

EXAMPLES OF INTEGRATED ASSESSMENT APPROACHES

CHAPTER 4:

EXAMPLES OF INTEGRATED ASSESSMENT APPROACHES

PURPOSE OF THIS CHAPTER

The purpose of this chapter is to provide examples of integrated assessment approaches. The examples are not exhaustive and do not claim to be generalisable to all contexts, but they attempt to use the broad principles and guidelines for the design of integrated assessments proposed in Chapter 3.

INTRODUCTION

The following two examples will attempt to demonstrate how integrated assessment approaches can be applied in different contexts. The first example is of a summative assessment at the end of the three-year learning programme that uses a non-unit standard-based qualification (or exit level outcomes qualification). The second example explores the use of integrated assessment using a unit standard-based qualification.

4.1 INTEGRATED ASSESSMENT: EXAMPLE 1 — NON-UNIT STANDARD-BASED QUALIFICATION

This example is based on the NQF registered qualification entitled *Certificate: Tourism Management* (NQF level 5, Identity number: 36030). The description of the qualification is attached as Appendix 1. This assessment could be part of a set of assessments (including, where appropriate, a written examination) and therefore focuses on the macro level of integrated assessment, namely the purpose, rationale and exit level outcomes of the qualification (refer to Figure 1.1). The first step is to study the level descriptors for a particular NQF level:

NQF level 5 ⁹	Applied Competence	Autonomy of Learning
TYPICALLY, A PROGRAMME LEADING TO THE AWARD OF A QUALIFICATION OR UNIT STANDARD AIMS TO DEVELOP LEARNERS WHO DEMONSTRATE THE FOLLOWING ATTRIBUTES:		
- a fundamental knowledge of the main areas of one or more fields or disciplines - b an informed understanding of the important terms [used], rules concepts, principles and theories in one or more fields or disciplines c. an understanding of the organisation or operating environment as a system within a wider context and in relation to the society; Does this mean a particular professional society or society in general? If the latter, it should be merely 'society' without a definite article. - d an ability to effectively apply essential methods, procedures and techniques of the field or discipline - e an ability to interpret, convert and evaluate texts and operational symbols or representations - f an ability to use 'acquired' knowledge to solve well-defined problems both routine and unfamiliar within a familiar context - g an ability to adjust an application of a solution within relevant parameters to meet the needs of changes in the problem or operating context - h an ability to evaluate the change using relevant evidence efficient information-gathering, analytical and synthesising, and evaluating skills; - j presentation skills using appropriate technologies - k an ability to communicate information coherently and reliably both verbally and in writing using basic conventions of an academic/professional discourse	l. the capacity to take personal responsibility for learning within a supervised environment; m. an ability to take personal decisions about and personal responsibility for actions; and n. an ability to evaluate personal performance against given criteria.	

Table 4.1: Level descriptors for NQF level 5

The level descriptors for NQF level 5 indicate that at this level learners are expected to have applied competence in the following (amongst others):

- the fundamental areas of one or more disciplines
- the rules, principles and theories relevant to specific disciplines/fields of learning
- the operational symbols, procedures, operations and techniques of the discipline/field of learning
- the use of procedures and techniques to solve routine problems
- information-gathering, analysis and presentation skills
- presenting and communicating coherent and reliable information using the conventions of academic/professional discourse.

⁹ The level descriptors for NQF levels 5 – 8 have not been finalised. These draft level descriptors were made available for public comment between 3 December 2001 and 28 February 2002. In this publication they are used only as examples.

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Level descriptor and autonomy of learning: NQF level 5	Generic critical cross-field outcomes
The ability to select and use a range of procedures and techniques to solve routine problems.	Identifying and solving problems where responses to problems show that critical and creative thinking has been used to make responsible decisions.
The ability to work within a system within a wider context and in relation to society.	Working effectively with others as a member of a team, group, organisation or community.
The capacity to take responsibility for one's learning within a structured learning environment.	Organising and managing oneself and one's activities responsibly and effectively.
The skills to effectively gather information, to analyse and present such information.	Collecting, analysing and critically evaluating information.
The ability to present and communicate information coherently and reliably using the basic conventions and formats of an academic/professional discourse.	Communicating effectively using visual, mathematical and/or language skills in oral and/or written presentations.
The ability to interpret and apply the operational symbols, procedures and techniques of a discipline or field.	Using science and technology effectively and critically; showing responsibility towards the environment and the health of others.
Comprehensive knowledge of the main areas of one or more disciplines or fields; A sound understanding of a discipline or field's key terms, rules, concepts, established principles and theories.	Demonstrating an understanding of the world as a set of related systems by recognising that problem-solving contexts do not exist in isolation.
The ability to evaluate personal learning and to identify personal strengths and weaknesses.	Reflecting on and exploring a variety of strategies to learn more effectively.
The capacity to take personal responsibility for learning within a structured learning environment.	Participating as responsible citizens in the life of local, national and global communities.
	Being sensitive to different cultures, assigned meanings and perceptions across a range of social contexts.
The ability to select and use a range of procedures and techniques to solve routine problems.	Developing entrepreneurial opportunities.

