

# SECTION 4

## 4.1 Introduction

Assessment is a continuous planned process of identifying, gathering and interpreting information about the performance of learners, using various forms of measurement. It involves four steps:

- generating and collecting evidence of achievement;
- evaluating this evidence;
- recording the findings; and
- using this information to understand and thereby assist the learner's development in order to improve the process of learning and teaching.

Assessment should be both informal (Assessment for Learning) and formal (Assessment of Learning). In both cases, regular feedback of learning experience is given.

## 4.2 Informal or Daily assessment

Assessment for learning has the purpose of continuously collecting information on a learner's achievement that can be used to improve their learning.

Informal assessment is a daily monitoring of the learners' progress. This is done through observations, discussions, practical demonstrations, class work / homework exercises, learner-teacher conferences, informal classroom interactions, etc. Informal assessment may be as simple as stopping during the lesson to observe learners or to discuss with learners how learning is progressing. Informal assessments are used to inform planning for teaching, but need not be recorded. It should not be seen as separate from learning activities taking place in the classroom. Learners or teachers can mark these assessment tasks.

Self-assessment and peer assessment actively involves learners in assessment. This is important as it allows learners to learn from and reflect on their own performance. The results of the informal daily assessment tasks are not formally recorded, unless the teacher wishes to do so. The results of daily assessment tasks are not taken into account for promotion and certification purposes.

## 4.3 Formal Assessment

All assessment tasks that make up a formal programme of assessment for the year are regarded as formal assessment to record for progression and certification purposes. The formal assessment tasks are subject to moderation for the purpose of quality assurance.

Formal assessment provides teachers with a systematic way of evaluating how well learners are progressing in a grade and in a particular subject. Examples of formal assessments include tests, examinations, practical tasks, projects, oral presentations, demonstrations, performances, etc. Formal assessment tasks form part of a yearlong formal Programme of Assessment in each grade and subject.

Because of the practical nature of the subject Agricultural Management Practices, some of the practical tasks should be observed and assessed by the teacher while the learner performs the skills.

In Grades 10 and 11, all assessment tasks are assessed internally. Of the seven tasks, six tasks (which are completed during the school year) comprise 25% of the total mark for Agricultural Management Practices. The seventh task is the end-of-year assessment component, which includes two parts: a practical assessment task (PAT) and a written theory paper. Together, these two parts make up the remaining 75%. This task is set and marked internally and moderated externally.

In Grade 12 the formal assessment comprises 25% of the total mark for certification; it is set and marked internally and moderated externally. The remaining 75% of the final mark for certification is set, marked and moderated externally.

In Grade 12 five tasks are completed during the school year and make up 25% of the total mark for Agricultural Management Practices. The end-of-year assessment component has two parts: a practical assessment task and a written theory paper. Together, these two parts make up the remaining 75% of the total mark for this subject.

The forms of assessment used should be age and developmental level appropriate. The design of these tasks should cover the content of the subject and include a variety of tasks designed to achieve the objectives of the subject.

Formal assessments must cater for a range of cognitive levels and abilities of learners as shown below.

The table below suggests how levels of complexity can be addressed in the setting of examination questions:

Categories of complexity	Description of categories	Some examples	Weighting
Knowledge	Merely assessing the recall of basic knowledge	Give labels, list, name, state or identify functions, recognize concepts, processes, mechanisms, etc.	± 40%
Comprehension and application	More than recall of facts including understanding and insight into routine and familiar	Describe or explain concepts, classify, processes, mechanisms; Make direct deductions from data given; do calculations, etc.	± 40%
	Application of components and systems to new, novel or familiar and unfamiliar situations	Interpret data; explain adaptations or environmental factors influencing effectiveness; draw flow charts or mind maps to illustrate processes or mechanisms; constructing tables and graphs to organize and present data; draw diagrams to investigate concepts; communicate findings and applying formulas	
Analysis, Synthesis and Evaluation	Analysis, synthesis and evaluation of data against given criteria	Problem solving; formulate a hypothesis; design experiments/ investigations; analyse; predict; argue and evaluate	±20%
<b>TOTAL</b>			<b>100%</b>

