

# TECHNOLOGY SUBJECTS FET CASS DOCUMENT GRADE 10 - 12 2008

Siyasebenzisana • Working Together • Samewerking

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#### INTRODUCTION

Assessment is one of the most important practices within the process of education. In order to gauge learner attainment and to monitor progress of teaching and learning, we need to assess.

Assessment in the National Curriculum Statement is an integral part of teaching and learning. The following issues need to be addressed:

- 1. Develop learners in a holistic manner to achieve the accepted levels of knowledge, skills and values.
- 2. Identify the strengths and weaknesses of **all** learners to:
  - 2.1 Provide support,
  - 2.2 Motivate and encourage.

Therefore, assessment needs to be relevant, ongoing and must cover all aspects of the curriculum programme. The programme of assessment needs to be integrated into daily, weekly and term programmes.

Managing assessment involves three stages: Collecting evidence, recording assessment and reporting. Managing these 3 areas is an ongoing process and is referred to as Continuous Assessment, abbreviated as CASS. Continuous Assessment involves assessing activities that are undertaken throughout the year, using various kinds of assessment forms, methods and tools.

Within the specified Programme of Assessment (other than the seven tasks which are discussed further on) the development of an Assessment Portfolio is compulsory. This consists of an accumulation of specified tasks, articles, samples and information developed and/or gathered to demonstrate the application of skills, knowledge and values in the subject.

### **PORTFOLIOS**

#### 1.1 WHAT IS A PORTFOLIO?

A portfolio is a collection of evidence of a learner's work and is determined by the Subject Assessment Guidelines (SAG).

A variety of tasks are organised in a certain format which will then form the learners' portfolio. It should be freely available in the classroom, so that the learners can work on it whenever they find it necessary to do so. Tasks, which can be included in such a portfolio, include investigation tasks, simulation tasks, small projects, tests and

examinations. These are collected over a period of time and serve a specific purpose.

Portfolios are also defined as ongoing systematic collections of products which represent achievements in the learner's curriculum journey. It shows how the learners have progressed towards achieving a specific Learning Outcome and Assessment standard.

The collection of Portfolio Tasks from the different Learning Outcomes of the Technology curriculum makes the portfolio an instrument for documentation and analysis, serving as a summary of the learner's progress throughout the year. The nature of the Portfolio Tasks are determined by the Subject Assessment Guidelines (SAG).

# The portfolio should include the following:

- A selection of learner's work (done by the learner);
- A selection of the learner's work assessed by the educator;
- The learner's work is to show development and progress over a specific period of time;
- Assessment tasks, which can be used to determine standards between schools and within a system.

# **BENEFITS OF A PORTFOLIO**

- The learners see themselves as being able to create pieces of writing, draw diagrams etc;
- The learners share the responsibility of assessing and reflecting on their own work;
- The educators and parents/caregivers monitor evidence of the learner's development over a period of time;
- The educator and learner integrate learning and assessment;
- It encourages cooperation amongst learners as well as between educators and learners:
- Educators, learners and parents/caregivers are provided with the opportunity to articulate the learning that takes place in the classroom;
- A portfolio is a way of tracking the learner's progress in a multidimensional way.

#### PURPOSE OF THE PORTFOLIO

Portfolios may be used:

- As tools for discussion with peers, educators and parents;
- > To provide evidence of learner competence;
- To complement and reinforce learning;
- As opportunities for learning to demonstrate their skills and understanding;
- As opportunities for learner's to reflect on their work;
- As a means to set future goals;
- As document of a learner's development and growth in ability, attitude and expression;
- As demonstrations of multiple intelligence and cultural diversity;
- As opportunities for learner's to trace the development of their learning;
- As opportunities for learner's to make connections between prior learning and new learning.

#### CONTINUOUS ASSESSMENT

Daily assessment in Technology Subjects:

Daily Assessment Tasks should be planned for teaching and learning activities. Progress should be monitored during learning activities. Informal daily monitoring can take place in different ways, e.g. question and answer sessions; assessment tasks, homework exercises etc.

