



**CENTRE FOR MATHEMATICS, SCIENCE AND TECHNOLOGY EDUCATION IN AFRICA
(CEMASTE)**

SECONDARY PROGRAMME – YEAR 2015

MODULE TWO - NATIONAL INSET PROGRAMME

THEME:

Enhancing Learner Growth in Mathematics and Science through Innovative Activities

PARTICIPANTS

Mathematics and Science Teachers with 1-6 Years of Teaching Experience

February, 2015



COURSE OBJECTIVES

Module two course objectives are to:

1. *Discuss and share experiences on implementation of 2014 INSET at*
 - a. *Sub-County level INSET;*
 - b. *School level INSET (lesson study)*
2. *Discuss and share successes and opportunities for improvement in mathematics and science classrooms in the year 2014 on:*
 - a. *The practice of ASEI-PDSI and;*
 - b. *ICT integration in lessons*
3. *Enhance the ability of participants to:*
 - a. *Develop Manipulative, Observation and Recording (MOR) skills in learners during mathematics and science lessons and;*
 - b. *Encourage, Capture, and Use (ECU) learner's ideas in teaching and learning mathematics and science concepts for learner growth*
4. *Strengthen subject content mastery through appropriate learning activities*

Learning Outcomes

Upon completion of this Module, you should be able to:-

1. *Demonstrate learning experiences in mathematics and science that promote learner growth.*
2. *Apply skills learned to develop learner's manipulative, observation and recording skills.*
3. *Apply skills learned to encourage, capture and use learner's ideas in lessons*



TRAINING PROGRAMME

DAY	TIME	TOPIC / SUB-TOPIC	FACILITATOR	DAY'S CHAIR
Sunday		ARRIVAL & REGISTRATION	House Keeping / Cateress	
Monday	08.00 - 08.30hrs	Registration and administrative activities		
	08.30 – 09.00hrs	Pre-Training Evaluation		
	09.00 – 09.30hrs	Training guidelines & objectives Levelling of expectations		
	09.30 – 10.30hrs	Opening Ceremony		
	10.30 – 11.00hrs	HEALTH BREAK – COFFEE / TEA		
	11.00 – 13.00hrs	FEEDBACK I: Feedback on Sub-County INSET		
	13.00 – 14.00hrs	HEALTH BREAK - LUNCH		
	14.00 – 16.00hrs	FEEDBACK I: Feedback on County and School-based Lesson Study		
	16.00 – 16.30hrs	Session Evaluation		
	16.30 -17.00hrs	Health Break: Tea/coffee		
	17.00hrs	Self-directed activities: Sub-county-based technical planning meetings and preparation for cascaded INSETs		
Tuesday	08.00 - 08.30hrs	Registration and administrative activities		
	08.30 – 10.30hrs	FEEDBACK II ASEI-PDSI practices in M&S classroom		
	10.30 – 11.00hrs	HEALTH BREAK– COFFEE / TEA		
	11.00 – 13.00hrs	FEEDBACK II: ICT integration in teaching and learning of M&S		
	13.00 – 14.00hrs	HEALTH BREAK- LUNCH		
	14.00 – 16.00hrs	Manipulative, Observation and Recording skills for learner growth: General Session – Refer to the facilitator’s guide; <ul style="list-style-type: none"> • Exposition: Rationale, objectives, introduction of session • Interactive plenary discussions based on module content • Group Discussion • Group Reporting • Conclusion and Wrap-up 		

