GRADUATENESS AND COMPETENCIES

In recent years, higher education (HE) systems across the world have become increasingly massified. Massification implies the expansion of student numbers as well as ideas of what a university education should entail, and the relationship that exists between universities and government, which funds and regulates universities (Boden & Nedeva 2010:37). In the past two decades, the long-standing contributions of universities to the expansion of citizens' knowledge and skills have been renamed as *employability* – a concept that is not new to current debates on graduateness. To gain a true understanding of the concepts, a distinction must be made between graduateness and employability.

Minten (2010:68) states that employability can be defined as the capability of obtaining and keeping fulfilling work. It is the ability to move self-sufficiently within the work environment to achieve potential by means of sustainable employment. Individual employability relates to knowledge, attitudes and skills (thus competencies) that a person possesses and the manner in which they utilise these assets when they are presented to potential employers in a specific context such as the labour market. Policies of government focussing on employability are based on the postulation that the economic welfare of individuals and the competitive advantage of nations depend on the knowledge, skills and entrepreneurial ardour of the workforce (Brown, Hesketh & Williams 2003 in Boden & Nedeva 2010:38). Hillage and Pollard (1998:1), describe employability as "... having the capability to gain initial employment, maintain employment and obtain new employment if required". This capability of gaining, maintaining and obtaining work is done by utilising a variety of competencies. These competencies can relate to discipline-specific capabilities. In response to developing employability among students, higher education institutions (HEIs) focus their efforts on providing opportunities to develop employability skills by entrenching them within the curriculum. These types of skills include the ability, for example, to design and present PowerPoint® presentations; the ability to communicate by using various technologies and techniques; and self-management skills. Graduate attributes go much further than employability. According to Barrie (2006:216), there have been numerous calls from industry and government to produce more employable graduates. Work-integrated/based learning components and practical applications allow for students to gain exposure to the work environment and to see certain skills in practice.

In Australia, generic graduate attributes are described as "... the skills, knowledge and abilities of university graduates, beyond disciplinary content knowledge, which are applicable in a range of contexts and are acquired as a result of completing any undergraduate degree. They should represent the core achievements of a university education" (Barrie 2006: 217). When determining possible attributes that can be ascribed to graduates, various role players should be in agreement on what these attributes must be. Graduate attributes are more than the disciplinary skills (such as public human resource skills) that must be acquired during the period students spend at the institution of higher learning. These attributes prepare students for their future roles in society, such as good, responsible citizenship. Various authors

(Bowden, Hart, King, Trigwell and Watts 2000, Barrie 2006) provide different definitions for graduate qualities. Core to the various definitions are personal or transferable skills, generic, core and key competencies/skills/attributes of graduates (Barrie 2006:218). According to Bowden *et al.* (2000), graduate attributes can be defined as "the qualities, skills and understandings a university community agrees its students would desirably develop during their time at the institution and, consequently, shape the contribution they are able to make to their profession and as a citizen". From the definition, two main types of attributes can be distinguished. *Firstly*, there are those that relate to the individual's capacity for global citizenship (including involvement with human rights issues such as equity, environmental sustainability and democratic processes, for example, elections) and the overall contribution to a well-functioning society. *Secondly*, there is the ability to attract and maintain work (thus employability) which will contribute to economic productivity and the development of human capital (Bridgstock 2009:32). It is evident that graduates should have the ability to actively contribute to society as well as gain meaningful employability (Coetzee *et al.* 2012:194).

In a number of the definitions of employability reference is made to competencies and capabilities. Competencies can be thought of as the state or quality of being qualified to perform a task. A person gains competency through education, training, experience, or natural abilities. Klemp (1980: 21) defines competence as "... an underlying characteristic of a person which results in effective and/or superior performance on the job." Parry (1996: 50) postulates that competencies are "a cluster or related knowledge, skills, and attitudes that reflects a major portion of one's job (a role or responsibility), that correlates with performance on the job, that can be measured with well-accepted standards, and that can be improved with training and development." (**http://www.nwlink.com/~donclark/hrd/case/compet1.html**).

