

ด่วนมาก

ที่ มท ๐๘๙๓.๒/ว ๒๖๓๑



ถึง สำนักงานส่งเสริมการปกครองท้องถิ่นจังหวัด ทุกจังหวัด

ด้วยสำนักความสัมพันธ์ต่างประเทศ สำนักงานปลัดกระทรวงศึกษาธิการ แจ้งว่า ศูนย์ระดับภูมิภาคว่าด้วยการศึกษาวិทยาศาสตร์และคณิตศาสตร์ของซีมีโอ (เรคแคม) เมืองปิ่นัง ประเทศมาเลเซีย จะดำเนินการจัดหลักสูตรฝึกอบรม ประจำปี ๒๕๕๕-๒๕๕๖ ให้แก่ประเทศสมาชิกซีมีโอ รวม ๔ หลักสูตร ระหว่างวันที่ ๑-๒๖ เมษายน ๒๕๕๖ โดยขอให้ประเทศไทยเสนอชื่อผู้สมัครรับทุนฝึกอบรมดังกล่าว ภายในวันที่ ๓๐ พฤศจิกายน ๒๕๕๕ ทั้งนี้ ผู้สมัครรับทุนควรเป็นครูผู้สอนวิชาวิทยาศาสตร์หรือคณิตศาสตร์ระดับชั้นประถมศึกษาและมัธยมศึกษา มีอายุไม่เกิน ๕๐ ปี และมีความรู้ความสามารถด้านภาษาอังกฤษเป็นอย่างดี โดยมีคะแนนสอบ IELTS เท่ากับ ๕.๐ หรือเทียบเท่า สำหรับสตรีไม่ควรอยู่ระหว่างการตั้งครรภ์ และได้ขอความร่วมมือกรมส่งเสริมการปกครองท้องถิ่นพิจารณาเสนอชื่อผู้ที่มีคุณสมบัติเหมาะสม หลักสูตรละ ๒ คน ให้สำนักความสัมพันธ์ต่างประเทศ สำนักงานปลัดกระทรวงศึกษาธิการ ภายในวันที่ ๒๕ ตุลาคม ๒๕๕๕ สำหรับกำหนดการสอบข้อเขียนและสัมภาษณ์ผู้สมัครรับทุนจะแจ้งให้ทราบในโอกาสต่อไป

ในการนี้ จึงขอความร่วมมือสำนักงานส่งเสริมการปกครองท้องถิ่นจังหวัด แจ้งองค์กรปกครองส่วนท้องถิ่นที่มีสถานศึกษาในสังกัดได้ประชาสัมพันธ์ให้ครูผู้สอนวิชาวิทยาศาสตร์และคณิตศาสตร์ทราบโดยทั่วกัน และหากมีผู้ประสงค์สมัครรับทุน ขอให้ส่งใบสมัครและสำเนาใบสมัคร รวมจำนวน ๕ ชุด ให้ส่วนวิชาการและมาตรฐานการศึกษาท้องถิ่น สำนักประสานและพัฒนากิจการศึกษาท้องถิ่น กรมส่งเสริมการปกครองท้องถิ่น ภายในวันที่ ๑๙ ตุลาคม ๒๕๕๕ สามารถดาวน์โหลดใบสมัครและรายละเอียดเพิ่มเติมได้ที่ www.dla.go.th



สำนักประสานและพัฒนากิจการศึกษาท้องถิ่น

ส่วนวิชาการและมาตรฐานการศึกษาท้องถิ่น

โทร. ๐ ๒๒๔๑ ๙๐๒๑-๓ ต่อ ๑๒๒, ๑๓๑

โทรสาร ๐ ๒๒๔๑ ๙๐๒๑-๓ ต่อ ๑๑๒, ๑๑๓



ที่ ศธ ๐๒๐๕/ ๓ ๕๐๕

กรมส่งเสริมการปกครองท้องถิ่น
 เลขรับ 64101
 วันที่ 13 ก.ย. 2555
 เวลา

กระทรวงศึกษาธิการ
 ๓๑๙ ถนนราชดำเนินนอก
 เขตดุสิต กรุงเทพฯ ๑๐๓๐๐

๗ กันยายน ๒๕๕๕

เรื่อง ทูลฝีกอบรมของศูนย์เรคแคม ประจำปี ๒๕๕๕ - ๒๕๕๖
 เรียน อธิบดีกรมส่งเสริมการปกครองท้องถิ่น
 สิ่งที่ส่งมาด้วย รายละเอียดหลักสูตร และแบบฟอร์มใบสมัครรับทุน จำนวน ๑ ชุด

