Designing a First Qualification in Land Administration in South Africa Using the Principles of Outcomes-based Education

J.C. (Koos) LANDMAN, South Africa

Key words: Land Administration, Curriculum Development, Communal Land, Land Reform

SUMMARY

With the introduction of a new government in South Africa in 1994, the country embarked on a programme of land reform, and currently the process of dealing with the issues of Land Redistribution, Land Restitution and Tenure Reform is underway. In a recent development, the State President signed the Communal Land Rights Act (Act 11 of 2004). This Act makes provision for, amongst other things, legal security of tenure by transferring communal land to communities and individual members of such communities. To facilitate land reform, capacity building learning programmes to equip a range of people to undertake various levels of land administration will have to be developed.

In the field of education the country saw a complete break from the system of content-based education and competency based training, to one of outcomes-based education and training. One of the major steps in the operation of an outcomes-based system of education or training is putting the process into manageable units of learning, referred to as Unit Standards by the South African Qualifications Authority. These Unit Standards are usually tied to individual skills or clusters of skills that have been identified by some form of narrow consultation with stakeholders, also referred to as an Outcomes Analysis, and can be done in a variety of ways.

Some unit standards in land administration were developed, and clustered with unit standards which were developed for other qualifications, into a first qualification in Land Administration. This qualification is in the finalisation stage and this paper will discuss the curriculum development process which started with an outcomes analysis, and which eventually culminated in the learning outcomes which were used in designing the Unit Standards making up this qualification.

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1. INTRODUCTION

The success of land reform in South Africa is crucial to the social and economic development of the people in the country. It is important to develop capacity and skills at the local level to manage the social, administrative and technical functions required to implement land reform programmes in accordance with legislation (van den Berg, 2004).

Sound land administration is crucial to land reform, and stability in the country. Such land administration requires a range of role players with varying levels of education.

In the field of education the country saw a complete break away from the system of content-based education and competency based training, to one of outcomes-based education and training (OBE). In outcomes-based learning programmes, the curriculum design process starts with the intended learning achievement, namely the outcomes. Outcomes-based learning implies that learners must demonstrate the achievement of an outcome, as well as their involvement in the learning processes. The outcomes-based curriculum emphasises a holistic and integrated approach towards learning, which entails mastering of content, competencies and processes within a specific context (*Olivier*, 1998).

The introduction of this new educational dispensation is overseen by the South African Qualifications Authority (SAQA), who is in the process of ensuring the smooth implementation of the National Qualifications Framework (NQF) into all aspects of learning in South Africa. The purpose of the NQF in the broad sense is to provide for the registration of nationally and internationally recognized qualifications on all levels in an integrated system, in order to facilitate access to and provide mobility in education and training.

One of the methods available to identify appropriate learning outcomes to meet the above requirements is the "develop a curriculum" (DACUM) method, which works on the premise that expert workers are better able to describe/define their job than anyone else. The DACUM method is a proven way of arriving at relevant outcomes, which is the starting point in the curriculum development process as used in outcomes-based education and training programmes. In this context capacity building training programmes designed to equip a range of people with a variety of educational backgrounds to undertake various levels of land administration will have to be developed. Land administration requires a range of competent role players. Varied levels of education programmes will have to be established in order to comply with the requirements of the NQF.

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2. IDENTIFYING WORKPLACE SKILLS BY MEANS OF THE DACUM METHOD

DACUM or "Developing a Curriculum" is an approach to occupational analysis. It has proven to be an effective method of quickly determining at relatively low cost, the occupational or workplace skills that must be performed by persons employed in a given job or occupational area.

In the DACUM context, occupational or workplace skills may be defined as activities or procedures performed by an individual worker in order to accomplish some component of the occupational role. Occupational skill statements are concise descriptions of significant units of work as the worker functions in his/her occupation. It has been successfully used to analyse occupations at the professional, technical, skilled, and semiskilled levels.

The profile chart that results from the DACUM analysis is a detailed and graphic portrayal of the general areas of competence (duties) and skills involved in the occupation or working department being analysed. The DACUM analysis can be used as a basis for (1) curriculum development, (2) student counselling and recruitment, (3) training needs assessments, (4) worker performance evaluations, (5) quality management, and (6) job descriptions.