Matrix 4.1: Matching the level descriptors and critical cross-field outcomes

The design of integrated assessment approaches in assessment instrument(s) should seek to determine the extent to which learners have achieved applied competence in relation to a qualification pitched at a particular NQF level.

As indicated in Chapter 3, the level descriptors provide the broadest description of what learners who achieve qualifications at this level have achieved on successful completion. They also give guidance in relation to the depth and breadth of learning required. At NQF level 5, for example, it is not required of learners to have acquired detailed, in-depth knowledge of a discipline or field, rather they need to have mastered the “main areas of one or more disciplines/fields” (refer to Table 4.1).

By matching the level descriptors and the critical cross-field outcomes, planners are assured that both the depth and breadth and critical generic outcomes are incorporated into the plan.

4.1.2 Study the purpose of the qualification

In keeping with the guidelines given in Chapter 3 for the design of integrated assessment approaches, the next step is to analyse the title, purpose and rationale of the qualification. The purposes and rationale of the *Certificate: Tourism Management* are as follows:

CERTIFICATE: Tourism Management NQF level 5

Certificate: Tourism Management NQF level 5

Purpose of the qualification:

- To promote an understanding of the interrelated nature of the sectors in the tourism industry
- To enhance learners' knowledge of legal and ethical principles applicable to the tourism industry, e.g. the impact of tourism
- To develop management supervisory skills
- To ensure improvement of management and customer service standards in the tourism industry
- To develop innovative thinking, leading to entrepreneurial skills, particularly to develop economic growth in developing regions in order to alleviate poverty through tourism Small-, Medium- and Micro Enterprises (SMMEs) Rationale

With the recent decline in tourism in western countries, Africa is gaining popularity among tourists. Due to the higher standard of living of a large part of the South African population, domestic tourism has also grown. Tourism creates employment, generates income and alleviates poverty – this is the most important reason why a qualification like this is necessary. However, this Tourism Management qualification does not intend to train learners for the transport or travel agency sectors, but rather to train practitioners to ensure sustainability in the tourism industry.

Excerpt 4: Certificate: Tourism Management

The *purpose* of a qualification highlights the *core*, the *rationale* of the qualification.

In keeping with the breadth and depth of learning required at this level, a summative assessment plan should focus on the ability to demonstrate applied competence in terms of the purposes of the qualification.

In this case, the core of the qualification deals with the following three aspects:

- (i) Knowledge and understanding of the tourism industry, including the legal and ethical principles applicable to tourism
- (ii) Management skills
- (iii) The development of entrepreneurial skills

Aspects of the integrated assessment dealing with the core should receive the greatest weighting of the component parts. Theoretically, the relative weighting in terms of the components of this particular qualification could be equal core credits for “knowledge and understanding of the tourism industry”, “management skills” and “entrepreneurial skills”, with less credits for fundamentals such as “mathematical literacy” and “communication”. The least (and remaining) credits are allocated in terms of the rules of combination for elective components.

At this point it is important to decide on the purpose of assessment. The purpose of an integrated assessment will inform the planning. Once practitioners have a good oversight of a qualification and its components and their relative “importance”, they have to decide why and where integrated assessment will take place. In this case the purpose is a summative assessment. A careful consideration of the relative weighting of each of the parts of the assessment is therefore critical.

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4.1.3 Analyse 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

As mentioned before, the exit level outcomes and their associated unit standards and assessment criteria (in the case of non-unit standards-based qualifications) are important sources of information as to what should be assessed to determine applied competence and to indicate the quality of the evidence to be produced by learners. At this point, possibilities for integrated assessment emerge. The matrix below lists the exit level outcomes and their associated assessment criteria and links these with the fundamental, core or elective learning areas of the qualification:

	Exit level outcome	Associated assessment criteria	Fundamental Core or Elective Learning Areas
1	Demonstrate verbal and non-verbal communication skills for service excellence	1.1 Read to interpret and write to produce common formats of written communication 1.2 Listen to interpret and speak to produce common formats of oral communication 1.3 Interpret and produce common formats of non-verbal communication	Communication (fundamental)
2	Use technology efficiently	2.1 Use computer software to produce verbal and non-verbal communication 2.2 Access information through the Internet 2.3 Access and use e-mail 2.4 Operate technological aids used for office administration and communication	Communication (fundamental)
3	Manage time and resources efficiently	3.1 Tourism activity is correctly planned 3.2 Organisation of time and resources is outlined 3.3 Control measures are indicated 3.4 Supervising skills are correctly applied 3.5 Apply the basic management functions in a small tourism activity	Management (core)
4	Apply basic entrepreneurial skills	4.1 Research feasibility of a business idea 4.2 Do basic market research 4.3 Produce a basic business plan	Entrepreneurship (core)
5	Apply basic knowledge and skills to efficiently manage a business	5.1 Demonstrate knowledge of basic economic principles and policies 5.2 Assist in the organisation of management functions	Economics Management (core)
6	Implement and produce proper financial management accounts	6.1 Compile and process accounting data of a going concern 6.2 Financial transactions are correctly recorded in a general ledger 6.3 A trial balance is correctly drawn up 6.4 Account for assets and liabilities 6.5 Compile company annual financial reports	Financial accounting (elective)
7	Demonstrate an understanding of the dynamics of the inter-related sectors of the tourism industry	7.1 Describe the composition of the tourism industry 7.2 Describe the different sectors of the tourism industry 7.3 Describe the roles and interrelationships between the tourism sectors 7.4 Identify trends in the tourism industry	Travel and Tourism (core)

