Towards a common terminology and architecture for standards developed by PrimTEd for literacy and mathematics ITE

This document serves two purposes, first, to suggest some suggestions on using standardised terminology in our various documents and, second, to present some recommendations for the format of any standards developed by working groups.

Towards a common understanding of terms used by PrimTEd working groups

PrimTEd working groups have participants who work in different disciplinary and pedagogical fields and come from diverse university, academic and ideological backgrounds. Given that PrimTEd is a collaborative effort, striving to produce outputs and deliverables that in a very real sense "have to talk to each other", this document has been produced to provide some suggestions on standardised terminology that will facilitate better interchanges.

In formulating recommendations about what terminology to use and how that terminology is to be understood we have taken key guidance from the following sources and authorities:

Concise Oxford Dictionary (12th edition) [used by the United Nations for deciding on what words mean in current English]

The International Organization for Standardization and two of its publications:

International Organization for Standardization. 2014. *Teaching Standards: Good practices for collaboration between National Standards Bodies and universities*. Geneva: International Organization for Standardization

International Organization for Standardization. 2002. *Guide 2. Standardization and related activities — General vocabulary*. Eighth edition. Geneva: International Organization for Standardization

Various South African Qualifications Authority (SAQA) documents, including:

South African Qualifications Authority. 2012. *Level Descriptors for the South African National Qualifications Framework*. Pretoria: South African Qualifications Authority

Adam, S. 2015. Learning outcomes: Understanding learning outcomes in the context of NQF implementation (Role, potential role, use, misconceptions and benefits – with special reference to their potential further application in South Africa in terms of recognition, qualifications design, evaluation of foreign qualifications and level descriptors). Pretoria: South African Qualifications Authority

The terminology looked at will be related to the following:

Standards

Assessment Criterion

Descriptor

Curriculum Framework

Curriculum

Standards

There are expectations that in relation to standards PrimTEd must take these steps in achieving its goals:

- Develop a common terminology and a common architecture for standards
- Standards endorsed by the field and professionally published
- Advocacy on the standards
- Support implementation of PrimTEd project outputs, including the standards, at all universities involved in primary teacher education.

These steps would clearly be facilitated by our having a reasonably common understanding of what standards and how they should be presented in text.

A standard is a required or agreed upon level of quality or attainment. In the educational context it is a registered statement of desired education and training outcomes and their associated assessment criteria.

The official ISO definition (ISO/IEC Guide 2, 2004, p. 12) is:

Document established by consensus and approved by a recognized body that provides for common and repeated use, rules, guidelines or characteristics for activities or their results aimed at achieving the optimum degree of order in a given context.

A standard document is therefore very much a normative document.

The ISO definition also makes clear that producing a standards document is not just a technical process. It is also a process of gaining consensus through involvement and general agreement of concerned and affected parties and then the issuing of the standards by a recognized body.

In the PrimTEd context the standards under consideration are those for teacher education in the disciplinary areas of literacy and numeracy.

These standards are at particular places in a hierarchy of levels ranging from qualifications (at the highest level) down to standards for learners in particular learning areas.

- The *Higher Education Qualification Sub-Framework* (HEQSF) (Council for Higher Education, 2014) lays down the rules for what qualifies as a higher education qualification and the levels of learning (provided in **level descriptors**) which apply to particular qualifications (South African Qualifications Authority, 2012). This framework provides the basis for standards development and quality assurance.
- Revised Policy on Minimum Requirements for Teacher Education
 Qualifications (MRTEQ) (Department of Higher Education and Training, 2015)
 lays down requirements for all teacher qualifications including the weighting of
 the various fundamental, disciplinary, pedagogical, situational and teaching
 practice learning components in them. These then are essentially programme
 standards. An appendix on the Collective roles of teachers in a school (pp. 60-61)
 is phrased in an outcomes way. The equivalent document for adult and
 community education has a more definite set of professional standards, in the
 appendix on Basic Competences for Professionally Qualified Adult Education and
 Training Educators and Community Education and Training Lecturers (pp. 42-44).

Note that the *MRTEQ* specifically warns that "The setting of standards, for example knowledge and practice standards..., to define competence at deeper specialized levels for specific subjects or specializations, is not defined in this policy. These standards will have to be developed by the relevant teacher education communities of practice." (p. 8).

