

# The National Qualifications Framework and Curriculum Development



We need systemic change, not just curriculum or pedagogic change; we need a new driving vision for our system, not just a new paradigm for curriculum design and delivery in the classroom.

*Dr M Nkomo*

**Write to us at**

Postnet Suite 248, Private Bag X06  
WATERKLOOF, 0145

**Visit us at:**

659 Pienaar Street (cnr. Waterkloof Road)  
BROOKLYN, Pretoria

**Telephone us at**

012 - 482 0800	Switchboard
012 - 482 0802	Executive Office
012 - 482 0836	Resource Centre and general information
012 - 482 0810	Strategic Support
012 - 482 0810	Communications
012 - 482 0807	Standards Setting and Development
012 - 482-0858	Quality Assurance and Development
012 - 482 0858	Evaluation of Educational Qualifications

**Fax us at**

012 - 346 5813	Executive Office
012 - 346 5809	Secretariat
012 - 346 5809	Communications
012 - 346 5812	Standards Setting and Development
012 - 346 5814	Quality Assurance and Development

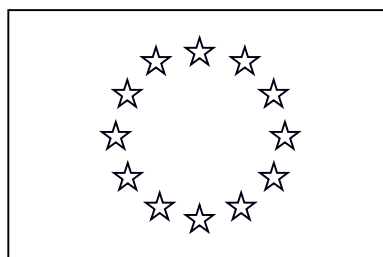
**e-mail us at**

[saqainfo@saqa.org.za](mailto:saqainfo@saqa.org.za)

**Visit our website at**

<http://www.saqa.org.za>

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**SAQA's Mission**

To ensure the development and implementation of a National Qualifications Framework which contributes to the full development of each learner and to the social and economic development of the nation at large.

## Introduction

As an introduction to this area, it may be helpful to explore what education is. This may seem like an elementary question but it is one that constantly, throughout the recorded history of mankind, has perplexed philosophers and thinkers. To this day, an absolute definition still escapes us. As Montaigne, the French philosopher, said when trying to find a meaning for the word education: ‘The farther I sail, the more land I espy, and that so dimmed with fogs and overcast with clouds, that my sight is so weakened I cannot distinguish the same.’ Nevertheless even though there is no undisputed definition of what education is, that does not mean that there is no value in exploring the concept. It is in this exploration that one is able to clarify one’s thinking and sort out the basic issues, and then establish some direction for a review of the South African initiatives.

A helpful place to start is the definition of education that Aristotle, the Greek philosopher, came up with some 2 500 years ago. He said the following:

We must not leave out of sight the nature of education and the proper means of imparting it. For at present there is a practical dissension on this point; people do not agree on the subjects which the young should learn, whether they should take virtue in the abstract or the best life as the end to be sought, and it is uncertain whether education should be properly directed rather to the cultivation of the intellect or the moral discipline. The question is complicated, too, if we look at the actual education of our own day; nobody knows whether the young should be trained at such studies as are merely useful as means of livelihood or in such as tend to the promotion of virtue or in the higher studies, all of which have received a certain number of suffrages. Nor again, if virtue be accepted as the end, is there any agreement as to the means of attaining it... (Politics, Book V, Chapter 3, Welldon’s translation)

In spite of its age, this extract illustrates some of the eternal problems that face those engaged in education. What is the purpose of education? Is it the development of practical skills to enable one to earn a living? Is it the process of forming and strengthening character? Is it the development of the mind and intelligence, the formation and understanding of concepts in the abstract? Is it the transmission or reproduction of our academic and cultural heritage and where possible, the improvement or transformation of that heritage? Aristotle asks what subjects should be taught. From the 1800s the study of the Classics i.e. Latin and Classical Greek was the basis of the curriculum, society believing that only if a man had read the Classics could he be deemed truly educated. However, since the exposure of that myth, debate has raged the world over about what subject matter and content best meets the needs of society; what is it that the education system should concentrate on. More recently debates have moved across discipline boundaries and

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*Aristotle*

**Qualification:** means a planned combination of learning outcomes which has a defined purpose or purposes, and which is intended to provide qualifying learners with applied competence and a basis for further learning.

inter-disciplinary studies have found favour. Rousseau in turn rejected the concept of deciding what children should learn altogether and rather favoured a much freer attitude, discovery learning. A further debate rages as to whether education is a process or is it an event of fixed duration? Having raised some of the complexities, Aristotle finally hints at the problem of how to 'educate' or how to become 'educated', by indicating that even if there were agreement on what its purpose is, there is no agreement as to the means of attaining it. This assertion opens up a whole new area of debate around pedagogy, curriculum design, development and delivery, education management and education structures. If the question was a difficult one at the time of Aristotle, its complexity has increased immeasurably with the theories and discoveries in psychology and sociology in respect of how people think and learn, and the relationship between individuals and the wider society within which they live.

It is within this context of constant debate and theorising that this discussion of curriculum development takes place. The concept that there is one correct mechanism for curriculum development and delivery is rejected and this discussion serves only to highlight some of the guiding principles and the problem areas for curriculum development and delivery within the NQF.

## What is a qualification and how does it relate to the curriculum and curriculum development?

It is important to explore what links exist between qualifications and the curriculum. It may then be possible to look more specifically at the relationship between qualifications and learning programmes.

**Qualification:** means a planned combination of learning outcomes which has a defined purpose or purposes, and which is intended to provide qualifying learners with applied competence and a basis for further learning; and it means the formal recognition of the achievement of the required number and range of credits and such other requirements at specific levels of the NQF as may be determined by the relevant bodies registered for such purpose by the SAQA (NSB regulations)

**Standard** means registered statements of desired education and training outcomes and their associated assessment criteria. (SAQA Act)

**Unit standard** means registered statements of desired education and training outcomes and their associated assessment criteria together with administrative and other information as specified in these regulations. (NSB regulations)

**Learning programme** means the sequential learning activities, associated with curriculum implementation, leading to the achievement of a particular qualification or part qualification. A learning programme can be identified with a cluster of qualifications, a single qualification or a part qualification. A particular qualification may be achieved through different learning programmes that meet the exit level outcomes and associated assessment criteria of the qualification. (Interim Joint Committee, 2000)

This document, referring to the NCHE Report of 1996, goes on to explain that learning programmes, while necessarily diverse, should be educationally transformative. Thus they should be planned, coherent and integrated; they should be value adding, building contextually on learner's existing frames of reference; they should be learner-centred, experiential and outcomes-oriented; they should develop attitudes of critical inquiry and powers of analysis; and they should prepare students for continued learning in a world of technological and cultural change.

**Programme, curriculum, course:** By programme we mean a coherent set of courses, leading to a certain degree. In a programme we can distinguish a core curriculum and optional courses, together making up the different ways a student can choose to arrive at the degree. (Vroeijenstein: 1995)

A definition of curriculum is more difficult in that it means different things to different people and hence there is often enormous confusion when discussions about curriculum take place. Definitions of curriculum range from rather narrow interpretations to broad, all-encompassing interpretations which include virtually every aspect of the full education system.

It may be helpful to mention a few of these and then try and suggest how the curriculum relates to qualifications and standards as defined in the NQF.

