

ANNUAL REPORT ON PROGRAMS AND ACTIVITIES

SEAMEO REGIONAL CENTRE FOR QITEP IN SCIENCE

January-September 2011

CHAPTER I

EXECUTIVE SUMMARY

SEAMEO Regional Centre for QITEP in Science is the SEAMEO Centre focusing on improving the science competences and quality of science teachers and educational personnel throughout the Southeast Asia region. Year 2011 is the third year in which SEAMEO QITEP in Science starts the operation under the second Five-Year Development Plan (5YDP) and also the year in which the Centre run under the new directorship of Prof. Dr. Ismunandar.

This executive summary highlights the centre progress in three Key Result Areas (KRAs) including Regional Leadership, Regional Visibility, and Solid Resource Base.

In terms of Regional Leadership, The Centre has conducted five regular trainings which are Environmental Education On Job

Training, Science Research and Development, Science Laboratory Management, Environmental Education, and Earth and Space Science, one in-country training conducted in Royal University of Phnom Penh (RUPP), Cambodia namely ICT-Based Science Learning, and three workshop programs for developing and planning the program, syllabi, and training materials for each QITEP in Science Training Courses. Those six trainings conducted have absorbed a total of 245 participants from Indonesia, Malaysia, Thailand, Lao PDR, and Cambodia.

In terms of Regional Visibility, various collaborative activities, visits and MoU Signed with regional and international institution including MoU signing between QITEP in Science and National Polytechnic Institute of Cambodia (NPIC), Workshop on Science Inquiry with Dr Caroline Kiehle from USA, Workshop on Potential of D-Book for Science learning with Prof. Masami Isoda from Tsukuba University Japan, and visit from Prof. Bruce Alberts, special science envoy of President Obama.

The Centre has also produced some publications such as brochure, leaflet, booklet, newsletter, and SEAMEO QITEP in Science (www.qitepscience.org) website updating to ensure accessibility for our stakeholder to the programs and activities information.

In terms of Solid Resource Based, a number of four various staff capacity building activities has been followed as offered by government department and local organization and those programs have upgraded the knowledge and skill of The Centre's personnel.

To undertake its programs and activities during the fiscal year under review, The Centre augmented the funds coming from the Government of Republic Indonesia.

CHAPTER II

GENERAL INFORMATION

The Regional Centre for Quality Improvement of Teacher and Education Personnel (QITEP) in Science is one of the new Centres under the Southeast Asian Minister of Education Organization (SEAMEO). The main purposes of SEAMEO QITEP in Science are to assist the Member States in: (a) improving the quality of science teachers and education personnel in the region, (b) conducting research and development, providing training and information services and clearing house as well as engaging in other related activities in science within and beyond the region, (c) establishing network for the purpose of resource sharing, information exchanges, research and development in the area of science teaching, and (d) providing access for decision makers to up-to-date, accurate, and consistent data and information in science for the benefit of the region.

Vision

The vision of the Centre is to be a centre of professional excellence in the area of science teaching for teachers and education personnel within the framework of sustainable development.

Mission

The mission of the Centre is to provide relevant and quality programmes in professional excellence for Science teachers and education personnel through capacity building activities, resource

sharing, research and development, and networking.

Values

To realize the vision and carry out its mission, SEAMEO QITEP in Science believes strongly in the importance of values as guiding principles for its staff in executing their tasks. All SEAMEO QITEP in Science staff should be aware of, comprehend and apply the Centre's values as follows.

- | | |
|--------------------|-----------------------|
| a. Professionalism | f. Productive |
| b. Togetherness | g. Innovative |
| c. Empathy | h. Credible |
| d. Democratic | i. Life-Long Learning |
| e. Accountable | j. Global Minded |

Goals

- a. To enhance the function of the organisation in managing SEAMEO QITEP in Science's resources for improving the competency of science teacher and education personnel.
- b. To develop excellent training system which meets the demand of national and international education communities.
- c. To enhance the ICT competency of SEAMEO QITEP in Science staff.
- d. To conduct natural preservation efforts collaboratively with relevant national and international agencies.
- e. To have sufficient infrastructure and financial resources.
- f. To develop research-based training programmes cooperatively with national and international institutions.

- g. To strengthen national and international networks for improving science teacher and education personnel competency in Southeast Asia region.
- h. To develop research-based innovations and resource-sharing in science education among member countries and relevant international institutions.