- The South African Council for Educators has issued a draft set of general
 Professional teaching standards (South African Council for Educators, 2017).
- The Consolidated Literacy Working Group of PrimTEd is about to release a set of Standards for South African language and literacy graduate teachers for consultation.
- The South African Qualifications Authority has a myriad of qualifications and socalled unit standards (mainly vocational, skills and adult basic education and training ones) that are built around standards for learners.
 (http://www.saqa.org.za/show.php?id=7391)

Teacher knowledge and practice standards

Teacher knowledge and practice standards are statements that describe what a teacher needs to know and be able to do to carry out their core function professionally and effectively. The statements are specific to a subject area and school phase or to a specific extended role, for example, school leadership (or inclusive education, etc.).

Note that standards do not normally prescribe how the students get to achieve the standards. That is determined by the curriculum and most standards do not prescribe a particular curriculum.

Therefore, teacher standards statements are not tied to a particular school curriculum statement or to a particular university course or programme curriculum. They relate more to the academic and practical knowledge required to teach a particular subject or discipline well and, if met by teachers, will allow them to deliver the curriculum that is in place at schools at a specific time, and to adapt effectively when the curriculum changes.

In South Africa, where currently there is a prescribed curriculum for schools (the *National Curriculum Statement Grades R - 12* (Department of Basic Education, 2011, 2013) comprising three documents (the *Curriculum and Assessment Policy Statements* (CAPS), the *National Policy Pertaining to the Programme and Promotion Requirements of the National Curriculum Statement grades R - 12*, and the *National Protocol for Assessment Grades R - 12*. Naturally, the curriculum for teacher training at a particular university will need to take the existence of this curriculum for school learners into account in preparing the future teachers students to teach that schooling curriculum (but that CAPS curriculum is *not* the university's B.Ed curriculum).

With the caveat that knowledge and practice standards for teachers are not per se tied to a particular curriculum, they certainly can inform the construction of initial teacher education programmes, courses/modules and their content, assessment tools, processes and materials at the curriculum level. At a higher level they can influence the **curriculum frameworks** for teacher education.

As Green (2018) puts it:

If well designed, collaboratively developed, collectively owned, and taken up into teacher education programmes, they form a national standard that can provide the basis for greater convergence between teacher education programmes intended to develop teachers of specific subjects, without requiring that programmes need to follow exactly the same curricula.

Assessment criterion

The purpose of assessment criteria (or by whatever other term they are called such as **performance criteria**, **evidence requirements**, **indicators** or **descriptors**) is to provide a clear description of the type and quality of evidence that would show that a particular outcome has been attained. In the context of education that means assessing learning or competence.

In competency-based assessment which has identified or specified learning outcomes ('Specific outcomes' in SAQA terminology) the attainment of these outcomes is assessed according to predefined criteria.

Assessment criteria are developed by analysing the learning outcomes and identifying the specific characteristics, qualities or criteria that students have to meet/do during assessment in order to demonstrate that they have achieved the learning outcomes.

This means specifying clearly the standards that must be met and what evidence will be used to show the desired level of achievement of learning outcomes.

Assessment criteria are crucial in establishing a clear understanding between lecturers and students about what is expected from assessed work. It should be made clear what aspects of the learning outcomes will be assessed. It also shows the learners what is valued in a curriculum.

Criteria define the characteristics of the work or performance, but they do not define how well students must demonstrate those characteristics – that is the job of the special descriptors if levels of proficiency have to be assessed.

Level descriptors

A level descriptor is a statement describing learning achievement at a particular level of the National Qualifications Framework that provides a broad indication of the types of learning outcomes and assessment criteria that are appropriate to a qualification at that level. Their purpose is to ensure coherence across learning in the allocation of qualifications and part qualifications to particular levels, and to facilitate the assessment of the international comparability of qualifications and part qualifications.

The SAQA level descriptors incorporate ten competencies:

- 1. Scope of knowledge
- 2. Knowledge literacy
- 3. Method and procedure
- 4. Problem solving
- 5. Ethics and professional practice
- 6. Accessing, processing and managing information
- 7. Producing and communicating of information
- 8. Context and systems
- 9. Management of learning
- 10. Accountability.

Curriculum

The usual English sense of 'curriculum' is of "the subjects comprising a course of study in a school or college" (*The Concise Oxford English Dictionary* (2011). In origin the word meant **a course to be run**, and hence, educationally, it is a course to be followed and completed.

In this common English sense, neither a set of standards nor a list of outcomes nor a syllabus are a curriculum (though they may well be part of one).