Self-assessment, peer assessment and group assessment must be used in learner assessment so that teaching and learning can be achieved.

Informal daily assessment should be used by learners to develop their skills, knowledge and values related to the subject. Checklists, and/or verbal/written feedback can assist teachers to counter barriers to learning or poor levels of participation.

The results of these daily assessment tasks are not taken into account for promotion and certification purposes.

# **Programme of Assessment**

A year-long formal Programme of Assessment for each subject and grade should be developed by the teacher. In Grades 10 and 11 the Programme of Assessment consists of tasks undertaken during the school year and an end-of-year examination.

The marks allocated to assessment tasks completed during the school year will be 25%, and the end-of-year assessment mark will be 75% of the total mark. (The 75% is made up of 25% for the Practical Assessment Task and 50% for the final examination)

In Grade 12, the Programme of Assessment consists of tasks undertaken during the school year and counts 25% of the final Grade 12 mark. The other 75% is made up of externally set assessment tasks. (The 75% is made up of 25% for the Practical Assessment Task and 50% for the final examination)

The marks achieved in each assessment task in the formal Programme of Assessment must be recorded and included in formal reports to parents and School Management Teams.

# **ASSESSMENT IN GRADES 10 AND 11**

# **Programme of Assessment in Grades 10 and 11**

The Programme of Assessment for Grades 10 and 11 comprises seven tasks which are internally assessed. The six tasks which are completed during the school year make up 25% of the total mark. The seventh task is the end-of-year assessment which includes a Practical Assessment Task (PAT) and a written theory paper. Together these two tasks make up the remaining 75%.

# PROGRAMME OF ASSESSMENT (400 marks)

ASSESSMENT TASKS	END-OF-YEAR ASSESSMENT			
25% (100 marks)	75% (300 marks)			
	PAT EXAM PAPER			
	25% (100 marks)	50% (200 marks)		
2 tests	Design project	<ul> <li>Written exam LO1-4</li> </ul>		
1 exam (mid-year) 3 practical tasks	L02 and LO4 Portfolio (25) Product/ artifact (75)	Main focus L03		

The Programme of Assessment comprises:

- Two tests (first and third term)
- One midyear examination (written)
- Three practical tasks (one per term in terms 1-3)
- The end-of-year assessment (which includes a Practical Assessment Task completed over 3 terms and a written examination).

**Example of an annual Programme of Assess** (The 75% is made up of 25% for the Practical Assessment Task and 50% for the final examination) **meant for Grades 10 and 11:** 

ASSESSME	NT TASKS	TERM ONE	TERM TWO	TERM THREE	TERM FOUR	% OF FINAL PROMOTION MARK
Tests		1		1		5
Midyear examin (written)	ation		1			5
Practical tasks: Simulations/ Investigations/ Small projects		1	1	1		15
End-of-year	Written examination				1	50
assessment	Practical Assessment Task				1	25

# **Assessment in Grade 12**

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

PROGRAMME OF ASSESSMENT (100 marks)	EXTERNAL ASSESSMENT (300 marks)			
ASSESSMENT TASKS	EXTERNAL ASSE	SSMENT TASKS		
25% (100 marks)	75% (300	) marks)		
	PAT	EXAM PAPER		
2 tests	Design project (main	<ul> <li>Written exam L01-4</li> </ul>		
2 exams (mid-year and trial)	focus L04)	<ul> <li>Main Focus L03</li> </ul>		
2 practical tasks	Portfolio (25)			
	<ul> <li>Product/ artifact (75)</li> </ul>			

Together the Programme of Assessment and the external assessment component make up the annual assessment plan for Grade 12.