Governing Board

The SEAMEO Centre for QITEP in Science Governing Board (GB) is the Centre's highest policy-making body. The GB is composed of representatives from each SEAMEO Member Country who are nominated by their respective Ministers/Secretaries of Education and appointed by the SEAMEO Council President. The GB is responsible for operational policies, strategic planning, annual evaluation, and review of the Centre's programs and budget. The SEAMEO Secretariat (SEAMES) Director and the Director of the Centre serve as ex-officio members of the Board.

SEAMEO Regional Centre for QITEP in Science Governing Board Members :

- | | |
|--|--|
| <ul style="list-style-type: none">• Ms. Nadia Lee Siew Hoon binti Abdullah | Senior Education Officer (Group II)
Department of Schools Inspectorate
Ministry of Education
BRUNEI DARUSSALAM |
| <ul style="list-style-type: none">• Mr. Sun Bunna | Deputy Director of Curriculum Development Department
Ministry of Education, Youth and Sport |

CAMBODIA

- Ir. Giri Suryatmana Secretary, Directorate General of Quality Improvement of Teachers and Education Personnel
Ministry of National Education

INDONESIA

- Mr. Oudone Thepvongsa Director, Ban Kuen Teacher Training College
Vientiane Province, **Lao PDR**

- Datuk Dr. Haili bin Dolhan Rector, Institute of Teacher Education
Ministry of Education Malaysia

MALAYSIA

- Dr. Carolina S. Guerrero Director IV, Bureau of Alternative Learning System
Department of Education
DepEd Complex, Meralco Avenue
Pasig City, Metro Manila

PHILIPPINES

- Dr. Charles Chew Master Teacher
Academy of Singapore Teachers
Ministry of Education

REPUBLIC OF SINGAPORE

- Dr. Pornpun Waitayangkoon President of The Institute for the Promotion of Teaching Science and Technology