Academics offer confusing definitions of curriculum. Jarvis (1995, p. 190) is useful in summing up the different uses of the word:

The word can mean **the total provision** of an educational institution, it can also refer to the **subject matter** of a particular course of study or even to the **learning that is intended**. Hence, it relates to both **the known and the intended**, i.e. the educational organization and provision, or to **the unknown and unquantifiable**, i.e. the learning experiences.

Broad definitions take 'curriculum' to be the whole actual teaching and learning situation. This would therefore include ideas and guidelines (in the form of official documents such as syllabi) about **what** is taught. It explicitly or implicitly will have a

rationale for **why** something should be taught and **to whom**. The curriculum's guidelines to teachers and the textbooks and workbooks it prescribes will influence the **content** of what is taught, how something is taught, and **when** and **where**. What actually happens in the teaching and learning process may be close to what was intended (whether this intention was overt or hidden) in the official curriculum or be unintended, but **what actually happens in the teaching and learning process** (the reality of what the learners experience) is part of the curriculum too.

Narrow definitions talk of curriculum as the **courses and subjects which comprise the intended outcomes of teaching, the knowledge and skills** which are transmitted through them. An official curriculum in this narrow sense is what laid down in the prospectus, handbooks, syllabus or official curriculum policy statements of the providers of education. Textbooks often form part of this formal curriculum.

Whether it is broadly or narrowly defined, in order to recognise and evaluate the principles underlying a particular curriculum, one has to ask how the curriculum views the following elements, among others:

- the roles of the teacher and learner
- teacher-learner relationship
- desired learner outcomes
- learning theory
- knowledge
- classroom organisation
- teaching spaces and resources
- control
- assessment
- certification
- · institutional decision making
- role of parents or, in adult education, sponsors
- the role of education in society
- the curriculum itself absolute and fixed or dynamic and subject to change

In the context of PrimTEd, it is probably safest to talk of 'the curriculum' in a fairly narrow sense of courses and subjects which comprise the intended outcomes of teaching and the knowledge and skills which are transmitted through them. Given the existence of the *Curriculum and Assessment Policy Statements* (CAPS), which has since 2012 (re-)imposed on South Africa a centrally, state determined curriculum, the reality is that at present we have a very real 'curriculum' embodied in a set of voluminous documents¹ that prescribe in a quite forceful way what is to be taught, when and how.

One might take one example – the *CAPS* for Foundation level mathematics is 512 pages long. How many Foundation level teachers will wade through and master a text of this size and make sensible judgements on what parts to use, is a matter for speculation?

There are, typically for many documents created by committees, some internal incoherences in the *CAPS*. This is seen most spectacularly in the contrast between the prescriptive curriculum sequence and detailed timetabling as against the preliminary injunctions that the *CAPS* are **recommendations** rather than mechanically applicable mandatory regulations. Anecdotal evidence suggests that education system practice (particularly by subject advisors) is interpreting the CAPS in what can be only described as a "fundamentalist" or "mechanical" way.

In the current context: *CAPS* is a and the curriculum in schools.

Curriculum Framework

A **curriculum framework** is a set of guidelines defining and explaining what a curriculum is required to be like or to contain.

A curricular framework is therefore not, as such, a curriculum. It sets the directions, standards and limits or boundaries of possible curricula.

In other words it is the guidelines for the construction of actual curricula.

UNESCO's International Bureau of Education (2017, p. 6) states that a curriculum framework:

should organize, control and/or regulate the content of the curriculum – that is, the subject descriptors or syllabuses, as well as textbooks and other learning materials. The framework should also apply to a range of matters that can have a direct impact on the development and implementation of curriculum, such as how the curriculum meets the current and future needs of the country, teaching methodology, teacher recruitment and selection, assessment and examination practice, and even class sizes.

In the PrimTEd context there would be certain key elements in curriculum frameworks developed by working groups. These would include any knowledge and practice competence standards developed for graduate teachers in literacy and mathematics (at the appropriate level using SAQA's NQF level descriptors for undergraduate study having relevance to the current curriculum that teachers have to teach in schools).

As Taylor (2018, p. 14), summarising Green states:

Broadly speaking, a curriculum framework for any subject area in initial teacher education programme serves to further unpack how the Knowledge and Practice standards can be addressed in the curriculum. It is a guide that describes minimum topics/units to be covered, the depth of coverage, the order in which they are to be addressed and the credits and time that could be allocated to each.

