Guidelines for
Integrated Assessment

THE SOUTH AFRICAN QUALIFICATIONS AUTHORITY

Please note:
The document has not been edited and layout has not been done. It will be put through a rigorous process of editing and layout when published formally.

Approved by SAQA on 9 Feb 2005.
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EXECUTIVE SUMMARY

1. This publication stems from the need to expand on the understanding of assessment in an outcomes-based paradigm through integrated assessment approaches as being in support of learning and teaching.

2. The main audience for this publication is providers/institutions, including work-based training organisations and their constituent education and training practitioners.

3. The publication proposes approaches to assess applied competence, i.e. practical, foundational and reflexive competence.

4. In addition, it attempts to develop a common understanding to integrated assessment and the approaches that will enhance the assessment of applied competence.

5. Integrated assessment will occur at many different levels and different moments throughout the course of a learning programme.

6. Integrated assessment as an approach should inform curriculum development and learning programme development and should be an integral part of the learning and teaching that will take place in the classroom.

7. The publication explores varied interpretations and definitions of integrated assessment.

8. It also explores the purposes of assessment and the validity and reliability of such assessments within the context of the National Qualifications Framework.

9. The broad principles upon which the development and design of integrated assessment approaches rests, include:
   - focusing assessment activities on the purpose of the unit standard or learning programme;
   - seeking ways to integrate theory and practice;
   - acknowledging that in an outcomes-based paradigm, assessment is not a once-off event;
   - acknowledging that any assessment can only hope to assess an appropriate sample of evidence and that such a sample should be sufficient to infer that a learner is competent; and
   - transparency of and access to assessment plans for all role players are key.

10. The broad guidelines for the development and design of integrated assessment approaches include:
    - studying the level descriptors for a particular NQF level;
    - studying the purpose of the qualification;
    - analysing the exit level outcomes, the critical cross-field outcomes and the main learning areas that deal with each dimension of the purpose of the qualification;
    - identifying discrete areas that need to be assessed separately;
    - identifying ways to facilitate integrated teaching and learning in areas where applied competence will be assessed;
    - sequencing the assessment in accordance with an assessment plan;
    - designing the assessment instruments; and
    - reviewing the process, instruments and application.

11. In addition, examples of integrated assessment approaches are explored.
### TERMS AND ACRONYMS

Note: All terms derive from formally accepted documentation such as the SAQA Act, the NSB and ETQA regulations and other formal policy documents published by the South African Qualifications Authority.

<table>
<thead>
<tr>
<th>Term/acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessment</td>
<td>A structured process for gathering evidence and making judgments about an individual’s performance in relation to registered national standards and qualifications</td>
</tr>
<tr>
<td>ACE</td>
<td>Advanced Certificate in Education</td>
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<tr>
<td>Applied competence</td>
<td>A learners’ ability to integrate concepts, ideas and actions in authentic, real-life contexts which is expressed as practical, foundational and reflexive competence</td>
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<tr>
<td>CCFO</td>
<td>Critical cross-field outcomes</td>
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<tr>
<td>CHE</td>
<td>Council on Higher Education</td>
</tr>
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<td>CIDA</td>
<td>Canadian International Development Agency</td>
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<td>DoE</td>
<td>Department of Education</td>
</tr>
<tr>
<td>DoL</td>
<td>Department of Labour</td>
</tr>
<tr>
<td>ETQA</td>
<td>Education and Training Quality Assurance body</td>
</tr>
<tr>
<td>Exit level outcome</td>
<td>A description of demonstrable and assessable end products of a learning process.</td>
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<tr>
<td>FET</td>
<td>Further Education and Training</td>
</tr>
<tr>
<td>Formative assessment</td>
<td>Assessment that takes place during the process of teaching and learning and which has as its purpose the progressive development of learners' abilities</td>
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<tr>
<td>GET</td>
<td>General Education and Training</td>
</tr>
<tr>
<td>HE</td>
<td>Higher Education</td>
</tr>
<tr>
<td>Integrated assessment</td>
<td>A form of assessment which permits the learner to demonstrate applied competence and which uses a range of formative and summative assessment methods</td>
</tr>
<tr>
<td>Learning programme</td>
<td>The sequential learning activities associated with curriculum implementation, leading to the achievement of a particular qualification or part qualification</td>
</tr>
<tr>
<td>LGWSETA</td>
<td>Local Government, Water and Related Services Sector Education and Training Authority</td>
</tr>
<tr>
<td>NAP</td>
<td>(Draft) A New Academic Policy for Programmes and Qualifications in Higher Education.</td>
</tr>
<tr>
<td>NCS</td>
<td>National Curriculum Statements</td>
</tr>
<tr>
<td>NPDE</td>
<td>National Professional Diploma in Education</td>
</tr>
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<td>NQF</td>
<td>National Qualifications Framework</td>
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<tr>
<td>NSB</td>
<td>National Standards Bodies</td>
</tr>
<tr>
<td>Programme</td>
<td>A coherent set of courses, leading to a qualification.</td>
</tr>
<tr>
<td>Qualification</td>
<td>A planned combination of learning outcomes with a defined purpose(s) that is intended to provide qualifying learners with applied competence and a basis for further learning</td>
</tr>
<tr>
<td>SAQA</td>
<td>South African Qualifications Authority</td>
</tr>
<tr>
<td>Site-based assessment</td>
<td>An assessment undertaken in the workplace making use of naturally occurring evidence</td>
</tr>
<tr>
<td>SQA</td>
<td>Scottish Qualifications Authority</td>
</tr>
<tr>
<td>Summative assessment</td>
<td>An assessment undertaken to make a judgment about achievement. This is carried out at the end of a learning programme</td>
</tr>
<tr>
<td>UNISA</td>
<td>University of South Africa</td>
</tr>
<tr>
<td>Unit standard</td>
<td>A coherent and meaningful outcome of learning or training that is formally recognised</td>
</tr>
</tbody>
</table>
CHAPTER 1: INTRODUCTION