- The curriculum is to be thought of in terms of activity and experience rather than of knowledge to be acquired and facts to be stored. (Hadow Report)
- The curriculum refers to the teaching and learning activities and experiences which are provided by schools (NEPI)
- A term which includes all aspects of teaching and learning such as the intended outcomes of learning, learning programmes, assessment, methodology (Curriculum Framework for GET and FET)
- All the learning which is planned and guided by the school, whether it is carried out in groups or individually, inside or outside the school (Kerr, 1968)
- The overall rationale for the educational programme of an institution (Kelly, 1989)
- Contextualised social practice; an on-going social process comprised of the interactions of students, teachers, knowledge and milieu (Cornbleth)

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- The curriculum is understood to be more than syllabus documentation. The term refers to all of the teaching and learning opportunities that take place in learning institutions. It includes:
  - The aims and objectives of the education system as well as the specific goals of learning institutions;
  - What is taught: the underlying values, the selection of content, how it is arranged into subjects, programmes and syllabuses, and what skills and processes are included;
  - The strategies of teaching and learning and the relationships between teachers and learners;
  - The forms of assessment and evaluation which are used, and their social effects
  - How the curriculum is serviced and resourced, including the organisation of learners, and of time and space and the materials and resources that are made available
  - How the curriculum reflects the needs and interests of those it serves including learners, teachers, the community, the nation, the employers and the economy. (ANC, 1994)
- Curriculum then has to do with:
  - Determining the purpose and values of the learning
  - Analysing the needs and nature of the learners
  - Deciding on the outcomes or learning objectives
  - Selecting the content, the subject matter that will support achieving the outcomes
  - Deciding on the activities, the methods and media for teaching/training and learning
  - Planning how assessment will be done
  - Planning how the overall effectiveness of the delivery of the curriculum will be evaluated (Bellis)

From an observation of these definitions, it is apparent that in the South African context particularly, curriculum is a broad concept including aspects such as standards setting, learning programme development and delivery and quality assurance of the delivery process. This broad definition is symptomatic of the practice in South Africa where the creators and guardians of knowledge have tended to be the same people – those responsible for deciding on what learners should learn have in most instances been the same people responsible for learning programme development and delivery as well as those responsible for deciding whether that delivery process is of quality.



Considering Bellis' definition or description of curriculum, the aspects that are related to standards setting are incorporated in bullets 1, 3 (especially if it were to include assessment criteria) and to some extent, bullet 4. Bullets 2, 4, 5 and 6 relate particularly to the development and delivery of learning programmes. Bullet 7 is predominantly concerned with quality assurance processes. However the point must be made that a consideration of quality and quality assurance is a crucial feature in standards setting i.e. decisions of what the desired learning outcomes of qualifications and standards should be, and definitely is a consideration in learning programme design and delivery. In other words, although the curriculum as such can be separated into 3 areas i.e. standards setting, programme development and delivery (a focussed perspective of curriculum development) and quality assurance, these three are inextricably linked and of necessity relate directly to each other.

The NQF challenges the traditional concept of curriculum development as perceived in the South African context, in that it separates out the three parts: the setting of the standards, the design, delivery and assessment thereof, and the quality assurance processes. However, there is a recognition that the three parts are linked and hence the concept of a quality cycle. In the cycle, the standards developed through the participatory and representative structures and processes of the NSBs and SGBs and then registered on the Framework, will have their delivery and achievement quality assured, for all users of the learning system through the ETQA system. This system in turn, reflects participatory and representative structures and processes. It is in assuring the quality of both the standards and learner achievements that the quality cycle of the Framework is closed. It is through closing the cycle that the system allows ongoing improvements both in the construction of standards and qualifications and in the delivery and assessment of these standards and qualifications, by the users of those standards and qualifications.

In some areas the NQF processes have been perceived as being simply about change in learning programme development and delivery i.e. reform in teaching practice. However, the NQF is primarily about systemic change: how a system is put in place that allows for adaptability, flexibility, responsiveness and accountability in setting standards; relevance, quality, creativity and accountability in the design and implementation of learning programmes; ensuring that the qualifications and standards and their delivery are of the degree of excellence that is specified.

In fact, the NQF is not about how learning is facilitated in the classroom and none of the NQF processes focus on learning programme development and delivery. The NQF processes focus on the setting of standards and the assurance of the quality of learner achievements. It sets in place standards and qualifications which become the starting point for learning programme design, development, and delivery. It establishes a new framework for who asks the questions of what should constitute a qualification or standard and who decides whether what has been done is of the specified degree of excellence. The fundamental challenge of the NQF to educators is not in terms of what should be included in a learning programme and how it should be taught and assessed, but in terms of who is included in the decision-making

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process, and the relationship between different partners in the process i.e. the social milieu in which the curriculum unfolds.

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## Can the same outcomes be achieved through different learning programmes?

A standards setting process that is separated from the delivery and quality assurance processes supports the proposition that the same outcomes can be achieved through different learning programmes. There are those who claim that the learning process determines the outcomes and that unless everyone follows the same learning process, the learning outcomes will not be comparable. However there are others who claim that although there will be unintended outcomes that differ from learning experience to learning experience, it is possible to ensure that identified specific outcomes can be achieved by means of a variety of learning programmes and courses. This is possible with proper planning and learning programme design, development and delivery, which would include the employment of appropriate assessment strategies.

Some facilitators of learning are of the opinion that different outcomes are inevitable and in fact this is desirable. Hence any attempt to define the learning outcomes to be demonstrated by qualifying learners should be resisted because it is not possible. This opinion is often associated with arguments for academic autonomy. No-one would argue that this approach may be appropriate in some areas of study where the purpose of a qualification is the pursuit and exploration of knowledge for knowledge sake. However in other areas this attitude is irresponsible. In the South African context the process of recognising and giving value to that which has been demonstrated by a learner at a different institution, has often been the cause of great suffering and disillusionment. Recognition of Prior Learning (RPL) has always been extensively practised throughout higher education and at all universities. Credit has been denied only when there has been clear empirical evidence of unsuccessful previous transfers or of highly deficient levels of learning in place. The tragedy is that there has been no systemic approach on the part of individual sectors or the state to address the real problem in the system namely, that qualifications that are comparable on paper and approved as such for funding and award purposes, are in reality not comparable. Instead individual institutions have developed processes of RPL which in fact have highlighted the problem further and learners who are found wanting as a result of these RPL processes, have had to suffer and are still suffering the consequences of the original systems failure. This is indefensible. Furthermore, limited financial resources place the responsibility

on our society to ensure that learners engage in programmes of study that receive national recognition, and are accepted as worthwhile by all appropriate social institutions.

Through the requirement for articulation in nationally-registered qualifications and standards, the NQF has challenged directly what is perceived to be one of the most problematic social uses of qualifications i.e. the practice of exclusion.

In the NQF paradigm there is an acknowledgement that one qualification can be achieved through different learning programmes. One cannot ignore however the fact that different experiences have a direct impact on the ultimate achievement of learning outcomes. On the other hand, it is also true that in no system, not even in a highly centralised system, can this be achieved. Furthermore it is highly debatable whether pursuit of conformity in all aspects on a national scale is desirable. In fact, there are those that argue that the context and the niche that individual institutions occupy militate against the establishment of national standards. Nevertheless there is a strong argument that society needs to be re-assured that if a learner has been awarded a particular qualification, there is a guarantee that that learner has demonstrated applied competence in specific skills and content areas.

If one accepts that achievement of learning outcomes is possible through a variety of learning programmes, then the real challenge lies in the evaluation of the learning programme development, delivery and assessment i.e. how effective is the learning programme and assessment that has taken place in ensuring that the degree of excellence specified in the standard or qualification has been met. In other words, is it only those learners who have displayed the registered learning outcomes that have been acknowledged as successful?