THAILAND

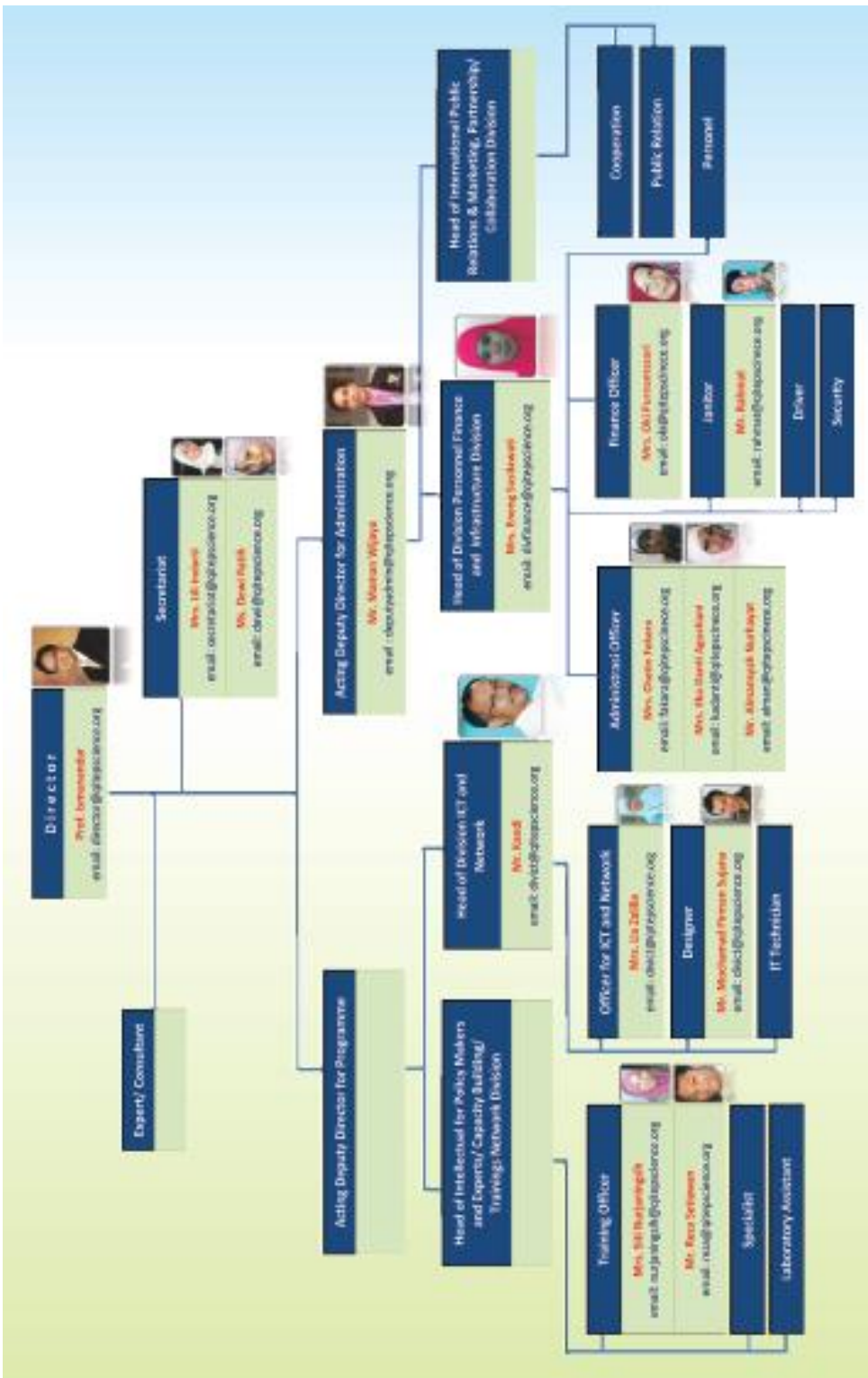
- Assoc Prof. Dr. Le Phuoc Minh

Vice Rector Institute for Education
Management (NIEM) Hanoi

VIETNAM

Organizational Structure

SEAMEO Centre on QITEP in Science is headed by a Director and assisted by two Deputy Directors: Deputy Director for Programme and Deputy Director for Administration. Under the two Deputy Directors, there are four divisions, namely: Intellectual for Policy Makers and Experts/Capacity Building/Trainings Division, ICT and Network Division, Personnel, Finance and Infrastructure Division, International Public Relations & Marketing, Partnership/Collaboration Division.



CHAPTER III

KEY RESULT AREA

KRA 1 : Regional Leadership

Capacity Building

To increase its capacity building, the Centre has conducted these training course, workshop, and Monitoring and Evaluation programs as follows.

Training Courses:

i) Environmental Education On Job Training

The Environmental Education on Job Training is developed in purpose of improving the competence of Bandung primary school science educator in comprehending and implementing environmental education material in daily activities, developing plan refer to Environmental Education.

This training is implemented in 4 phases. The first phase of understanding the concept given by environmental experts housed in QITEP in Science. The second phase is the learning environment in the classroom in the form of lesson study. The third phase is implementation of environmental education in creating an environmentally-friendly school. The fourth phase is evaluation of the implementation.

Until now, the Centre has conducted two of those four phases. The first Phase was held on 18 - 20 May 2011 took place in SEAMEO QITEP in Science and participated by 100 elementary science school teacher in Bandung, Indonesia. Each participant had to develop environmentally based lesson plan and school development plan to be selected for the second phase training.

The second phase was conducted on 9 - 11 August 2011 located in 3 Bandung elementary schools which were Margahayu Elementary School, Pertiwi Elementary School, and Padjajaran Elementary School. The number of participant was 40 persons who were elected from the first phase. The participants were grouped to conduct lesson study activity in environmental education subject.

The third and fourth phase will be conducted on September and November 2011 respectively.

ii) Environmental Education for Sustainable Development

Training course on environmental education is intended for high school biology teachers. The training is an important part of improving the quality of science teaching and learning in schools with respect to ecosystem services and its support of Climate Change Education, Sustainable Development, and the Preservation of our Earth.



The training was carried out on 22 - 28 May 2011 in Bandung, Indonesia. The venue of the programme was QITEP in Science, Bandung - Indonesia. The participants of the programme consisted of 27 science teachers from Indonesia, Lao PDR, Malaysia, and Thailand.



