

## South-South Cooperation Fund (SSC Fund)

### Implementation Status Report

2010

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**Region/Country:** Asia and the Pacific Region

**Project Title:** ICT in Education Teacher Training

**Project budget:** Total 40, 000 USD  
OTHER FUNDS IF APPLICABLE (INDICATE SOURCE(S)) .....

**Date of the project initiation:** 28 May 2009

**Completion of the project field work:** July 2010

**Responsible Sector/Division:** Asia-Pacific Regional Bureau for Education,  
Bangkok

**Name of the project officer** Fengchun MIAO

**Submitted by:** Fengchun MIAO  
**Date:** March, 2010

**Distribution** - UNESCO Paris  
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## **1. Introduction (project's objective)**

With the experiences gained from the implementation of the various ICT in Education projects in the Asia-Pacific region since 2002, the UNESCO Bangkok Office, through this project will strengthen a network of TEIs in the Asia-Pacific region by developing their capacities in training teachers to use ICT effectively. The main goal of the project is the development of the ICT in education teacher training materials and online platform. This process will involve undertaking activities under the following components:

**Component 1** Updating of the Regional Guidelines on Teacher Development for ICT-Pedagogy Integration and conducting literature review on the status and quality of female teachers with a specific focus on their ICT competency.

**Component 2** Gathering of key materials and resources arising from UNESCO-facilitated National Training Workshops for Teacher Educators and developing them as modules of the online training materials.

**Component 3** Reproducing the e-learning capacity building modules on ICT in Education: Module 1 – ICT in Education Essentials; Module 2 – ICT in Education Decision Making.

**Component 4** Developing a series of tools for teachers and teacher educators.

**Component 5** Establishing and maintaining an online platform of ICT in Education Teacher Training in the Asia-Pacific region. The platform would also open an on-line forum for teacher educators on issues of using ICT to their daily practices.

**Component 6** Promotion of the online platform as well as reproduction and distribution of the training tools and materials to the network of TEIs in the Asia-Pacific region.

## **2. Implementation and Activity Progress**

### **2.1 Statement of progress**

#### **Component 1:**

##### **▪ Updating of the Regional Guideline**

On 15 November 2009 and 5 February 2010, we held two face-to-face meetings with Professor Jonathan Anderson, the international expert UNESCO Bangkok has contracted for the updating of the regional guideline. Based on the discussion, we have confirmed the content framework, main content for all chapters and the details of the format of the updated Regional Guideline. As of now, the first draft of all 12 chapters has been completed (see 6). The drafted chapters are currently under peer review, and all text and graphics will be ready for publications by end of April.

##### **▪ Literature Review on Gender Issues Relating to ICT Use in Education**

Literature review has been undertaken to identify useful articles and resources on Gender & ICT-related issues, including the status and quality of female teachers with a specific focus on their ICT competency. Based on the literature review we have finished, the reporting framework of the literature review has been designed, and the first draft of the report has been prepared (see 6). A selection of these articles and resources has already been published on the ICT in Education website and ICT in Education newsletter as follows (please click the hyperlinks to see the full text):

- [ICT gender gap: Stereotyped thinking continues to impact females' choice for technology careers](#)
- [Twenty eight European companies make a commitment to bringing more women into technology industries](#)
- [Gender differences in teacher computer acceptance](#)
- [Gender, subject and degree differences in university students' access, use and attitudes toward Information and Communication Technology](#)
- [Are girls really excluded from ICT, or is this just a misconception?](#)
- [Gender-based issues and trends in ICT applications in education in Asia and the Pacific](#)
- [Gender and ICT](#)
- [Photo contest on promoting gender equality in education](#)
- [Technology-based vocational skills training for marginalized girls and young women](#)
- [Gender and ICTs for Development: A Global Source Book](#)

Successful case studies from Asia Pacific and other regions in promoting gender focused ICT competency in all three levels; policy, gender sensitive training and school leadership has been identified and are under documentation to help promote female teacher ICT competency in Asia Pacific.

## **Component 2**

Materials and resources from UNESCO-facilitated National Training Workshops for Teacher Educators have been collected, the framework and the first version of online training modules has been developed and the following learning modules have been developed: Overview of ICT in Education Programme of UNESCO; Regional Guidelines on ICT-Pedagogy Integration; ICT Standards for Teachers; ICT Pedagogy Content & Methodology; Effective Training Strategy on ICT-Pedagogy Integration; Facilitate Teachers' Professional Development on ICT-pedagogy Integration; ICT for Higher Order Thinking (Please also see report in component 5).