The target audience for the Guidelines for Integrated Assessment is providers of education and training and the education and training practitioners responsible for the delivery and assessment of learning.

The purpose of this publication is to provide guidelines in relation to the development of assessment approaches that facilitate the evaluation of the extent to which a learner is able to integrate knowledge. The assessment will therefore focus on the extent to which a learner can demonstrate applied knowledge or competence. Applied competence, in terms of the National Qualifications Framework (NQF) is evidenced through the learners’ ability to integrate concepts, ideas and actions in authentic, real-life contexts and is expressed as practical, foundational and reflexive competence, namely:

- **Practical competence** - the demonstrated ability to perform a set of tasks and actions in authentic contexts
- **Foundational competence** - the demonstrated understanding of what we are doing and why we are doing it
- **Reflexive competence** - the demonstrated ability to integrate our performances with our understanding so that we are able to adapt to changed circumstances and explain the reason behind these adaptations (SAQA, 2001: 11).

It should be noted that the term ‘applied competence’ or ‘applied knowledge’ within the NQF paradigm encompasses all types of knowledge, i.e. practical and theoretical, as well as the ability to reflect, within the particular context that it will be used. In the past, theoretical knowledge, in particular, was privileged. In the conceptualisation of the NQF, a deliberate decision was made that all types of knowledge should be valued and that, depending on the context, equal value will be given to all the dimensions of knowledge.

These guidelines are about assessment in an outcomes-based paradigm whereby the teaching, learning and assessment focus on supporting the learners’ progressive attainment of skills, attitudes and practical and theoretical knowledge, as captured and described in the purposes and outcomes of unit standards and qualifications. The core principles of outcomes-based assessment, namely fairness, validity, reliability, practicability and authenticity of the assessment, as described in the Criteria and Guidelines for the Assessment of NQF registered Unit standards and Qualifications (SAQA, 2001)¹ are assumed to be familiar to the reader.

It may be argued that there is no need for an additional publication dealing with outcomes-based assessment approaches, but international practice has shown that the assessment of integrated learning is still very limited. Biggs (2001:7) for example, states that in his view, in the United States of America, the mind-shift of assessment as part of the learning process rather than assessment as an end in itself, has not yet taken place. This means that where assessment should be in the service of learning and the learner, the main focus of assessment still seems to be that of a selection tool.

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¹ Obtainable from [www.saqa.org.za](http://www.saqa.org.za)
Biggs (2001: 6) blames this on deeply entrenched historical notions of assessment where assessment, from the earliest ages were used to ‘select the best individuals in terms of stable characteristics’, or norms. He maintains that particularly in elitist schools and universities, ... education is ... a selective exercise, with norm-reference examinations [considered to be] entirely appropriate...[O]ften the procedures of constructing and administering tests, establishing reliability and validity, and interpreting and reporting test scores are based on parametric statistics, as if the assumptions of polygenetic inheritance, which produce the normal curve, are appropriate for educational assessment’.

The need for these guidelines therefore emanate from the need to expand our understanding of assessment as a critical component of the teaching and learning process whereby assessment is undertaken in support of the learning and to determine the application of knowledge in authentic situations. The mechanism identified for achieving this purpose is integrated assessment approaches as described in numerous policies of the emerging education and training system of South Africa. However, even a cursory analysis of definitions of integrated assessment indicates that integrated assessment is not necessarily commonly understood. The first task of these guidelines is therefore to establish a common understanding of integrated assessment.

