Province of the
EASTERN CAPE
DEPARTMENT OF EDUCATION

DIRECTORATE: CURRICULUM FET PROGRAMMES

**PROVINCIAL
SUBJECT IMPROVEMENT PLAN
COMPUTER APPLICATIONS
TECHNOLOGY**

PROVINCIAL SUBJECT IMPROVEMENT PLAN FOR COMPUTER APPLICATIONS TECHNOLOGY

	1. GENERAL INFORMATION	
1.1	NAME OF SUBJECT PLANNER	MR A.L MAKONANO
	DESIGNATION	Deputy Chief Education Specialist : CAT AND IT
1.2	CONTACT DETAILS : Tel: 040 6084570 Cell: 0826948063 Fax: 040 6084390 email:aleopoldmakonano@gmail.com	

	2. INTRODUCTION	
2.1	Purpose of the Provincial Subject Improvement Plan for 2013	• To improve learner performance in Grade 10-12 CAT in the Eastern Cape Province
2.2	How will the Subject Improvement Plan be used?	• To be customized into District and school Subject Improvement plans and be utilized by both Subject advisors and Teachers
2.3	My vision for my subjects for 2013	• To maintain a 100% passes in Computer Applications Technology in 2013 and beyond
2.4	List <u>6</u> achievable/do-able goals set for my subject for the current school year	• All CAT Grade 10 -12 teachers to be fully orientated with CAPS • Ensuring that Grade 10-12teachers implement CAPS policy successfully • All schools offering CAT have access to internet and information management and be able to use social media such as *face book* and *mix it* for learning purposes • To ensure that each learner is updated with latest information through the Provincial and National CAT websites • To ensure that each learner has access to Learner support Material e.g. text book, computer programmes • To ensure that each grade 12 learner has access to internet and email services

2.5	Subject Pass rate pledge for Grade 12 for 2013 in each of the 23 districts	NAME OF DISTRICT	TARGET PASS RATE FOR 2013
		Butterworth	80%
		Cofimvaba	100%
		Cradock	100%
		East London	95%
		Fort Beaufort	80%
		Graaff Reinet	100%
		Grahamstown	100%
		Dutywa	80%
		King William's Town	80%
		Lady Frere	80%
		Libode	90%
		Lusikisiki	90%
		Maluti	100%
		Mbizana	90%
		Mount Frere	80%
		Mount Fletcher	90%
		Mthatha	90%
		Ngcobo	90%
		Port Elizabeth	95%
		Queenstown	95%
		Qumbu	90%
		Sterkspruit	90%
		Uitenhage	90%

3. GENERAL AREAS REQUIRING INTERVENTION (Add to the list if necessary according to the needs of the subject)
3.1	Establishment of Provincial Subject Committee

	Time frame: 11 to 13th of February 2013				

Name	Contact details			Designation
	Cell	Fax	Email	
Mr Makonano A.L	0826948063	0406084394	aleopoldmakonano@gmail.com	Chairperson
Mrs. Felkers	0732685651			Deputy
Mr Thomson H				Secretary
Mr Mohatla	0725897029			Member
Mrs. Hanisi	0731929731			Member
Mr Ngeni	0824612865			Member

3.2 Development of Committee Meeting agendas and reporting tools with timeframes

Provincial Committee meeting dates	Proposed Agenda Items for discussion	Responsibility	Reporting tools	District Committee meeting proposed dates	Proposed Agenda Items for discussion	Responsibility	Reporting tools
11-13 February Provincial	Prescribed content coverage Provincial Election	Subject Planner	Letter of invitation, reports, attendance register	28 Feb	Prescribed content coverage Election	Subject Advisor	Letter of invitation, reports, attendance register
10 - 11 April	Analysis of results Term 1 moderation CAPS Grade 10-12 SBA moderation	Subject Planner	Letter of invitation, reports, attendance register	02 May	Grade 10-12 SBA moderation June Examinations	Subject Advisor	Letter of invitation, reports, attendance register
04-05 Sep	Provincial Umalusi	Subject Planner	Minutes and report.	17-19 September	Discussion of moderators reports	Subject Advisor	Letter of invitation,

	moderation analysis Learner support		Letter of invitation, reports, attendance register		Learner support		reports, attendance register
	25 March to	A + practical course	Subject Planner	Letter of invitation, reports, attendance register	20 March	A + practical course	Subject Advisor	Letter of invitation, reports, attendance register

3.3	List professional development needs for Subject Advisors and Teachers with timeframes
	3.3.1 ICT TRAINING
	3.3.2 Assessor And Moderator Course
	3.3.3 A+ technical Programme
	How will the identified professional development needs be addressed?