**4.4.3. Degrees of difficulty for examinations/test questions**

**Other factors besides the type of cognitive demand affect the degree of difficulty of examination/test questions.** We know this because questions that align to a particular type of cognitive demand are not always as difficult as other questions that align to the same cognitive demand. For example:

- a recall question that asks students to recall an abstract theory, or complex content is often much more difficult to accomplish than one which asks candidates to recall a simple fact (i.e. differences in content difficulty).
- a question that requires recalling an ordered sequence of events and which entails writing a few sentences is generally easier than one which involves the same type of cognitive demand but entails writing a whole essay (i.e. differences in ‘writing difficulty’).
- literal comprehension of source material comprising a simple contemporary magazine article is generally easier than literal comprehension of a classical work because of differences in the content, vocabulary, sentence and organisational structure, register, diction, literary techniques, abstractness of ideas and imagery, and background knowledge required (i.e. differences in ‘reading difficulty’).

**In addition** to identifying the **type of cognitive demand** made in each examination/test question, examiners are asked to use their knowledge of the subject, their experience of teaching it and marking and/or moderation experience to make judgments about whether each examination/test question is easy, moderately difficult, difficult, or very difficult for the average learner in the grade.

To judge the level of difficulty of each examination/test question, you need to consider both the demands that each question makes on the cognitive schema of an average learner and the intrinsic difficulty of the question or task. To make this judgment, you need to identify where the difficulty or ease in a particular question resides.

1	2	3	4
<b>Easy</b> for the average learner to answer.	<b>Moderately</b> challenging for the average learner to answer.	<b>Difficult</b> for the average learner to answer.	<b>Very difficult</b> for the average learner to answer. The skills and knowledge required to answer the question allows for level 7 learners (extremely high-achieving/ability learners) to be discriminated from other high ability/proficiency learners.

**No weightings** are allocated to the degrees of difficulty. Examiners should analyse the items in their papers to ensure the paper is **not too easy** or **too difficult** even if the cognitive demand of the paper is according to the standard.

#### 4.4 Programme of Assessment

The Programme of Assessment is designed to spread formal assessment tasks in all subjects in a school throughout a term.

##### 4.4.1 Grades 10 and 11

###### Formal assessment: Grades 10 and 11 (Six tasks)

Term 1	Term 2	Term 3	Term 4: Promotion Mark
1. <b>Assignment</b> 25% 2. Control test 75%	3 Mid-year examination 100 %	4 Control test 75%	<b>SBA</b> Term 1:100 Term 2:100 Term 3:100  <b>Total SBA: <math>300 \div 12 = 25</math></b>  <b>(5) PAT</b> Management Overview: 20 Practical Activities: 50 Management Test: <b>20</b> Time Register: <b>10</b> <b>Total PAT: <math>100 \div 4 = 25</math></b> <b>(6) Examination</b> <b>Total: <math>200 \div 4 = 50</math></b>
<b>100</b>	<b>100</b>	<b>100</b>	<b>Final mark: 100</b>

##### 4.4.2 Grade 12

###### Formal assessment: Grade 12 (Six Tasks)

Term 1	Term 2	Term 3	Certification Mark
1. <b>Assignment - 25%</b> 2 Control test - 75%	3. Mid-year examination 100%	4. Trial examination 100%	<b>SBA</b> Term1:100 Term 2: 100 Term 3:100  <b>Total SBA: <math>300 \div 12 = 25</math></b>  <b>(5) PAT</b> Management Overview: 20 Practical Activities: 50 Management Test: <b>20</b> Time Register: <b>10</b>  <b>Total PAT: <math>100 \div 4 = 25</math></b>  <b>(6) External Examination:</b> <b>Total <math>200 \div 4 = 50</math></b>
<b>100</b>	<b>100</b>	<b>100</b>	<b>Total certification Mark: 100</b>

Certification Mark for Grade 12		
SBA (25%)	PAT (25 %)	End-of-year assessment (50%)
Term 1: 100	Practical assessment task: 100	End-of-year examination: 200
Term 2: 100		
Term 3: 100		
<b>100</b>	<b>100</b>	<b>200</b>
<input type="checkbox"/> Internally set <input type="checkbox"/> Internally marked <input type="checkbox"/> Externally moderated <input type="checkbox"/> Recorded on SASAMS SBA mark sheet provided by the provincial assessment body	<input type="checkbox"/> Internally set <input type="checkbox"/> Internally marked <input type="checkbox"/> Externally moderated <input type="checkbox"/> Recorded on SASAMS marksheet provided by the provincial assessment body	<input type="checkbox"/> Externally set <input type="checkbox"/> Externally marked <input type="checkbox"/> Externally moderated <input type="checkbox"/> Externally captured <input type="checkbox"/> Recorded on SASAMS marksheet provided by the provincial assessment body

