



Province of the
EASTERN CAPE
DEPARTMENT OF EDUCATION

Provincial CASS Guidelines

GRADE 10-12

2008

AGRICULTURAL TECHNOLOGY

Siyasebenzisana • Working Together • Samewerking

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1. INTRODUCTION TO ASSESSMENT IN AGRICULTURAL TECHNOLOGY

This document is intended to guide Subject Advisors and Teachers in the management and implementation of Assessment in Agricultural Technology. It must be read in conjunction with the National Subject Assessment Guideline (SAG) 2007 and 2008. Where differences in this guideline are noted, the National Policy should take precedent. The aim is to determine the competencies of learners in scientific inquiry, problem solving, critical thinking, construction and application of knowledge relevant to Agricultural Technology. Assessment in Agricultural Technology is driven by the four **Learning Outcomes (LO`s)** through the relevant **Assessment Standards (AS)**. When the Assessment Standards are achieved, then the relevant Learning Outcomes will be considered achieved. The Assessment Standards can be attained through a variety of assessment tasks.

2 CONTINUOUS ASSESSMENT(CASS)

Continuous Assessment (CASS) involves assessing activities that are undertaken throughout the year, using various kinds of assessment forms, methods and tools. In Grades 10 – 12 continuous assessment comprises two different but related activities: **informal Daily** assessment and a **formal** Programme of Assessment.

Continuous assessment (CASS) through informal daily assessment and the formal Programme of Assessment should be used to:

- Develop learners' knowledge, skills and values
- Assess learners' strengths and weaknesses
- Provide additional support to learners
- Motivate and encourage learners

2.1 DAILY ASSESSMENT IN AGRICULTURAL TECHNOLOGY

Daily assessment in Agricultural Technology provides learners with multiple opportunities to improve and master their scientific inquiry, problem solving, critical thinking and application of knowledge competencies before being assessed in these competencies in the Programme of Assessment. Therefore daily assessment is developmental in nature and a variety of assessment tasks can be used to develop learners' Agricultural Technology

competencies e.g. conceptual design; problem solving; practical investigations, enhance manipulation of apparatus, accurate measuring & observation skills.

Other examples of assessment tasks are: class tests, practical, drawing and interpretation of graphs, calculations, translation activities, analysis and interpretation of different forms of data. Individual learners, groups of learners or the teacher can mark these assessment tasks. Self-peer and group assessment actively involve learners in assessment.

As daily assessment tasks are not used for a promotion mark, qualitative, analytical, holistical rubrics, checklists and rating scales can be used to monitor learner progress.

2.2 ASSESSMENT IN GRADE 10 & 11

2.3 PROGRAMME OF ASSESSMENT IN GRADES 10 AND 11

The Programme of Assessment for Agricultural Technology in Grades 10 and 11 consists of **seven** tasks which are **internally assessed**. Of the seven tasks, the six tasks which are completed during the school year make up 25% of the total mark for Agricultural Technology, while the end-of-year examination is the seventh task and makes up the remaining 75%, and it includes a Practical Assessment Task (PAT)

PROGRAMME OF ASSESSMENT (400 marks)		
Assessment tasks	End of year Assessment	
25% (100) marks	75% 300(marks) = 100%	
	PAT	EXAM PAPER
	25% (100)	50% (200) marks
2 tests 1 exam 2 practical tasks 1 research task	Design project LO4 <ul style="list-style-type: none"> • Portfolio 50 • Products 50 	<ul style="list-style-type: none"> • Written exam • Main focus LO3

The programme of Assessment comprises:

- Two tests: term 1 and term 3
- Mid year exam
- Two practical tasks: term 2 and term 3
- One research tasks : term 1
- Final exam which includes PAT and written exams

2.4 Examples of assessment tasks

Tests that should last 60 minutes and count a **minimum** of 50 marks.

Practical tasks should include both **planning and development**. These tasks should be based on real practical activities such as projects, simulation, modeling, fabrication, manufacturing and demonstration.

Research tasks that could include a case study, which is used as a basis for questions, investigations, interpretation and conclusion.

Grade	Content
Grade 10	<ul style="list-style-type: none">• Communication systems and sources of Agricultural information• Different types of hazardous substances used in Agricultural sector• Types of irrigation systems for a particular area• Types of fences for different purposes
Grade 11	<ul style="list-style-type: none">• Safety in the work place• Fire control• The calibration of a specialized tool

Practical Assessment Tasks

Practical Assessment Task (100) but counts 25%

The 100 marks is broken into 50 marks for a designed portfolio and the other 50 marks for the finished product

In grade 10 and 11, it is **internally** set, assessed and moderated, by means of a rubric. The practical tasks must include evidence of the development of the product, that is:

- The planning process
- The knowledge and skills accumulated in the process
- The technological process followed
- The materials used
- The safety and environmental aspects considered
- The calculations used- if applicable, sketches or diagrams
- The starting time and ending time- how long it took to complete from start to finish
- The investigations or research undertaken, and
- Any other information that is relevant to the project

2.5 ASSESSMENT IN GRADE 12

In Grade 12, Assessment consists of two components; a Programme of Assessment which makes up **25%** of the total mark for Agricultural Technology and external assessment which makes up the remaining **75%**. The Programme of Assessment for Agricultural Technology comprises six tasks which are internally assessed . Assessment Task and a written theory paper. Together these two tasks make up the remaining 75%.