Matrix 4.2: Exit level outcomes, associated assessment criteria and learning areas

In a set of summative assessments, assessment designers could therefore identify the following opportunities for integrated, inter-disciplinary assessments:

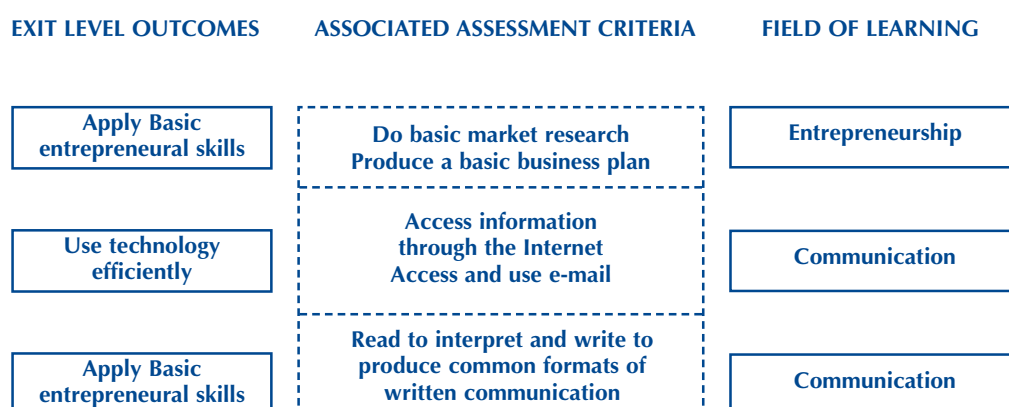


Figure 4.1: Opportunities for inter-disciplinary integrated assessment

In Figure 4.1 the use of the Internet and e-mail communication are integrated in an assessment of the ability to undertake market research and to produce a business plan.

However, it will not always be possible to assess every aspect of the qualification in an integrated fashion. The areas where assessment will be of discrete parts of the qualification must be identified.

4.1.4 Identify discrete areas that need to be assessed separately

In this case, because of the technical nature of financial accounting, it may not be possible to assess the full range of learning through a single integrated assessment. Therefore it may be necessary to design an integrated assessment instrument that for example deals with the application of knowledge particularly within the accounting discipline:

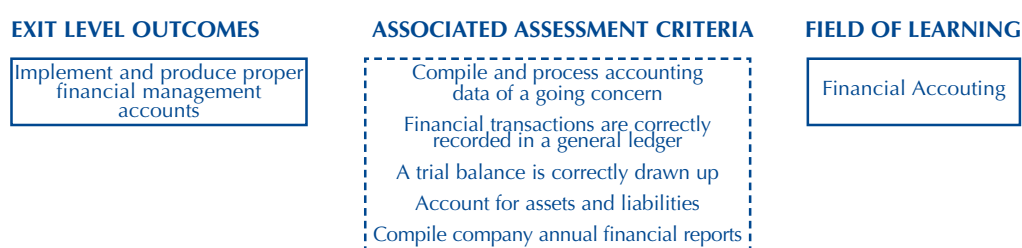


Figure 4.2: Integrated assessment within a particular discipline/field of learning

Integrated assessment comes after integrated teaching and learning. Practitioners must identify ways in which the teaching and learning will support the application of integrated understanding, knowledge and skills.

4.1.5 Identify ways to facilitate integrated teaching and learning in areas where applied competence will be assessed

Figure 1.2 in Chapter 1 is a useful model for developing integrated approaches to teaching,

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learning and assessment. For example, in the *Certificate: Tourism Management*, it would be sensible to structure teaching and learning activities dealing with *management* together with those dealing with management of a *tourism enterprise* and those dealing with the *economic environment* that may impact on the management of such an enterprise. The following exit level outcomes, associated assessment criteria and the fields of learning could be *taught* in an integrated manner:

EXIT LEVEL OUTCOMES	ASSOCIATED ASSESSMENT CRITERIA	FIELD OF LEARNING
Manage time and resources efficiently	Tourism activity is correctly planned Organisation of time and resources is outlined Control measures are indicated Supervising skills are correctly applied Apply the basic management functions in a small tourism activity	Financial Accounting
Apply basic knowledge and skills to efficiently manage a business	Demonstrate knowledge of basic economic principles and policies Assist in the organisation of management functions	Economics and Management