The annual assessment plan comprises:

- Two tests (first and third term)
- Two written examinations (midyear and trial)
- Two practical tasks (one per term in terms 1 and 2)
- The external assessment task (which includes a Practical Assessment Task and a written examination)

### **Example of an annual assessment plan for Grade 12:**

ASSESSME	ENT TASKS	TERM ONE	TERM TWO	TERM THREE	TERM FOUR	% OF FINAL PROMOTION MARK
Tests		1		1		5
Examinations (m	idyear and trial)		1	1		10
Practical tasks: Simulations/ Investigations/ Small projects		1	1			10
	Written theory Examination				1	50
External Assessment	Practical Assessment Task			1		25

# Assessment in Grades 10 and 11 Programme of Assessment in Grades 10 and 11

The Programme of Assessment for Engineering Graphics and Design in Grades 10 and 11 comprises seven tasks which are internally assessed. The six tasks which are completed during the school year make up 25% of the total mark for Engineering Graphics and Design. The seventh task is the end-of-year assessment which includes a Practical Assessment Task (PAT) and two written theory papers. Together the Practical Assessment Task and the theory papers make up the remaining 75%.

PROGRAMME OF ASSESSMENT (400 marks)					
ASSESSMENT TASKS	END-OF-YEAR ASSESSMENT				
25% (100 marks)	75% (300 marks)				
	PA	Т	THEORY EXAM PAPERS		
	25% (100	marks)	50% (200 marks)		
2 tests	PAT: Part 1	PAT: Part 2	<ul> <li>Paper 1 (100 marks)</li> </ul>		
1 exam (mid-year)	Design project	CAD	<ul> <li>Paper 2 (100 marks)</li> </ul>		
3 practical assignments	(50 marks)	Drawing task (50 marks)			

# The Programme of Assessment comprises:

- Two tests (first and third term)
- One midyear examination (written)
- Three practical assignments (one per term in terms 1-3)
- The end-of-year assessment task (which includes a Practical Assessment Task and two written examinations)

# **Example of an annual Programme of Assessment for Grades 10 and 11:**

ASSESSI	MENT TASKS	TERM ONE	TERM TWO	TERM THREE	TERM FOUR	% OF FINAL PROMOTION MARK
Tests		1		1		7.5
Midyear exam (written)	ination		1			10
Practical assig Case studies/ Investigation/ Application of		1	1	1		7.5
End-of-year assessment	Written Examination: Paper 1 Paper 2				1	50
	PAT: Part 1 – Design Project Part 2 – CAD drawing				1	25

PROGRAMME OF ASSESSMENT (100 marks)	EXTERNAL ASSESSMENT (300 marks)				
INTERNAL ASSESSMENT TASKS	EXTERNAL ASSESSMENT TASKS				
25% (100 marks)	75% (300 marks)				
		PAT	THEORY EXAM PAPERS		
	25% (1	00 marks)	50% (200 marks)		
2 tests 2 exams (mid-year and trial) 2 practical assignments	PAT: Part 1 Design Project (50 marks)	PAT: Part 2 CAD drawing Task (50 marks)	<ul><li>Paper 1 (100 marks)</li><li>Paper 2 (100 marks)</li></ul>		

Together the Programme of Assessment and the external assessment component make up the annual assessment plan for Grade 12.

The annual assessment plan comprises:

- Two tests (first and third term)
- Two written examinations (midyear and trial)
- Two practical tasks (one per term in terms 1 and 2)
- The external assessment task (which includes a Practical Assessment Task and two written examinations)

# Example of an annual assessment plan for Grade 12:

ASSESSI	MENT TASKS	TERM ONE	TERM TWO	TERM THREE	TERM FOUR	% OF FINAL PROMOTION MARK
Tests		1		1		7.5
Examination (n	nidyear and trial)		1	1		10
Practical assig Case studies/ Investigation/ Application of o		1	1		1	7.5 50
End-of-year assessment	Paper 2				'	30
	Part 1 – Design Project Part 2 – CAD drawing				1	25

# **MODERATION OF ASSESSMENT TASKS**

Moderation is of great importance because it is during this process that the validity, relevancy and quality of the tasks given are checked.