Programme of Assessment (100) marks	External Assessment (300)	
Assessment Tasks	External Assessment Tasks	
25% (100)	75% (300) marks =100%	
2 tests 2 exams (June & Trial) 1 practical task 1 research task	PAT 25% (100) marks	EXAM 50% (200) marks PAPER
	<ul style="list-style-type: none"> • Portfolio (50) • Products (50) 	<ul style="list-style-type: none"> • Exam LO1- 4 • Main focus LO3

The annual assessment plan comprises:

- Two tests (first and third term)
- Two written examinations (mid-year and trial)
- One practical task (term 2)
- One research task (term 1)
- The external assessment task (which includes a Practical Assessment Task and a written examination)

Tests that should last, at least 60 minutes and count a minimum of 50 marks

Practical tasks should include both **planning and development**. These tasks should be based on real practical activities such as projects, simulation, modeling, fabrication, manufacturing and demonstration.

Research tasks that could include a case study, which is used as a basis for questions, investigations, interpretation and conclusion.

Grade	Content
Grade 12	<ul style="list-style-type: none"> • Alternative energy sources used in agriculture. • Electrical fences • Possible correct irrigation system for a particular area (including type of crop, topography and contours, erosion, ground water and contamination).

2.6 Examinations

The mid-year and trial exam for grade 12 should consist of one paper of 6 questions and will count 200 marks, and the duration of the paper is 3 hours.

Practical Assessment Tasks

Practical Assessment Task (100) but counts 25%

The 100 marks is broken into 50 marks for a designed portfolio and the other 50 marks for the finished product

The Practical Assessment Tasks in grade 12 is **externally** set, assessed and moderated, by means of a rubric. The practical tasks must include evidence of the development of the product, that is:

- The planning process
- The knowledge and skills accumulated in the process
- The technological process followed
- The materials used
- The safety and environmental aspects considered
- The calculations used- if applicable, sketches or diagrams
- The starting time and ending time- how long it took to complete from start to finish
- The investigations or research undertaken, and
- Any other information that is relevant to the project

External examinations

The external exam for grade 12 should consist of one paper of 6 questions and will count 200 marks, and the duration of the paper is 3 hours. All the questions are compulsory. Exam papers should test the knowledge and skills covered in Agricultural Technology Learning Outcomes 1-4

Examinations guidelines

General remarks

- These guidelines are applicable to grade 12
- Integration of all Learning Outcomes 1–4 must be reflected in the questions
- The emphasis of the exam paper will be on the 9 Assessment Standard of LO 3
- The applicable COs and the Assessment Standards are infused and can be used as contexts for formulating questions in the theory papers.

Specifications

- One paper : 3 hours : 200 marks
- 15 multiple choice questions with value of 45 marks of the total marks (200)
- All questions are compulsory
- Sketches must be neat
- All calculations and units must be indicated
- The questions will not necessarily count for the same marks, as each section of the work has a different weighting

Suggested exam paper format

Question	AS	Concepts covered in LO 3	Marks
Q 1	1-9	Multiple choice questions can cover all ASs	45
Q 2	1,2, 8 &9	Materials & Structures	35
Q 3	3	Electrical energy	20
Q 4	1,4,8 &9	Skills and construction processes	35
Q 5	1,5,8&9	Tools, Implements & Equipment	35
Q 6	6,7,8&9	Irrigation and related tools,materials,drawings and measurement and communication	30
		TOTAL	200

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

Categories of complexity	Description of categories	Some examples	Weighting
Basic cognitive skills	Assess basic knowledge	Identify, recognize,	20%
Comprehension	Understanding and insight into familiar situations	Describe, classify, Processes, make, deductions,etc	40%
Application	Application of components and systems to new or unfamiliar situations	Interpreting data, explaining adaptations,etc	25%
Higher intellectual abilities	Analysis of data Synthesis of data Evaluation of data against given criteria	Problem solving,analyse Predict, investigate Argue, evaluate,etc	15%
TOTAL			100%

Teachers must report regularly and timeously to learners and parents on the Progress of learners. Schools will determine the reporting mechanism but it could include written reports, parent-teacher interviews and parent's days. Schools are required to provide written reports to parents once per term on the Programme of Assessment using a formal reporting tool. This report must indicate the percentage achieved in the subject and include the following seven-point scale.

RATING CODE	RATING	MARKS %
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

3. MODERATION OF THE ASSESSMENT TASKS IN THE PROGRAMME OF ASSESSMENT

Moderation of Assessment tasks should take place at three levels.