Figure 4.3: Opportunities for inter-disciplinary integrated teaching and learning

4.1.6 Sequence the assessments in accordance with the assessment plan

In this example the assessment is a summative assessment dealing with the exit level outcomes of the qualification. Therefore it will occur at the end of the learning programme. However, the assessments that will help develop the abilities of learners to reach this point must be clearly spelt out. The sequencing of assessment is illustrated in Figures 3.4 and 3.5 (Chapter 3). For the *Certificate: Tourism Management*, the sequence of the formative (or developmental) assessments could be as follows:

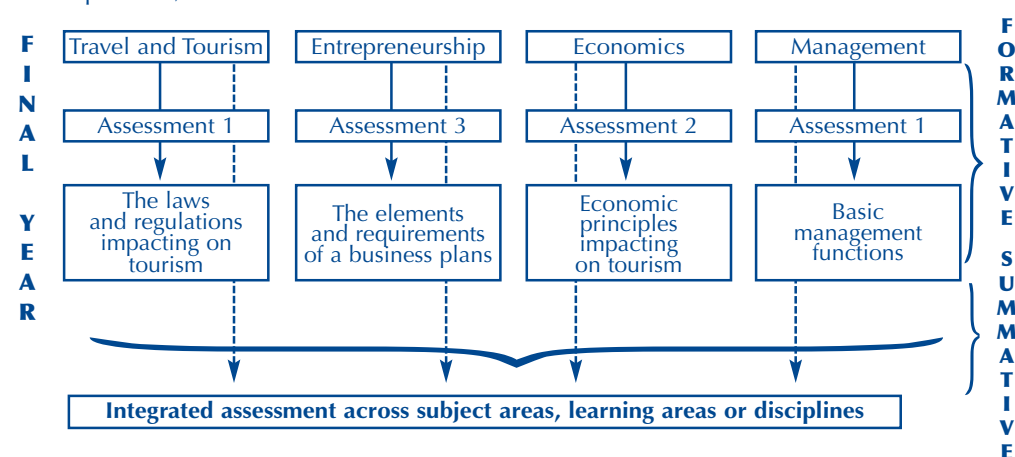


Figure 4.4: Sequencing assessment activities

4.1.7 Design the integrated assessment instruments

At this stage, the assessment designer(s) should have a clear idea of how, for what purpose and where integrated assessment approaches can be used. The next step is to design assessment instruments and to decide on the weighting of each component part of the assessments. Below is an example of an integrated assessment instrument that can be used as part of a set for the *Certificate: Tourism Management*.

Conduct **research** into the **feasibility** of a **tourism activity** in a particular context. Your research must culminate in a **report** and an **oral presentation** giving the details of your findings.

The report must reflect:

- The proposed tourism activity, based on an analysis of regional, national and international trends in the tourism industry as appropriate.
- The economic, ethical, social and environmental **impact** of the proposed tourism activity.
- A business plan detailing the **resources, risk management and financial management** needed to initiate and sustain the activity.
- The other **role players/partners** who will be needed to initiate and sustain the activity.

A project of this nature will cover most of the exit level outcomes and their associated criteria for the *Certificate: Tourism Management*. For example, each of the highlighted words above encapsulates a host of the criteria. To test the coverage of the exit level outcomes, the associated assessment criteria and learning areas, the different elements of the assessment could be placed in a matrix, as follows:

Highlighted Word	Exit Level Outcomes	Assessment criteria
Research	Use technology efficiently	1.1; 2.2; 4.1; 4.2
Feasibility	Apply basic entrepreneurial skills	1.1; 2.2; 4.1; 4.2; 5.1;
Tourism activity	Demonstrate an understanding of the dynamics of the interrelated sectors of the tourism industry, the legal and ethical issues and possible impact	7.1; 8.1; 8.2
Report	Demonstrate verbal and non-verbal communication skills	1.1; 1.2; 1.3; 2.1; 2.4
Oral presentation	Demonstrate verbal and non-verbal communication skills	1.1; 1.2; 1.3; 2.3; 2.4
Trends	Demonstrate an understanding of the dynamics of the interrelated sectors of the tourism industry	7.4; 9.6
Impact	Demonstrate basic knowledge of legal and ethical principles pertaining to the tourism industry Demonstrate an understanding of the potential positive and negative physical/environmental, economic and social/community consequences of tourism	9.1; 9.3; 9.5
Resources	Apply basic knowledge and skills to effectively manage a business Manage time and resources efficiently	3.1; 3.2; 4.3; 5.2; 8.3
Risk management	Apply basic knowledge and skills to effectively manage a business Manage time and resources efficiently	3.3; 3.4; 3.5; 9.2; 9.4
Financial management	Apply basic knowledge and skills to effectively manage a business Manage time and resources efficiently Implement and produce proper financial management accounts	6.1; 6.2; 6.4
Role players/partners	Demonstrate an understanding of the dynamics of the interrelated sectors of the tourism industry	7.2; 7.3