สำนักประสานและพัฒนารจัดการศึกษาท้องถิ่น
 เลขรับ 12063
 วันที่ ๑๓ ก.ย. ๒๕๕๕
 เวลา

ด้วยศูนย์ระดับภูมิภาคว่าด้วยการศึกษาวิทยาศาสตร์และคณิตศาสตร์ของซีมีโอ (เรคแคม) เมืองป็นัง ประเทศมาเลเซีย แจ้งว่า จะดำเนินการจัดหลักสูตรฝีกอบรมประจำปี ๒๕๕๕ - ๒๕๕๖ ให้แก่ประเทศสมาชิก ซีมีโอ รวม ๔ หลักสูตร ระหว่างวันที่ ๑ - ๒๖ เมษายน ๒๕๕๖ โดยขอให้ประเทศไทยเสนอชื่อผู้สมัครรับทุน ฝีกอบรมดังกล่าว ภายในวันที่ ๓๐ พฤศจิกายน ๒๕๕๕ และหากมีผู้สนใจเพิ่มเติม สามารถเสนอชื่อเพิ่มได้อีก โดยผู้สนใจต้องรับผิดชอบค่าใช้จ่ายต่าง ๆ เอง ทั้งนี้ ผู้สมัครรับทุนควรเป็นครูผู้สอนวิชาวิทยาศาสตร์ หรือ คณิตศาสตร์ระดับประถมศึกษาและมัธยมศึกษา มีอายุไม่เกิน ๕๐ ปี มีสุขภาพแข็งแรง และมีความรู้ความสามารถ ด้านภาษาอังกฤษเป็นอย่างดี โดยมีคะแนนสอบ IELTS เท่ากับ ๕.๐ หรือเทียบเท่า สำหรับสตรีไม่ควรอยู่ในระหว่าง ตั้งครรภ์ รายละเอียดดังแนบ

ในการนี้ สำนักงานปลัดกระทรวงศึกษาธิการ ใ้ขอความร่วมมือจากหน่วยงานของท่านในการ พิจารณาเสนอชื่อผู้มีความสมบัติเหมาะสม หลักสูตรละ ๒ คน พร้อมทั้งส่งใบสมัครและสำเนา รวม ๕ ชุด ให้สำนัก ความสัมพันธ์ต่างประเทศ สป. ภายในวันที่ ๒๕ ตุลาคม ๒๕๕๕ สำหรับกำหนดการสอบข้อเขียนและสัมภาษณ์ ผู้สมัครรับทุน จะแจ้งให้ทราบในภายหลัง

จึงเรียนมาเพื่อโปรดพิจารณาให้ความร่วมมือในเรื่องข้างต้นด้วย จะขอบคุณมาก

ขอแสดงความนับถือ

(นางสาวจุไรรัตน์ แสงบุญญา)
 รองปลัดกระทรวง ปฏิบัติราชการแทน
 ปลัดกระทรวงศึกษาธิการ

ส่วนวิชาการและมาตรฐานการศึกษาท้องถิ่น
 เลขรับ 1592
 วันที่ ๑๔ ก.ย. ๒๕๕๕
 เวลา

สำนักงานปลัดกระทรวง
 สำนักความสัมพันธ์ต่างประเทศ
 โทร. ๐ ๒๒๘๑ ๖๓๗๐ ต่อ ๑๑๗
 โทรสาร ๐ ๒๒๘๑ ๐๙๕๓

๑๕/๙/๕๕



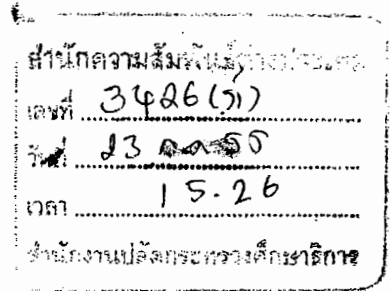
Southeast Asian Ministers of Education Organisation
Regional Centre for Education in Science and Mathematics



Our Ref.: RCP/GEN/157/V.22(9)
5 July 2012

Permanent Secretary / Director-General / Secretary-General / Undersecretary
Ministries of Education, SEAMEO Member Countries:

Dr. Sasithara Pichaichannarong
Permanent Secretary
Ministry Of Education
Rajdamnern Avenue
Bangkok 10300, THAILAND



Dear Sir/Madam,

RECSAM REGULAR COURSES FOR FISCAL YEAR 2012/2013 (1 ~ 26 APRIL 2013)

I have the honour to inform you that this Centre will be offering courses for senior educators and teacher trainers from SEAMEO member countries. Herewith are the information and condition that will assist the various Ministries of Education in their selection of nominees to attend RECSAM courses.