The resource persons were experts of science education and environmental science: Prof. Ismunandar (SEAMEO QITEP in Science/Bandung Institute of Technology), Prof. Intan Ahmad and Dr. Achmad Sjarmidi (Bandung Institute of Technology), Prof. Hertien Koosbandiah Surtikanti (Indonesia University of Education), Dr. Sediono Abdulah and Dr. Yenny Hendriani (SEDEC).

iii) Earth and Space Science for Sustainable Development

Training Course on Earth and Space Science is designed for high school science teachers, especially physics teachers. Teachers as agents of change through the transformation process, have a great chance in guiding their students to have awareness and attitude to continually adapt and maintain the environment, so

that they can preserve the human being sustainability in the future by comprehending earth and space science.



This training programme aims to improve the comprehension and skill in using data source and equipments related to the earth and space science, which will be used by teachers to improve the quality of learning process of earth and space in class.

The training was held on 5 - 11 June 2011 in Bandung, Indonesia. The venue of the programme was QITEP in Science, Bandung - Indonesia. The participants of the programme consisted of 27 science teachers from Indonesia, Lao PDR, and Thailand.



The resource persons were experts of science education and earth and space science namely Prof. Ismunandar (QITEP in Science/Bandung Institute of Technology), Dr. Hakim L. Malasan, Judhistira Aria Utama, M.Si, Dr. Irwan Meliano, Dr. Dhani Herdiwijaya, Dr. Evan Irawan Akbar, Dr. Sarmoko Saroso (Bandung Institute of Technology), Dr. Sediono Abdulah and Drs. Dadan Muslih, M.T

iv) ICT-Based Science Learning (as In-Country Training in Phnom Penh, Cambodia)

This training course was carried out during 19 - 25 June 2011 in cooperation with Royal University of Phnom Penh (RUPP), Cambodia as the venue of the training course. The participants of the programme consisted of 35 science teachers and lectures from Cambodia.

As the information technology is rapidly developing these day, science learning in school can be benefited from this phenomena to increase student's understanding and interest in science subject. Based on this thought, the purpose of the training is to improve the skills and competencies of training participants in using ICT-based technologies to support the science learning activity in their schools.



The resource persons were experts of science education and ICT: Prof. Ismunandar, Mr. Kandi, MA, and Ms. Lia Zalilia, MT from SEAMEO QITEP in Science, Mr. Agus Maulani, from SEDEC Bandung, and Dr. Achmad Imam Kistijantoro, Ph.D from Bandung Institute of Technology (ITB).

v) Science Laboratory Management

The training was carried out on 3 - 9 July 2011. The venue of the programme is in SEAMEO Center for QITEP in Science, Bandung - Indonesia. The training programme goals are to improve the laboratory management competence of science teachers in enhancing the quality of teaching-learning in secondary education.



The participants of the programme consisted of 27 science teachers from Indonesia, Lao PDR, Malaysia, Philippines, and Thailand.



The resource persons were experts of science education and laboratorium management science namely Prof. Ismunandar (QITEP in Science/Bandung Institute of Technology), Prof. Triyanta, Ph.D, Prof. Djulia Onggo, and DR. Yessi Permana (Bandung Institute of Technology), Dr. Sediono Abdulah and Drs. Dadan Muslih, M.T (SEDEC).

vi) Science Research and Development

This training is aimed to enhance the science teacher skill to establish the science research culture for student and assisting student to conduct science research project in their school.

It was held on 17 - 23 July in Bandung, Indonesia and participated by 29 science teacher from Indonesia, Malaysia, Lao PDR, Thailand, and Phillipines.

This training was consisted of Basic Science Research Skills and Methodology, Statistical Techniques Used in Science Research, Proposal and Scientific Report Development, and also Managing Science School Club.





The training was supported by experts from Science Education and Empowerment Centre (SEDEC), and Bandung Institute of Technology namely Dr. Anggraini Barliani, Dr. Ciptati, and Dra. Lenny Herliawatie, M.Sc

Workshops on Program, Curriculum and Material Development of each training courses.

To assure the quality of The Centre's training courses, the curriculum and training materials are developed and reviewed by the experts from related fields far before the training will be conducted. This workshop was held on 21 - 26 February 2011 participated by experts from Bandung Institute of Technology and

Indonesia University of Education. The output from this workshop are the training syllabi and material that will be used in The Centre's training courses.

Monitoring and Evaluation (Monev) Program

Monitoring and Evaluation (Monev) program is aimed at having feedback in order to improve and to find the effectiveness of planning and implementation on the next training courses of QITEP in Science and also to know how much impact the trainings gave for the participants' learning process in school. This activity will take place in five countries and five Provinces in Indonesia. The Monev team collects data and information through alumni of the QITEP in Science courses by using instruments such as questionnaires, Focus Group Discussion (FGD), observation, and field notes to see the processes of learning in schools.