ACTIVITY	RESPONSIBILITY	TIMEFRAME
Workshop on questioning skills	Nelson Mandela Metropolitan University	March 2013
Moderation course	Subject Planner	11 – 13 February 2013
Training on CAT practical skills	Subject Planner	11 – 13 February 2013

3.4	List teaching and learning techniques and skills to be enhance
	3.4.1 Question skills
	3.4.2 Note Taking skills
	3.4.3 Essay writing
	How will the teaching and learning methodologies identified be remediated together with timeframes

ACTIVITY	RESPONSIBILITY	TIMEFRAME
Presentation and discussions	Subject Advisor	On-going

3.5	List moderation processes and procedures to be enhanced
	3.5.1. School based moderation skills
	3.5.2.District and SMT on-site support

		3.5.3 Provincial support		
		How will the moderation processes and procedures identified be remediated together with timeframes		
		ACTIVITY	RESPONSIBILITY	TIMEFRAME
		Orientation of new subject advisors	Subject Planner	11 – 13 February and on going
		Workshop on how both school and cluster moderations to be conducted	Subject Planner	11 – 13 February 2013
		Monitoring on site moderation of CAT	Subject Planner	14 – 23 August 2013
		Monitoring of district Moderation	Subject Planner	9 – 26 April 2013 15 – 26 July 2013 8 – 18 October 2012
3.6		List ways in which the interpretation of Policies and Guidelines is to be cascaded to Subject Advisors and teachers with timeframes 3.6.1 Workshops 3.6.2 Meetings 3.6.3Development of Memoranda		
		How will the interpretation of Policies and Guideline be cascaded with timeframes		
		ACTIVITY	RESPONSIBILITY	TIMEFRAME
		Agenda items in the Subject Advisor Indaba	Curriculum planner	25 January 2013
		District workshop and support	Subject Advisor	On going
		Cluster	Subject Advisor	On-Going
3.7		Identify Subject Planning needs (Work Schedule/ Annual Teaching Plan, Lesson Plans and Programme of Assessment) and how these will be accomplished with timeframes 3.7.1 CAPS content 3.7.2 Question Paper Development 3.7.3 Assessment of CAT		
		How will the identified subject planning need be remediated together with timeframes		
		ACTIVITY	RESPONSIBILITY	TIMEFRAME

	Mediation of New CAPS content	Subject Planner	On going
	Development of tasks	Subject Planner	On going
	Workshop on Assessment of CAT	Subject Planner	29 – 31 May 2013

3.8	List classroom practice (questioning techniques, record keeping, discipline etc) to be developed 3.8.1 Remedial Teaching 3.8.2 capturing of Data Electronically and back up 3.8.3 Monitoring of Access learners who use the computer lab and computer resources such as printers etc		
	How will the classroom practice identified be remediated together with timeframes		
	ACTIVITY	RESPONSIBILITY	TIMEFRAME
	Guidance on portfolio arrangement	Subject Advisor	On – going
	Teaching of both Formal and Practicals	Subject Advisor	On going
	Good control of computer Labs	Subject Advisor	On- going
3.9	Problem areas identified in the teaching of content (using SBA moderation reports, examiners reports, analysis of results, question by question analysis of Grade 12 Final examination question papers, memorandum discussion, interviews with chief markers and moderators) 3.9.1 Inadequate coverage of Microsoft Access 3.9.2 Duration of Paper 2 3.9.3 Functions used in programs like MS Access and Excel		
	Suggested remediation for identified problem areas:		
	ACTIVITY	RESPONSIBILITY	TIMEFRAME
	Familiarize learners at an earlier stage	Teachers	3 years
	Learners to be exposed to previous papers	Teachers	3 years
	Practical teaching	Teachers	3 years
3.10	Problem areas identified in the setting of exam question papers and memoranda (using examiners reports, analysis of results, question by question analysis of Grade 12 Final examination question papers, memorandum discussion, interviews with chief markers and moderators)		

	3.10.1 Some questions were favored urban learners who are exposed to ICT world
	3.10.2 Inappropriate mark allocation
	3.10.3 Information Management

Suggested remediation for identified problem areas		
ACTIVITY	RESPONSIBILITY	TIMEFRAME
Discussion on Computer Applications Tech	SES	February
Mediation of National Report on SBA Moderation	SES	February
Internet Access	SES	On-Going