Matrix 4.3: Coverage of exit level outcomes by the integrated assessment instrument

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Keeping in mind that the areas where separate assessments of discrete learning areas were identified earlier, the relative weighting of each of the component parts of this integrated assessment should be defined and agreed. This should be in line with the overall purpose of the qualification. The purpose of the qualification indicated three key aspects that will indicate applied competence, namely

- (i) Knowledge and understanding of the tourism industry, including the legal and ethical principles applicable to tourism
- (ii) Management skills
- (iii) The development of entrepreneurial skills

These aspects will therefore carry the most weight in terms of the assessment. Matrix 4.4 can be used as the basis for a marking guide. It demonstrates the notion of weighting in relation to the overall purpose (the core) of the qualification. It also enables the assessor to report on the composite parts of the assessment:

Overall Purpose of the qualification	Evidence from the assessment	Associated assessment criteria	Relative Weighting
Knowledge and understanding of the tourism industry, including the legal and ethical principles applicable to tourism	The proposed tourism activity, based on an analysis of regional, national and international trends in the tourism industry as appropriate. The economic, ethical, social and environmental impact of the proposed tourism activity	7.1; 7.2; 7.3; 7.4; 8.1; 8.2; 9.6; 9.1; 9.3; 9.5	30%
Management skills	A business plan detailing the resources, risk management and financial management needed to initiate and sustain the activity	3.1; 3.2; 3.3; 3.4; 3.5; 4.3; 5.2; 6.1; 6.2; 6.4; 8.3; 9.2; 9.4	40%
The development of entrepreneurial skills	Conduct research into the feasibility of a tourism activity in a particular context The other role players/partners that will be needed to initiate and sustain the activity	1.1; 2.2; 4.1; 4.2; 5.1; 7.2; 7.3	20%
Other exit level outcomes such as: The use of technology Communication	Conduct research Your research must culminate in a report and an oral presentation giving the details of your findings	1.1; 2.2; 4.1; 4.2 1.1; 1.2; 2.1; 2.3; 2.4	10%

Matrix 4.4: The relative weighting of the composite parts of the integrated assessment

4.1.8 Review the process, instruments and application

The final step is a standard step as part of the internal moderation of assessment results, the quality assurance of the assessment process, including the quality assurance of assessor practice, and the review of the assessment instrument for appropriateness and effectiveness¹⁰.

¹⁰ For more details on internal and external moderation, refer to the Criteria and Guidelines for the Assessment of NQF registered Unit Standards and Qualifications (SAQA, 2001), obtainable from: www.saqa.org.za

4.2 INTEGRATED ASSESSMENT: EXAMPLE 2 — UNIT STANDARD-BASED QUALIFICATION

The second example is based on the NQF registered qualification entitled *National Certificate: Generic Project Management* (NQF level 4, Identity number: 21160).

The description of the qualification is attached as Appendix 1. As before, the assessment will be a part of a set of assessments (including a written examination where appropriate) and could focus on formative (the meso level – refer to Figure 1.1), as well as summative assessments (the macro level).

In keeping with the need to develop a holistic assessment strategy, the first step is to study the level descriptors for a particular NQF level: Consult Table 4.2 where the Level descriptions for NQF level 4 are given.

4.2.1 Study the level descriptors for a particular NQF level

A learning programme leading to the award of a qualification or unit standards at NQF level 4 develop learners who demonstrate	
(a) applied competence	
(i)	a fundamental knowledge of the most important areas of one or more fields or disciplines, in addition to the fundamental areas of study;
(ii)	an informed understanding of the key terms, rules, concepts, established principles and theories in one or more fields or disciplines;
(iii)	an understanding of the organisation or operating environment as a system within a wider context;
(iv)	an ability to apply essential methods, procedures and techniques of the field or discipline;
(v)	an ability to apply and carry out actions by interpreting information from texts and operational symbols or representations;
(vi)	an ability to use knowledge to solve common problems within a familiar context;
(vii)	an ability to adjust an application of a common solution within relevant parameters to meet the needs of small changes in the problem or operating context;
(viii)	an ability to motivate the change using relevant evidence;
(ix)	a basic ability to gather relevant information, analytical and evaluating skills ; and
(x)	an ability to communicate and present information reliably and accurately in writing and verbally.
(b) autonomy of learning	
(i)	a capacity to take responsibility for learning within a supervised environment;
(ii)	a capacity to take decisions about and responsibility for actions;
(iii)	a capacity to evaluate their performance against given criteria; and
(iv)	a capacity to take the initiative to address any shortcomings they find.