2.0 NOMINATION OF PARTICIPANTS

2.1 Please send the list of **Nominees, Participants' Application Forms and the Scholarship Agreements for the courses as stipulated in the following table**. It is much appreciated if the Ministries of Education could cooperate to meet with the deadlines suggested. The participants may be nominated to the courses according to the allocations as stated below.

Title of Courses	No. of Scholarships Offered Per Country	Deadline for documents to reach RECSAM
RC-PS-137-1: Making Sense of Primary Science through Inquiry: Problem-Based Learning at Work	2	30 November 2012
RC-PM-137-2: Making Real Life Connections and Developing Mathematical Ideas in Primary Classrooms	2	30 November 2012
RC-SS-137-3: Active Learning of Secondary Science through the Integration of ICT	1	30 November 2012
RC-PM-137-4: Lesson Study: Enhancing Instructional Practices in Primary Mathematics Classrooms	2	30 November 2012

Member Countries are welcome to send fee-paying participants for the above courses (see Item 5.0 for conditions). Applications for places could be made earlier through telephone call or e-mail at director@recsam.edu.my followed by an official letter.

Handwritten signature

2012/07

2.2 The qualifications required for the course participants are described in the annexures of the different courses. **Please follow the required qualifications as strictly as possible in your selection of participants for the respective courses.** This is to ensure active participation during the course and to allow participants to derive full benefit from the courses. In addition, to enhance the impact of these courses it is suggested that the nominated participants are key personnel who are/will be likely to effect considerable multiplier effects upon their return to their respective positions.

2.3 The nominated participants must be in good health both physically, mentally and certified medically fit in order to complete the course (Applicants must submit his/her **medical certificate** together with the application form).

2.4 Nominations would normally be considered only upon receipt of the duly completed application forms of the nominees. Please notify RECSAM soonest possible if your country is unable to fill the number of scholarships specified. The vacant places may be offered to other member countries with due notice.

2.5 Applicants should also submit a photocopy of the front page of their passports with their particulars clearly printed. Applicants who do not have a passport at the time of application will need to submit the documents **two weeks** after notification of acceptance.

2.6 **Attention.** Application forms are to be completed in duplicates by each candidate. Kindly reproduce more copies of the forms if necessary. Completed application forms and scholar agreement, medical report, photocopy of International passport and other relevant documents of the nominated candidates must be sent to RECSAM before the deadline given (see table). If this is not possible, then a list of the names of potential candidates with the certified copy of their qualifications in Science / Mathematics must be sent in advance to RECSAM. All member countries are expected to **NOMINATE AT LEAST THREE NAMES** as candidates for each course. RECSAM will select two candidates from these nominees for courses RC-PS-137-1, RC-PM-137-2 and RC-PM-137-4, and one candidate from these nominees for course RC-SS-137-3. If any of the candidate's qualification does not meet the requirements stated, RECSAM has the right to reject that particular candidate and the scholarship be given to candidates from other member countries.

3.0 COURSE INFORMATION

3.1 Details of the Courses

Please refer to attached booklet on course descriptions.

3.2 Compulsory Requirement

All participants must have a good working knowledge of spoken and written English in order to get the maximum benefit out of the courses. **A certified copy of their proficiency in English must be attached with the participants' form.**

4.0 GENERAL INFORMATION

4.1 Air Travel and Personal Accident Insurance

Participants should secure their own air-travel and personal insurance themselves throughout the duration of the course. RECSAM will not be responsible for taking insurance to cover air-travel and personal insurance accidents. **No responsibility for any form of insurance or any other expenses such as passport fee, visa fee, exit fee, airport tax, insurance premium, etc. will be assumed by RECSAM, SEAMEO Secretariat or the Government of Malaysia.**

4.2 Health and Age Limit

The nominated participant must be in excellent health and should not be more than 50 years of age.

4.3 Expectant Mothers

Because of the intensive nature of the training programme, it may not be advisable for female participants who are in the family way to attend these courses. Moreover, most airlines generally do not accept passengers who are in an advanced stage of pregnancy, normally around 7 months and above. As such, nominating Ministers should ensure that participants will not face this problem particularly on their homeward journey. RECSAM reserves the right to terminate the training programme of any participant who is likely to face such a problem. However, the termination procedure will, as usual, be made in consultation with the nominating Ministry.

4.4 Terms of Scholarships

Participants from SEAMEO countries on SEAMEO Scholarships will be provided with:

- i. Economy class air-ticket from capital city/or nearest International Airport from participant's work station to Penang and back (excluding any air-travel tax). As soon as nominations are received and accepted by RECSAM Office, airline tickets will be dispatched to the respective Ministries of Education unless otherwise requested by the Ministries of Education to be sent to the nearest city where the participants live.
- ii. Food and accommodation on twin-sharing basis are provided at RECSAM International House for the duration of the course.