The curriculum framework would also have, whether explicitly or implicitly some indication of an educational ideology (with views of the learner, the nature of knowledge and of education itself) that influences in turn the conception of good practice including what methods are best, the appropriate type of curriculum and the role of the teacher.²

In certain disciplinary areas the curriculum framework may well need to make a choice of certain curriculum options. Thus, for example, in literacy, two approaches to literacy teaching – synthetic phonics and whole language are hardly compatible (and in the United Kingdom synthetic phonics is the official approach, though within it, any particular curriculum programme may be used. Similarly, one can have obvious incompatibility between discovery learning and systematic instruction (the latter being very much the *CAPS* approach. Hopefully, such choices embedded in curriculum frameworks will be evidence-based.

Courses and modules

A **course** is a series of lessons or lectures or study material on a particular subject.

A **module** is one of a set of independent units of study or training forming part of a course. There is a technical meaning of the term module which is that a module is each of a set of standardized parts or independent units that can be used to construct a more complex structure. In this sense a module that is part of a qualification should be part of a large structure, a course of study, in which it plays a carefully designed role in a sequence of other modules and has clear linkages to the other modules.

In practice in current South African university usage there is no difference in meaning between course and module. A module is just a course of study. Whilst trying to correct the misuse of the term module is probably a lost cause, it would be wise to be clear whether a module does in fact have any linkages to the other parts of the curriculum of the qualification.

A significant problem with short modules is that if they have no linkages to those that precede and follow them there is simply no time for formative assessment (at all the levels of Bloom's taxonomy) that could improve the learner's competence.

For example, these *Principles of the National Curriculum Statement Grades R – 12* are meant to guide the national curriculum:

Social transformation; Active and critical thinking; High knowledge and high skills; Progression; Human rights; Valuing indigenous knowledge systems; Credibility; Quality and efficiency; and Providing an education that is comparable in quality, breadth and depth to those of other countries

The format of knowledge and performance standards for graduate teachers of literacy and mathematics

General principles

Some general principles relating to the architecture of these standards are as follows:

- A simple, easy to understand format
- Does not replicate generic professional standards for teachers (such as the the SACE ones) but are specific to the relevant domain/field/subject namely, literacy and mathematics
- Are as concise as can be, given the content to be covered
- Not over complicated or with multiple concepts/ideas in each item
- Linguistically and conceptually accessible (though allowing for necessary technical terminology)
- All should be at NQF level 5 or 6 and compatible with SAQA NQF level descriptors for such.
- These are competence standards for university graduate teachers at the exit of their university studies and therefore should not be divided into proficiency levels or graded in terms of experience or years of service (however the format should be such that a future expansion to include in-service teachers with varying degrees of experience is easy to do).

What are the standards to be used for?

Before designing standards it may be helpful to consider what in practice they will be used for. They can, of course be used for many things but commonly they are used for:

- designing a curriculum (usually by experts),
- helping lecturers and teachers understand what their course or module should do or contain,
- assisting test and examination compilers decide what should be assessed
- help the educators prioritise what is important in a possibly lengthy and complicated curriculum document
- guide textbook writers (alongside a curriculum document if there is one).

The actual format

When one surveys teacher competency standard documents one finds that essentially there are two main formats (though they contain a bewildering multiplicity of terms for their components).

The first format type is like this:

- 1. **Standard** (a fairly general statement or even just a title)
- 2. **Learning outcomes** (also called **Specific outcomes**, **Components**, **Elements** or **Skills**)
- 3. **Assessment criteria** (sometimes called, depending on the nature of the standard, **performance criteria**, **evidence requirements** or **indicators**)

A typical example of such is the familiar format for SAQA Unit Standards (and also used by UNISA for all its B.Ed. Module outcomes).

The second format type is similar but the Part 3 is sub-divided into Level of proficiency descriptors or Level of Experience/expertise descriptors

- 1. **Standard** (a fairly general statement) (also called an **Anchor statement**)
- 2. **Learning outcomes** (also called **Standards, Specific outcomes, Components**, **Elements** or **Skills**)
- 3. **Assessment criteria** (sometimes called, depending on the nature of the standard, **performance criteria**, **evidence requirements**, **evidence of achievement**, **indicators** or **descriptors**) sub-divided by:

e.g.