Table 4.2: Level descriptors for NQF level 4

The level descriptors for NQF level 4 indicate that at this level learners are expected to have applied competence in:

- the most important areas of one or more fields/disciplines
- the use of key terms, rules, concepts, established principles and theories in the above fields/disciplines
- the operating environment as a system within a wider context

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- methods, procedures and techniques of the field/discipline
- gathering, analysing and evaluating, as well as and interpreting information from texts and symbols
- solving common problems
- adjusting applications within the operating context and motivating why
- communicating and presenting information

Level descriptor and autonomy of learning	Generic critical cross-field outcomes
The ability to solve common problems The ability to adjust applications within the operating context and motivate why	Identifying and solving problems where responses to problems show that critical and creative thinking has been used to make responsible decisions
	Working effectively with others as a member of a team, group, organisation or community
The capacity to take decisions about and responsibility for actions	Organising and managing oneself and one's activities responsibly and effectively
Gathering, analysing and evaluating, as well as interpreting information from texts and symbols	Collecting, analysing and critically evaluating information
Communicating and presenting information	Communicating effectively using visual, mathematical and/or language skills in oral and/or written presentations
The use of key terms, rules, concepts, established principles and theories in the above fields/disciplines	Using science and technology effectively and critically, showing responsibility towards the environment and the health of others
The operating environment as a system within a wider context	Demonstrating an understanding of the world as a set of related systems by recognising that problem-solving contexts do not exist in isolation
The capacity to evaluate personal performance against given criteria The capacity to take the initiative to address any shortcomings they find	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 sensitive to different cultures, assigned meanings and perceptions across a range of social contexts

A matrix is useful to match level descriptors and critical cross-field outcomes:

Matrix 4.5: Matching level descriptors and critical cross-field outcomes

Note: There is not always a one-to-one relationship between the level descriptors and critical cross-field outcomes. Also, some critical cross-field outcomes will only become evident in practice, e.g. "working effectively with others as a member of a team, group, organisation or community". The next step, if the guidelines are found to be useful, is to study the purpose of the qualification.

4.2.2 Study the purpose of the qualification

The purpose of this qualification provides a description of the core competences, as well as the context within which this qualification will be offered:

National Certificate: Generic Project Management
Purpose of the qualification: The primary purpose of the qualification is to provide learners with: • A foundation of basic project management skills which can be used to build further project management related competences • Competence to be effective project team members • Competence to execute small, simple projects • Competence to provide assistance to a project manager of large projects Rationale: This qualification reflects the needs of the project management sector, both now and in the future, for a general (not sector specific) skills pool. This qualification is intended for a project level that will include working as a leader in the context of a small project/sub-project involving few resources and having a limited impact on stakeholders and the environment or working as a contributing team member on a medium to large project when not a leader. The prospective candidate for this qualification may be a person who is entering the workplace or has been working in the workplace and has limited formal project management training/competence. Such a person may be working part time or full time with projects. They may be a team member or in a specialised support role such as Project Secretary, Project Administrator, procurement or cost support, planner – estimator support.

Excerpt 5: National Certificate: Generic Project Management

The *purpose* of the qualification highlights the *core*, the *rationale* of the qualification.

In this case, the core of the qualification deals with:

- Basic project management skills to execute small projects
- Support functions to assist with large projects

At this point it is important to decide on the purpose of assessment. The purpose of an integrated assessment will inform the planning. Once practitioners have a good oversight of a qualification and its components and their relative “importance”, they have to decide why and where integrated assessment will take place. In keeping with the core of the qualification, the purpose of assessment could be formative or summative. In formative integrated assessments the purpose could be the progressive exposure to and application of project management skills. A summative assessment could assess the extent to which learners can apply basic project management skills in the execution of a small workplace project.

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4.2.3 Analyse 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

In a matrix, the following opportunities for integrated assessments emerge

Exit level outcome	Unit standard titles	Fundamental, Core or Elective learning areas
Contribute and provide assistance to a project's scope, life cycle activities and the effective execution of the project plan by applying the correct range of project management tools and ensuring project work is carried out according to plan	- Provide assistance in implementing and assuring project work is conducted in accordance with the project quality plan - Apply a range of project management tools - Contribute to project initiation, scope definition and scope change control - Schedule project activities to facilitate effective project execution - Use language and communication in occupational learning programmes	Core (6 credits) Core (8 credits) Core (9 credits) Core (8 credits) Fundamental (5 credits)
Support the implementation of the project plan in response to outcomes evaluated and assessed and provide related inputs to keep the project on track	- Contribute to the management of project risk within field of personal expertise - Identify, organise and coordinate project life cycle phases for control purposes - Identify, suggest and implement corrective actions to improve quality - Monitor, evaluate and communicate project schedules - Accommodate audience and context needs in oral communication - Interpret and use information from texts - Use language and communication in occupational learning programmes - Schedule project activities to facilitate effective project execution	Core (5 credits) Core (5 credits) Core (6 credits) Core (4 credits) Fundamental (5 credits) Fundamental (5 credits) Fundamental (5 credits) Core (8 credits)
Perform administrative duties related to the project and documentation requirements and administer project meetings and workshops	- Conduct project documentation management to support project processes - Implement project administration processes according to requirements - Plan, organise and support project meetings and workshops - Use language and communication in occupational learning programmes - Write texts for a range of communicative contexts	Core (6 credits) Core (5 credits) Core (4 credits) Fundamental (5 credits) Fundamental (5 credits)
Contribute to project financial management issues related to cost budgets for an element of work	- Participate in the estimation and preparation of cost budgets for an element of work and monitor and control actual cost against budget - Use mathematics to investigate and monitor the financial aspects of personal, business and national issues	Core (6 credits) Fundamental (6 credits)
Work with and support team project members working on the designated project	- Work as a project team member - Evaluate and improve the project team's performance	Core (8 credits) Core (8 credits)
Perform procurement duties related to the project undertaken	- Fulfil procurement activities and supervise procurement administration - Use mathematics to investigate and monitor the financial aspects of personal, business and national issues	Core (8 credits) Fundamental (6 credits)
Supervise a project team and implement a range of procedures and systems related to one of the following types of projects: developmental, technical or business	- Supervise a project team - Support the project environment and activities to deliver project objectives	Elective (14 credits) Elective (14 credits)