#### 4.4.3 Assignments Tasks

Grade 10 to 12 each have a minimum of 1 assignment in term 1

Grade 10	Grade 11	Grade 12
<b>Assignments could</b> be designed from the following: <ul style="list-style-type: none"> <li><input type="checkbox"/> crop production</li> <li><input type="checkbox"/> crop management</li> <li><input type="checkbox"/> soil and water management</li> <li><input type="checkbox"/> animal production</li> <li><input type="checkbox"/> management.</li> </ul>	<b>Assignments could</b> be designed from the following content: <ul style="list-style-type: none"> <li><input type="checkbox"/> crop management;</li> <li><input type="checkbox"/> soil and water management;</li> <li><input type="checkbox"/> animal production;</li> <li><input type="checkbox"/> animal management</li> <li><input type="checkbox"/> fertiliser management and application.</li> </ul>	<b>Assignments could</b> be designed from the following: <ul style="list-style-type: none"> <li><input type="checkbox"/> farm planning</li> <li><input type="checkbox"/> recording</li> <li><input type="checkbox"/> product harvesting</li> <li><input type="checkbox"/> marketing</li> <li><input type="checkbox"/> value adding</li> <li><input type="checkbox"/> processing</li> <li><input type="checkbox"/> packing and distribution.</li> </ul>

Assignments should include both the planning and application of agricultural management skills. These assignments are based on activities (such as research, investigations and projects) and should focus on the particular crop and animal production enterprises that are practiced at a school (e.g. viticulture, livestock production and the manufacturing of dairy products etc.).

#### 4.4.4 Control Tests

- A test in the programme of assessment is not made up of several smaller tests. Each test should cover a substantial amount of content and should be set for **60 -90** minutes each and a mark allocation of count a minimum of **75-100** marks.
- A test should include management principles and practices, concepts, processes, technology, systems, production principles, equipment and safety procedures that are relevant to various production enterprises.
- Each task, test and examination should cater for a range of cognitive levels and abilities of learners.

#### 4.4.5 Examinations

##### General requirements of examination papers

Examination papers should consist of:

##### 1. Shorter questions

This is normally section A or question one of the examination. Short questions should be set to have one or two marks per question.

The different types of short questions are:

- multiple-choice questions
- matching type (column A and column B) questions
- one word/term questions
- true or false questions / change statement to make it true.

##### 2. Longer questions

This is normally section B, from question two onwards, and should consist of various types of questions on different sections of the content that are linked to the production enterprises in each agri-ecological region that assesses different skills. Each question should be subdivided and can include different types of questions. The following are examples:

- questions with short answers (even one word);
- questions with longer answers (one sentence to one or more paragraphs); and
- drawings of graphs, tables, diagrams, etc.

##### Grade 10 and Grade 11 examinations

The mid-year and end-of-year examinations for Grades 10 and 11 should consist of one paper and count 200 marks.

The suggested duration of the paper is 3 hours for Grades 10 and 11. All the questions are compulsory.

	Grade	Mid-year examination	End-of-year examination
<b>Duration</b>	10	2 hours	3 hours
	11	2 hours	3 hours
<b>Marks</b>	10	150	200
	11	150	200

**Grade 10 Examinations**

Duration of Paper: 3 hours			
Production Enterprise	Shorter Questions	Longer Questions	Total Marks
Section A	50		50
Section B		3 x 50 marks	150
<b>Total Marks</b>	<b>50</b>	<b>150</b>	<b>200</b>

**Grade 11 Examinations**

Duration of Paper 3 hours			
Production enterprise	Shorter questions	Longer questions	Total marks
Section A	50		50
Section B (3 questions)		3 x 50 marks	150
<b>Total Marks</b>	<b>50</b>	<b>150</b>	<b>200</b>