Providers have traditionally been responsible for all aspects of the learning process i.e. setting the standards including deciding on the skills to be developed and the content to be taught, designing the learning programme, its delivery and its assessment and furthermore, through self-evaluation in those institutions where it was carried out, and in the case of technikons through external evaluation, monitoring the effectiveness of what they did. The primary task of providers is arguably in the area of the design and delivery of learning programmes and the assessment thereof, the primary focus of their expertise. This means that decisions about how to achieve the desired learning outcomes, how to encourage the development of the identified skills and in some cases, choosing the content that best suits the process, should rest in their hands. The NQF supports this. Furthermore the critical role of providers in the standards setting and in the evaluation of the effectiveness of the delivery process is incorporated in the participatory processes of the NQF. The necessity for self-evaluation as a means of ensuring real awareness of quality and improvement is emphasised and will be discussed in more detail later.

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## What is the relationship between the NQF, learning programme development and delivery and outcomes-based education?

Qualifications and standards registered on the 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.

**Outcomes-based education means clearly focussing and organising everything in an educational system around what is essential for all students to be able to do successfully at the end of their learning experiences.**

More detailed discussion of the reasons for deciding on this approach are set out in the SAQA publication *The NQF An Overview*. In short however, the NQF approach with its commitment to outcomes-based education and training is the means that South Africa has chosen to bring about systemic change in the nature of the education and training system – to transform the manner in which it works as a system, how it is organised and the vision that drives participants within the system as they perform their own particular roles and functions within that system. There is an historical imperative in the fragmentation of our society, to focus on what it is that a learner knows and can do rather than where the learner did his or her studying. Furthermore in order to achieve integration and coherence within the system so that access and portability can become a reality, it is necessary to clearly articulate the outcomes of learning achievements.

When a society finds itself lagging behind other countries in the global market for example, politicians start to use education reform as a platform for canvassing votes, questioning the validity of what is taught and how it is taught in an effort to improve the country's economic or social situation. Furthermore, when a new government is elected to power inevitably they engage in so-called education reform. They institute change in the content of the curriculum, a change in the assessment system, the advocacy of new ways of 'doing things' in the classroom i.e. they try and find the perfect curriculum and the perfect way of delivering that curriculum. In other words, they institute curriculum reform. These reforms then become the focus of criticism from opposition politicians and the cycle begins again. In this process, there is an assumption that is made, particularly by the education sector of society, that necessary systemic change is equivalent to curriculum change. In the approach described, attention is not given to systemic change i.e. the way in which the education and training is organised and managed, but rather to how the curriculum is delivered.

The word *outcomes* suggests a relationship with outcomes-based education, a philosophy expounded primarily by Spady. Confusion arises because outcomes-based education as discussed by Spady incorporates both ideas i.e. systemic change and curriculum change. To illustrate this, in answer to the question 'What does the term "Outcomes-based Education" really mean?', Spady responds as follows:

Outcomes-based education means clearly focussing and organising everything in an educational system around what

is essential for all students to be able to do successfully at the end of their learning experiences. This means starting with a clear picture of what is important for students to be able to do, then organising curriculum, instruction, and assessment to make sure this learning ultimately happens. (Spady, 1994: pg 1)

The fact that curriculum change i.e. curriculum, instruction, and assessment, is part of systemic change i.e. clearly focussing and organising everything in an educational system, is made clear in this extract. However this distinction is not always clear in discussions in the South African context.

Spady has made the point that outcomes-based education is not about curriculum change (Spady 1999). It is about changing the nature of how the education system works – the guiding vision, a set of principles and guidelines that frame the education and training activities that take place within a system. If one accepts that outcomes-based education is about systemic change, then there is likely to be a dimension that challenges current practices of curriculum development and delivery. However the point needs to be emphasised: outcomes-based education is primarily about systemic change and not curriculum change. The NQF then in its commitment to a system of education and training that is organised around the notion of learning outcomes, is about systemic change.

Spady also states that outcomes-based education is about a consistent, focussed, systematic, creative implementation of four principles:

- **A clarity of focus on the learning outcomes** that ultimately students need to demonstrate; Spady calls these complex role performance abilities and the corresponding South African conception could possibly be the critical cross-field education and training outcomes. Spady's mapping of SAQA's critical cross-field outcomes to his complex role performance abilities is attached as Appendix A.
- **The design-down/build-back approach** to building the curriculum; the curriculum design starts with the abilities, skills, knowledge, attitudes that one ultimately wants students to demonstrate and ensures that the assessment is focussed on what the learner has achieved in relation to these learning outcomes rather than focussed on what was presented in the course of delivery.
- **High expectations;** the expectation must be that learners are able to achieve these outcomes and therefore it is necessary for those who work in the system to behave and structure what they do in working with learners, in such a way that they are enabled to achieve these outcomes;
- **Expanded opportunity;** there is a necessity to move beyond the rigid blocks we have created around education e.g. blocks of time and the traditional organisation of learning institutions. (Spady, 1999)

In the NSB regulations, outcomes are defined as the contextually demonstrated end products of the learning process. Hence in the NQF paradigm,

There is a necessity to move beyond the rigid blocks we have created around education e.g. blocks of time and the traditional organisation of learning institutions.

**In the South African context however, in 1994 the democratic government faced substantial problems in education and training at the systemic level. These problems were so deep-rooted and wide-spread in the system from schooling through to higher education and training that they impacted negatively on actual teaching practice and student learning.**

the successful planning and delivery of a learning programme is only possible when the desired endpoint or endpoints are clear i.e. the desired learning outcomes. There are choices to be made within the learning programme design and development in respect of methodology, assessment, technological resources to be used etc. Within an outcomes-based system, these choices need to be governed by the extent to which a particular decision contributes ultimately to the achievement of the desired learning outcomes, be they specific or critical outcomes.

One could argue that any education and training system exists on a number of levels and it would be appropriate at this stage to distinguish three them:

- 1 The principles governing the system organisation i.e. the value drivers in a system;
- 2 The principles of pedagogy or the educational philosophy that drives learning programme design, delivery and assessment;
- 3 Specific learning programme delivery or implementation – pedagogy in the classroom.

Some would argue that (2) should precede (1). In the South African context however, in 1994 the democratic government faced substantial problems in education and training at the systemic level. These problems were so deep-rooted and wide-spread in the system from schooling through to higher education and training that they impacted negatively on actual teaching practice and student learning. Hence in the South African scenario, the most pressing need for reform was at the systemic level. This is a pre-requisite for deeper engagement with pedagogy and teaching practices. Hence in order to address the fundamental problems in our system of relevance, integration and coherence, access, articulation, progression and portability, credibility and legitimacy, in a transparent way for all users of the system, the decision was taken to establish a qualifications framework i.e. a set of principles and guidelines by which records of learner achievement are registered to enable recognition of acquired skills and knowledge; the records reflect the required outcomes of the learning process. Hence at the systems organisational level, the NQF determines that a system organised around the notion of learning outcomes will drive education and training in South Africa.

The next stage of concern for those responsible for ensuring that the education and training system delivers appropriately, is the area of education management and teaching practice. This naturally involves engaging with the pedagogy of outcomes-based education. At this level it is likely that there will be disagreement among practitioners; some will support the educational philosophy associated with outcomes-based education and the associated teaching strategies while others will deny its effectiveness. This kind of debate is essential in that practitioners are forced to consider the effectiveness of their own practice in relation to different views. However debates at this level must distinguish between outcomes-based education as a driver in systemic reform i.e. transformation, and outcomes-based education as an educational philosophy that governs classroom activity.