Level of proficiency descriptors	(e.g.	3.1 Initial or Graduate
----------------------------------	-------	-------------------------

3.2 Proficient

3.3 Highly accomplished)

or

Rating descriptors (e.g. 3.1 Unacceptable

3.2 Satisfies minimum expectations

3.3 Good

3.4 Outstanding)

or

School Phase or Grade descriptors

The draft **Standards for South African language and literacy graduate teachers** (prepared by the Consolidated Literacy Working Group) have opted for the first format type for three main reasons:

- It is a simple, easy to read and understand format.
- These are exit outcomes what an initial teacher education graduate should know and be able to do by the time they have completed their qualification not ones to cover the variations in competence and experience of in-service teachers.
- They avoid having proficiency levels this is what all Foundation and Intermediate Phase graduate teachers should know and be able to do with reasonable competence.

Here are some examples from one of these literacy teacher standards:

Standard	Teachers graduates have knowledge of language and literacy and of how to teach learners to read and write	
Purpose and rationale	Language and literacy teachers need to have knowledge of: the theoretical, historical, and research-based-foundations of reading and writing, language structures and conventions, speaking, listening, viewing and presenting, the processes and phase appropriate instruction used in teaching these; and the role of the language and literacy teacher within and across subjects.	
General competencies assumed to be in place	The teacher is a fluent reader and writer in two or more official languages including English (or Afrikaans).	
Specific outcomes and assessment criteria		
Specific outcome	Assessment criteria	
Demonstrate basic knowledge of the key components of language	Explanations can be given of language phonology, morphology, grammar, semantics, textual features and socio-pragmatics.	
Demonstrate knowledge of the theoretical and research- based foundations of home language acquisition and second language learning (i.e. FAL).	 Explanations can be given about the differences and similarities between the natural acquisition of a home language[s] and the formal learning of another language in an educational context (i.e. FAL). The implications of learners speaking a different language[s] at home and how this may impact on their learning can be discussed. Current language acquisition theories can be applied in multilingual contexts. 	

Knows about typical The role of knowledge of spelling strings and patterns and morphemes in spelling accurately in the particular language sequences of development in children's orthography. spelling · Knowledge of the role of morphemes in spelling is demonstrated (e.g. in English, -ed, -ing, sub-, pre-, in-, etc.) is demonstrated. · Knowledge of spelling strings and patterns is demonstrated (knowing the patterned basis to spelling (there are a limited number of possible spellings for individual syllables) (e.g. in English ight (as in height, light, night), ei (as in their, weigh), etc.). Understanding the role of invented spelling and influence of the learners' linguistic repertoire on spelling development is demonstrated. Demonstrate knowledge Features of page or screen-based visual texts (e.g. layout, colour, image choice) can be explained. of phase appropriate · The effects of the relationship between words and images of features of page or screen-based visual various kinds on meaning can be explained. texts, of how the Strategies for teaching learners how to read and view visual relationship of verbal and texts or texts that combine words and images can be visual features of texts described. affects meaning and of strategies to teach learners to become firstly, visually literate and subsequently, critically visually literate

The wording of Specific Outcomes and Assessment Criteria

A learning outcome statement is a precise description of the observable and measurable things that a student must be able to do.

Accompanying this outcome statement should be an assessment criterion (or a set of assessment criteria) that describe what will be taken as evidence that the outcome has been achieved. These assessment criteria may include a description of the level of proficiency that the student has to achieve (though this may be in the form of a general NQF level descriptor applying to the whole set of outcome statements).

An **outcome** statement is usually presented in the form: **verb, noun** and **conditions** (if applicable).

e.g. "Describe [verb] a problem situation [noun] using words, mathematical expressions, equations and/or drawings (conditions]"

Assessment criteria should follow the form **noun, verb, condition** and consist of complete sentences with two parts: an essential activity or result of an activity; and an evaluative statement. The candidate is required to meet *all* the assessment criteria to be considered to have achieved the outcome and therefore only *critical* evidence which must be considered by an assessor should be included).

- e.g. Mathematical symbols [noun] are correct and used in the proper context [evaluative statement].
 - The description [noun] is consistent with the original statement of the problem [evaluative statement].
 - The **layout** [noun] is **clear and structured so that it can be easily read** (evaluative statement].

The verbs

Most people of familiar with the types of knowledge outcomes listed in Bloom's taxonomy (Bloom et al, 2014). The revised version of the list provides a useful set of words to us in the standards outcome statements. In practice for this level (graduate students) the ones relating to Comprehension, Application and Analysis re probably the most appropriate.