LEVEL	MODERATION REQUIREMENTS
School	Each task which is to be used as part of the Programme of Assessment should be submitted to the Subject Head for moderation before learners do the task. Teacher portfolios and evidence of learner performance should be moderated regularly by the head of the subject.
Cluster/District	Teacher portfolios and a sample of evidence of learner performance must be moderated during the first three terms. Teachers must bring their portfolios with the tasks prescribed for each moderation session and 10% of learner performance evidence (minimum of 5 learner portfolios) if there are fewer than 50 learners in the school.
Provincial/National	This only applies to Grade 12. Teacher portfolios and a sample of evidence of learner performance must be moderated once a year after the second cluster moderation.



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School Stamp

..... DISTRICT

GRADE 10/11 AGRICULTURAL TECHNOLOGY LEARNER PROGRAMME OF ASSESSMENT 200...

NAME OF SCHOOL		GRADE	
NAME OF LEARNER		CENTRE NUMBER	
NAME OF TEACHER		SIGN	DATE
Assessment Task	Maximum Mark	Mark Obtained	Programme of Assessment mark
			Programme of Assessment maximum mark
Controlled Tests:			
Test 1	100		20
Test 2	100		20
Totals of tests	200		40
Practical Tasks	100		20
Research tasks	100		20
Mid-year exam	200		20
End of year exam	200		
Total marks for Programme of Assessment			100

HOD..... Signature.....Date.....

Principal.....Signature.....Date.....

Moderation panel

NAME IN PRINT	SIGNATURE	DATE
Moderator		
Moderator		
Moderator		
Cluster Leader		
District Official		

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DISTRICT-----

SCHOOL STAMP

GRADE 12 AGRICULTURAL TECHNOLOGY LEARNER PROGRAMME OF ASSESSMENT 200...

NAME OF SCHOOL			EXAMINATION NUMBER	
NAME OF LEARNER			CENTRE NUMBER	
NAME OF TEACHER			SIGN:	DATE:
Assessment Task	Maximum Mark	Mark Obtained	Programme of Assessment mark	Programme of Assessment maximum mark
Controlled Tests:				
Test 1	150			10
Test 2	150			10
Totals of tests	300			20
Practical Tasks	100			20
Research Project	100			20
Total practical Tasks	200			40
Mid-year exam	200			20
Trial exam	200			20
Total of midyear & Trial exams	400			40
Total marks for Programme of Assessment				100

HOD.....Sign.....Date.....

Principal.....Sign.....Date.....

Moderation panel

NAME IN PRINT	SIGNATURE	DATE
Moderator		
Moderator		
Moderator		
Cluster Leader		
District Official		



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COMPOSITE CASS MARK SCHEDULE

GRADE 10/11: SCHOOL.....CENTRE NO.....DATE.....SCHOOL STAMP
 AGRICULTURAL TECHNOLOGY

SURNAME AND INITIALS	TERM 1					TERM 2					TERM 3					Moderated mark			
	Research task	Convert	Test	Convert	Subtotal	Practical task	Convert	Midyear Exam	Convert	Subtotal	Test	Convert	Trial exam	Convert	PAT		Convert	Subtotal	Total
	100	20	50	5	25	100	25	200	10	35	50	5	200	10	100	25	40	100	

Term 1 Educator.....Sign.....HOD.....Sign.....Principal.....Sign.....District official.....Date.....

Term 2 Educator.....Sign.....HOD.....Sign.....Principal.....Sign.....District official.....Date.....

Term 3 Educator.....Sign.....HOD.....Sign.....Principal.....Sign.....District official.....Date.....



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COMPOSITE CASS MARK SCHEDULE

GRADE 12: SCHOOL.....CENTRE NO.....DATE.....SCHOOL STAMP
 AGRICULTURAL TECHNOLOGY

SURNAME AND INITIALS	TERM 1					TERM 2					TERM 3					Moderated mark			
	Research task	Convert	Test	Convert	Subtotal	Practical task	Convert	Midyear Exam	Convert	Subtotal	Test	Convert	Trial exam	Convert	PAT		Convert	Subtotal	Total
	100	20	50	5	25	100	25	200	10	35	50	5	200	10	100	25	40	100	

Term 1 Educator.....Sign.....HOD.....Sign.....Principal.....Sign.....District official.....Date.....

Term 2 Educator.....Sign.....HOD.....Sign.....Principal.....Sign.....District official.....Date.....

Term 3 Educator.....Sign.....HOD.....Sign.....Principal.....Sign.....District official.....Date.....



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**DECLARATION FORM
GRADE 10/11 OR
12 (NATIONAL SENIOR CERTIFICATE)
DECLARATION BY LEARNER**

SCHOOL:.....
NAME OF LEARNER (Surname and Name).....
GRADE.....
EXAMINATION/ID NO.....
CENTRE NUMBER.....
TEACHER'S NAME (Surname and Initials).....

I hereby declare that all pieces of assessment tasks contained in this portfolio (evidence of performance), are my own, original work and that if I have made use of any source, I have acknowledged this.

I agree that if it is determined by the competent authority that I have engaged in any fraudulent activities whatsoever in connection with my Continuous Assessment, I shall forfeit completely the marks gained for this assessment.

CANDIDATE'S SIGNATURE.....DATE.....

As far as I know, the above statement by the candidates is true and I accept that the work submitted belongs to him/her

TEACHER'S SIGNATURE.....DATE.....