DACUM operates on thee premises:

- Expert workers are better able to describe/define their job than anyone else.
- Any job can be effectively and sufficiently described in terms of the occupational or workplace skills that successful workers in that occupation perform.
- All occupational or workplace skills have direct implications for the knowledge and attitudes that workers must have in order to perform the skills correctly.

A carefully chosen group of eight to twelve expert workers from the occupational area under consideration form the DACUM committee. Committee workers are recruited directly from business, industry, or the professions. The committee works under the guidance of a facilitator for two to three days to develop the DACUM chart. Modified small-group brainstorming techniques could be used to obtain the collective expertise and consensus of the committee.

One of the advantages of the DACUM approach is that because of the current occupational expertise of workers, committee participants do not need any advance preparation. Almost without exception, participants on DACUM committees have found the process to be a professionally stimulating and rewarding experience.

The facilitator carefully guides the DACUM committee through each of the following steps:

- Orient committee to DACUM.
- Review job or occupational area of concern.
- Identify the general areas of competence (duties or GAC's).
- Identify the specific occupational or workplace skills performed in each GAC.
- Review and refine GAC and skill statements.

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- Sequence GAC and skill statements.
- Identification of entry-level skills.
- Other options, as desired.

Although the DACUM process has been used for several purposes, it is ideally suited for researching the competencies that should be addressed in the development of new educational programmes, and also the competencies that should be delivered by existing educational programmes.

3. THE COMMUNAL LAND RIGHTS ACT, ACT NO. 11 OF 2004

The Communal Land Rights Act, generally referred to as CLaRA, has been signed by the State President. The purpose of the Act is to provide for legal security of tenure by transferring communal land, including KwaZulu-Natal Ingonyama land, to communities, or by awarding comparable redress; to provide for the conduct of a land rights enquiry to determine the transition from old order rights to new order rights; to provide for the democratic administration of communal land by communities; to provide for Land Rights Boards; to provide for the co-operative performance of municipal functions on communal land; to amend or repeal certain laws; and to provide for matters incidental thereto.

The promulgation of the above Act made the design of a learning programme in Land Administration at the local level a national imperative.

4. ESTABLISHING A COMPETENCY PROFILE IN LAND ADMINISTRATION AT THE LOCAL LEVEL

The concept of training local level land administrators was first explored in 1996 with a DACUM workshop, during which the General Areas of Competence (GAC's) for a local land administrator were identified by a number of stakeholders. At that time a range of workplace skills associated with each GAC was also identified, which could serve as the basis for establishing learning outcomes for a first qualification in land administration (*Appendix A*).

Other sources of information existed which was used as guidelines for establishing learning outcomes for a first qualification in land administration in South Africa.

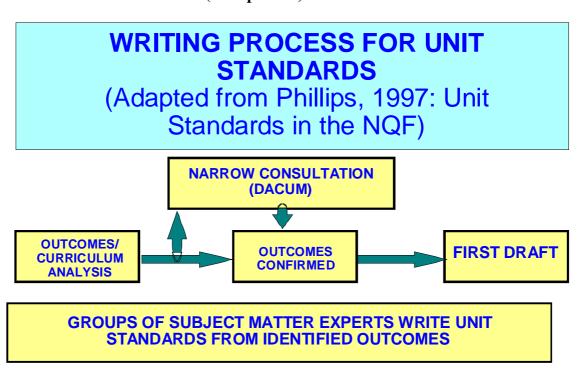
- The Polytechnic of Namibia introduced a National Certificate Course in Land Measuring in 1997, which included a number of land administration related topics.
- The Centre for Environment & Development (CEAD) at the University of KwaZulu-Natal in Pietermaritzburg, introduced a postgraduate programme in Land-Information Management. Two semester modules deal with land administration related topics.
- In Malawi the Ministry of Lands and Housing has introduced Certificate and Diploma programmes in land administration, totalling six semesters of study.