The following definition and two excerpts from registered qualifications highlight the extent to which there is agreement (or differences) in the understanding of integrated assessment:

The National Standards Bodies (NSB) Regulations (1998:4), provide a broad description of integrated assessment as follows:

...a form of assessment which permits the learner to demonstrate applied competence and which uses a range of formative and summative assessment methods.

Likewise, qualifications and unit standards registered on the National Qualifications Framework (NQF) make explicit statements about integrated assessment, for example in the following unit-standard based qualification:

Integrated assessment at the level of qualification provides an opportunity for learners to show that they are able to integrate concepts, ideas and actions across unit standards to achieve competence that is grounded and coherent in relation to the purpose of the qualification.

Integrated assessment must judge the quality of the observable performance, but also the quality of the thinking that lies behind it. Assessment tools must encourage learners to give an account of the thinking and decision-making that underpin their demonstrated performance. Some assessment practices will be of a more practical nature while others will be of a more theoretical nature. The ratio between action and interpretation is not fixed, but varies according to the type and level of qualification.

A broad range of task-oriented and theoretical assessment tools may be used, with the distinction between practical knowledge and disciplinary knowledge maintained so that each takes its rightful place.

Excerpt 1: National Certificate: Tourism Guiding

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2 'Authentic situations' refer to meaningful application of knowledge and may include 'simulations' or other approaches as the context requires.
In another registered non-unit standard based qualification, integrated assessment is described as:

The assessment methods are unique to the different outcomes. Theory tests focus on the knowledge of learners, while the practical assignments focus on the demonstration of skills. Therefore, the two assessment methods cannot be separated as the one complements the other in ensuring that the purpose of the qualification was achieved.

Theory and practice are integrated in the following ways:
Theory: Tests and an externally moderated final examination
Practice: Projects and assignments, case studies, portfolios containing proof of learning process

Excerpt 2: Certificate: Tourism Management

When examining the NSB definition and the two excerpts, the notion that applied competence is theoretical knowledge, (but is also more than theoretical knowledge) emerges quite strongly. In all cases, learners are required to demonstrate, as well as understand. Furthermore, the two excerpts from the qualifications both link integrated assessment to the purposes or the core of the qualifications.

However, in both cases, in the excerpts from the qualifications, there is a clear distinction between practical knowledge and theoretical (or discipline-based) knowledge, and in the second excerpt, the weighting of the practical knowledge is at the level of formative assessment, not subject to external moderation, while in the first excerpt, users of the qualification are warned that the ‘distinction between practical knowledge and disciplinary knowledge [should be] maintained so that each takes its rightful place’.

This brief analysis seems to suggest that integrated assessment is interpreted as assessment of theoretical knowledge, and separately, but in addition to this, assessment of practical skills. This approach effectively perpetuates the distinction between knowledge and skills rather than attempting to assess integrated learning, which is a combination of knowing, doing, understanding and application of knowledge.

This publication therefore also intends to explore the current understanding of integrated assessment, both as it is expressed in qualifications and unit standards, as a guideline for the users of the qualification, and the ways in which it finds expression in policies, guidelines and practice.

The important point is that integrated assessment can be understood in many different ways and on many different levels according to the context within which integrated assessment approaches will be developed and used. Assessing in an integrated fashion, for example, may be utilised to assess integrated learning in the smallest coherent unit of learning – a unit standard, or at the other extreme, it may be an instrument that could be used to assess across disciplines and fields of learning.

In this regard Kraak (2000: 15) maintains that
Knowledge is problem-oriented; it attempts to solve problems by drawing on multiple disciplines, which interact in the real-world contexts of use and application, yielding
solutions and new knowledge which are not easily reducible to any of the participating disciplines.

This is in keeping with the notion of applied competence. Integrated assessment should therefore occur throughout a learning programme in support of the development of problem-oriented knowledge. Figure 1.1 highlights the possible levels at which integrated assessment approaches could be used:

<table>
<thead>
<tr>
<th>LEVEL</th>
<th>PURPOSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>MACRO</td>
<td>EXIT LEVEL OUTCOMES</td>
</tr>
<tr>
<td>Meso</td>
<td>INTERMEDIATE LEVEL OUTCOMES, e.g. 2&lt;sup&gt;nd&lt;/sup&gt; year</td>
</tr>
<tr>
<td></td>
<td>LEARNING AREA OUTCOMES, e.g. Accountancy</td>
</tr>
<tr>
<td></td>
<td>COHERENT ‘CHUNKS’ OF LEARNING, e.g. a set of unit standards or outcomes, subjects or modules</td>
</tr>
<tr>
<td>Micro</td>
<td>UNIT STANDARD OUTCOMES, e.g. specific outcomes and assessment criteria</td>
</tr>
</tbody>
</table>

**Figure 1.1: The possible different levels and purposes of integrated assessment approaches**

There are therefore many possible permutations of integrated assessment – this will largely depend on the context and the purpose of the assessment. An important point in this regard is that integrated assessment should not be forced across disciplines. If, for example, the two majors of a general Bachelor’s degree are Sociology and French, it will not be possible (or appropriate) to use a summative integrated assessment instrument to assess across such disciplines. However, where the majors in a Bachelor of Commerce-degree are Financial Accounting and Business Economics, clearly the possibility for integrated assessment approaches at the summative level across these two disciplines are to be encouraged.