Until this report was produced, the Centre have conducted Monev activity in five countries which were Malaysia, Lao PDR, Brunei Darussalam, Thailand, and Philipinne. Each of these Monev activities took place in four days and conducted by a team of two or three officer. The table below shows the team member and respondents of each Monev Activities.

No.	Country	Date	Team	Respondent
1.	Malaysia	3 - 6 August 2011	<ul style="list-style-type: none"> ▪ Mr. Kandi ▪ Mr. Reza Setiawan 	<ul style="list-style-type: none"> ▪ Mr. Anandan Kaniapan ▪ Ms. Aizatul Adzwa

2.	Lao PDR	3 - 6 August 2011	<ul style="list-style-type: none"> ▪ Ms. Eneng Susilawati ▪ Mr. Maman Wijaya 	<ul style="list-style-type: none"> ▪ Khampeine Bownjingm ▪ Chaleunsack Ounkeo ▪ Chittranond Voradeth ▪ Chanthy Phounsavath ▪ Khamboo Vongsengkeo ▪ Thotsakanh Sitthivon
3.	Brunei Darussalam	1 - 4 August 2011	<ul style="list-style-type: none"> ▪ Ms. Chatin Fakara ▪ Ms. Lili Indarti 	<ul style="list-style-type: none"> ▪ Mr. Muh. Azman Abd. Bundol ▪ Ms. Lee Shiaw Heng ▪ Ms. Lim Soh Ngo ▪ Ms. Siti Hawa Hj. Mat Noor ▪ Ms. Lim Yen Tsern ▪ Ms. Rashikah Hj. Abdul Samad ▪ Mr. H. Mohd. Saiful bahrin bin Hj. Sabli ▪ Mr. Chung Yun Onn
4.	Thailand	17 - 20 August 2011	<ul style="list-style-type: none"> ▪ Mr. Komarudin ▪ Mr. I Made Alit Mariana ▪ Ms. Eka Danti Agustiani 	<ul style="list-style-type: none"> ▪ Mr. Saronyou Srisomporn ▪ Mr. O Phart Phraterp ▪ Ms. Ampai Huangthong
5.	Philippines	22 - 25	<ul style="list-style-type: none"> ▪ Prof. 	<ul style="list-style-type: none"> ▪ Mr. Joseph E.

		August 2011	Ismunandar. ▪ Mr. Wita Sutrisno ▪ Ms. Lia Zalilia	Vineles ▪ Ms. Maria Victoria D. Abcede ▪ Ms. Vivian Intatano ▪ Ms. Dolores B. Samaniego ▪ Ms. Ma. Pilar P. Carmona
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KRA 2 : Regional Visibility

Strengthening linkages with inter-centre, national, regional, and international institutions

The main purpose for SEAMEO Regional Centre for QITEP in Science in increasing the linkages with national, regional, and international institution was to develop networking, increase the access and establish cooperation, and recognition. Here are list of collaboration and networking activities conducted by the Centre in year 2011.

i) MoU signing between SEAMEO QITEP in Science and National Polytechnic Institute of Cambodia (NPIC)

On 8 February 2011, Delegation of National Polytechnic Institute of Cambodia (NPIC) consisting of H.E. Bun Phearin, its President and some heads of faculty Mr. Tun Sikhoeum (Head of Education Quality Control Office), Mr. Muong Phasi (Head of Academic Affair), Mr. Prom Peou (Head of Mechanics Faculty), Mr. Chan Sopheap (Head of Electronics Faculty), Mr. Kong Ravath (Head of

Civil Engineering Faculty), Mr. Thach Vilhal (Officer of Finance Office), Mr. Heng Bunikan (Officer of Information and Cooperation Unit) visited QITEP in Science. Both of institutions have signed Memorandum of Understanding (MoU) to collaborate in undertaking programmes, projects, and other related activities for a period of five years.