At the third level, consideration is focused on the implementation of partic-

ular learning programmes within the system. Clearly if the practical arrangements for implementation have not addressed all aspects adequately e.g. teacher training, support material, it is illogical to claim that the role of outcomes-based education in systemic transformation is at fault; or the educational principles expounded by proponents of outcomes-based education are invalid. Prof. Jonathan Jansen has convincingly argued that implementation issues, which are not necessarily related to philosophical issues, are at the heart of the success of delivery in an education and training system.

The NQF's alignment then with outcomes-based education is at the systems organisation level. The NQF philosophy indicates that decisions in respect of learning programme design, development, delivery and assessment need to consider constantly the learning outcomes that learners need to demonstrate. Decisions should not be governed by the input that facilitators can make to the process e.g. special areas of interest, particular attitudes. This is especially true in the design of assessment processes. It can be convincingly argued that good facilitators of learning and curriculum developers have always done that – a Janus-faced approach of looking at what the desired learning outcomes are and developing learning programmes in accordance with the available resources thereby ensuring the balance between inputs and outcomes. This cannot be argued as convincingly for assessment practices and this issue will be discussed in more detail later.

There is a need for practitioners to accept that there are assumptions within our systemic structures that may be problematic and ought to be changed e.g. time-based learning programmes rather than learning programmes focused on outcomes; recognising and valuing formal learning within institutions above learning gained in the workplace; assessment models that ignore skills other than reading and writing. The skill of a true educator is the ability to identify the problematic assumptions and develop positive and creative ways of challenging the structures and changing their influence on learners so that they are in a better position to deal with the demands of the real world; that they have education for employability i.e. the ability to adapt acquired skills to new working environments (those ultimate learning outcomes that we would like all learners to demonstrate) and not simply education for employment i.e. the ability to do a specific job. The principles of expanded opportunity and high expectation are particularly relevant.

The danger that threatens the system is that outcomes-based education is perceived as a panacea for all ills in the South African education and training system. This is clearly not the case. The NQF has been created to address specific systemic features, namely a system that created and perpetuated inequity through inappropriate social uses of qualifications, that permitted the delivery of education and training that lacked quality and that prevented adequate participation in education and training decision-making by important stakeholders. The NQF is not a curriculum framework and hence its primary focus is not how the outcomes are achieved. Its primary focus however does include what it is that curricula or more specifically, learning programmes, should aim to achieve – the desired learning outcomes - and the assurance that learners accredited with particular standards and qualifications have demonstrated their ability as specified in the standards and qualifications.

**The NQF philosophy indicates that decisions in respect of learning programme design, development, delivery and assessment need to consider constantly the learning outcomes that learners need to demonstrate.**

In some cases, people maintain that supporters of the NQF or proponents of outcomes-based education claim that outcomes-based education is a panacea for all ills in education and training. In a country like South Africa with its history of deprivation, the nature of the problems that exist in education and training are multi-faceted, and it would be naïve to contemplate that there is a single solution. The problems are many and the solutions rest in numerous initiatives, arguably the most significant of which is the NQF.

## How does the NQF description of a qualification impact on learning programme development?

**I**n the NSB regulations, a qualification is described as follows:  
A qualification shall

**In a country like South Africa with its history of deprivation, the nature of the problems that exist in education and training are multi-faceted, and it would be naïve to contemplate that there is a single solution.**

- represent a planned combination of learning outcomes which has a defined purpose or purposes, and which is intended to provide qualifying learners with applied competence and a basis for further learning;
- add value to qualifying learner in terms of enrichment of the person through provision of status, recognition, credentials and licensing, marketability and employability; and opening-up of access routes to additional education and training;
- provide benefits to society and the economy through enhancing citizenship, increasing social and economic productivity, providing specifically skilled/professional people and transforming and redressing legacies of inequity;
- comply with objectives of the NQF contained in section 2 of the (SAQA) Act;
- have both specific and critical cross-field outcomes that promote life-long learning;
- where applicable, be internationally comparable;
- incorporate integrated assessment appropriately to ensure that the purpose of the qualification is achieved, and such assessment shall use a range of formative and summative assessment such as portfolios, simulations, workplace assessments and also written and oral examinations;
- indicate in the rules governing the award of the qualification that the qualification may be achieved in whole or in part through the recognition of prior learning, which concept includes but is not limited to learning outcomes achieved through formal, informal and non-formal learning and work experience.

Not all eight points are directly related to curriculum development and delivery. However it is arguable that curriculum developers cannot ignore any of these aspects and in fact, should make every effort to ensure that they



are considered in the learning programme development, delivery and assessment. It may be helpful to explore some of the features of a qualification in more detail.

## Planned combination of learning outcomes with a defined purpose

Every qualification and standard that is registered on the framework must have a declared purpose. Once the purpose of the qualification is defined, learning programme developers are provided with a clear indication of the focus area. The purpose may be as specific or as flexible as the crafters of the qualification wish: a qualification geared to a specific task e.g. a blasting certificate, will have a specific, direct purpose while another qualification may have as its purpose, the pursuit of knowledge for knowledge sake, the development of formative thinking skills.

Not only must the purpose be clear. The combination of learning outcomes must be acquired systematically, in a planned programme of learning to ensure that the purpose of the qualification is met. There is an awareness of the pitfall of the shopping-basket approach to qualification acquisition i.e. a process whereby a learner accumulates credits for achieved outcomes, but the combination has happened in such a way that the achievement is meaningless in respect of the purpose of the qualification. This pitfall has been pointed out on numerous occasions and is one of the reasons given for rejecting the unit-standard model of qualification structure. Hence in the design and delivery of the learning programmes the ultimate purpose of the qualification must be kept, to ensure the articulation that is intended in the framework. The assessment processes in particular are crucial to ensure that there is an alignment between the purpose of the qualification and the way in which the learning outcomes are assessed and learners are accredited. The role of rules of combination in standards setting, responsible learning programme development and delivery, integrated assessment and effective quality assurance processes are critical in avoiding this pitfall. The intention of the whole qualification is not necessarily achieved by the achievement of its parts.

By the same token, the purpose of whole qualifications that are not structured using unit-standards, can subsume the parts to such an extent that articulation between qualifications, access, progress and portability within the system are virtually impossible. The pitfall in such a system is that it favours a particular way of learning – following a continuous programme over a period of time, usually a few years, which culminates in a qualification that is institution-specific. Attention must be given to the accreditation of learners who have demonstrated specific learning outcomes and who choose, for whatever reason, to leave a particular institution or to leave further study, with the intention of continuing study at a later stage or at another institution. This problem is especially prevalent in higher education and training where the perception exists that learners' acceptance in another institution at a later stage is not necessarily determined by the actual learning they have gained previously but by criteria determined by the institution

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**Applied competence is defined as the ability to put into practice in the relevant context the learning outcomes acquired in obtaining a qualification.**

at which they wish to register, based on their own perceptions of the quality of the courses they have followed. By suggesting that different institutions meet the needs of different contexts and niche markets while at the same time awarding qualifications that share the same names, one avoids directly confronting the underlying perceptions about differences in the quality of delivery and assessment within the system and then addressing them. The lack of transparency in exposing the systemic problems, which seem evident from the RPL practices of some institutions, does not positively promote the development of a culture of life-long learning.

The debate about the pros and cons of each model for qualification construction are endless. For the successful implementation of the NQF, it is enough for curriculum developers to acknowledge that both approaches exist and in the development, delivery and assessment of learning programmes for the particular qualification they are working with, they need to be aware of the associated problems and ensure that the pitfalls are obviated.