Andrews and Higson in Coetzee *et al.* (2012:14) propose the following *transferrable* competencies which are central to graduate employability:

- professionalism;
- dependability;
- the ability to cope with uncertainty;
- the ability to work under pressure;
- the ability to work and think strategically;
- the capability to communicate and interact with others, either through networking or as a team member;
- written and oral skills;
- ICT skills;
- creativity and self-confidence;
- effective self-management and time-management skills; and
- the ability to learn and accept responsibility.

Various other competencies which place more emphasis on personal transferable skills can also be identified. These are (Chetty in Coetzee *et al.* 2012:10):

- *Task management and problem solving* (focusing on achieving objectives, using analytical and conceptual thinking, collecting information to support problem solving, and decision making).

- *Working with others* (making use of logical and rational arguments to convince others, understanding and building/reflecting on how other people perceive him or her, being other-regarding, and building positive relationships).
- *Communication* (oral and written communication).
- *Self-awareness* (taking responsibility for own learning experiences and development, dealing with pressures and emotions, and showcasing a sense of purpose) (Higher Education Quality Council 1995).

The Standards of Excellence for Public Administration Education and Training (2008:11) identifies public sector skills as:

- flexibility;
- life time learning;
- applying practical, life experiences to both training and academic activities;
- critical and analytical thinking;
- involving society to achieve policy goals;
- ability to operate within a political environment;
- building of high performance organisations; and
- dealing with complexity, uncertainty and ambiguity.

According to the National Association of Schools of Public Affairs and Administration (NASPAA) Standards (2009:7) universal competencies for Public Administration students are

Table 1 Feeder and generic competencies

Feeder competencies	Generic competencies
1. Self-Management	1. Networking and building bonds
2. Decision making	2. Continuous improvement
3. Technical proficiency	3. Team leadership
4. Concern for others	4. Problem solving and decision making
5. Problem analysis	5. Citizen focus and responsiveness
6. Team membership	6. Applied strategic thinking
7. Creative thinking	7. Applying technology
8. Citizen service orientation	8. Planning and organising
9. Diversity citizenship	9. Project management
10. Organisational communication effectiveness	10. Developing others
	11. Managing interpersonal conflict and resolving problems
	12. Budgeting and financial management
	13. Communication and information management
	14. Impact and influence
	15 Diversity management

Source: DPSA (2005:8)

Table 2 Competencies regarded as crucial for the Senior Management Service

General understanding of how things work	Technical skills competencies	People skills competencies
• Ability to contextualise (socio-economic/geo-politics) • General knowledge • Knowledge (evidence based knowledge) • The ability to understand large and complex systems • The ability to understand the context in which they operate: political, economic and technical, regulatory	• Ability to apply technical skills to generate knowledge for management • Decision-making • Financial management and supply chain management • Ability to deliver services relevant to context • Being able to restructure • Knowledge and skill to link operational goals and objectives to compensation plans • Management • Performance budgeting • Performance management • Policy implementation • Process and reengineering knowledge to maintain and improve cost efficiencies • Programme and project management, including service delivery (citizen focus) • Project and programme management • Project management • Public financial management • Public human resource management • Public policy making • Strategic human resource management • Strategic leadership programme • Strategic planning • Technical competencies • Implementation of regulations	• Competency on values/ethics/ moral toughness • Capacity and competing flexibility – ability to move quickly, start programmes, close programmes and seize opportunities • Leadership: guiding people and motivating them to serve the people • Interacting with people appropriately • Human capital management • Mentoring

Source: Wessels (2012:168)

to articulate and apply public service perspectives, to communicate with as well as interact with citizens and a diverse and constantly changing workforce; to be actively part of the policy process; to lead and manage public governance; and to think critically, analyse, synthesise, solve problems and make decisions.

The South African Public Service Middle Management Competency Framework (Department of Public Service and Administration 2005:8) provides the following as middle management competencies:

According to the DPSA (2005:3) feeder competencies can be classified as competencies that those that enter middle management must possess or be able to demonstrate. Generic competencies are those that middle managers need to be able to function throughout the public service. The Department of Public Service and Administration (DPSA) also identifies competencies that are essential to the Senior Management Service (SMS) (Wessels 2012: 168). These competencies are depicted in table 2.