In addition, the relationship between theory and practice will vary hugely across sectors and learning programmes. What ‘theory applied in practice’ and the integration thereof, means in the context of an Engineering curriculum and what this means in the context of an English curriculum or Social Anthropology will differ.
However, an important point is that the NSB Regulations (1998) makes integrated assessment an explicit requirement within the rationale and structure of a qualification and therefore of a curriculum that will lead to the attainment of that qualification. Assessment should be integral to the teaching and learning activities of a learning programme and should therefore be part of the curriculum and learning programme development. A key point is that we cannot assess in an integrated fashion if we do not teach and learn in an integrated fashion. Integrated learning comes before integrated assessment. Figure 2 demonstrates how teaching, learning and assessment activities could be developed as a coherent process focused on the progressive achievement of the purpose(s) of the unit standard or qualification.

Figure 1.2: Towards teaching, learning and assessing in an integrated fashion

The process detailed in Figure 2 suggests that integrated teaching, learning and assessment should be carefully planned. The sequencing and purposes of assessment should consciously support and enhance learning throughout the learning programme – and should not be considered an add-on to be administered at the end of the programme.

When planning integrated assessment approaches, particularly if the plan is to assess across disciplines, sufficiency of evidence is very important. The *Criteria and Guidelines for the Assessment of NQF registered Unit standards and Qualifications* (SAQA, 2001: 37) asks: “Is there enough evidence to meet all the criteria needed to certify the learner as competent?” The assessment plan should therefore detail what would be considered *sufficient*, keeping in mind the possibility of *naturally occurring evidence* that may emerge through workplace practice and the like. In many cases,
sufficiency of evidence has been interpreted as needing to assess every minute detail of the learning outcomes and assessment criteria. Assessment, regardless of the purpose of the assessment, i.e. diagnostic, formative or summative, can only hope to assess a representative sample of the learning. The key is to decide, during the planning process, what evidence will best demonstrate applied competence.

Linked to sufficiency, is the need to report on discrete disciplines or fields of learning. The assessment plan should therefore detail the weighting of the composite parts of the assessment – both in relation to the integrated assessment results, as well as the contribution that such an assessment would make towards awarding credits to the composite parts of the assessment. In other words, if the assessment of Communication is to be integrated with the development and presentation of a Business Plan, for example, the weighting of Communication will be determined by the extent to which an oral presentation of a Business Plan contributes towards the achievement of the required credits for Communication. An oral presentation, in terms of the total number of credits required for Communication, could for arguments sake, ‘count’ 2 credits. The credit-rating and weighting of the integrated assessment should therefore indicate that Communication will ‘count’ 2 credits, while the Business Plan will ‘count’ 8 credits.

Conclusion
Rowntree (in Mothata, et al, 2003, p. 82) reminds us of the importance of meaningful assessment in an education and training system. He maintains that

If we wish to discover the truth about an educational system, we must look into its assessment procedures. What student qualities and achievements are actively valued and rewarded by the system? How are its purposes and intentions realised? To what extent are the hopes and ideals, aims and objectives professed by the system ever truly perceived, valued and striven for by those who make their way within it? The answers to such questions are to be found in what the system requires students to do in order to survive and prosper.

The ‘hopes and ideals’ of the education and training system of South Africa are expressed in the many policies that have been developed with the purpose of creating an enabling, accessible process in support of learning and in developing the skill to apply knowledge appropriately and in meaningful contexts. The Guidelines for Integrated Assessment hopes to contribute to our growing understanding of the mechanisms to achieve meaningful learning.

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3 To ‘demonstrate’ encompasses practical, observation-based assessment approaches, but is also understood to ‘demonstrate’ understanding through knowledge tests or other theory tests, as appropriate to the context within which the assessment will occur.
CHAPTER 2: WHAT IS INTEGRATED ASSESSMENT?

PURPOSE OF THIS CHAPTER

The purpose of this chapter is to develop a common understanding of integrated assessment within the context of an assessment plan or strategy. In addition to defining integrated assessment, the various purposes of assessment will be explored. These purposes range from a developmental (or formative) focus, to a judgemental (or summative) focus. Also, because assessment is considered to be such an important tool to determine the health of an education and training system, the validity and reliability of assessment, particularly in terms of the reporting on integrated assessment will be discussed.