### **It is intended to provide qualifying learners with applied competence and a basis for further learning**

In the NSB regulations, applied competence is defined as the ability to put into practice in the relevant context the learning outcomes acquired in obtaining a qualification.

The concept suggests that foundational competence, practical competence and reflexive competence are all necessary for the meaningful accomplishment of a task in any real world context. Foundational competence is described as an understanding of what is being done and why. Practical competence is described as a demonstrated ability to do a particular thing. Reflexive competence 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. Ian Bellis defines competence 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. He has also indicated that this approach is not new: “The ideas and the practice have been around for well over twenty years”.

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.

The word ‘competence’ in outcomes-based education or competency models is accused of narrowness, focused on action with little attention to the understanding or the moral issues surrounding the action. Criticisms of operationalism and marketisation of knowledge are often levelled at outcomes-based systems. It may be worth recalling Barnett’s statement in this regard:

The new vocabulary in higher education is a sign that modern society is reaching for other definitions of knowledge and reasoning. Notions of skill, vocationalism, transferability, competence, outcomes, experiential learning capability and enterprise, when taken together, are indications that traditional definitions of knowledge are felt to be inadequate for meeting the systems-wide problems faced by contemporary society. Whereas those traditional definitions of knowledge have emphasised language, especially through writing, an open process of communication, and formal and discipline-bound conventions, the new terminology urges higher education to allow the term knowledge to embrace knowledge-through-action, particular outcomes of a learning transaction, and transdisciplinary forms of skill

(Barnett, 1994: 71)

There has been a broadening of the concept of ‘competence’ to embrace the notion of applied competence. The behaviouralist limitations that have dogged competency models to date exist only if irresponsible educators promote them. It rests in the hands of learning programme developers and implementers to ensure that learning does not become narrow, behaviourist and devoid of critical thought. The curriculum principle of praxis – the integration of action and reflection in a particular context, is consistent with this understanding of competence. Critical self-evaluation ought to reveal shortcomings in this area.

The concept of applied competence incorporates the notion that there are different kinds of knowledge. Gibbons et al. have identified two modes of knowledge i.e. Mode 1 and Mode 2. Mode 1 knowledge tends to be homogeneous, rooted in disciplines, hierarchically structured and coded according to the canonical rules of specific disciplines. It is usually transmitted from disciplinary expert to novice and problems are usually set and solved within the academic community. Mode 2 knowledge on the other hand is non-hierarchical, inter- or trans-disciplinary, fast changing, contextualised and socially responsive. Problems arise in society and are solved in the context of application. Gibbons et al. have described the shift that is occurring internationally from Mode 1 to Mode 2 forms of knowledge production.

It has been suggested that most learning programmes do provide learners with propositional knowledge or foundational competence. However within the context of applied competence, they should also offer learners opportunities to gain practical competence, not only in controlled and defined environments as indicated in the description of Mode 1 knowledge, but also outside the safety of the classroom and laboratory, in real-world contexts, where learners will be required to adapt and re-contextualise their learning to function successfully in complex and unpredictable circumstances. These opportunities enable the development of reflexive competence and self-improvement. In the assessment of learners too the notion of applied competence is often ignored and assessment focuses on foundational compe-

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tence or in limited cases, practical competence. Rarely is assessment directed at reflexive competence.

There are those who argue that the NQF processes through the emphasis on outcomes, side-steps the issue of values in the curriculum. It could also be argued however that reflexive competence requires learners to reflect on their learning experience critically, in terms of the values espoused by a democratic society. Certainly the objectives of the NQF and the values embedded in the critical outcomes would suggest that reflexive competence within the NQF includes a consideration of the learning experience within a value system, the ethical implications of particular practices and the attendant social responsibilities.

It is the duty of responsible educators to ensure that this educationally sound interpretation of outcomes and competence is not neglected in a system that is socially negotiated. This imperative exists at each stage of the education and training process: standards setting, implementation and assessment and quality assurance.

**It is mandatory for standards setters to incorporate at least some of the Critical Outcomes in the standards that they recommend and proposers of qualifications must ensure that all Critical Outcomes have been addressed appropriately at the level concerned within the qualifications being proposed.**

### Critical cross-field education and training outcomes

The Critical Cross-field Education and Training Outcomes, commonly known as the Critical Outcomes, are an additional mechanism through which coherence is achieved in the framework. These Critical Outcomes describe the qualities which the NQF identifies for development in students within the education and training system, regardless of the specific area or content of learning i.e. those outcomes that are deemed critical for the development of the capacity for life-long learning. These outcomes are intended to direct the thinking of policy makers, curriculum designers, facilitators of learning as well as the learners themselves.

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These are the Critical Outcomes adopted by SAQA:

- Identify and solve problems in which responses display that responsible decisions using critical and creative thinking have been made.
- Work effectively with others as a member of a team, group, organisation, community.
- Organise and manage oneself and one's activities responsibly and effectively.
- Collect, analyse, organise and critically evaluate information.
- Communicate effectively using visual, mathematical and/or language skills in the modes of oral and/or written presentation.
- Use science and technology effectively and critically, showing responsibility towards the environment and health of others.

- Demonstrate an understanding of the world as a set of related systems by recognising that problem-solving contexts do not exist in isolation
- In order to contribute to the full personal development of each learner and the social and economic development of the society at large, it must be the intention underlying any programme of learning to make an individual aware of the importance of:
  - Reflecting on and exploring a variety of strategies to learn more effectively;
  - Participating as responsible citizens in the life of local, national and global communities;
  - Being culturally and aesthetically sensitive across a range of social contexts;
  - Exploring education and career opportunities, and
  - Developing entrepreneurial opportunities.

Some outcomes are specific to the qualification e.g. an electrician must know certain things. However if life-long learning is a principle underpinning the education and training system in our country, then the electrician must acquire certain other skills e.g. information analysis, and problem solving. If another principle underpinning the education and training system is the meaningful contribution of citizens in social institutions, by displaying tolerance and ensuring the social and economic success of our country, it is critical that he/she has other skills e.g. working effectively with others, communication, using science and technology effectively and critically, understanding the world as a set of related systems, participating as a responsible citizen in the life of the community. Furthermore if he/she is to ensure self development, there are other skills that need to be developed e.g. managing oneself, employing strategies to learn more effectively, being culturally and aesthetically aware, and exploring entrepreneurial opportunities.

The intention of the education and training reforms in our society demand that learning programme developers do not give undue attention to the needs of an occupation at the expense of society's needs and the needs of the individual. The fifth objective of the NQF reflects this i.e. to contribute to the full development of each learner and the social and economic development of the nation at large. By the same token, the so-called generalist qualifications can no longer ignore the requirements for individuals to have an occupation; nor can they ignore society's need for its members to contribute fully to its processes in the economic, political and social arenas, in favour of the development of the individual.

When a qualification is registered, there is a requirement for the critical outcomes to be articulated. Therefore in developing learning programmes, they cannot be ignored. Programme developers need to ensure that the learning programmes accommodate opportunities to develop and assess the critical outcomes and in the evaluation of the delivery of the learning programme, there will be a need for a focus on the extent to which attention has been

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**A bachelor degree whether in science, the arts or commerce field is still a bachelor degree, making comparable demands on learners in the critical outcomes, regardless of the context.**

given to this aspect. There is no prescription in any of the SAQA regulations or requirements of how these outcomes are to be incorporated and developed. However in the description of the outcomes and the assessment criteria within a qualification or standard, there may be some leading indications in respect of how these critical outcomes will be assessed. Since the qualifications and standards focus on the learning outcomes, the methodology of how the critical outcomes will be developed within context, is in the hands of the practitioners. Accredited ETQAs will have the responsibility of evaluating the learning programmes including the assessment practices, to determine the extent to which the assessment processes meet the requirements as stipulated in the qualification registered on the NQF, and hence how successfully the critical outcomes have been addressed.