When analysing and comparing the various competencies, the following seems to feature in the various frameworks as competencies required:

- critical and analytical thinking
- technological skills
- self-awareness
- communication skills
- planning and organising
- policy making
- functioning in a changing environment
- problem solving
- collaboration with society and the workforce.

It should be noted that the SMS framework provides a more complex set of competencies required for the public service. It is imperative that academics understand the intentions of the various identified skills, attributes and competencies, as they will inform curricula.

CURRICULUM DESIGN

A curriculum is a plan for the process of learning and teaching and can be seen as a procedure for determining learning outcomes and the learning content of the specific module and the way in which students will be exposed to the learning content (the what). It also makes provision for assessment criteria as well as methods of facilitating learning and technology that will be used (the how).

According to Tasdemir and Kus (2011:170) a curriculum is all the situations that relate to experiences that are facilitated through explicitly planned activities. A curriculum is the plan that offers individuals a variety of learning experiences. Gagne (1965) describes the topic field as the content and the statement of objectives as the discernible behaviour. The author suggests that positioning the content and the pre-evaluation of students' introductory skills should be dealt with concurrently. A curriculum should be based on concrete output or experiences rather than being an abstract document. It culminates vigorous relations between objectives, content, educational states and evaluation. In the design of a curriculum, science, society, the learner (the individual), the topic field and nature are considered to be the sources (Tasdemir & Kus 2011:170). Wessels (2012) broadly defines curriculum as the learning that is facilitated by a specific university programme and it "includes a combination of explicit and implicit knowledge, skills, values and competence in the broadest sense of the word" (Wessels 2012:163).

Fraser and Bosanquet (2006:279), Stark and Lattuca in Coetzee *et al.* (2012:195) identify consistent elements relating to a definition for curriculum among various university stakeholders. These elements include the following six elements:

- A faculty or programme's purpose, mission, or shared expression of what is essential for students to learn.
- A set of experiences that authorities (for example government or professional bodies) feel all students should have.
- The set of courses offered to students.

- The set of courses students elect from those on offer.
- The content central to a specific discipline, and
- The time and credit frame (relating to accreditation) in which the faculty offers education.

According to the Standards of Excellence for Public Administration Education and Training (2008:6) a curriculum must be purposeful and responsive. Programmes need to be designed in such a manner that will install a commitment within students to be a catalyst for development and those students are able to communicate properly with those that they work with.

For learning outcomes to be considered of an excellent quality, a collaborative effort must be made between the curricula, the learning efforts of the students, and the teaching methods applied. The desired learning outcomes can be achieved by observing the manner in which students obtain, process and synthesise information presented, and the ensuing improvement of skills (Meyers & Nulty 2009:567), such as an ability to analyse internal environmental factors in an organisation accurately in order to ensure and provide proactive futuristic adjustments. Students will have to identify, analyse and describe internal factors and provide possible adjustments and solutions. These are specific skills that will make students more employable and present society with better-rounded graduates. These specific skills link to the required ability to think critically, analyse and synthesise.