2.1 DEFINING INTEGRATED ASSESSMENT

In establishing a common understanding of integrated assessment - an approach that departs from historical approaches to assessment - it is unavoidable that the concept is interpreted differently. Some definitions and descriptions of integrated assessment are presented here to explore the commonalities (and differences) in understanding, namely:

(i) …integrated assessment should [assess] the ability to combine key foundational, practical and reflexive competence with some critical cross-field outcomes (CCFOs) and apply these in a practical context for a defined purpose. The context should be relevant to real life application (SAQA/CIDA, 2003: 62).

(ii) …it should measure the extent to which candidates have integrated the knowledge, skills, personal qualities taught and/or modelled through the different unit standards which make up the programme (proposed Advanced Certificate in Education – School Management and Leadership) (www.saqa.org.za)

(iii) …assessment should ensure that the candidate is a consistently competent individual, capable of undertaking the whole activity being assessed rather than small time-consuming and trivial tasks. It is advisable to plan to assess not only one outcome as a whole activity, but several … across a number of different units. This process is called integration of assessment. Integrating assessment in this way will considerably lighten the burden on both assessor and candidate and will lead to more coherent and meaningful assessments (Scottish Qualifications Authority, 1997: 23).

(iv) Integrated assessment at the level of qualification provides an opportunity for learners to show that they are able to integrate concepts, ideas and actions across unit standards to achieve competence that is grounded and coherent in relation to the purpose of the qualification (www.saqa.org.za, National Certificate: Tourism: Guiding).

(v) …making use of integrated tasks and activities, and a variety of methods, tools, techniques and contexts in assessing learners’ performance (Department of Education (DoE), Draft revised National Curriculum Statement for Grades R – 9 (Schools)).

(vi) …the integration of knowledge and skills across subjects and terrains of practice is crucial for achieving applied competence as defined in the NQF …the NCS.
seeks to promote an integrated learning of theory, practice and reflection (DoE, Qualifications and Assessment Policy Framework Grades 10 – 12 (Schools)).

(vii) The testing again and again of the same restricted range of skills and abilities can no longer be justified; instead of simply writing about performance, students should be required to perform in authentic or simulated real-world contexts. This demands innovative assessment approaches and methods, which ensure that all learning outcomes are in fact assessed, and that assessments add value to student learning (CHE, Draft New Academic Policy for Programmes and Qualifications in Higher Education (NAP), 2001: 112).

(viii) Integrated assessment refers to:
- Assessing a number of outcomes together
- Assessing a number of assessment criteria together
- Assessing a number of unit standards together
- Using a combination of assessment methods and instruments for an outcome/outcomes
- Collecting naturally occurring evidence (such as in a workplace setting)
- Acquiring evidence from other sources such as supervisor’s reports, testimonials, portfolios of work previously done, logbooks, journals, etc. (SAQA, 2001: 55).

(ix) Integrated assessment at qualifications level enables learners to show that they are able to integrate concepts, ideas and actions across unit standards to achieve competence that matches the purpose of the qualification (LGWSETA, 2004: 13).

The key elements emerging from these definitions and descriptions of integrated assessment seem to include:

<table>
<thead>
<tr>
<th>Key element</th>
<th>Source (see above)</th>
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<tbody>
<tr>
<td>The need to demonstrate applied competence, including providing evidence of the achievement of critical cross-field outcomes</td>
<td>(i); (vi)</td>
</tr>
<tr>
<td>Relating the assessment to a defined purpose (of unit standards and qualifications)</td>
<td>(i); (iv); (ix)</td>
</tr>
<tr>
<td>The context in which the assessment should be undertaken is key</td>
<td>(i); (v); (vii)</td>
</tr>
<tr>
<td>The practicability and efficiency of assessment approaches are important</td>
<td>(iii); (vii); (viii)</td>
</tr>
<tr>
<td>Integrated assessment approaches should ‘add value to student learning’</td>
<td>(iii); (vii)</td>
</tr>
<tr>
<td>Integrated assessment is a more authentic and coherent method to evaluate learning by specifically linking the underpinning theory with practice</td>
<td>(iii); (iv); (vii)</td>
</tr>
<tr>
<td>Integrated assessment should make use of a variety of assessment instruments whereby more than one mode of learning is assessed</td>
<td>(v); (vii); (viii)</td>
</tr>
<tr>
<td>Integrated assessment aims to assess in an appropriate manner, the extent to which learners can ‘integrate concepts, ideas and actions’</td>
<td>(i); (ii); (iv); (vi); (ix)</td>
</tr>
<tr>
<td>The assessment of knowledge, skills and personal qualities</td>
<td>(ii); (vi)</td>
</tr>
</tbody>
</table>

Table 2.1: Key elements emerging from various interpretations of integrated assessment

It seems clear that integrated assessment is actually no different from good practice. However, the purpose of this publication is not to put ‘old wine into new bottles’, but to encourage a deliberate engagement with a form of assessment that is in the service
of meaningful learning and which supports the achievement of the purpose of the qualifications and unit standards.