3.11 Problem areas identified in the moderation of School Based Assessment (SBA) using Department of Basic Education Moderation report and the Provincial Moderation Reports

3.11.1 Mark allocation in research projects

3.11.2 Failure to include PAT assessment tools

3.11.3 Design and usage of marking tools/rubric

Suggested remediation of identified problem areas		
ACTIVITY	RESPONSIBILITY	TIMEFRAME
Designing a rubric /marking tool	Subject Advisor	11 -13 February
Discussion on moderation process	Subject Advisor	

3.12 Identify any co-curricular activities related to the subject that will be initiated or continued in 2013 and how information will be cascaded to subject advisors and teachers with timeframes

ACTIVITY	TIMEFRAME	TARGET GROUP	RESPONSIBILITY	METHOD OF ADVOCACY	WHAT WILL THE ACTIVITY ACHIEVE FOR THE SUBJECT?
SACLA National Conference	15 February 2013	Teachers and Subject Advisors	Subject Planner	Conference	Improve learner performance

3.13 Explain how the coverage of curriculum content will be monitored and supported during the academic year with timeframes

ACTIVITY	RESPONSIBILITY	TIMEFRAME

	School Moderation	Subject Advisor	On –Going
	District moderation	Subject Advisor	On-Going
	Provincial moderation	Subject Advisor	On -Going
3.14	Extra LTSM identified for usage 3.14.1 Text books 3.14.3 Websites 3.14.3 internet portal		
3.15	List equipment and resources available 3.15.1 textbooks available in most schools 3.15.2 Avusa newspaper supplement 3.15.3 study guides		

Name of District	No of Learners Level 1	No of Learners Level 2	No of Learners Level 3	No of Learners Level 4	No of Learners Level 5	No of Learners Level 6	No of Learners Level 7	% Pass	
Butterworth	60	54	27	7	1	0	247	59.7	
Cofimvaba	6	33	27	17	6	0	46	93.3	
Cradock	5	15	26	24	7	4	48	93.9	
Dutywa	31	48	21	4	4	2	123	71.2	
East London	69	120	108	103	71	42	620	87.1	
Fort Beaufort	1	1	5	6	6	4	51	95.8	
Graaff Reinet	1	12	21	15	13	11	75	98.7	
Grahams town	5	11	15	7	9	1	83	89.6	
King William's Town	32	100	79	31	13	8	187	88.2	
Lady Frere	7	14	16	13	3	2	32	87.3	
Libode	12	42	34	16	1	0	392	88.6	
Lusikisiki	31	35	7	2	1	0	62	59.2	
Maluti	0	13	11	6	5	0	121	100.0	
Mbizana	5	28	17	5	0	0	70	90.9	
Mount Fletcher	12	34	36	27	14	4	85	90.6	
Mount Frere	1	10	8	6	0	0	88	96.0	
Mthatha	4	17	78	72	32	25	562	98.3	
Ngcobo	24	26	10	2	2	0	21	62.5	
Port Elizabeth	109	288	249	191	146	100	713	90.3	
Queenstown	58	118	90	28	20	6	171	82.0	
Qumbu	6	8	1	0	0	0	96	60.0	
Sterkspruit	25	47	41	12	8	5	42	82.1	
Uitenhage	34	67	98	80	65	47	375	91.7	

Comparison of the % pass rate to other years							
DISTRICT	GRADE	2012	≤ ≥	2011	≤ ≥	2010	Identified reasons for the decline or increase in the % pass rate
Butterworth	12	59.7	≤	64.5	≤	90.5	See section 4 below
Cofimvaba	12	93.3	≤	93.5	≥	79.5	
Cradock	12	93.9	≥	86.5	≤	96.4	
Dutywa	12	71.2	≥	46.4	≤	80.6	
East London	12	87.1	≤	90.8	≤	86.4	
Fort Beaufort	12	95.8	≤	100.0	≥	75.7	
Graaff Reinet	12	98.7	≥	93.8	≤	98.2	
Grahams town	12	89.6	≤	100.0	=	100.0	
King William's Town	12	88.2	≥	81.9	≤	88.4	
Lady Frere	12	87.3	≥	67.6	≤	91.7	
Libode	12	88.6	≥	75.1	≤	93.8	
Lusikisiki	12	59.2	≤	82.6	≤	91.3	
Maluti	12	100.0	≥	75.7	≤	96.0	
Mbizana	12	90.9	≤	93.8	≤	98.7	
Mount Fletcher	12	90.6	≥	86.7	≥	69.9	
Mount Frere	12	96.0	≥	66.0	≥	41.1	
Mthatha	12	98.3	≤	98.4	≥	96.0	
Ngcobo	12	62.5	≤	81.5	≤	100.0	
Port Elizabeth	12	90.3	≤	91.5	≤	93.2	
Queenstown	12	82.0	≥	72.2	≤	89.0	
Qumbu	12	60.0	≥	53.8	≥	43.3	
Sterkspruit	12	82.1	≥	80.3	≤	87.5	
Uitenhage	12	91.7	≤	94.6	≤	97.2	