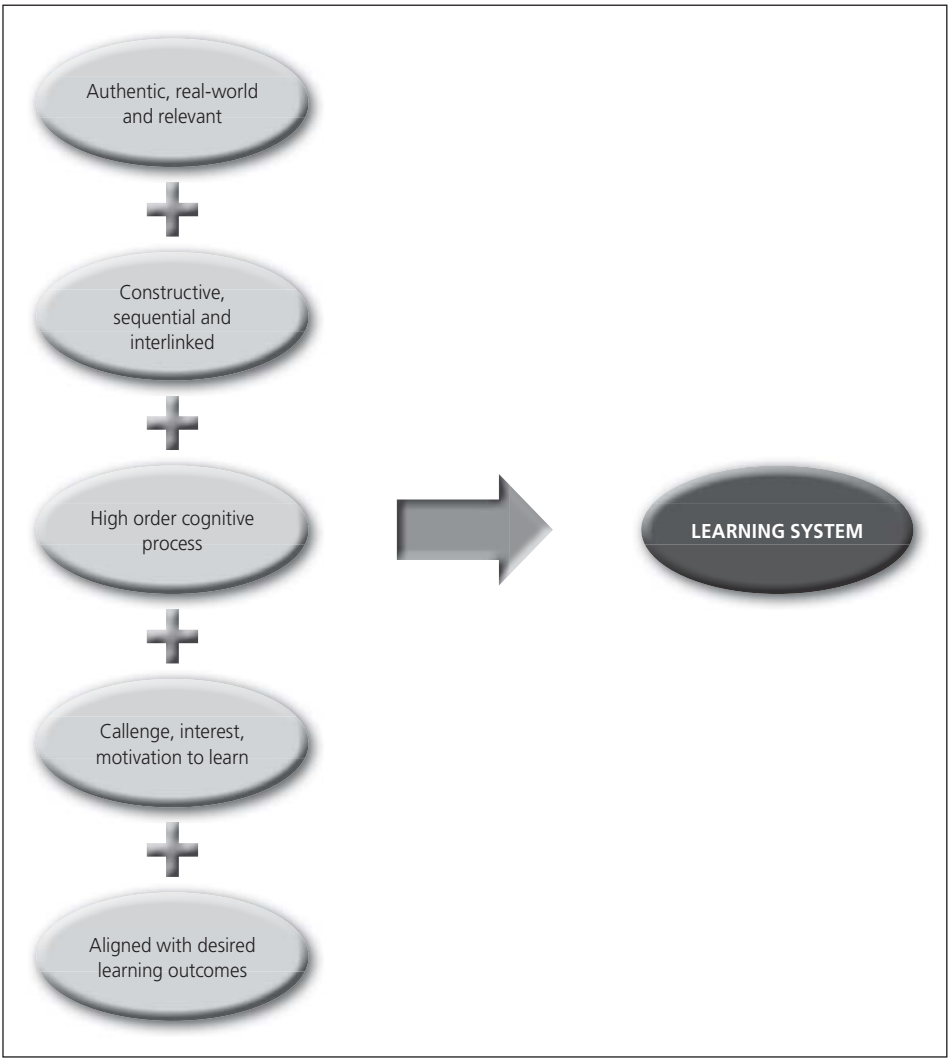
This can be achieved when students achieve deep learning. Students who adopt an approach that is focused on deep learning wish to develop a meaningful understanding of the learning material presented to them that creates a better understanding, comprehension, and a more spontaneous sharing of ideas, as well as constructing better-defined knowledge structures, and resolving discrepancies in knowledge. Through deep learning, students will also be able to explain cause-effect relationships or personal experiences. The questioning of explanations and causes will also enable students to theorise better. These are characteristics that should form part of graduateness. Biggs (2003) is of the opinion that lecturers are in a powerful position to create deep learning opportunities for students in, for example, the design of the curriculum, assessment opportunities, and teaching methods. Students need to engage cognitively in specific behaviours to guarantee the quality of set learning outcomes, and therefore construct learning environments that will warrant adaptive responses to a curriculum that is consistent with aims, such as the achievement of greater employability and graduateness.

Curriculum design *principles*

According to Lave in Coetzee *et al.* (2012:349) a constructivist type of curriculum allows for various opportunities for practice. Within a constructivist approach learners have to take responsibility for their own learning. Different learning environments allow learners to engage in the process where learning is redefined, and students can assess themselves and their peers. Learning outcomes are seen as competencies that involve implicit and explicit knowledge and skills, professional values as well as environmental factors.

Meyers and Nulty (2009:568) developed the following principles to maximise the learning experience of the student. Lecturers should develop courses in ways that provide students with teaching and learning materials, tasks and experiences. This can be depicted as shown in Figure 1.

Figure 1 Maximisation of the learning system



Source: Coetzee *et al.* (2012:196).

The key focus of Meyers and Nulty's five principles is the establishment and use of a system of components within a curriculum resulting in more active learning through student-centred engagement, thus creating opportunities where students can actively partake in or influence their individual learning experience. The central idea of applying these principles is to influence the learning system in ways that require students to follow an approach of deep learning that will meet the assessment requirements of the course and achieve the desired learning outcomes (Meyers and Nulty 2009:568). Biggs (2003:6) states an important need for the contextualisation of principles to the teaching environment which is also referred to as constructive alignment: "Wise and effective teaching is not … simply a matter of applying general principles of teaching according to rule: those principles need adapting to your own personal strengths and to your teaching context." Students need to

be able to draw comparisons to their own unique working environment and experiences (especially in the case of fully employed students). The learning experience should enable working students to gain a more intent understanding of the environment in which they function. Authors such as Polanyi and Eisner caution against the idea of constructive alignment, as they see it as too restrictive, which may stem freedom of thought (Meyers and Nulty 2009:567–569).