Matrix 4.6: Exit level outcomes, unit standard titles and learning areas

4.2.4 Identify discrete areas that need to be assessed separately

In cases where certain learning areas may have a “high impact”, or deal with a “high risk” area, it may be necessary to design discrete, separate assessment (SAQA, 2003: 64). In other cases, it may not be possible to provide sufficient evidence of applied competence in an integrated assessment. In such cases, these areas will be assessed separately. In this example of the *National Certificate: Generic Project Management*, the mathematical unit standards may need additional and separate assessment as do the language and communication unit standards. Some of the unit standards which are not included in the above matrix include the following:

Unit standard titles	Fundamental, Core or Elective learning areas
Apply knowledge of statistics and probability to critically interrogate and effectively communicate findings	Fundamental (6 credits)
Measure, estimate and calculate physical quantities and explore, critique and prove geometrical relationships in 2 and 3 dimensional space	Fundamental (4 credits)
Engage in sustained oral communication and evaluate spoken texts	Fundamental (5 credits)
Read, analyse and respond to a variety of texts	Fundamental (5 credits)
Write for a range of contexts	Fundamental (5 credits)

Table 4.3: Unit standards to be assessed separately

4.2.5 Identify ways to facilitate integrated teaching and learning in areas where applied competence will be assessed

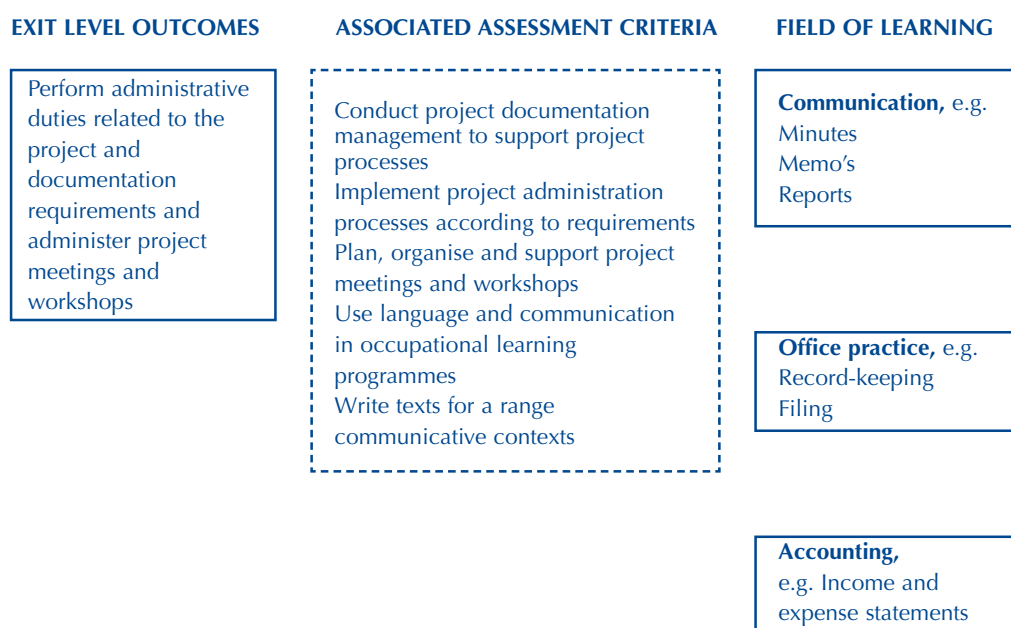


Figure 4.5: Opportunities for inter-disciplinary integrated teaching and learning