| | **District intervention strategies** | | | |
	DISTRICT	**INTERVENTION / S**	**TIMEFRAME**	**METHOD / HOW?**
	Butterworth	workshops	End of the 1 term	Two day workshops
	Cofimvaba	Monitoring and support	Two days per term	School visits
	Cradock	Work shops	Once per term	Two days
	East London	Monitoring and support	Two days per term	School visits
	Fort Beaufort	Work shops	Once per term	Two days
	Graaff Reinet	Monitoring and support	Two days per term	School visits
	Grahamstown	Work shops	Once per term	Two days
	Dutywa	Work shops	Once per term	Two days
	King William's Town	Work shops	Once per term	Two days
	Lady Frere	Work shops	Once per term	Two days
	Libode	Work shops	Once per term	Two days
	Lusikisiki	Monitoring and support	Two days per term	School visits
	Maluti	Work shops	Once per term	Two days
	Mbizana	Work shops	Once per term	Two days
	Mount Frere	Monitoring and support	Two days per term	School visits
	Mount Fletcher	Work shops	Once per term	Two days
	Mthatha	Work shops	Once per term	Two days
	Ngcobo	Work shops	Once per term	Two days
	Port Elizabeth	Monitoring and support	Two days per term	School visits
	Queenstown	Monitoring and support	Two days per term	School visits
	Qumbu	Work shops	Once per term	Two days
	Sterkspruit	Monitoring and support	Two days per term	School visits
	Uitenhage	Monitoring and support	Two days per term	School visits
4.3	Questions in which the learners did not answer successfully			
	Question 7			
4.4	Suggested reasons (e.g. content was not taught, content not assessed during SBA)			
	Content to be taught as from grade 10 to 12 because most teachers are unable to teach it fully.			

4.5	Remedial action in identified challenge areas.	
	Database training workshop for five days	
4.6	Questions in which learners did well	
	Question 1 and 2 Microsoft word and Excel	
4.7	Suggested reasons	
	Most teachers are confidant to teach MS Word and Excel	
4.8	How can these reasons be translated into good practice for other areas of the curriculum?	
	Teachers needs to expose learners in other programs earlier in grade 11	
4.9	Identified content which appeared in the exam paper which was not taught during the year in certain schools and districts. Why?	
	Database because its long and some teachers are not competent enough to teach Microsoft Access	
4.10	Implications of the coverage non-coverage of content during the academic year	
	Learners are loosing more marks which could have boosted their performance.	
4.11	How were the distribution of the three cognitive levels distributed across the range of questions in the Grade 11 and 12 final exam papers?	
	All cognitive levels were represented adequately	
4.12	How can this information in terms of the three cognitive levels determine remedial lesson planning?	
	By reading most difficult questions, Please read the attached information	

5. OUTLINE OF INTERVENTIONS FOCUSSING ON THREE IMPACT AREAS

	AREA	ACTIVITY	RESPONSIBILITY	TIMEFRAME
1	PLANNING	Computer Applications Technology is an integrated science, and it must be seen within the holistic field of science framework: such as Mathmatics, Physical/Life Sciences Expose learners to broad career opportunities in Computer world as an Industry e.g. Banking, Programmer, Information Technology and Technicians etc CAT plan include holding subject meetings to based on 2012 Grade 10,11-12 analysis of results and grade 9(ANA) with emphasis on addressing the problems identified in 2012, viz: Giving more attention to informal tasks to improve knowledge, skills and values in learning. Tasks must address the LOs and ASs in order to prepare learners for the formal tasks,(where applicable) Completing Work schedules 10-12 within allocated time (end of August) Designing of lesson plans and lesson preparation that correlate with the work schedules for 2013. Twinning arrangement/sharing good practices Recognition and celebration of excellence in the subject (level 6 & 7) Integration with ICT to enhance teaching and learning Quantifiable targets to be achieved every year 83% Identifying schools without teachers and taking remedial action. Ensuring that all schools have resources e.g. every learner has at least one a working computer. Retrieval policy of text books must be in place and fully utilized and factor in parental involvement Conducting regular content gap workshops on week–ends/school holidays on difficult topics and approaches such as; Information Management Ms Word Ms Excel Ms Access Internet Graphs Practical Assessment Plan Strengthening the subject committee and making sure that they are active and functional by showing evidence of meetings and activity plans.	Subject Planner and Subject Education Specialist	On going