There are some interesting points in respect of the incorporation of critical cross-field outcomes into learning programmes that need to be considered. The critical outcomes, sometimes called generic skills or essential skills or core skills, have been deemed problematic for learning programme developers on two counts. The first is ‘the impossibility of decontextualising statements about core skills with any meaning’ (Wolf). Nuttall and Goldstein have summarised the problem as follows: The difficulty with such out-of-context descriptions is that they are too poorly defined to ensure comparability, and the more precisely defined they become, the more rooted in context they become. The problem is not so much that these skills do not exist or that they cannot be identified, but rather that they are, by definition, inseparable from the contexts in which they are developed and displayed. The separation of a critical outcome from a specific outcome e.g. problem-solving in a the context of electricians work or law, does not necessarily give the concept independent value. The nature of problem-solving in law is different from the nature of problem-solving in electricians work. Others however would argue that regardless of context there are common features in approach, attitude, process and management that are common in all successful problem-solving contexts.

The level of complexity in respect of the critical outcomes is seen as one way of comparing qualifications and allocating qualifications and standards to levels. The level descriptor debate is hence associated with critical cross-field education and training outcomes, their definition and testing their value in a decontextualised situation. The claim is that it is impossible to assign qualifications to levels in a consistent and comparable fashion, using the critical outcomes as a means of judgement. Others say that this is possible – a bachelor degree whether in science, the arts or commerce field is still a bachelor degree, making comparable demands on learners in the critical outcomes, regardless of the context.

SAQA is encouraging debate around these issues and exploration of the possibilities. A SAQA document, “Towards the development of level descriptors in the NQF: A point of departure”, which engages in some of the issues around level descriptors has been placed in the public arena, with the primary purpose of stimulating this debate.

## Integrated assessment

In the NSB regulations, integrated assessment means that form of assessment that permits the learner to demonstrate applied competence and which uses a range of formative and summative assessment methods.

This is one area in which SAQA has made a direct statement about how something should be done. In all other areas, SAQA has attempted to provide the underpinning attitudes and principles and has purposefully avoided direct statements of how particular processes must be done or how particular outcomes must be achieved. This arises from a belief that how something is done requires the expertise of learning programme developers and teacher practitioners. However, the history of assessment and how assessment results have been used in this country raise some important questions about the appropriateness of the dominant assessment model of our country and the social uses of assessment results.

SAQA in the NSB regulations, has made a direct statement about assessment methodology. It has indicated that integrated assessment must be incorporated appropriately to ensure that the purpose of the qualification is achieved, and such assessment must use a range of formative and summative assessment such as portfolios, simulations, workplace assessments and also written and oral examinations. Too often have we heard the criticism: “he knows the theory but cannot apply his knowledge in a work situation” or “he has matric English but can’t write a letter/fill in a form!” Furthermore, some qualifications mean that a student is assessed in discrete parts and the assumption - or is a leap of faith? - is that the overall purpose of the qualification has been achieved – the whole is the sum of the parts. This assumption also assumes that the purpose of the qualification is clear.

A prime example is the Senior Certificate examination. In this process, a learner is assessed separately in six subjects, often with two or three papers within each subject. The linkages between the separate papers within a subject are often not clear, and certainly the linkages between assessment in the different subjects is not clear. Furthermore there is no clear indication of the purpose of the qualification as a whole. In fact, currently it appears to serve two very different purposes. On the one hand, it serves as a school leaving examination, which is arguably a statement of achievement or minimum competence, while on the other hand, it serves as a university entrance examination, which is arguably a comment about potential for further study. Accepting that the method of assessment should fit the purpose for which the results will be used, one could argue that in the Senior Certificate assessment process, there are two conflicting purposes and therefore these two purposes cannot be met using the same assessment instrument.

One can debate at length the meaning of the phrase ‘a range of formative and summative assessment’ – what does formative mean in the context of a qualification? The rather worn-out cliché, of a pilot in order to be awarded a licence, must have developed the skills of taking off as well as landing illustrates the dilemma. However in this statement SAQA is drawing attention to the popular trend in South Africa of conducting once-off written examinations, in order to make decisions about the award of qualifications,

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**SAQA through its standards setting and quality assurance processes will however be looking for variation from a final end-of-course written examination as the determining, qualifying assessment method.**

and rarely assessing the breadth of skills that are deemed important. Furthermore the statement supports the sentiment that learners should be provided with more than one opportunity to display their knowledge in the process of their study, since a once-off written examination does not provide students with an opportunity to find out where the gaps in their learning are; furthermore if a once-off examination is conducted at the end of the learning programme there is no allowance for remediation; that learners should be provided with a variety of contexts in which to display their knowledge since a once-off written examination does not provide for the assessment of skills that are not suited to that mode of assessment .

The high failure rate among Grade 12 candidates at Senior Certificate level is witness to the need for assessment reform. Perhaps the introduction of continuous assessment systems, which should not be confused with continuous testing, aimed at reducing the failure rate by improving candidates chances of passing during the period of preparation, will go some way to addressing this problem. The introduction of a continuous assessment system is sometimes interpreted as a lowering of expectations or standards. It should rather be seen as a means of encouraging a system which has not given attention to assessment, to focus on the need for valid and reliable assessment which can assist learners in understanding what is expected of them. In this way it may be possible to improve the functional ability of the work force.

SAQA has been specific about the particular types of assessment e.g. portfolios. It is however up to the practitioners in the field to exercise their minds on the question of what is appropriate, feasible and manageable. SAQA through its standards setting and quality assurance processes will however be looking for variation from a final end-of-course written examination as the determining, qualifying assessment method.

Integrated assessment incorporates not only foundation, practical and reflexive competence but also looks to bringing overall purpose of the qualification under scrutiny – to what extent have the parts produced the whole. Meg Pahad notes that improvement in assessment practice as described in assessment guidelines and policies cannot be implemented unless teachers understand why they are assessing, what they are assessing, and how to assess in a manner appropriate to the purpose of the assessment (Pg 248). The separation of assessment method from the purpose of the task and the purpose of the overall learning experience results in discrete assessment and achievement which has little or no meaning in respect of applied competence.

The SAQA document “Guidelines for the assessment of NQF registered unit standards and qualifications” has been placed in the public arena. For more detailed discussion of the issues surrounding assessment, please refer to that document. Copies are available from the SAQA Offices or from the website (<http://www.saqa.org.za>).



## Recognition of Prior Learning (RPL)

Among the objectives of the NQF are the need to facilitate access to, and mobility and progression within education, training and career paths as well as the need to accelerate the redress of past unfair discrimination in education, training and employment opportunities. SAQA is challenged to find a way in which these two objectives can be met, to find a way to recognise the learning that has taken place outside traditional learning contexts, previously the only learning contexts that were formally recognised. SAQA has indicated its intention to engage its structures in the area of RPL as a means of giving practical meaning to these objectives.

Standards and qualifications are the starting points for learning programme development. These documents provide guidance for assessors in that they indicate very clearly what needs to be assessed; they provide guidance for learners in that they give a clear indication of the learning outcomes to be developed and assessed; furthermore they are a guide for facilitators of learning and learning programme developers in that the standards and qualifications provide the purpose for which a learning programme is being constructed and thereby indicate how the different learning outcomes and associated assessment criteria meet the purpose.