It is thought that learning environments that provide students with not only occupation-specific outcomes, but also generic and reflective competencies, prepare students more adequately for the work environment (as students will be able to perform more effectively). Mentkowski and Associates in Vaatstra and De Vries (2007:336) are of the opinion that generic competencies provide the foundation for the ability to develop discipline and therefore occupation-specific competencies. Everwijn, Bomers and Knubben (1993) and Vaatstra and De Vries (2007:337) postulate that core elements of a curriculum must include generic competencies (skills, knowledge and attitude), reflective competencies (an understanding of thoughts and actions – thus meta-cognitive abilities), and occupation-specific competencies (those required of a student to function effectively in the public service). Interaction between general competencies, conceptual competencies, communication and teamwork skills as well as reflective competencies in a work-specific context are critical to be able to deal with complex working situations that constantly change.

There are various ways in which a curriculum can be designed. In their book, *Understanding by Design* (2005), Wiggins and McTighe follow an approach that they refer to as a *backward design* approach with a focus on *teaching for understanding*. It is strongly reminiscent of an outcomes-based approach that could work well with incorporating graduateness into the curriculum design process. The backwards design model avoids the mechanistic inclination of behaviourism and provides an advantage by incorporating valuable assessment practices. Howard (2007:4), Wiggins and McTighe state that the design is backward as it commences with the desired results and then works backwards to a curriculum that is based on suitable evidence of learning. The aim with this approach is that students experience a deeper understanding of the content presented via the assessment used, the instruction utilised and the curriculum design. The three stages in the backward design process are as outlined below.

Stage 1: Identify desired results

In the first stage, the focus is on what students should know, comprehend and be able to achieve. It is here where the orientation to curriculum design is more constructivist than behaviourist. Wiggins and McTighe (1998:10) provide a framework for curriculum content by taking into consideration the three levels of knowledge:"… that which is worth being familiar with; that which is important to know and do; and that which represents an 'enduring understanding'". The *enduring understanding* relates to disciplinary (Public Administration) and/or interdisciplinary thought (think of multi-, intra- and interdisciplinary content within the curriculum), and it also includes the foundational concepts that ground the curriculum (with reference to the module or the full programme). The criteria for determining essential understandings are the following (Wiggins & McTighe 1998:10–11):

- To what degree does the proposed idea, theme or process embody a holistic picture which will have enduring value beyond the lecture room?

- To what extent does the proposed idea, theme, or process exist in or at the core of the discipline?
- To what scope does the proposed idea, theme, or process require exploration?
- To what point does the proposed idea, theme, or process offer potential for student engagement?

Stage 2: Determine acceptable evidence

In stage 2, the question that is posed relates to how it will be determined whether the desired understandings and skills have been achieved. Consideration is also given to the appropriate assessment opportunities (including both formative and summative assessment) and the accompanying assessment evidence. Assessment opportunities could range from informal self-evaluation, peer reviews to more formal and complex tasks and projects such as case studies and simulations. In more traditional curriculum design processes, assessment is not considered before teaching (this is central to the backward design model).

Stage 3: Plan learning experiences and instruction

It is only in stage 3 that the actual learning experiences (instructional strategies) will be planned. Since suitable evidence has already been taken into consideration, the learning experiences are planned in a manner that will enable students to produce the anticipated results. Teaching is viewed as a means to an end, not an end in itself. Wiggins and McTighe (1998:13) propose asking the following questions during this stage:

- What necessary skills and knowledge will enable students to perform more effectively and achieve the desired results?
- What types of materials and resources would be the most effective to achieve the set goals?
- Is the all-inclusive design effective?
- What category of activities will prepare students with the required skills and knowledge?
- What will be taught and facilitated, and how will this most effectively be taught in relation to performance goals?