Assessment tasks are selected or identified to demonstrate the level of understanding, knowledge, skills and values. Projects, case studies, research, assignments, examinations and tests are the tools of assessment.

The tasks are pre-moderated and post moderated.



# **MODERATION TOOL**

# CASS MODERATION TOOL FOR FET GRADE 10-12.

DISTRICT	
NAME OF SCHOOL	
TERM AND DATE	
SUBJECT	
NUMBER OF LEARNERS	
NAME OF EDUCATOR	
NAME OF MODERATOR	
DESIGNATION	
4 EDUCATOR ROBTEO	110

1. EDUCATOR PORTFOLIO				
	Yes	No		
Thoroughly bound				
Consolidation form				
Mark sheets				
Index with cross references				
Assessment instruction				
Sections separated with interleaves				
Work Schedule				
Lesson Plans				
Period attendance register				
Assessment tasks				
Activities				
Test and memorandums				
Rubrics				
Simulation exercises				
Mark schedules				
Performance assessment tasks				
Assignments				
Instructions				
Letter of authenticity				
Dates				

# COMMENTS:

2. COMPONENTS OF	NUMBER	REMARKS
CASS		
Daily Assessment Tasks		
Home work ; Assignment; Class work		
etc.		
Safety test, First Aid		
Simulation / Investigation / Projects		
Formal test (term 1 & 3) with		
memoranda		
Common Practical Assessment Tasks		
Common Examination June (Gr		
10,11,12)		
and September (Gr 12) with Memoranda		

3. STANDARD OF	YES	NO	REMARKS
ASSESSMENT TASKS			
Clear instructions			
Format – spread of questions on			
LOs covered			
Mark allocations			
Grading (application, recall)			
Internal moderation done			
Standard acceptable			

4. MARKING	YES	NO	REMARKS
According to realistic criteria			
Marking according to marking grids			
and memo			
Internally moderated			
Marks correctly calculated			
Marks correctly converted to CASS			
form			

5. MASTER FILE	YES	NO	REMARKS
National Protocol on assessment			
Subject Assessment Guidelines			
Learning Program Guidelines			
POLICIES			
Civil Technology			
Mechanical Technology			
Electrical Technology			
Engineering Graphics and Design			
FET Consolidation Form			
Technical Activities			
DOCUMENTS			
National Senior Certificate Policy			
Higher Education Admission			
requirements			
AND			
Year Plan			
Time table			
Minutes of subject meetings			
Analysis of results			
Pace setters			
Work schedules			

6. LEARNERS PORTFOLIOS	GRA	DE 10	0, 11 8	12	2	
Surname & initials	Tests	Mid year Exam	Project Investigation/ Simulations	Trial Exam	PAT	
Top 1.						
2.						
Middle 1.						
2.						
3.						
4.						
Low order 1.						
2.						

7. PAT	Learners		<u> </u>
	YES	NO	
Has every learner got material to develop artifact			
Any progress on the development of artifact			
Artifact done by individual			
Marks recorded			
COMMENTS:			

8. PAT Portfolio	Teachers		Learners		
	YES	NO		YES	NO
Attendance register					
Clear instructions, assessment criteria and memorandum					
Evidence of assessment done according to criteria					
Marks recorded					
COMMENTS:					

9. PRACTICAL TASK (CAD)	Teachers	Learners
	YES / NO	YES / NO
Practical task with assessment criteria and memorandum		
Evidence of practical task completed by the learner		
Evidence of assessment done according to criteria		
Marks recorded		
COMMENTS:		

HIGHLIGHTS	•		
- III GITE GITTO	•		
CHALLENGE	S:		
OTALLETTOL	<u>.                                    </u>		
RECOMMENI	DATIONS:		
I declare that	all information	on on this form is o	correct and moderation was done
properly.			
property.			
	_		
Signature:	Teachers	•	Date:
	Moderator	•	Date:
	Principal	:	Date:
	1 Interpar	•	Date:

# TECHNOLOGY FET PORTFOLIO



District:	
School:	
Name:	
Grade:	
Year:	