	AREA	ACTIVITY	RESPONSIBILITY	TIMEFRAME
5. OUTLINE OF INTERVENTIONS FOCUSSING ON THREE IMPACT AREAS				
		Developing common formal assessment tasks at Provincial and District/Cluster level		
		Supplying every school Teacher with a Laptop so as to incorporate practical work into teaching		
2	TEACHING	Ensuring that Computer Applications Technology is allocated 4 hours a week/160 hours per year,–for work schedule/content coverage to be attained and maximum time for revision is allowed. Scientific approach to teaching the subject must be emphasized, so as to develop scientific skills in our learners. Compulsory 15 minutes reading of case/scenario, and DRILL concepts to enhance learning. It must be well structured. Ten point's guidelines developed by the Province must be used to prepare learners for final exams. Providing learners with quality activities and assessment tasks that will develop their ability to analyse, interpret various data e.g. graphs, tables, case studies, calculations, posters etc. It must be noted that through well structured quality tasks, a number of scientific skills can be developed. Teaching must also be in the context of examinations guidelines, refer to (2009) NSC Exam guidelines Ensuring that teachers always use LOLT when presenting their lessons and expose learners to various strategies that will improve their proficiency in the language. Practical Skills and theory part should be linked. Encourage schools to organize magazine with a ICT-related issues, journals, Avusa newspapers supplement and motivate learners to watch CAT programmes in order to widen their scope on issues pertaining to new developments in ICT Make use of Extension Officers from the SITA Learner activities where possible, should be balanced with international Driver License and standards Ensure that teachers make use of their school and local environment as well as institutions of higher education in order to enrich their knowledge and also make their teaching exciting and interesting.	Subject Planner and Subject Education Specialist	On going
4	ASSESSMENT	School- based moderation (SBA) A detailed Management plan must be in place Ensure that teachers submit tasks to HOD's for moderation before administered. Ensure that SBA is fair, valid and reliable Ensure that appropriate Assessment instruments are used Ensure that cognitive levels are adhere to: 40:40:20 CAPS Feedback noted on the task, dated and signed by moderator for the teacher to effect those changes or recommendations prior the date of administering the task. Task before effecting changes filled in the Portfolio of the teacher as evidence. In the absence of HOD in the site / cluster leaders, qualified subject teachers from	Subject Planner and Subject Education Specialist	On going

	AREA	ACTIVITY	RESPONSIBILITY	TIMEFRAME

	AREA	ACTIVITY	RESPONSIBILITY	TIMEFRAME
		neighboring schools and Subject Advisors should provide assistance. Comprehensive district report must be generated by Cluster Leader and Subject Advisor Marked learners work must be moderated checking on the quality of marking and to correctness of constructive feedback. Teachers should encourage/develop investigative skills of learners by giving them more challenging and interesting projects. Also consider the Indigenous Knowledge System (IKS) in your communities. Learners can interview senior citizens on certain aspects of traditional farming practices Ensuring that teachers administer daily informal tasks on the basic concepts such as definitions, attaching functions to parts of diagrams, interpretation of data and glossary of key words. More informal tasks must be given to consolidate learning and scaffolding knowledge base.		
5	MONITORING AND SUPPORT	Identification of areas of weakness during on-site visits, district and Provincial moderation: - Evidence of Lesson planning and preparation. Dates on learners' and teachers' work Quality of tasks and adherence to Bloom Taxonomy Creativity on the part of designing tasks–using exemplars Understanding how to design a rubric by many teachers. Ensure that exemplar question papers, memos and other tasks are made available to learners to groom and familiarize them of the style of questioning. Ensure regular targeted monitoring and support to Teaching, Learning and Assessment. Ensure that teaching and assessment is in line with the National and Provincial policy Ensure post moderation, evaluation and positive support regularly Ensuring that schools are in possession of/ and use the Examiner's Reports	Subject Planner and Subject Education Specialist	On going

5. OUTLINE OF INTERVENTIONS FOCUSSING ON THREE IMPACT AREAS