Attention: Any fee incurred by a participant due to last minute cancellation of ticket or replacement of participant, after the ticket is issued, should be borne by the Ministry of Education of that nominating country. SEAMEO RECSAM will not take on the responsibility for such penalty charge or extra charge of any kind pertaining to the above.

4.5 Each participant is requested to complete and sign 3 copies of the "SEAMEO-RECSAM Scholar Agreement" Forms. Kindly reproduce more copies of the agreement if necessary. Two fully completed copies are to be returned following the date as specified in 2.1 and one copy to be kept by the Ministries of Education for reference.

4.6 Accommodation, Food and Attire

Participants will be accommodated at RECSAM International House and food will be provided at RECSAM Cafeteria. On occasions when meals are not catered for, food allowance will be given. The rooms are of double occupancy with bathroom attached. RECSAM has the right to allocate room-mates to the participants. All participants are expected to be properly dressed for classes — no T-shirts and jeans during class sessions.

4.7 Early Issue of Exit Permits and Entry Visas to Malaysia

It is requested that the following be done as early as possible:

- i. Exit permit for nominated participants (except for Malaysians and Singaporeans) must be obtained from their own Government, and
- ii. Entry visa for nominated participants (except for Malaysians, Singaporeans and Bruneians) into Malaysia must be obtained from the Malaysian Embassy in the participants' own country. The visa should be a minimum of 6 weeks to cover the 4 week period of the course, with multiple entries for the participants, should they require to go back in case of emergencies. RECSAM will send the participants a letter of offer to help expedite the visa application process when we receive the participants' names from the Ministries of Education.

4.8 National Costume for Closing Ceremony

It is requested that each participant from the various member countries bring along with him/her the **country's national costume to be worn during the Closing Ceremony.**

4.9 Cultural Performance

It is a normal practice in RECSAM that at the end of every batch of courses, there will be a cultural performance held after the closing ceremony and certificate presentation. Participants from different SEAMEO countries are expected to give a cultural presentation (eg. dance, drama, and the like) that depicts the culture of their countries. It would certainly be very helpful if they could come prepared with the necessary items such as costumes, musical instruments, etc. related to their culture.

4.10 Gifts Exchange

Before the participants leave for their home countries, there will usually be the exchanging of souvenirs and gifts among participants. It is advisable that the participants bring along souvenirs for this purpose.

5.0 PARTICIPANTS FROM MEMBER COUNTRIES ON FEE-PAYING BASIS

The following are the conditions for participants from Member Countries on fee-paying basis:

- i. They will also abide by the stipulations of the RECSAM Scholar Agreement and follow the requirements of the programme;
- ii. They are physically fit and meet the necessary qualifications to attend the course;
- iii. They pay a minimum course fee which does not cover airfare, medical expenses, insurance, and extension of visa fees. (For further enquiries, kindly write to Director, SEAMEO RECSAM, Jalan Sultan Azlan Shah, 11700 Gelugor, Penang, Malaysia, or email director@recsam.edu.my; Fax: +6-04-6522-737 or +6-04-6522-742).

Thank you.