ii) APEC - Tsukuba International Conference V

QITEP in Science participated in the APEC - Tsukuba International Conference V: Innovation of Classroom Teaching and Learning through Lesson Study- Focusing on Mathematics Textbooks, e-Textbooks and Educational Tools -held in Tokyo & Tsukuba, Japan, February 17th - 20th, 2011. Ismunandar (Director of QITEP in Science), representing the center, presented paper on “The Status of ICT for Education in Indonesia and Efforts in the Center” in parallel session titled “Current Status and Efforts for Using ICT in case of SEAMEO centers” chaired by Prof. Bunyamin Maftuh. In the conference the QITEP in Science Director also participated to the World Largest Lesson Study Meeting in Elementary School, University of Tsukuba.

iii) Prof. Bruce Alberts Visit (President Obama Special Envoy on Science)

Prof. Dr. Bruce Alberts is an accomplished scientist in the fields of biochemistry and molecular biology and the former President of the U. S. National Academies of Science in Washington, D.C.

He is coming to visit Indonesia in his capacity as President Obama's Science Envoy to Indonesia.



In his visit, he also visited SEAMEO Regional Center for QITEP in Science on 5 July 2011. In his visit, he gave a short presentation to participants of Training Course on Science Laboratory Management and all management of QITEP in Science.

iv) Workshop on Inquiry Science with Dr. Caroline Kiehle

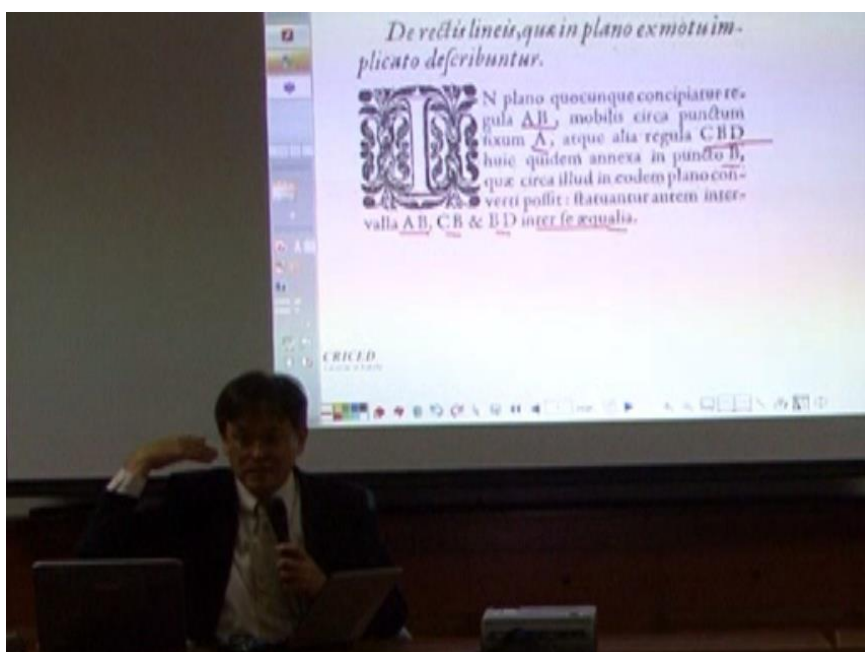
This workshop was held on July 2011 participated by science education personnel. Dr. Caroline Kiehle explained about the role and importance of inquiry for science learning, especially for elementary level student to engage their interest in science subject.



Dr. Kiehle also presented the stages of science teacher professional development used in USA to enhance the teaching competence of US science teacher in science subject.

v) Workshop on Potential of Digital Book (D-Book) for Science Learning with Prof. Masami Isoda

This workshop was held in July 2011. In his presentation, Prof Masami Isoda introduced the new technology and approach for science learning in school using D-Book.