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There has also been input from a number of stakeholders serving in various forums discussing the implementation of CLaRA. Amongst them were Dr Sipho Sibanda, Chief Director: Land Reform Systems and Support Services from the Department of Land Affairs, South Africa, Mr Chris Williams Wynn, the Surveyor-General of KwaZului-Natal, and members of the South African Standards Geberating Body (SGB) for Surveying, chaired by Ms Elbé Janse van Rensburg, who is also Vice President of the Council for Professional and Technical Surveyors. Input was also received from a number of officials of the KwaZulu-Natal Department of Traditional and Local Government Affairs, and Council members of the South African Geomatics Institute (SAGI)(Appendix B).

5. USING THE DACUM CHART AND OTHER RELATED INFORMATION TO DESIGN A UNIT STANDARD

The Writing Process For Learning Units/ Unit Standards (Phillips 1997)



One of the major steps in the establishing an outcomes-based system of education or training is putting the process into manageable units. These units are usually tied to individual skills or clusters of skills, which have been identified through consultation with stakeholders, e.g. a DACUM analysis, and by researching existing qualifications as mentioned in Par. 4. This process is also referred to as an Outcomes Analysis and can be done in a variety of ways. A description of the major components of a Unit Standard is as follows:

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5.1 The Unit Standard Title

Obtaining the Unit Standard title from the DACUM chart requires the input of a number of experts from academia, the original DACUM committee, as well as other relevant identified stakeholders. Experts in a particular learning area will be able to cluster similar skills or identify individual skills which then become Unit Standard Titles. The title must reflect a clearly defined learning achievement, demonstrating that the learner was exposed to a learning experience or experiences where knowledge, skills and attitudes were mastered.

A curriculum design process must accommodate the development of outcomes that can be applied in a wide range of situations and develop qualities of independence and the ability to reflect critically, solve problems and make judgements. The success of OBE depends largely on the quality of the various defined outcomes. If these definitions are too narrow or too vague, this will lead to poor results once the student graduate has to deal with true-life issues in the real world.

5.2 Purpose of the Unit Standard

A brief statement explaining what the skill (or skills) is about and its importance is needed. The statement reflects:

- the contextualised purpose of the Unit Standard
- a qualitative improvement in respect of performance and enhanced learning.
- the study area to be covered by the Unit Standard, clearly defined by the relevant experts.

The title is only written when the details of the Standard Unit has been conceptualised.

5.3 Specific Outcomes

It is usually necessary to break the topic or objective of the Unit Standard title (which is an outcome) into smaller or more specific outcomes to elaborate on the title. Between 4 and 6 Specific Outcomes should be defined in the following way:

- Measurably and verifiably capture the purpose of the Unit Standard
- Begin with a verb and could contain an object and modifier
- Focus on competence outcomes for learning and performance

5.4 Assessment Criteria

The Assessment Criteria will provide a detailed measure of outcome requirements. Step by step, they take the learner, and eventually the assessor, through the criteria by which competence in the outcome may be measured. The items in the performance assessment indicate what the learner will do, can do, or has done in demonstrating competence in the outcome. These items will, in general, be smaller components of the Specific Outcomes

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defined in (5.3) above, and will follow the same sequence. The rule of thumb is for every Specific Outcome there should be 2 or more assessment criteria.

6. DESIGNING THE LEARNING PROGRAMME

6.1 The Concept of Applied Competence

Qualifications and standards registered on the SAQA NQF are described in terms of the learning outcomes that the qualifying learner is expected to have demonstrated. Hence there is an underlying commitment to a system of education and training that is organised around the notion of learning outcomes. SAQA emphasises the notion of applied competence – the ability to put into practice in the relevant context the learning outcomes acquired in obtaining a qualification.

Applied competence suggests three competencies that are necessary for the meaningful accomplishment of a task in any real world context. These competencies are:

- Foundational competence which is described as an understanding of what is being done and why.
- *Practical competence* which is described as a demonstrated ability to do a particular thing.
- Reflexive competence which is described as a demonstrated ability to integrate or connect performance with the understanding of that performance so as to learn from the actions and adapt to change and unforeseen circumstances.