**Grade 12 examinations**

- The Grade 12 examination paper focuses on generic enterprises that are covered by all schools irrespective of their agro-ecological area.
- The mid-year examination for Grade 12 should consist of one paper with a **mark allocation of 200** marks. The suggested duration of the end of the year examination paper is three hours.
- The trial examination should almost resemble the end-of-year examination in terms of the layout of the paper, the content that is covered and the questioning style. This paper should also be written in three hours **with a mark allocation of 200** marks.
- The end-of-year examination is a written paper, which is set and moderated externally. It accounts for 50% of the marks for assessment. The external examination for Grade 12 should consist of one paper, which has a total of 200 marks. The duration of the paper should be three hours.

Duration of the Paper 3 hours			
Production Enterprise	Shorter questions	Longer questions	Total Marks
Section A	50 marks		50
Section B (3 questions)		3 x 50 marks	150
<b>Total Marks</b>	<b>50</b>	<b>150</b>	<b>200</b>

**4.4.6 Practical Assessment Task of Agricultural Management Practices(PAT)**

1. The aim of the Practical Assessment Task for Agricultural Management Practices is to assess the management, entrepreneurial, research, marketing, operational and technical skills of learners in the production enterprises to which they are exposed. The context in which the subject is offered includes a wide range of different production systems, production enterprises, management approaches and ecological differences between the different regions of the country.
2. The PAT has to allow for this wide range of possible approaches and applications. PAT guidelines should therefore be provided to help in standardising the wide variety of possibilities - which is possible in the subject Agricultural Management Practices.

3. The PAT will show progression in complexity, content and context from Grade 10 to Grade 12.
4. The PAT (Grades 10 -12) consists of the following components:
  - A Management overview (production planning) **of an enterprise at a school;**
  - Relevant practical tasks, which are comprehensively assessed **(internally or externally)**
  - Management test **(case studies/scenario's and content in management overview and practical's);**
  - Journal of hours/time** spent in a practical situation or production enterprise.

#### 4.4.6 Final mark

The final mark of the PAT is linked to the following domains:

Domain	Mark
Management aspects (affective domain)	40
Practical activities (psychomotor domain and cognitive domain)	60
<b>Total Marks</b>	<b>100</b>

The assessment tool for this activity can be a checklist or a rubric.

#### 4.5 Recording and Reporting

Recording is a process in which the teacher documents the level of a learner's performance in a specific assessment task. It indicates learner progress towards the achievement of the knowledge as prescribed in the Curriculum and Assessment Policy Statements. Records of learner performance should provide evidence of the learner's conceptual progression within a grade and his or her readiness to progress or being promoted to the next grade. Records of learner performance should also be used to verify the progress made by teachers and learners in the teaching and learning process.

Reporting is a process of communicating learner performance to learners, parents, schools, and other stakeholders. Learner performance can be reported in a number of ways. These include report cards, parents' meetings, school visitation days, parent-teacher conferences, phone calls, letters, class or school newsletters, etc. Teachers in all grades report in percentages against the subject. Seven levels of competence have been described for each subject listed for Grades R-12. The various achievement levels and their corresponding percentage bands are as shown in the table below.

## AGRICULTURAL MANAGEMENT PRACTICES GRADES 10-12

### Codes and Percentages for Recording and Reporting

Rating Code	Description of Competence	Percentage
7	Outstanding achievement	80 - 100
6	Meritorious achievement	70 - 79
5	Substantial achievement	60 - 69
4	Adequate achievement	50 - 59
3	Moderate achievement	40 - 49
2	Elementary achievement	30 - 39
1	Not achieved	0 - 29

Teachers will record actual marks against the task by using a record sheet, and report percentages against the subject on the learners' report cards.

#### 4.6 Moderation of Assessment

Moderation refers to the process that ensures that the assessment tasks are fair, valid and reliable. Moderation should be implemented at school, district, provincial and national levels. Comprehensive and appropriate moderation practices must be in place for the quality assurance of all subject assessments.

#### 4.7 General

This document should be read in conjunction with:

**4.7.1** *National policy pertaining to the programme and promotion requirements of the National Curriculum Statement Grades R-12;* and

**4.7.2** The policy document, *National Protocol for Assessment Grades R-12.*