From the above framework, it can be inferred that the process of curriculum design will be influenced by a number of aspects. If the *backward design* model of Wiggins and McTighe is followed, one would start with the student as graduate. A university graduate will be characterised by three all-inclusive attributes regarded as enabling university education outcomes. These aspects are scholarship (which relates to the attitude of the student towards knowledge), global citizenship (the student's attitude towards the world), and lifelong learning (the students' attitude towards themselves). The three core elements therefore relate to knowledge, the world, and the individual. Specific generic, transferable meta-skills and attributes for students relate to the following eight critical outcomes (Coetzee *et al.* 2012:200) which relate to the skills identified in the various frameworks:

- *Interactive skills* are primarily communication skills that include the ability to converse and interact with diverse cultures, conflict-handling skills, and teamwork.
- *Problem solving and decision making skills* refer to the ability to be proactive and creative in solving pre-empted problems.

- *Continuous learning orientation* shows a cognitive willingness and openness to acquiring new knowledge and experiences (such as technological changes). Graduates must stay abreast of developments in their fields of specialisation such as Public Administration and strive to improve themselves continuously.
- *Enterprising skills* lead to innovative and venturesome graduates who can approach projects clear-headedly by investigating all options available before important decisions are made.
- The ability to present information and knowledge in a clear and concise manner is integral to the *presentation and application of information skills*.
- Graduateness further implies that the individual is able to accomplish set goals and tasks through *goal-directed behaviour*.
- Core to the creation of a better society is *ethical and responsible behaviour*. The creation of a public sector environment based on ethics and values will contribute to the eradication of corruption.
- Lastly, the *skill of analytical thinking* calls for logical reasoning, which is characterised by emotional intelligence.

Learning material must be authentic and relate to real-world problems so that real-world solutions can be found; and tasks must be interlinked and aligned, and challenge the abilities of students. Higher-order cognitive processes must be used by the students. In the team approach that is followed by a number of HEI's in designing the curriculum. It is essential for the team, consisting of the lecturer(s), critical readers, curriculum design specialists, graphic designers and language practitioners, to identify and follow a constructivist approach to understand what the desired results should be. In stage 2 the assessment opportunities and required evidence must be determined, and in the final stage, the actual learning experience (and instructional activities) will be designed. Although a constructivist approach will primarily be followed, a connectivist approach will be ideal in the changing technological environment where social media and networking play a major role. Students and lecturers contribute to wikis and weblogs and make use of Twitter and Facebook groups to communicate, create and share knowledge. A critical component of connectivist learning environments is the requirement of critical reflection.

SUMMARY AND CONCLUSION

According to Bernstein and Osman in Coetzee *et al.* (2012) HEIs must aim to develop graduates who"… can see the world through the eyes of the 'other' [and] exude a sense of public good and good citizenship". Such graduates will "have the capacity to 'imagine' possible futures" and will be able "to see the familiar in unfamiliar ways". They will be "professionals and members of civil society with critical thinking skills, functioning knowledge, reflective competencies, and an appreciation of diversity and life's complexities … [and they will form part of] an educated citizenry that can play a role [in the upliftment of society]".These graduates are thus well rounded citizens having more than just competencies that make them employable.

This article provided an overview to incorporating graduateness in curriculum design and identified competencies needed to make a student more employable. Employability is the ability of a student to acquire and maintain employment and if needed, obtain new employment. What makes a student employable relates mostly to discipline-specific knowledge acquired during the years of study. Graduateness refers to more than just being employable. It refers to a set of skills that are known as meta-skills and focus on knowledge, global citizenship and lifelong learning. It is a journey that the student will undertake to be able to apply knowledge to real-life problems, where an understanding exists not only of the global and work environment but also of the individual him- or herself. Constructivism theory is mostly used in curriculum design, whereby learning is a dynamic process in which learners construct original ideas or concepts based upon their previous or present knowledge. According to the various frameworks students must be lifelong learners who engage in reflective practice, be self-aware and other-regarding, and the various competencies include the ability to analyse, synthesise, solve problems, communicate, think critically and plan and organise. This article provided the puzzle pieces to a well-rounded graduate and provided an overview of graduateness, various competencies, employability and curriculum design.

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