The notion of applied competence indicates that a qualification must address both the 'theory' needs as well as the practical needs of learners. A qualifying learner must be able to understand as well as do something useful with the knowledge, in a real-world context – the balance between the needs of the individual and the social and economic development of the nation at large.

Competence can be defined as a skill or cluster of skills, carried out in an indicated context to standards of performance, of understanding in context, of understanding the system and of transferring the skills to other related contexts. Such skills can be identified for specific occupations, for any workplace context or working department. Once identified, learning programme design can commence using the identified skills as a research database.

6.2 Learning Activities

The learning activities tell how the learner can acquire the skills which will result in competence. The learning activities provide the means by which the learning is to take place. It is here that knowledge of the learning process is most critical. This item should suggest a number of things the learner can do to bring about the desired learning outcomes. This could include the following:

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- Performing self-assessments on work completed
- Completing and submitting reports and projects
- Participating electronically in discussion groups
- Analysing information on internet resource pages
- Accessing interactive learning materials

6.3 Assessment Methodology

Assessment is a planned process for gathering evidence and making judgements about a person's performance in relation to the agreed outcomes. Assessment is a means of providing feedback to candidates (and other stakeholders) on performance related to the achievement of these outcomes. (Sutherland, 2000).

In order to ensure that the assessment is valid and reliable, a variety of assessment methods should be used, depending on what is being assessed. Some of these methods could include the following (Sutherland, 2000):

- Portfolios of evidence
- Simulated assessment tasks
- Self assessments
- Written assessments (tests and examinations)
- Written and oral reports
- Role plays
- Workplace observations (work placements and practical components)
- Case studies
- Demonstrations
- Group assessments
- Open book assessments
- Oral presentations
- For a template on Learning Programme Design, see *Appendix C*.
- For a combination of Unit Standards to be used in a first qualification in Land Administration, see *Appendix D*

7. CONCLUSION

For the objectives of the Communal land Rights Act to be realised, education and training of Land Administrators at the local level will have to take place. This will be on level 4 of the National Qualifications Framework, and will be a first qualification in Land Administration in South Africa. The SGB in Surveying has embarked on a process whereby the full range of qualifications in land administration will be developed, right up to NQF Level 7 – the equivalent of a Professional Degree.

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The DACUM method of occupational analysis provides the curriculum developer with a database of information from which, with information obtained from other sources, a qualification could be designed based on Unit Standards.

The DACUM process is currently the subject of skills development which is taking place right here in Accra as part of the CIDA (Canadian International Development Agency) funded "Toolkit for Change" project. To date 19 Dacum facilitators have been trained by Bow Valley College and the Canadian Vocational Association, and a total of 18 occupational analyses have been carried out be the newly trained facilitator. One of these was for Block layers (builders), and the following survey-related workplace skills have been identified:

- Establish building line
- Establish datum peg
- Mark out position of structure
- Place profile boards
- Check accuracy

This project will continue until 2010 and many more occupations will be analysed in this way, with the objective to upgrade skills of the workforce in Ghana in both the formal and informal sectors.

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- Mangosuthu Technikon, Durban, South Africa
- Department of Land Affairs, South Africa

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BIOGRAPHICAL NOTES

J C (Koos) Landman (MSc Land Surveying, N.H.Dip Surv, M.Dip.Tech Civil, Pr.S(SA))

Koos Landman has lectured in the surveying discipline for 24 years, and has wide experience and knowledge of NQF/ SAQA-aligned learning programme design. He has been trained in Canada and South Africa by the Canadian Vocational Association (CVA), and is the only South African certified by the CVA as a DACUM (Develop a Curriculum) workplace skills analyst and a DACUM trainer. He has trained more than 120 DACUM facilitators from South Africa, Zimbabwe, Swaziland, Botswana, Ghana and Namibia under endorsement of the CVA, and has conducted numerous workplace skills analyses within different contexts both nationally and internationally.

He served on the Education Advisory Committee of the Council for Professional and Technical Surveyors of South Africa, and presently serves on the Standards Generating Body for Surveying where he has been involved in the writing of unit standards. He is also the convenor of the Curriculum Development Working Group responsible for designing a curriculum in Land Administration.