## **Component 3**

3000 copies of the e-learning capacity building modules on ICT in Education: Module 1 – ICT in Education Essentials; Module 2 – ICT in Education Decision Making, have been re-produced. And over 1500 copies have been sent to all UNESCO Offices, other UN agencies (such as UNESCAP, UNICEF, World Bank), other international or (sub-)regional organizations for developing countries (such as SEAMEO), MoEs of developing countries in this region, policy makers, teacher trainers, and teachers. Certificates of completion of the Modules (<http://www.unescobkk.org/education/ict/ict-in-education-projects/capacity-building/certificates/>) are being collected.

Among others, SEAMEO Regional Centre for Education in Science and Mathematics have

used the two modules to train about 30 senior teacher trainers and teachers from Myanmar, Iran, Afghanistan, Maldives, Sri Lanka, Nepal, Indonesia, Fiji, Brunei, Bhutan and Thailand. They were so happy with a new certificate (below please see the photo of participants holding the certificates of completion).



#### **Component 4**

##### **▪ Development of Supporting Software and Resources on ICT in Education**

The development of the CD-ROMs “Free Software for Educators”, “Multimedia Resources” and “Web-tools for Educators” and “Directory of ICT Resources for Teaching and Learning of Science, Mathematics and Language” for teacher trainers, teachers and other educators have been completed. We had initially produced and distributed 1000 copies of each CD-ROM last year. Responding to the surging demands on the CD-ROMs, we have recently updated the CD-ROMs and re-produced 3000 copies each. The CD-ROMs “Learning Tools for Children and Young Adults” and “Learning Tools for Adults” are in development and will be completed in April.

Below are the brief description of the four (4) CD-ROMs stated above:

##### **Free Software for Educators**

ICT in Education Teacher Training Series 1

ISBN: 978-92-9223-271-9

Target group: Educators, teachers, teacher educators, students, school ICT coordinators, IT administrators

This CD-ROM contains free (open source) software which may help educators to produce their own ICT based learning objects, learning materials and classroom resources. About 30 applications are included, categorized into Office & Design, Internet, Educational Tools, Audio and Video, Graphics & Animation and Utilities. A full list of applications can be viewed on the webpage of the CD-ROM.

URL: <http://www.unescobkk.org/education/ict/ict-in-education-projects/training-of-teachers/ict-in-education-teacher-training-project-in-the-asia-pacific-region/free-software-for-educators/>



## Multimedia Resources

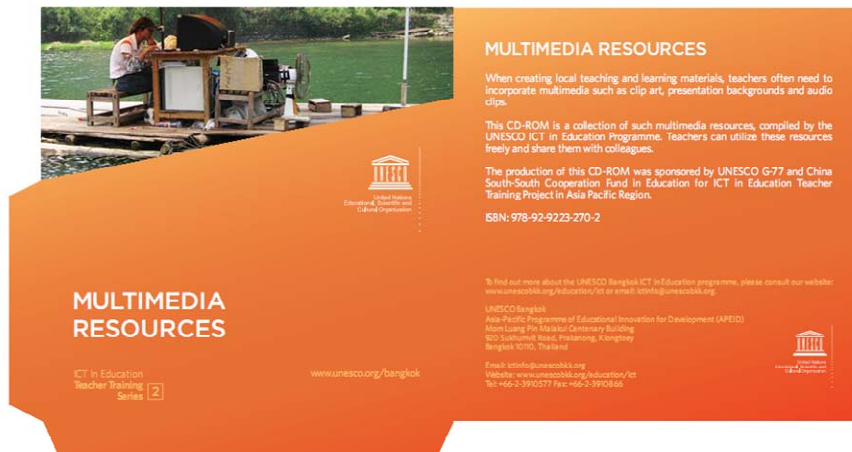
ICT in Education Teacher Training Series 2

ISBN: 978-92-9223-270-2

Target group: Educators, teachers, teacher educators, students, school ICT coordinators, IT administrators

When creating local teaching and learning materials, teachers often need to incorporate multimedia. This CD-ROM is a collection of various multimedia resources, containing a huge clip art collection, PowerPoint backgrounds, icons, pictures, music, and flash-applets for teachers to produce their own materials or lesson plans.

URL: <http://www.unescobkk.org/education/ict/online-resources/e-library/elibrary-themes/teaching-and-learning/multimedia-resources/>



## Web Tools for Educators CD-ROM

ICT in Education Teacher Training Series 3

Target group: Policy makers, Ministries of Education, school and MOE ICT coordinators, school IT technicians, IT administrators, teacher educators and teachers.

This CD-ROM, “Web Tools for Educators”, contains free web-based tools (computer software that is accessible via the Internet) that are useful for people working in the education field. In particular, this CD-ROM contains software that teachers can use to enhance teaching and learning, and software that education administrators can use to improve productivity and efficiency.