Knowledge/Remembering	define, list, recognize, repeat, recall
Comprehension/Understanding	characterize, describe, explain, identify, locate, recognize, sort, classify, summarize
Application/Applying	choose, demonstrate, implement, perform
Analysis/Analyzing	analyze, categorize, compare, differentiate
Evaluation/Evaluating	assess, critique, evaluate, rank, rate, check
Synthesis/Creating	construct, design, formulate, organize, synthesize, plan, produce

References

Adam, S. 2015. Learning outcomes: Understanding learning outcomes in the context of NQF implementation (Role, potential role, use, misconceptions and benefits – with special reference to their potential further application in South Africa in terms of recognition, qualifications design, evaluation of foreign qualifications and level descriptors). Pretoria: South African Qualifications Authority www.saqa.org.za/docs/webcontent/2015/Stephen%20Adam%20presentation.pdf

Anderson, L.W., Krathwohl, D.R., Airasian, P.W., Cruikshank, K.A., Mayer, R.E., Pintrich, P.R., Raths, J. and Wittrock, M.C. (Eds.) 2001. *A Taxonomy for Learning, Teaching and Assessing.* New York: Addison Wesley Longman.

Council for Higher Education. 2014. *Higher Education Qualifications Sub-Framework. Government Gazette*, Vol. 592, No. 38116, 17 October 2014.

http://www.che.ac.za/sites/default/files/publications/Government%20Gazette%2038 116%2017%20October%202014%20HEQSF.pdf

Department of Basic Education. 2011. *Approval of the National Curriculum Statement Grades R - 12 as national education policy*. *Government Gazette*, Vol. 555, No. 34600, 12 September 2011

 $\frac{https://archive.opengazettes.org.za/archive/ZA/2011/government-gazette-ZA-vol-555}{-no-34600-dated-2011-09-12.pdf}$

Department of Basic Education. 2013. *Questions and Answer booklet: For the advocacy of the implementation of the National Curriculum Statement (NCS) Grades R-12*. Pretoria: Department of Basic Education

https://www.education.gov.za/LinkClick.aspx?fileticket=SPE_3Gmx1B4%3d&tabid=41 9&portalid=0&mid=4018

Department of Higher Education and Training. 2015. *Revised policy on the minimum requirements for Teacher Education Qualifications*. *Government Gazette*, Vol. 596, No. 38487, 19 February 2015

http://www.dhet.gov.za/Teacher%20Education/National%20Qualifications%20Framework%20Act%2067_2008%20Revised%20Policy%20for%20Teacher%20Education%20Quilifications.pdf

Department of Higher Education and Training. 2015. Policy on minimum Requirements for Programmes Leading to Qualifications for Educators and Lecturers in Adult and Community Education and Training. **Government Gazette**, Vol. 597, No. 38612, 27 March 2015

http://www.dhet.gov.za/Teacher%20Education/Policy%20on%20minimum%20requirements%20for%20programmes%20leading%20to%20qualification.pdf

Gallie, M. And Keevy, J. 2014. *Standards Framework for Teachers and School Leaders*. London: Commonwealth Secretariat www.saqa.org.za/docs/papers/2014/StandardsFramework.pdf

Green, W. 2018. Standards in Teacher Education. PrimTEd Working Group Meeting. 17 April 2018. Pretoria: Department of Higher Education and Training

International Organization for Standardization. 2002. *Guide 2. Standardization and related activities – General vocabulary*. Eighth edition. Geneva: International Organization for Standardization

https://www.iso.org/obp/ui#iso:std:iso-iec:guide:2:ed-8:v1:en

International Organization for Standardization. 2014. *Teaching Standards: Good practices for collaboration between National Standards Bodies and universities*. Geneva: International Organization for Standardization https://www.iso.org/files/live/sites/isoorg/files/archive/pdf/en/teaching_standards_en_-lr.pdf

Jarvis, P. 1995. Adult and continuing education. Second edition. London: Routledge

South African Council for Educators. 2017. *Professional Teaching Standards. Draft for consultation with teachers and subject and phase specialists*. Centurion: South African Council for Educators

https://www.sace.org.za/assets/documents/uploads/sace_65860-2017-10-13-SACE% 20Professional%20Teaching%20Standards%20LR.%202.pdf

South African Qualifications Authority. 2012. *Level Descriptors for the South African National Qualifications Framework*. Pretoria: South African Qualifications Authority www.saqa.org.za/docs/misc/2012/level_descriptors.pdf

UNESCO International Bureau of Education. 2017. *Training tools for Curriculum Development: Developing and Implementing Curriculum Frameworks.* Geneva: UNESCO International Bureau of Education http://unesdoc.unesco.org/images/0025/002500/250052e.pdf