Yours sincerely,



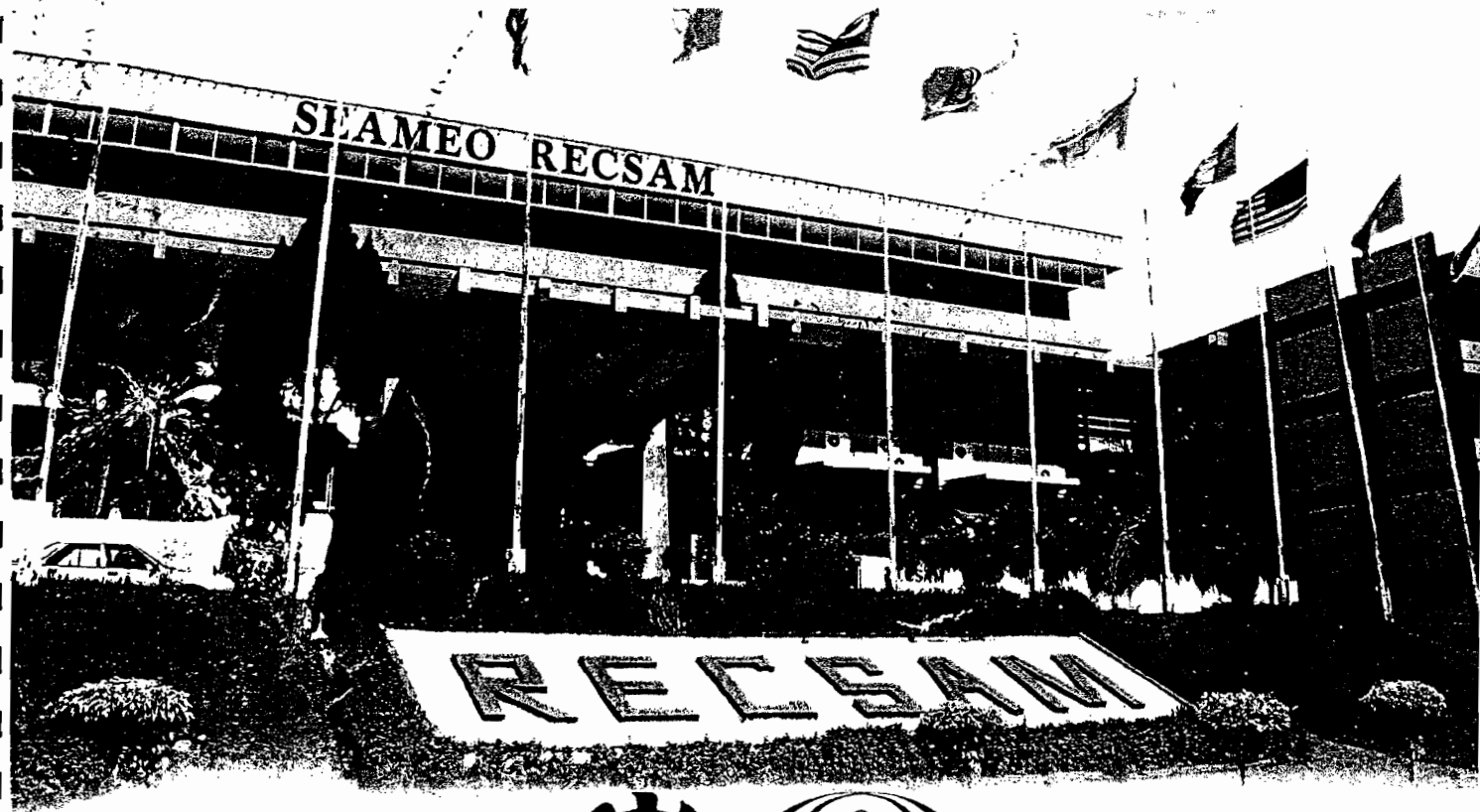
DR. DEVADASON ROBERT PETER
for Centre Director
SEAMEO RECSAM
Penang, Malaysia

Copies to:

Chairman & Members of RECSAM Governing Board
SEAMEO Affairs Officers, Ministries of Education, SEAMEO Member Countries.
Director, SEAMEO Secretariat, Bangkok 10110, Thailand

**Enclosed please find the following documents for your perusal and action:*

- i. Participants' Application Forms
- ii. SEAMEO RECSAM Scholarship Agreements
- iii. Course description for fiscal year 2012/2013
- iv. Checklist of the documents to be submitted to SEAMEO RECSAM by each participants



SEAMEO Regional Centre for Education in Science
and Mathematics

SEAMEO RECSAM
REGULAR COURSES
Fiscal Year 2012/2013

Brunei Darussalam
Cambodia
Indonesia
Lao PDR
Malaysia
Myanmar

Philippines
Singapore
Thailand
Timor Leste
Vietnam

Jalan Sultan Azlan Shah, 11700 Gelugor
Penang, Malaysia

Tel: 60 4 6522700 Fax: 60 4 6522737

Website: www.recsam.edu.my



**RECSAM'S REGULAR COURSES
FISCAL YEAR 2012/2013**

All courses are of 4 weeks duration.

1 to 26 April 2013	
RC-PS-137-1	Making Sense of Primary Science through Inquiry: Problem-Based Learning at Work
RC-PM-137-2	Making Real Life Connections and Developing Mathematical Ideas in Primary Classrooms
RC-SS-137-3	Active Learning of Secondary Science through the Integration of ICT
RC-PM-137-4	Lesson Study: Enhancing Instructional Practices in Primary Mathematics Classrooms

Level : P : Primary
S : Secondary

Subject : S : Science
M : Mathematics

Course Code: RC-PS-137-1

Course Title:

MAKING SENSE OF PRIMARY SCIENCE THROUGH INQUIRY: PROBLEM-BASED LEARNING AT WORK

Rationale:

Science teachers need to nurture among students critical thinking and problem solving and habits of mind that promote exploration and discovery such as curiosity, questioning, openness to ideas, learning from mistakes and persistence. Teachers need to shape science content in ways that engage students in making sense out of it through inquiry and application. The best way for students to learn science is for them to experience authentic problems that challenge science, and the thought, habits of mind and actions associated with trying to solve them.