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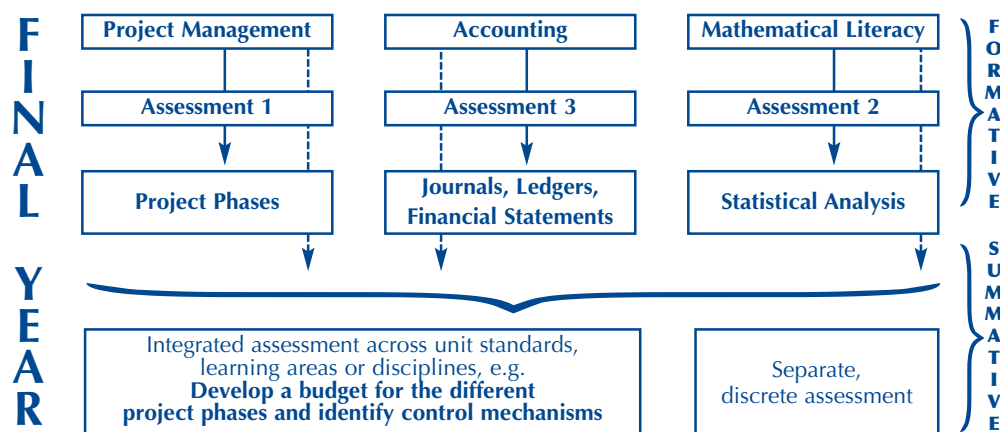


Figure 4.6: Sequencing assessment activities

4.2.7 Sequence assessment in accordance with the assessment plan

(See also Figures 3.4 and 3.5).

4.2.8 Design integrated assessment instruments

The following assessment will be conducted over a period of a few months. However, there are distinct stages in the assessment, which could be both formative and summative when the project is completed.

Identify a project that you will supervise in your work environment.

i. Develop a project plan that includes:

- Definition of scope
- Identification of resources required (human, financial, infrastructural)
- Identification of risks
- Monitoring and evaluation tools

ii. Implement the project and describe:

- The project life cycle phases
- The project team's performance
- The procurement procedures and budget control
- The documentation and administrative requirements
- Corrective action to keep the project on track and/or to improve quality of output

iii. Develop a report to conclude the project, including:

- The outcome and benefits of the project
- The budget and timelines of the project
- The review and evaluation of the process
- The way forward on completion of the project

The different elements of the assessment can be placed in a matrix to test the coverage of the exit level outcomes, the unit standard titles and learning areas, as follows:

Highlighted word/phrase	Exit level outcomes	Unit Standard title	Credits
Supervise	Supervise a project team and implement a range of procedures and systems related to the project	- Supervise a project team - Support the project environment and activities to deliver project objective	14 14
Scope	Contribute and provide assistance to a project's scope, life cycle activities and the effective execution of the project plan by applying the correct range of project management tools and ensuring project work is carried out according to plan	- Contribute to project initiation, scope definition and scope change control - Schedule project activities to facilitate effective project execution	9 8
Resources		Participate in the estimation and preparation of cost budgets for an element of work and monitor and control actual cost against budget	6
Risks and Corrective action	Support the implementation of the project plan in response to outcomes evaluated and assessed and provide related inputs to keep the project on track	Contribute to the management of project risk within field of personal expertise	5
		Identify, organise and coordinate project life cycle phases for control purposes	5
		Identify, suggest and implement corrective actions to improve quality	6
		Monitor, evaluate and communicate project schedules	4
		Schedule project activities to facilitate effective project execution	8
Monitoring, review and evaluation	Support the implementation of the project plan in response to outcomes evaluated and assessed and provide related inputs to keep the project on track	- Monitor, evaluate and communicate project schedules - Evaluate and improve the project team's performance	4 8
Project phases		Identify, organise and co-ordinate project life cycles phases for control purpose	6
Project team performance		Evaluate and improve the project team's performance	8
Procurement	Perform procurement duties related to the project undertaken	Fulfil procurement activities and supervise procurement administration	8
		Use mathematics to investigate and monitor the financial aspects of personal, business and national issues	6
Budget	Contribute to project financial management issues related to cost budgets for an element of work	- Participate in the estimation and preparation of cost budgets for an element of work and monitor and control actual cost against budget - Use mathematics to investigate and monitor the financial aspects of personal, business and national issues	
Documentation and administration	Perform administrative duties related to the project and documentation requirements and administer project meetings and workshops	Conduct project documentation management to support project processes	6
		Implement project administration processes according to requirements	5
		Plan, organise and support project meetings and workshops	4
		Use language and communication in occupational learning programmes	5
		Write texts for a range of communicative contexts	5
Report		Interpret and use information from texts	5
		Use language and communication in occupational learning programmes	5
		Write texts for a range of communicative contexts	5

Matrix 4.7: Coverage of outcomes by the integrated assessment instrument

EXAMPLES OF INTEGRATED ASSESSMENT APPROACHES

4.2.9 Review the process, instruments and application

The final step is a standard step as part of the internal moderation of assessment results, the quality assurance of the assessment process, including the quality assurance of assessor practice, and the review of the assessment instrument for appropriateness and effectiveness.

CONCLUSION

It is not possible in a publication where the generic developments of integrated assessment approaches are proposed, to explore all the applications of the concept. Nevertheless, it is hoped that the guidelines provided will assist education and training practitioners to make a start and to refine the approach in practice. The guidelines and examples should be seen only as possible exemplars and should not be considered as prescriptive or final. They should be seen rather as an important starting point for discussion and debate.

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