For the purposes of this publication, the formal definitions derived from the SAQA regulations are used.

Assessment is defined as

a structured process for gathering evidence and making judgments about an individual’s performance in relation to registered national standards and qualifications’ (SAQA, 2001: 16)

Integrated assessment is seen to be an important mechanism whereby evidence of applied competence can be presented. The National Standard Bodies (NSB) Regulations (1998: 4) extend and deepen the understanding of assessment in describing integrated assessment as

...a form of assessment which permits the learner to demonstrate applied competence and which uses a range of formative and summative assessment methods.

These two definitions encapsulate a host of principles and concepts that is increasingly becoming the common currency used in relation to assessment in the emerging education and training system of South Africa. Integrated assessment is put into practice by

- Assessing a number of outcomes together [or]
- Assessing a number of assessment criteria together [or]
- Assessing a number of unit standards together [and]
- Using a combination of assessment methods and instruments for an outcome/outcomes [and]
- Collecting naturally occurring evidence (such as in a workplace setting) [and/or]
- Acquiring evidence from other sources such as supervisor’s reports, testimonials, portfolios of work previously done, logbooks, journals, etc. (SAQA, 2001: 55).

In addition, the term applied competence, points to one of the key principles of the NQF, i.e. that knowledge, within the new education and training paradigm, is viewed as reflecting foundational, practical and reflexive competencies. This means that learners must be able to demonstrate understanding of the underpinning theory, which is the basis of their practice in a particular context and through reflection, must be able to integrate performance with understanding (SAQA, 2001: 21).

Furthermore, the NSB definition suggests that integrated assessment is not a once-off event, and that such a range of assessments may have more than one purpose and may take different forms, i.e. it ‘uses a range of formative and summative assessment methods’. In the Criteria and Guidelines for the Assessment of NQF registered Unit standards and Qualifications (SAQA, 2001: 26) formative assessment is broadly described as ‘assessment that takes place during the process of learning and teaching’, with the purpose to support learning, while summative assessment is used to make a ‘judgement about [learner] achievement’, which is used at a particular point (usually at the end) of a learning programme to measure progress in terms of the requirements of national standards and qualifications so that credits can be awarded.
Here, it should be noted that summative assessments will take place throughout the curriculum (refer to Figure 1.1), at a point when a judgement is made about whether a learner is able to progress to the next level/semester/unit of learning. A learning programme could therefore be small or large – small in terms of the fact that it covers a particular unit of learning, for example a skills programme or short course or a part of the module, and large in that the learning programme could come to an end at the completion of a full year of study in a discipline (also refer to Figure 3.4 and 3.5 in chapter 3). The curriculum will therefore consist of a series of learning programmes.

The important point is that the learning programme will have a range of assessments planned, including diagnostic, formative and summative assessments at the appropriate moments. The NSB regulations state that designers of qualifications should ensure that ‘integrated assessment [is] appropriately incorporated to ensure that the purpose of the qualification is achieved’ (1998: 8).

Integrated assessment should offer an opportunity to demonstrate the depth and breadth of learning at all stages and through a variety of ways throughout the learning programme. As mentioned in chapter 1, integrated assessment could be used at different levels and for different purposes during the delivery of the learning programme. At qualification exit level for example, a set of integrated assessments could be used when credits have been accumulated over time and at different learning sites (possibly through a series of skills programmes) in order to assess the integration of knowledge and skills in terms of the purpose of the qualification (LGWSETA, 2004). This approach contrasts with the notion that if a learner is assessed in discrete parts of a qualification, i.e. in terms of subject areas the assumption is that the overall purpose of the qualification has been achieved. However, in practice, educators seldom have (or seek) an overview of the overall purpose of the qualification, instead they focus on their own disciplines and the linkages between the parts of the qualification are not necessarily made. This suggests that at the qualification exit level, it may be necessary to develop assessments that will evaluate learning across subjects and terrains of practice.

In addition, throughout the learning programme, educators must seek to assess the application of knowledge within their disciplines, both for formative (or developmental), as well as for summative (or judgemental) purposes. This would mean that coherent ‘chunks of learning’ are assessed, including theory and practice. This could be achieved through ‘clustering’ of unit standards and learning outcomes. The advantage is that the understanding of theory, in support of practice, is assessed. It also avoids duplication of the assessment of learning outcomes that overlap with outcomes in other disciplines or modules.