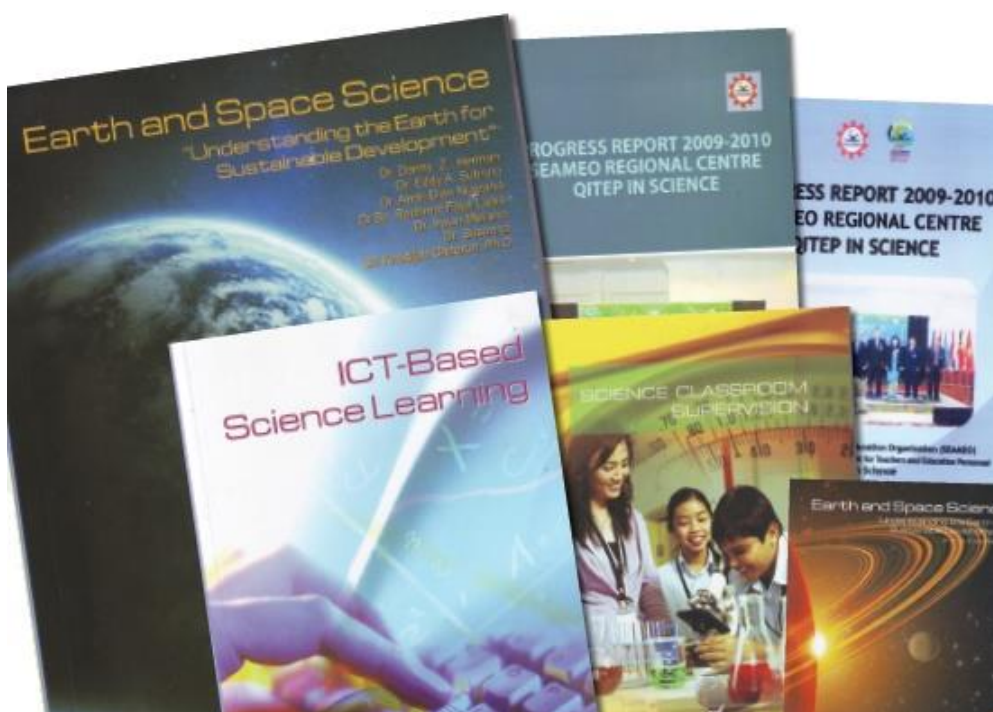


This technology provides the teacher with a more interactive learning material that can be delivered to students to enhance their understanding in math and science subject.

Increase means for stakeholders to access SEAMEO programs

To ensure accessibility for our stakeholder to the programs and activities information, The Centre has also produced some publications both printed and digital. Printed publications produced during the year include brochure, leaflet, booklet, and newsletter.

The digital references have also facilitated access through SEAMEO QITEP in Science (www.qitepscience.org) upgraded website, training materials DVD and SEAMEO QITEP in Science Video Profile DVD.



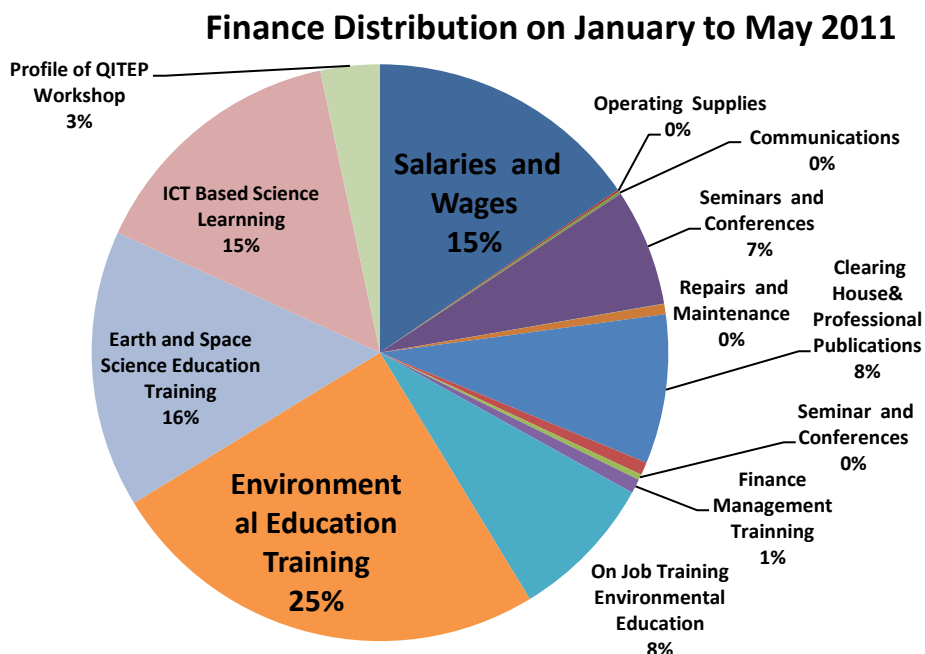
The Centre library has also been beefed up with training material books as well as some books donated from private companies such as Asahi Glass Foundation and the honorable guest visited our Centre such as Prof. Bruce Alberts and Prof. Masami Isoda.