He is presently the Vice President (Administration and Finance) of the South African Geomatics Institute, as is an alternate member of the South African Council for Professional and Technical Surveyors.

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CONTACTS

J C (Koos) Landman Mangosuthu Technikon Umlazi Durban SOUTH AFRICA P O Box 12363 JACOBS 4026 SOUTH AFRICA Tel. + 27 31 907 7308

Mobile + 27 82 409 2816

Email: landman@julian.mantec.ac.za / mantec05@iafrica.com

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APPENDIX A: DACUM CHART FOR A LOACL LAND ADMINISTRATOR

GAC's					WORKPLACE S	KILLS			
A PRACTICE ADMINISTRATIVE SKILLS	A1 Operate and maintain database	A2 Operate computer system	A3 Exercise supervisory skills	A4 Plan and schedul work effectively	. I	A6 Work independently	A7 Organise work space	A8 Uphold principles of participative management	A9 Conduct operations in an ethical manner
B FACILITATE COMMUNICATION BETWEEN COMMUNITY & LOCAL	B1 Be fluent in predominant local language	B2 Be fluent in English	B3 Conduct meetings	B4 Demonstrate cultural sensitivit	B5 Take minutes	B6 Produce Reports	B7 Demonstrate listening skills	B8 Clearly verbalise ideas and concepts	B9 Convey technical terms into ordinary language
COMMUNITY & LOCAL GOVT.	B10 Identify stakeholders	B11 Facilitate links between stakeholders	B12 Apply the principles of adult education	B13 Educate & inform community and officials on principles of integrated planning		B14 Demystify jargon			
C GATHER AND ANALYSE INFORMATION	C1 Apply various information gathering techniques	C2 Select appropriate information gathering techniques	C3 Conduct needs assessment using various techniques re PRAs/ RRAs	C4 Evaluate & interpret information gathered	C5 Make recommen- dations on information gathered	C6 Keep & maintain a 'resource file'			
D ACQUIRE, MAINTAIN & UPDATE MAPS OF THE AREA	D1 Identify maps & know where to acquire them	D2 Interpret aerial photographs	D3 Read maps	D4 Convey map information to community	D5 Identify need for spatial information	D6 Draw sketch maps	D7 Identify changes to existing maps	D8 Update maps according to identified changes	D9 Assist cartographer in annotating maps
	D10 Reproduce maps & aerial photographs on appropriate media								
E RECORD INFORMAL LAND RIGHTS	E1 Keep & maintain a local register	E2 Acknowledge local custom & practice with regard to land rights	E3 Reconcile Statute & Common Law with regard to Land rights	E4 Relate local register to a map or aerial photograph	E5 Interpret a developmental map	E6 Demarcate relative positions on ground (from developmental map)			
F FACILITATE REGISTRATION OF FORMAL LAND RIGHTS	F1 Identify the need for upgrading the community	F2 Liaise between community & professionals	F3 Facilitate registration of initial title for land claimant	F4 Advise community on legal issues of Land Rights					

APPENDIX A: DACUM CHART FOR A LOACL LAND ADMINISTRATOR

GAC's					WORKPLACE S	KILLS			
G INTERPRET LAND LAWS & POLICIES	G1 Interpret town planning scheme	G2 Interpret municipal by-laws	G3 Recommend different forms of Land Tenure	G4 Advise on different forms of family law relating to land	G5 Reinforce gender rights with regard to Land Laws	G6 Identify & work with relevant land development laws	G7 Keep abreast about relevant Land Policy & Land Law	G8 Inform community of Land Law, Land Policy & changes thereto	
H DEMONSTRATE LEADERSHIP IN CONFLICT SITUATIONS	H1 Preempt conflict situations	H2 Determine the core problem in a conflict situation	H3 Identify possible alternative solutions	H4 Initiate negotiations between dissenting parties	H5 Facilitate negotiations between dissenting parties	H6 Recommend a mediator to resolve conflicts	H7 Communicate outcome of the mediation process	H8 Remain impartial	
I UNDERSTAND & EXPLAIN STRUCTURES & FUNCTIONS OF GOVT.	I1 Identify all service providers to community	I2 Identify the 'function' of each service provider	I3 Inform community of function of each service department		I4 understanding of the executive functions of govt				
J PROMOTE & ENCOURAGE USAGE OF LAND AS A SCARCE ECONOMIC RESOURCE	J1 Advise on availability of development finance	J2 Advise on conditions of mortgage bond finance	J3 Advise on appropriate land use (urban/rural)	J4 Identify & act on land use transgressions	J5 Educate on the economic value of land				
K ADVISE COMMUNITY ON TECHNICAL & ENVIRONMENTAL ISSUES	K1 & K2 Identify the role and responsibility of Land surveyors, town planners & other departmental practitioners		maintenance	K3 cost of provision & of various levels of ervice	K4 Promote environmental awareness & conservation issues	K5 Educate on the value of land & water as natural resources	K6 Facilitate links between community & environmental groups	K7 Advise on the principles of incremental development planning	