It should be noted again that integrated assessment, in terms of more than one unit standard or learning outcome, should never be forced. There will be a need to assess unit standards or learning outcomes discretely, particularly in the early stages of a learning programme, but then the educator should guard against over-assessment where each outcome ‘(or worse, each assessment criterion) [is assessed separately resulting in] hundreds of little fragmented meaningless assessments of the check-list type, taking up valuable learner and educator time without anything of value being learnt’ (LGWSETA, 2004: 13). Assessments are important moments in the course of
learning programmes and the cost and practicability of assessment should be considered when planning integrated assessment.

2.2 THE PURPOSES OF (INTEGRATED) ASSESSMENT

The purposes of assessment, in line with the changing focus of the emerging education and training system in South Africa, are increasingly understood as having the primary function of supporting learning. In the National Curriculum Statement Grades 10 – 12 (DoE, 2002: 23), for example, the point is made that there are many reasons why learners’ performances are assessed. These include assessment for monitoring progress, diagnosing or remediating barriers to learning, selection, guidance, supporting learning, certification, and for promotion.

This understanding of assessment is in agreement with international trends in education and training. Keeves (in the International Encyclopedia of Education, 1994: 364) describes the purposes of assessment ‘as the basis for instructional decisions’. These purposes include:

(a) placement decisions
(b) formative or monitoring decisions
(c) diagnostic decisions, and
(d) summative or attainment decisions

To these purposes one can add that assessment also serves the purpose of quality assuring the assessment process, the assessment instruments and the performance of assessors.

That assessment is increasingly seen to be in the service of the learner and learning is confirmed by Mothata (et al, 2003, p. 86) who argues that ‘the overall message [emerging from the new approach to assessment is] that assessment is now more about learning than testing; assessment for the benefit of the learner and their teacher rather for accountability to some outside body or programme’.

Yet, Brooks (1993, p.85) observes that all too often:

Test results become not the means to assess movement toward ends and to shift directions if necessary, but the ends themselves. Schools over-emphasize test results – teachers gauge their own efficacy by them, parents fixate on them, and students come to fear them. Ultimately, test results obscure opportunities to honor and value individual differences and instead translate differences into classifications that place, even trap, students in a range of settings such as remedial and gifted programs. Further, most tests, particularly fact-based, multiple-choice tests are unreliable as indices of what students do or do not “know”. In preparing for tests, student must guess which discrete bits of information the teacher – or the state – consider most important. Worst of all, in most school settings, testing is not part of the instructional program.

For assessment to be meaningful therefore it should be fully integrated into teaching and learning and should guide decisions about the activities that will support and enhance learning. It should never be an ‘add-on’, to be used at the end of a learning

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4 The different purposes of assessment are discussed in detail in the Criteria and Guidelines for the Assessment of NQF registered Unit standards and Qualifications (SAQA, 2001) and will not be repeated here. The reader can obtain an electronic copy from the SAQA website: www.saqa.org.za
programme in the form of a once-off written examination. Apart from the fact that a once-off written examination does not provide learners and educators with opportunities to determine the gaps in learning where remediation can be undertaken, a typical written examination does not generally attempt to assess the integration of learning in line with the purpose of a qualification. This does not suggest that written examinations cannot be used as a form of assessment, but an over-reliance on only one form of assessment, assessing only one mode of learning, is no longer defensible (SAQA, 2000).

In the General Tutorial Letter of the UNISA National Professional Diploma in Education (NPDE), for example, it is acknowledged that assignments and examinations by their very nature cannot tell us everything about what you know and can do. In order to get a better picture of your overall achievements, we need to offer you additional opportunities to demonstrate what you can do [through the] inclusion of integrated assessment (2004: 3).

In addition, other key purposes of assessment, namely to ensure accountability of providers within the system and to measure the health of the system, must be borne in mind when drafting an assessment plan. The National Curriculum Statement Grade R – 9 (Schools) suggests that assessment of learner performance should be a routine part of monitoring the performance of the education system. Systemic assessment [should be] undertaken at the end of each phase within the general education and training phase (DoE, 2000: 94).

Monitoring the effectiveness of teaching and learning and the efficacy of policies are therefore an important purpose of assessment. Nuttal (in the International Encyclopedia of Education, 1994: 3904) notes that monitoring is ‘of major importance [to most countries] and that they ‘devote substantial resources to them’. The purpose of such monitoring is to provide information about how the educational system as a whole is functioning, and usually chart[s] changes in the level of student achievement over time. This monitoring or evaluation can contribute to demonstrating the accountability of the educational system, and the information derived from national monitoring commonly attracts much public attention and is extensively used in political debate.

A national monitoring system is not the focus of this publication, but the requirements of such a system, such as reporting on discrete parts (or subjects) of qualifications, for example in the Senior Certificate examination in South Africa, may influence the design of integrated assessment and may have an impact on the way in which results of such assessments are reported. In addition, large-scale assessments such as the Senior Certificate examinations rely heavily on the extent to which the results can be considered to be valid and reliable. For this reason, validity and reliability of integrated assessment approaches will be discussed briefly.