Problem-based learning (PBL) is a powerful vehicle for authentic, inquiry-based learning, in which a real world problem becomes a context for students to investigate, in depth, what they need to know and want to know. In PBL approach, the students are viewed as active participants of their learning, create their own decisions as driven by "ill-defined" problems, and continuously respond to each other as well as to the teacher and to the new content information they encounter. When students acquire inquiry skills, problem solving and decision-making skills they can make informed decisions when confronted with everyday problems and thus make them responsible, independent and self-directed learners.

Objectives:

This course is designed to familiarize participants with the philosophy of PBL, to gain understanding of its intended benefits, and to create sample PBL lessons so that eventually they gain confidence in employing problem-based learning and inquiry in their science classrooms.

At the end of the course, the participants should be able to:

1. Gain understanding on the nature and process of inquiry-based science learning
2. Acquire an understanding of the philosophy of PBL approach, its processes and challenges in implementing it as an instructional strategy
3. Demonstrate skills in using various facilitation strategies in managing students working in groups
4. Create assessment tools to gauge students' learning during PBL lesson
5. Develop and implement quality inquiry-based science lesson plans that adopts the problem-based learning approach in the science classroom using the lesson quality improvement process.

Course Contents:

The course is based on a sound grounding of the philosophy of problem-based learning. More emphasis will be given to group discussions and hands-on and minds-on activities to demonstrate the processes of PBL, as well as integration of active approaches which are compatible with PBL deemed essential in developing PBL science lessons.

The major areas include:

1. Inquiry-based science learning: what, how and why
2. Problem-based learning (PBL)
 - 2.1 Philosophy, Nature and Characteristics
 - 2.2 Facilitation Strategies and Group Dynamics
 - 2.3 PBL process in action
 - 2.3.1 Introducing PBL scenario
 - 2.3.2 Identifying Learning Issues
 - 2.3.3 Listing Plan of Action
 - 2.3.4 Listing Possible Solutions
 - 2.3.5 Resolving Problems
3. Challenges in the PBL classroom
 - 3.1 Problem selection and development
 - 3.2 Delivery and facilitation
 - 3.3 Teaching and learning resources
 - 3.4 Classroom management issues
4. Assessment for Learning in PBL classrooms
 - 4.1 Assessing science content
 - 4.2 Assessing science thinking and processes
 - 4.3 Using rubrics in authentic assessment
5. Developing PBL instructional materials for classroom use
 - 5.1 Sources and resources for problems
 - 5.2 Format for designing problems
 - 5.3 Intentions of designing problems

Duration: Four weeks

Participants: Science teacher educators or key secondary science teachers

English proficiency: Minimum IELTS band 5.0 or equivalent

Expected Output: Project Work Report (Group report)
Multiplier Effect Action Plan (Individual action plan)

Course Code: RC-PM-137-2

Course Title:

**MAKING REAL LIFE CONNECTIONS AND DEVELOPING MATHEMATICAL IDEAS
IN PRIMARY CLASSROOMS**

Rationale:

In traditional mathematics classrooms, teachers teach mathematics using direct instruction. Students learn mathematics passively and they find mathematics uninteresting, difficult and isolated because they are unable to connect to the concepts taught. However, when connections are made, mathematics instantaneously come alive, become real and applicable. Making real life connections lets the students experience for themselves how they can use mathematics in their daily lives, as well as how they could use it in their future careers. These connections can best be made possible by using approaches like problem-based learning and realistic mathematics education. Strong grounding of mathematics content and conception is integrated with various skills and values that the students will find essential in life. Interests in the subject are rekindled and passion instilled. Students become motivated as they will realise that mathematics are not only easy but can be fun as well.

Objectives:

At the end of the course, participants are able to:

1. describe and explain certain trends and issues in mathematics education;
2. develop mathematical concepts using real life examples;
3. use effective approaches in mathematics learning that can connect mathematics to real life;
4. assess learning of mathematics in real life; and
5. plan, develop, try-out and improve strategies, skills and values which can make connections between mathematical concepts with real life happenings using the lesson quality improvement process.

Course Contents:

This course emphasizes a good exposure to trends and issues in mathematics education, a good grounding of strong mathematical content and concepts through real life examples, effective approaches, a variety of assessment techniques & skills, values and passion in teaching.