KRA 3 : Solid Resource Base

Financial Viability

To undertake its programs and activities during the fiscal year under review, The Centre augmented the funds coming from the Government of Republic Indonesia. The budget system applied in Indonesia is based on Performance-Based Budgeting and Medium Term Expenditure Framework. Diagram below shows the finance

distribution of SEAMEO QITEP in Science activities from January to June 2011



Human Resource Management

At present, the Centre only employs 1 professional who is the Centre Director and 14 local staffs. Management structure and organization of SEAMEO QITEP in Science underwent changes in leadership as 1 January 2011, Prof. Dr. Ismunandar became the Centre's official 2nd Director of SEAMEO Regional Centre for QITEP in Science. The former Acting Director was transferred back to his initial position as the Director of Science Education Development and Empowerment Centre (SEDEC).

Other new staffs joined in January such as Ms. Dewi Ratih Fuji Astuti as Secretariate Officer, Ms. Oki Purnama Sari as Finance and Personnel Officer, Mr. Almansyah Nurhayat as Administration Officer, and Mr. Mochamad Firman Sujana as ICT Officer.

As an effort in promoting professional development of its staffs, The Centre facilitate various staff development programs, as it will help to improve the effectiveness and efficiency of the Centre's management. The Centre's staff development programs in the Fiscal Year under review are as follows:

i) Trainings on Financial Management organized by SEAMEO secretariat

The SEAMEO Secretariat, with the co-operation of SEAMEO QITEP in Science have carried out a Finance and Accounting training for the three SEAMEO QITEP Centers in SEAMEO QITEP in Science, Bandung, Indonesia from 27th February to 12th March 2011. The training was attended by 8 participants from QITEP in Language, QITEP in Math, QITEP in Science, and RETRAC. Instructors come from SEAMEO Secretariat; 3 instructors. All of the participants must have degree in accounting and proficiency in English.

The topics of the training were Budgetary System and Regional Centers'/Projects' Accounting System. The training consists of the following topics: Overview, Budgeting, Petty Cash, Obligation of Funds, Funds Disbursement, Pledge Control Record, Journal Voucher, General Ledger Report, Trial Balance

Report, Donor Subsidiary Report, Details of Cash Report, Expenditure Subsidiary Ledgers, Schedule of Expenditure Subsidiary Ledger Report, Funds Status Report.

ii) Workshop on e-Procurement organized by SEAMEO BIOTROP

This workshop was held on 14 April 2011 aimed to realize the system of procurement of goods and services to be efficient, effective, transparent, meet the principle of justice, and accountable. The venue was on the SEAMEO BIOTROP Bogor, West Java, Indonesia

iii) Seminar on Teaching Bussines English Using Minimax

This workshop was held on 29 April 2011 organized by Dr. Kay J. Westerfield, Dept. of Linguistic/American English Institute, University of Oregon, RELO (Regional English Language Office) of U.S Embassy in co-operation with Sampoerna, which is one of the biggest company in Indonesia. It is aimed for English Language teachers focusing on business communication using "MiniMax", a series of English/Indonesian bilingual booklets.

iv) Chemical Safety and Security Officer (CSSO)

This training is aimed to establish safety culture in chemical laboratory. It was conducted on 13-17 June 2011 at Chulalongkorn University Bangkok Thailand, sponsored by Sandia Laboratory and CRDF Global, USA

Facilities

QITEP in Science, in implementing its programs and activities, uses the facilities and infrastructure owned by the host institution (SEDEC)

i) Dormitory and Guest House

To support the main task and its function, QITEP in Science provides dormitories with 90 rooms which can hold 230 persons. In addition, QITEP also provides a guest house with 3 rooms which each room is able to hold 5 persons.

ii) Conference/Meeting Facilities

QITEP in Science has auditorium that accommodates 200 people for seminars, conferences and meetings are



equipped with LCD and air conditioning and also 4 classrooms which are equipped by multimedia facilities.

iii) Exhibition Room

Exhibition room provides many great hands-on exhibits dealing with electricity, gravity



and all your favorite science experiments.

iv) Library

Our library has a number of science and science education resources.

v) Laboratory

The Centre is well equipped with Physics Laboratory, Biology Laboratory,



Chemistry Laboratory, Earth and Space Laboratory, and Computer Laboratory.