APPENDIX B: EXAMPLE OF ELEMENTS USED TO IDENTIFY UNIT STANDARD COMPONENTS

Function (SAGI Planning for services and infrastructure	Land Manager • Prepare base mapping • Ensuring integrated planning	Job Description LA • Assist with base mapping • Assist with integrated planning	Namibia Land Measurer & Dr Sibanda Namibia: Measuring and drawing skills Make use of maps and measuring equipment Measure features on maps and relate to real world features Make use of drawing instructions Apply technical drawing techniques Present and plot effectively and correctly Base mapping for physical planning Understand principles of base mapping Describe the products of base mapping Describe the process to produce base maps Interpret base maps for physical planning Describe possible problems and constraints of interpretation Dr Sibanda: Introduction to reading a map and/or computerised data base Introduction to land use planning and development objectives	Workplace Skills - DACUM Read maps Convey elementary map information to community Draw sketch maps Copy maps & aerial photographs on appropriate media Identify recorded land use and boundaries on maps and photos Capture data on LIS Identify maps & know where to acquire them Update maps according to identified changes Assist in annotating maps Interpret aerial photographs Relate local register to a map or aerial photograph Interpret a developmental map (CLAP) Identify all service providers to community Identify the 'function' of each service provider Identify the function of each service department Establish the cost of provision & maintenance of various levels of service Apply principles of integrated planning	Registered Unit Standard Construct a Cartesian co-ordinate grid and plot points NQF3; Credit 4; ID 11596 Registered Unit Standard Plot tape and offset measurements on a plan NQF3; Credit 3; ID 14442 Registered unit Standard Read a plan NQF3; Credit 3; ID 14242 Registered Unit Standard Obtain information from a plan NQF4; Credit 4; ID 11624 Registered Unit Standard Apply map and related spatial information skills for decision- making in the workplace NQF4; Credit 2; ID 14270 Registered Unit Standard Interpret photographic detail from aerial photography for annotation purposes NQF4; Credit 4; ID 11725 Proposed Unit Standards on SERVICE PROVISION/ PLANNING/ LEGALITIES
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APPENDIX C: TEMPLATE FOR LEARNING PROGRAMME DESIGN

Unit Standards Specific Outcomes	Unit Standard Assessment Criteria	Learning and Teaching Strategies	Assessment methodology (formative and summative)
Operate the hardware components of a personal computer	Physical connections between components are verified		
OUTCOME RANGE Keyboard, mouse, stiffy drive and display	Components are operated according to manufacturer's instructions		

APPENDIX D: DRAFT COMPILATION OF UNIT STANDARDS TO BE SUBMITTED TO SAQA FOR FIRST QUALIFICATION IN LAND ADMINISTRATION. For details go to www.saqa.org.za