The major areas include:

1. Trends & issues in mathematics education:
 - 1.1. Constructivism in mathematics education
 - 1.2. The nature of mathematics
 - 1.3. The core areas in mathematics education
- content, mental processes, skills & values
 - 1.4. Conceptions & misconceptions
2. Using real life examples to develop mathematics concepts in
 - 2.1. Numbers
 - 2.2. Algebra
 - 2.3. Geometry
 - 2.4. Data Presentation
3. Making real life connections through:
 - 3.1. Problem-based learning
 - 3.2. Realistic mathematics education
4. Assessment for learning:
 - 4.1. Assessment in real life mathematics
 - 4.2. Instruments & techniques of assessment
 - 4.3. Facilitating & questioning techniques
 - 4.4. Observation skills
5. Planning, developing, trying-out and improving strategies, skills and values which can make connections between mathematical concepts with real life happenings using the lesson quality improvement process.

Duration: Four weeks

Participants: Mathematics educators or key primary mathematics teachers

English proficiency: Minimum IELTS band 5.0 or equivalent

**Expected Output: Project work report (Group report)
Multiplier effect action plan (Individual action plan)**

Course Code: RC-SS-137-3

Course Title:

ACTIVE LEARNING OF SECONDARY SCIENCE THROUGH THE INTEGRATION OF ICT

Rationale:

Strategies that promote active learning are encouraged to be used extensively in the science classroom as it improves student understanding. ICT has been playing a more significant role in the classrooms recently. Newer ICTs are much more interactive and offers potential for sustaining strategies that promote active learning in the classroom.

Objectives:

The main objective of this course is to provide participants with an understanding of how strategies that promote active learning can be enhanced by the use of ICT.

At the end of the course, participants are able to:

1. Demonstrate understanding of strategies that enhance active learning;
2. Demonstrate skills in using ICT tools for active learning of science;
3. Develop assessment tools that measure successful use of strategies that enhance active learning in an ICT integrated environment;
4. Use the lesson quality improvement process to design, develop and evaluate active learning enhanced ICT integrated science lessons.

Course Contents:

This course emphasizes a good grounding of theory and classroom practice. Emphasis will be given to discussions and activities to demonstrate the strategies involved in the teaching and learning of science to enhance active learning using ICT.

The major areas include:

1. Active Learning
 - 1.1 Constructivism
 - 1.2 Active and passive learning
 - 1.3 Hands-on and minds-on learning

2. ICT Tools to enhance active learning of science
 - 2.1 Blogs
 - 2.2 Interactive Simulations
 - 2.3 Claymations
 - 2.4 Webquest
 - 2.5 Podcast
 - 2.6 Interactive whiteboards

3. Assessment for active learning of science
 - 3.1 Assessing using rubrics
 - 3.2 Assessing using online tests

4. Lesson quality improvement process
 - 1.1 The lesson quality improvement process
 - 1.2 Develop quality lesson plans that illustrate active learning through the integration of ICT using the lesson quality improvement process

Duration: Four weeks

Participants: Science educators or key secondary science teachers

**Expected Output: Project work report (Group report)
Multiplier effect action plan (Individual action plan)**

Course Code: RC-PM-137-4

Course Title:

LESSON STUDY: ENHANCING INSTRUCTIONAL PRACTICES IN PRIMARY MATHEMATICS CLASSROOMS

Rationale:

Effective teaching requires good planning and implementation of thoughtful lessons. In most cases effective lessons are designed by good teachers who spend a great deal of time reflecting on their teaching and reviewing the results from the previous classes taught. Lesson Study in a form of embedded Continuing Professional Development (CPD) is widely used to harness teachers' reflective skills more systematically. A series of processes are involved that include the major steps of lesson planning, presentation/observation and reflection on the lesson. Through Lesson Study, educators are encouraged to develop their own theories and pedagogy from their classroom practices to enhance professional growth through collaborative efforts. Thus Lesson Study is well suited as a form of self-reflective inquiry widely used in school-based curriculum, school improvement and teachers' continuing professional development.

Objectives:

The main objective of this course is to provide participants the knowledge and skills required to conduct Lesson Study in their own classrooms.

At the end of the course, participants should be able to:

1. acquire the basic knowledge on the nature, historical background and elements of Lesson Study;
2. try-out different teaching methodologies through the Lesson Study processes;
3. design and implement Lesson Study;
4. assess and evaluate Lesson Study.

Course Contents:

This course emphasizes a good grounding of theory with reflective classroom practices. Participants will be involved in hands-on and minds-on workshops or activities that facilitate discussions and team work. It is expected that participants will acquire knowledge and skills to initiate and design small-scale Lesson Study projects aimed at improving classroom practices in their respective schools.