DAY	TIME	TOPIC / SUB-TOPIC	FACILITATOR	DAY'S CHAIR
	16.00 – 16.30hrs	Session Evaluation		
	16.30 -17.00hrs	Health Break: Tea/coffee		
	17.00hrs	Self-directed activities: Sub-county-based technical planning meetings and preparation for cascaded INSETs		
Wednesday	08.00 - 08.30hrs	Registration and administrative activities		
	08.30 – 10.30hrs	Manipulative, Observation and Recording skills for learner growth: Subject Session Exposition - Refer to the subject-based session plan and facilitator's guide; <ul style="list-style-type: none"> • Mathematics: Transformation; Chemistry: The Mole, • Physics: Pressure; Biology: Support & Movement 		
	10.30 – 11.00hrs	HEALTH BREAK– COFFEE / TEA		
	11.00 – 13.00hrs	Manipulative, Observation and Recording skills for learner growth: Development of Teaching and Learning Activities & Lesson planning Refer to the subject-based session plan and facilitator's guide; <ul style="list-style-type: none"> • Mathematics: Transformation; Chemistry: The Mole, • Physics: Pressure; Biology: Support & Movement 		
	13.00 – 14.00hrs	HEALTH BREAK- LUNCH		
	14.00 – 16.00hrs	Manipulative, Observation and Recording skills for learner growth: Peer teaching and improvement of lesson plans Refer to the subject-based session plan and facilitator's guide; <ul style="list-style-type: none"> • Mathematics: Transformation; Chemistry: The Mole, • Physics: Pressure; Biology: Support & Movement Submission of revised lesson plans to facilitator		
	16.00 – 16.30hrs	Session Evaluation		
	16.30 -17.00hrs	Health Break: Tea/coffee		
	17.00hrs	Self-directed activities: Sub-county-based technical planning meetings and preparation for cascaded INSETs		
Thursday	08.00 - 08.30hrs	Registration and administrative activities		
	08.30 – 10.00hrs	Encouraging, Capturing and Using Learner's own ideas in lessons: General Session – Exposition: Refer to the general session plan and facilitator's guide; <ul style="list-style-type: none"> • Rationale, objectives, introduction of session • Interactive plenary discussions based on module content 		

DAY	TIME	TOPIC / SUB-TOPIC	FACILITATOR	DAY'S CHAIR
		<ul style="list-style-type: none"> Group Discussion Group Reporting 		
	10.30 – 11.00hrs	HEALTH BREAK– COFFEE / TEA		
	11.00 – 13.00hrs	Encouraging, Capturing and Using Learner’s own ideas in lessons: Subject Session Exposition - Refer to the subject-based session plan and facilitator’s guide; <ul style="list-style-type: none"> Mathematics: Loci; Chemistry: Structure & Bonding, Physics: Magnetic effect of electric Current; Biology: Cell and cell physiology 		
	13.00 – 14.00hrs	HEALTH BREAK- LUNCH		
	14.00 – 16.00hrs	Encouraging, Capturing and Using Learner’s own ideas in lessons: Development of Teaching and Learning Activities & Lesson planning Refer to the subject-based session plan and facilitator’s guide; <ul style="list-style-type: none"> Mathematics: Loci; Chemistry: Structure & Bonding, Physics: Magnetic effect of electric Current; Biology: Cell and cell physiology 		
	16.30 -17.00hrs	Health Break: Tea/coffee		
	17.00hrs	Self-directed activities: Sub-county-based technical planning meetings and preparation for cascaded INSETs		
Friday	08.00 - 08.30hrs	Registration and administrative activities		
	08.30 – 10.30hrs	Encouraging, Capturing and Using Learner’s own ideas in lessons: Peer teaching and improvement of lesson plans Refer to the subject-based session plan and facilitator’s guide; <ul style="list-style-type: none"> Mathematics: Loci, Chemistry: Structure & Bonding, Physics: Magnetic effect of electric Current; Biology: Cell and cell physiology Submission of revised lesson plans to facilitator Session Evaluation		
	10.30 – 11.00hrs	HEALTH BREAK– COFFEE / TEA		
	11.00 – 11.45hrs	Action plan & way forward: Sub-county groups - Plenary		
	11.45 – 12.00hrs	Resource Person Talk:	TSC	
	12.00 – 12.20hrs	Post-Training Evaluation		
	12.20 – 13.20hrs	Closing Ceremony		
	13.20 – 14.20hrs	HEALTH BREAK - LUNCH		

DAY	TIME	TOPIC / SUB-TOPIC	FACILITATOR	DAY'S CHAIR
	14.20 – 15.30hrs	Certificate awards: Subject Registrars		
CLEARANCE & DEPARTURE				