	ID	UNIT STANDARD TITLE	LEVEL	CREDITS
Core	14257	Position a tape for measuring	Level 2	3
Core	11596	Construct a Cartesian co-ordinate grid and plot points	Level 3	4
Core	14442	Plot tape and offset measurements on a plan	Level 3	3
Core	14242	Read a plan	Level 3	3
Core	11694	Undertake tape and offset surveying	Level 3	5
Core	11624	Obtain information from a plan	Level 4	4
Core	14270	Apply map and related spatial information skills for decision-making in the workplace	Level 4	2
Core	11725	Interpret photographic detail from aerial photography for annotation purposes	Level 4	4
Core	Proposed	Determine the provisional position of a survey point by a hand-held global positioning system (GPS) receiver to an accuracy of 5 metres or better	Level 4	7
Core	13928	Monitor and control reception area	Level 3	4
Core	14359	Behave in a professional manner in a business environment	Level 2	5
Core	14342	Manage time and work processes within a business environment	Level 2	4
Core	8104	Operate and take care of equipment in an office environment	Level 2	2
Core	14347	Receive, distribute and dispatch mail in an office environment	Level 2	2
Core	13918	Manage time and the work process in a business environment	Level 3	4
Core	10136	Plan, organise and support project meetings and workshops	Level 4	4
Core	14339	Identify and maintain the types of records required in own industry and understand why it is necessary to create evidence and maintain confidentiality	Level 2	5
Core	Proposed	Operate a geographical information system and components thereof for the purpose of keeping tenure records in a community based registry	Level 4	7

APPENDIX D: DRAFT COMPILATION OF UNIT STANDARDS TO BE SUBMITTED TO SAQA FOR FIRST QUALIFICATION IN LAND ADMINISTRATION. For details go to www.saqa.org.za

	ID	UNIT STANDARD TITLE	LEVEL	CREDITS
Core	Proposed	Participate in land use planning and development	Level 4	6
Core	Proposed	Apply a working knowledge of sections of the Communal Land Rights Act (Act 11 of 2004)	Level 4	6
Core	Proposed	Assist with elementary field investigation and presentation of findings on land ownership rights at the local level	Level 3	5
Core	Proposed Unit Standard	Assist with the conducting of a land rights enquiry and with the presentation of the findings on land ownership rights		5
Core	Proposed	Investigate land ownership rights, and make recommendations to resolve simple disputes	Level 4	7
Fundamental	7547	Operate a personal computer system	Level 2	6
Fundamental	7566	Operate personal computer peripherals	Level 2	3
Fundamental	7568	Demonstrate knowledge of and produce word processing documents using basic functions	Level 2	3
Fundamental	7572:	Demonstrate knowledge of and produce computer spreadsheets using basic functions	Level 2	3
Fundamental	7574	Demonstrate knowledge of and produce a presentation using basic functions	Level 2	3
Fundamental	7567	Produce and use spreadsheets for business	Level 3	5
Fundamental	7570	Produce word processing documents for business	Level 3	5
Fundamental	9532	Demonstrate basic knowledge of computers	Level 3	6
Fundamental	7569:	Demonstrate understanding of the basic concepts of databases and the ability to plan and create a simple database	Level 2	3
Fundamental	7576	Demonstrate the ability to use a database for business	Level 3	5
Fundamental	13494	Describe situations using measurements and solve simple, realistic measurement problems	<1	1
Fundamental	12444	Measure, estimate and calculate physical quantities and explore, describe and represent geometrical relationships in 2-dimensions in different life or workplace contexts	Level 2	3

APPENDIX D: DRAFT COMPILATION OF UNIT STANDARDS TO BE SUBMITTED TO SAQA FOR FIRST QUALIFICATION IN LAND ADMINISTRATION. For details go to www.saqa.org.za

	ID	UNIT STANDARD TITLE	LEVEL	CREDITS
Fundamental	14108	Measure, estimate, calculate physical quantities, explore, describe and represent, interpret, justify geometrical relationships in 2 & 3-dimensional space relevant to the life or workplace of the comm	Level 3	4
Fundamental	8974	Engage in sustained oral communication and evaluate spoken texts	Level 4	5
Fundamental	8975	Read analyse and respond to a variety of texts	Level 4	5
Fundamental	8979	Use language and communication in occupational learning programmes	Level 4	5
Fundamental	8976	Write for a wide range of contexts	Level 4	5
		TOTALS	<level 1<="" td=""><td>1</td></level>	1
			Level 2	45
			Level 3	53
			Level 4	72