The major areas include:

1. Introduction to research in education and Lesson Study
 - 1.1 Overview of Lesson Study as a form of Continuing Professional Development (CPD)
 - 1.2 Historical background of Lesson Study
2. Trends, issues and values in primary mathematics education
 - 2.1 Current teaching pedagogies to improve primary mathematics teaching and learning
 - 2.1.1 Promoting student-centred learning and higher order thinking through constructivist teaching pedagogies for primary classrooms
 - 2.1.2 The core areas in mathematics education – content, mental processes, skills and values
 - 2.1.3 Enhancing mathematical thinking using technological tools
 - 2.2 Assessment for improving teaching and learning in primary classrooms
 - 2.2.1 Assessment in primary mathematics classrooms: Why, why and how of assessment
 - 2.2.2 Instruments and techniques of assessment for learning: Observation skills, Questioning techniques, Alternative assessment
 - 2.2.3 Using and interpreting assessment results
3. The essential elements of Lesson Study process
 - 3.1 Lesson planning
 - 3.2 Lesson presentation/observation
 - 3.3 Lesson improvement
4. Planning, developing and implementing Lesson Study projects in schools
 - 4.1 The Lesson quality improvement process
 - 4.2 Developing thoughtful and quality lessons for primary classrooms based on input from collaborative practitioners with reflections for lesson improvement using Lesson quality improvement process
 - 4.2.1 Lesson planning: Designing lesson integrating pedagogies
 - 4.2.2 Lesson development: Revising quality lesson
 - 4.2.3 Try-out: Implementing Lesson Study projects in local school
 - 4.2.4 Final write-up: Documenting Lesson Study project

Duration: Four weeks

Participants: Mathematics educators or key primary mathematics teachers

Expected Output: Project work report (Group report)

FEE PAYING SCHEDULE FOR SEAMEO RECSAM REGULAR COURSES (wef 1 JULY 2012) FOR RESIDENTIAL AND NON-RESIDENTIAL PARTICIPANTS

All components provided are for a duration of 4 weeks

PACKAGE / ITEM	A RESIDENTIAL WITH FOOD/POCKET ALLOWANCE	B NON-RESIDENTIAL WITH FOOD/POCKET ALLOWANCE
	RM	RM
Tuition fees	780.00	780.00
Accommodation (Twin-sharing)	1,260.00	-
Facilities	670.00	670.00
Food	980.00	980.00
Materials	400.00	400.00
Local travel	100.00	100.00
Medical (outpatient)	50.00	50.00
TOTAL	4,240.00	2,980.00

Note:

The fee excludes participant's airfares, in-patient medical and health expenses, and travel insurance.

รายละเอียดเกี่ยวกับผู้สมัครรับทุนเรคแคม

ชื่อหลักสูตร _____

1. ชื่อและนามสกุล _____

Name _____

วุฒิ _____

2. วิชาเอก _____ วิชาโท _____

3. วันเดือนปีเกิด _____ อายุ _____ ปี อายุราชการ _____ ปี

4. ตำแหน่งและที่ทำงานปัจจุบันพร้อมหมายเลขโทรศัพท์ (เขียนให้ละเอียดและชัดเจน)

ที่อยู่โรงเรียน _____

โทรศัพท์ _____ โทรสาร _____

5. ความรู้ภาษาอังกฤษ ดี ปานกลาง พอใช้

6. ความรู้ภาษาอื่น ๆ จีน ญี่ปุ่น อื่น ๆ โปรดระบุ _____

7. ความรู้ด้านคอมพิวเตอร์ ดี ปานกลาง พอใช้

8. ประสบการณ์และพินความรู้ทางด้านภาษาที่เกี่ยวข้องกับหลักสูตรการอบรมที่เสนอขอรับทุน

8.1 _____

8.2 _____

8.3 _____

8.4 _____

8.5 _____

8.6 _____

8.7 _____

8.8 _____

9. เคยเดินทางไปศึกษา/ฝึกอบรม/ ดูงาน/ประชุม/สัมมนาต่างประเทศหรือไม่

เคย ไม่เคย

(ถ้าเคยให้แจ้งด้วยว่า เคยไปศึกษา/ฝึกอบรม/ ดูงาน/ประชุม/สัมมนาในเรื่องใด ที่ไหน และเมื่อไร)

10. หน้าที่การงานปัจจุบัน

10.1 การสอนหรือการนิเทศ _____

10.2 งานพิเศษ _____

10.3 งานอื่น ๆ _____

11. เหตุผลที่ประสงค์จะไปอบรมที่ศูนย์เรคแคม _____

12. งานที่จะทำเมื่อกลับจากการอบรมแล้ว (หากได้รับทุน)

13. ข้าพเจ้าขอรับรองว่า ข้อความดังกล่าวข้างต้นถูกต้อง และเป็นความจริง

ผู้สมัครลงนาม _____

ผู้บังคับบัญชา _____

ตำแหน่ง _____