RPL has essentially two aspects. The first is the ability for learners through RPL to be accredited with certain learning achievements. The second is the assessment of learners through RPL to gauge their potential for entry to a specific learning programme. If the objectives of facilitating access to, and mobility and progression within education, training and career paths as well as accelerating the redress of past unfair discrimination in education, training and employment opportunities are to be met, then exploring ways in which both these aspects can be addressed in learning programme design especially in respect of assessment, is critical. Traditional methods of assessment e.g. written examinations are an option for learners who have experienced learning in formal institutions. However they are not helpful for learners who have gained skills outside the formal learning institutions and often serve only to entrench barriers to progression. It is on these learners that RPL pilots and research should focus.

To engage meaningfully with RPL, learning programme developers will need to engage with the rather complex issues of RPL and will need to engage in the myriad debates that surround this very challenging area, if in the delivery process, the needs of learners who have followed alternate routes to the formal education path are to be met.

## Credits

In the NSB regulations, credit means that value assigned by the Authority to ten (10) notional hours of learning, and notional hours of learning means the learning time that it is conceived it would take an average learner to meet the outcomes defined, and includes concepts such as contact time, time spent in structured learning in the workplace and individual learning.

**RPL has essentially two aspects. The first is the ability for learners through RPL to be accredited with certain learning achievements. The second is the assessment of learners through RPL to gauge their potential for entry to a specific learning programme.**

**The assumption then is that education – the grasping of concepts and understanding – is time bound. Hence the confusion of time arises whereby time is perceived to be a significant feature in these two concepts when in fact they are not time-related at all.**

This concept is one that is easily mis-interpreted and frequently leads to an interpretation of qualification structure based on time spent (determined by the time historically assigned to a specific qualification) rather than an analysis of learning outcomes e.g. a two-year qualification should be on one level while a three-year qualification must be on a higher level.

The difficulty arises from the fact that when one talks about the value in the context of a standard or qualification, one is referring to the importance that a specific aspect plays in the bigger picture of the qualification. Furthermore the level of difficulty demanded by mastery of the skills and content also has an impact on the positioning of standards or qualifications at particular levels and the selection of a credit weighting. The problem arises because there are no units of measurement for either of these concepts, as one has specific units of measurement for more concrete concepts such as distance and speed.

What happens then, in the case of ‘important’ concepts, is that teachers indicate the importance to learners by spending more teaching time in the classroom on the concept, providing lots of drilling exercises, to ensure that students ‘know it’. In the case of concepts that are deemed to be difficult, teachers provide a greater length of time in their planning to enable learners to have enough time and opportunity to spend in trying to grasp the concepts. The assumption then is that education – the grasping of concepts and understanding – is time bound. Hence the confusion of time arises whereby time is perceived to be a significant feature in these two concepts when in fact they are not time-related at all.

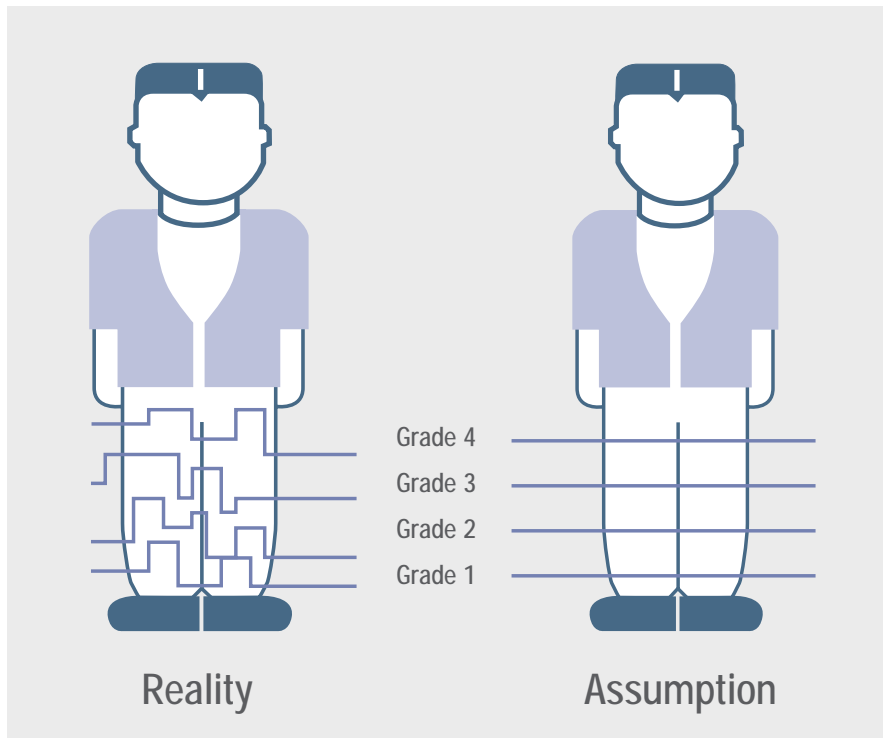
The concept of notional hours of learning which result in the award of credits is a concept that can really upset the principle intentions of an outcomes-based system simply because it is so easily mis-understood to mean real time or contact time or actual teaching and learning time rather than a notion that incorporates two concepts that are not time-related at all i.e. level of difficulty and the value of the learning experience to the qualification as a whole.

### Learning assumed to be in place

Because of the assumption that learning is time-bound and the traditional practice of having a fixed curriculum that all learners at an institution should follow, a further assumption is made i.e. if a student has reached a particular point in learning, there are distinct assumptions that are made about his/her knowledge base. For example, a child who enters Grade 3 is assumed to have developed specific language and mathematical abilities, for example, i.e. the abilities outlined in the Grade 2 learning programme.

In reality learning theory has indicated that different learning levels are possible in children of the same age and who have ostensibly been exposed to the same learning conditions. This concept becomes more marked as learners move through the system. This is because children come to learning situations with different experiences, they see and assimilate new knowledge differently and learn at different rates, in different ways. Hence to assume that two children who enter Grade 3 have the same understandings of the

Grade 2 learning experience is problematic. However learning is organised into year long, module long sections and embarking on one section presupposes uniform understanding of preceding components. To look at a picture:



Developments in the field of learning theory have challenged time-bound study by recognising that there are multiple intelligences, that individuals learn in different ways, that they learn at different rates. Hence the structural organisation of learning and hence delivery, into time-based sections is inappropriate for the diverse student body that education systems have to accommodate. The assumption that time is a determining factor in the acquisition of knowledge and mastery of skills needs to be confronted.

Many argue however that organising learning into time-based sections reflecting the academic year or term is the only feasible way in which to manage learning of a large mass of students; formal institutions need to be organised so that a structured time-table for delivery and assessment can be instituted.