2.3 VALIDITY AND RELIABILITY

The CHE (2001, 113) maintains that

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Validity, reliability and practicability are discussed in detail in the Criteria and Guidelines for the Assessment of NQF registered Unit standards and Qualifications (SAQA, 2001). Readers are referred to Chapter 3. An electronic copy can be obtained from the SAQA website: www.saqa.org.za
...if we are to take assessment seriously, it is important to grasp how [validity and reliability] apply to ... education practice and to understand that there tends to be a trade-off between these two qualities of assessment.

Validity is concerned with the appropriateness, usefulness and meaningfulness of inferences made from the assessment results. Validity therefore refers to ‘measuring what is says it is measuring, be it knowledge, understanding, subject content, skills, information, behaviours’ (SAQA, 2001: 17). The questions ‘Are we assessing the right things?’ and ‘Are we assessing things right?’ are important and could give guidance in terms of the fitness of and fitness for purpose of the assessment (CHE, 2001: 114).

Strategies to improve the validity of assessment include:

- clarify learning outcomes and their links to specific assessment criteria within an overall assessment strategy;
- ensure that the methods selected are ‘fit for purpose’;
- use a range of assessment methods to ensure that all learning outcomes are assessed (avoid testing only those which are easy to test);
- establish good links between assessment, learning and personal development, by inter alia, allowing students some element of choice, encouraging self-assessment and reflection (CHE, 2001: 114).

This is best achieved by setting authentic or applied tasks in the context of the learning programme, which closely simulate real world contexts.

It therefore seems that

...the closer the assessment is to the teaching and learning process, the more valid, accurate and fair it is likely to be ... due to high levels of validity, assessment results should be dependable and comparable, although not necessarily statistically reliable (CHE, 2001:116).

Reliability in assessment is about consistency and the extent to which the same judgements can be made in similar contexts in order to statistically analyse the results (SAQA, 2001: 18). The Scottish Qualifications Authority (1997: 17) maintains that ...an assessment which is reliable gives consistent results on different occasions with different candidates and different assessors. Achieving a reliable assessment involves minimising the factors which give rise to errors.

Some of these errors arise from assessor practices, the environment for the assessment and from the sample of learning that will be assessed.

In terms of integrated assessment, it is not always easy to reconcile the requirement of statistically reliable assessments, with the validity and authenticity of assessments. In many a standardised assessment in the past, validity of assessment was sacrificed for the reliability of such assessments. Internationally, these two purposes, namely to assess learning and to assess system efficacy, are considered to be not entirely comfortable with each other. Whitford and Jones (in Hargreaves, et al, 2001, p. 1163), for example, argue that standardised tests do not provide a clear picture of learning achievements and suggest that assessing learning with the same instruments and at the same time as assessing to ensure accountability, could confuse the issues, i.e. it is unclear ‘whether it is the school or the student that is being assessed’, and as a
result ‘learning and achievement are fundamentally confused’. Accountability, according to them, ‘reduces school quality to a numeric formula’ and that this approach is ‘over-simplified and ill-suited to evaluat[e] many important aspects of schooling’.

Nevertheless, integrated assessment plans have to bear this requirement in mind as currently, standardised testing is still the most commonly used tool to evaluate student learning, which intends to simultaneously measure the success (or lack thereof) of the education and training system.

Therefore, the task of the designer of assessment strategies, including integrated assessment approaches, is to, as far as possible, balance the requirements of validity and reliability. The following strategies for reducing inconsistencies in evaluating assessment results may be useful:

- establish clear [and common] manageable assessment criteria;
- use internal moderation (where [educators] meet during and after the [assessment] to compare … interpretations of the criteria and marking categories or bands);
- establish institutional frameworks to ensure consistency in the use of numerical quantification and verbal descriptions of [inter alia] level descriptors;
- use several assessment tasks using a range of assessment methods (CHE, 2001:155);
  and
- evaluate the assessment criteria for efficacy and relevance.

**Conclusion**

Educators throughout the world are increasingly reaffirming that …the intent of instruction is to promote students’ abilities as thinkers, problem-solvers, and inquirers….Assessments, if they are to be aligned with current views on instruction and human learning, must more closely resemble meaningful learning tasks and assess the acquisition of high-level thinking and reasoning abilities as integral to subject-matter knowledge (International Encyclopedia of Education, 1994:370).

Integrated *assessment* approaches must therefore support integrated *learning* approaches and should seek to develop and measure those abilities in learners to not only understand the underpinning theory, but to apply the theory in authentic contexts and to reflect on what they are doing, and why.