To look at this from another angle then, one cannot ignore the impractical nature of formal institutions for providing experience in real-life situations. This is recognised in fields like medicine, law, accounting and teaching where programmes of learning require that students spend time in actual work environments: the internship year for doctors, articles for aspiring lawyers and accountants, teaching practice in schools for student teachers. This is a tacit acknowledgement that formal institutions provide only one perspective on the nature of learning while the world of work provides another. It is not only the world of work that can provide learning opportunities, but also participation in community service. The point is that if one accepts that life-long learning embraces the concept that learning takes place all through one's life, in a variety of contexts which provide alternative perspectives on the apparent truths that are gathered in formal study in a structured environment, then one must accept that there are multiple sites

Developments in the field of learning theory have challenged time-bound study by recognising that there are multiple intelligences, that individuals learn in different ways, that they learn at different rates.

of learning and that relevant learning achieved outside the walls of formal institutions needs formal recognition as valid learning experiences. For this reason to assume that learning must be organised and hence delivered in time-based modules because that is the best way for formal institutions to be organised, is to deny the existence of other sites and ways of learning. As Kathy Luckett points out, “the need to accommodate the notion of life-long learning mean(s) that this qualification structure predicated on a ‘year-cohort model’ has become anachronistic. The need to reorganise our institutional time and space (curriculum structure) has become critical”

Learning programme developers would be wise to take cognisance of the reality that learners learn differently and come to a learning experience with different levels of understanding and build in appropriate assessment processes to assess what students know rather than assess what they do not know, and avoid making assumptions about their knowledge base. Teaching strategies naturally should also take this reality into account. In fact, it could be argued that the successful implementation of the NQF requires that these assumptions are made explicit, so that learners and teachers can work together to ensure the achievement of all learning outcomes deemed necessary – Spady’s principle of high expectation.

**“The need to accommodate the notion of life-long learning mean(s) that this qualification structure predicated on a ‘year-cohort model’ has become anachronistic. The need to reorganise our institutional time and space (curriculum structure) has become critical”**

## Conclusion

**I**n conclusion the following observation is relevant. The past South African education system, including those schools and institutions that have been recognised for academic excellence internationally, did not necessarily produce critically aware citizens: the span of the apartheid era is sufficient witness to this. On the broader front, one cannot ignore the common experience of many learners which is witness to educationally unsound practices. A recent report on the state of the South African workforce in the Sunday Times Business Times (5/12/99) seems to substantiate this. In the article ‘Skills Shortages in the SA Labour Market’ it was reported that 76% of the 273 organisations surveyed, didn’t have adequate skilled human resources; 54% of organisations needing engineers have experienced problems in recruiting these professionals; 50% of those organisations which employ IT professionals have shortages; there are specific shortages in mathematics and mathematics-related occupations. This report on skills within the current labour force reflects the problems of our past; there has not been enough time to test the initiatives of the democratic government. Often criticism of the new is characterised by a suggestion that the ways of the past are tried and tested; that what has been done provided quality education; that the current programmes which are based on past practice, deliver people with the skills that are needed in our society. The current situation in South Africa as described in this report is a product of a system that clearly did not deliver for the majority of learners in the country. It is the responsibility of every South African to acknowledge this and dedicate themselves to finding better ways of doing things.

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## Appendix A

### PUTTING THE FIVE SOUTH AFRICAN QUALIFICATIONS AUTHORITY (SAQA) "LIFE-ROLE APPLICATION" CRITICAL OUTCOMES INTO ACTION

(Integrated with the Spady "Total Learner" Framework)

Developed by *Des Collier and William Spady*

The Delta Foundation Enterprising Youth and OBE Initiatives

#### Capable Entrepreneurial Life-Role Performers (Creative Learners) Are:

Resourceful, future-focused Opportunity Creators, guided by an ethos of initiative and innovation, who:

- Independently collect, analyze, organize, and critically evaluate emerging trends and possibilities in various fields for their entrepreneurial potential.
- Routinely look beyond conventional approaches and understandings to reveal the unexplored potential in all life situations.
- Purposefully locate and assess information on current and emerging work and income-generating opportunities and create innovative ways to capitalize on them.
- Continuously assess existing business practices and propose innovative ways to expand and improve them.
- Adeptly use any available resources to legitimately generate personal and community income.

#### Capable Career Life-Role Performers (Performance Learners) Are:

Adept, productive Career Performers, guided by an ethos of diligence and quality, who:

- Consistently set high performance goals for themselves and work until they are accomplished.
- Independently research the challenges that career professionals face in their fields and the standards they must maintain to be successful.

- Consistently use these professional standards and the most advanced methods in their fields to assess and complete their work.
- Gather and effectively utilize the people, resources, and technologies need for accomplishing projects successfully within agreed-upon time and resource constraints.
- Periodically update a portfolio of their strongest personal aptitudes, technical skills, and accomplishments and present it to potential employers for evaluation.

### Capable Personal Life-Role Performers (Inner Learners) Are:

Conscientious, self-directed Life Managers, guided by an ethos of reflection and improvement, who:

- Insightfully assess their unique personal qualities and explain how strengthening them will open doors to continued learning and life success.
- Perceptively identify the ways they learn best and consistently employ them as tools for on-going growth and improvement.
- Consistently probe new information, ideas, and experiences for their deeper meaning and connection to their desired quality of life.
- Regularly initiate and sustain endeavors that strengthen their skills, health, quality of life, and opportunities for advancement.
- Consistently manage their time to allow for regular periods of study, exercise, and self-improvement in their daily lives.
- Sensibly select and consume foods and nutrients that contribute to their long-term health and well-being.
- Consistently make prudent financial planning and personal expenditure decisions.

### Capable Peer Life-Role Performers (Collaborative Learners) Are:

Forthright, collaborative Team Members, guided by an ethos of honesty and reliability, who:

- Actively develop joint projects with their peers in which plans and responsibilities are clearly defined, equitably shared, and reliably carried out by all members.
- Adeptly apply leadership skills and knowledge of effective teamwork to accomplish team goals.

- Consistently fulfil commitments, without excuses, and support others in doing the same.
- Actively listen to the intent and spirit of others' words and consistently offer them constructive feedback and suggestions when appropriate.
- Skilfully use a variety of means and strategies to communicate clearly in all situations.
- Consciously take into account the interests and viewpoints of all parties in openly airing disagreements, and consistently work to resolve them ethically and equitably.

### Capable Citizen Life-Role Performers (Service Learners) Are:

Active, responsible Community Contributors, guided by an ethos of caring and commitment, who:

- Sensitively address the country's problems by respecting and advocating the democratic rights of all.
- Consistently stand firm in the face of challenges and pressures in advocating causes affecting the common good.
- Freely devote their time, talents, and knowledge to improving the environment and the health and well-being of others.
- Actively work with others in their community to maintain or improve the quality of understanding and living in the world around them.
- Persistently seek and employ ways to address and solve problems affecting the well being of their local communities and global environment.

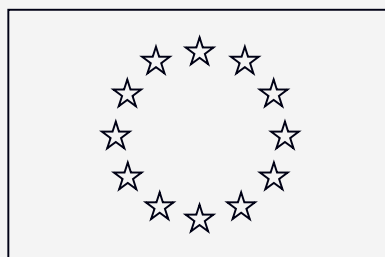
For more information on using the SAQA Critical Outcomes framework creatively and productively, on Transformational Outcome-Based Education, or on the Delta Foundation's Enterprising Youth and OBE Initiatives, phone Des Collier in South Africa at 083-269-4242, or William Spady in the U.S. at 970-262-1935.



## The Delta Foundation

### Enterprising Youth Initiative – Curriculum Planning

Enabling Outcomes	Making success happen				
	Acting Entrepreneurially 12	Applying Career Expertise 11	Working Together 1	Applying Myself Fully 3,8	Creating a Better World 6,9
Thinking and Orientations 7,10	Creative	Qualitative	Empathic	Ethical	Systemic
Mastering Essential Knowledge					
Mastering Specific Skills					
Communicating Effectively 5					
Using Maths Effectively					
Using smart Technologies 6					
Making Strategic Decisions 1,4					
	Resourceful, future-focused Opportunity Creators who...	Adept, productive Career Performers who...	Forthright, collaborative Team Members who...	Conscientious, self-directed Life Managers who...	Active, responsible Community Contributors who...



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