Each of the tools on this CD-ROM comes with a “tutorial” which explains what the tool can be used for and what its educational or efficiency advantages are. In addition, clear instructions are provided regarding how to download and install the tools.

URL: <http://www.unescobkk.org/education/ict/online-resources/e-library/elibrary-themes/teaching-and-learning/web-tools-for-educators-cd-rom/>



## Directory of ICT Resources for Teaching and Learning of Science, Mathematics and Language

ICT in Education Teacher Training Series 4

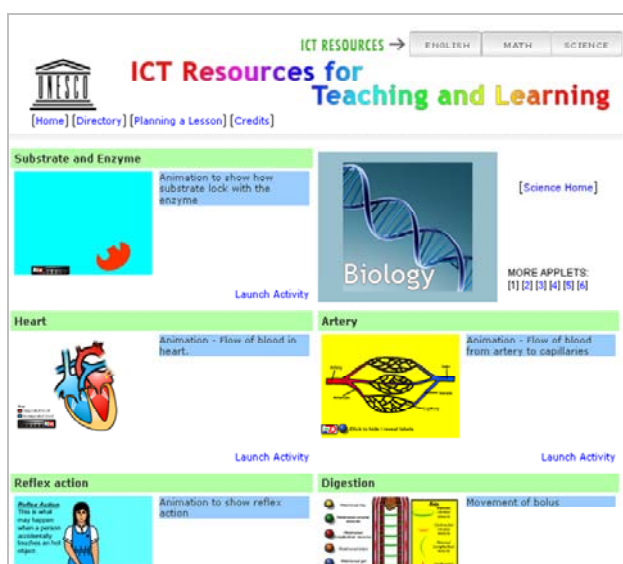
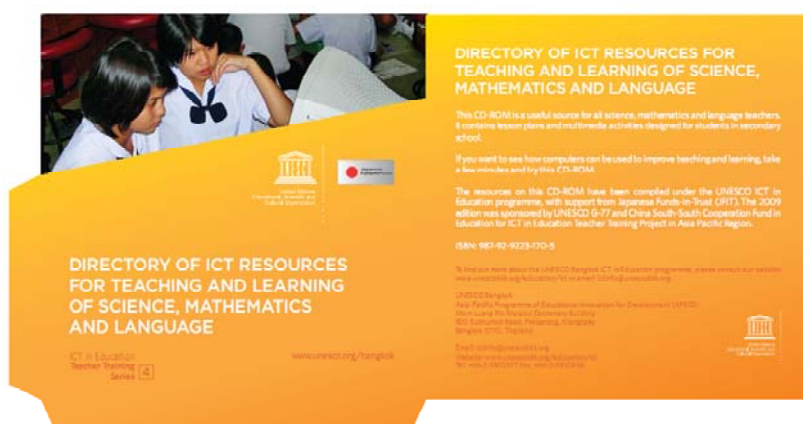
ISBN: 987-92-9223-170-5

Target group: Secondary school science, mathematics and language teachers, teacher educators  
 The CD-ROM, contained with Directory of ICT Resources for Teaching and Learning of Science, Mathematics, and Language, features a collection of ICT-based resources for classroom instruction. It provides lesson plans and multimedia activities designed for students in secondary school.

The first edition of this CD-ROM was produced in 2005, and has enabled many teachers with access to useful high-quality digital resources. By having easy access to these resources on a free CD-ROM, teachers have been able to save time in preparing lessons and improve their teaching.

The CD-ROM has been especially valuable for teachers who don't have fast Internet connections (or no Internet connection), and who have limited funds and lack the time to search for good, free teaching resources.

URL: <http://www.unescobkk.org/education/ict/online-resources/e-library/elibrary-themes/teaching-and-learning/directory-of-ict-resources-for-teaching-and-learning-science-mathematics-and-language/>



### ▪ Dissemination of the Developed Materials

Since 28 September 2009, CD-ROMs have been sent on request to 128 institutions or individuals from 42 countries: Belgium, Bhutan, Bangladesh, Brunei, Canada, Cambodia, Chile, China, Egypt, Fiji, France, Ireland, India, Indonesia, Jordan, Kazakhstan, Kenya, Lebanon, Malaysia, Mexico, Mongolia, Nigeria, Norway, Oman, Pakistan, Papua New Guinea, Philippines, Poland, Samoa, Saudi Arabia, South Africa, Sri Lanka, Suriname, Switzerland, Thailand, Turkey, Uganda, UK, USA, Uzbekistan, Viet Nam, Zambia.

They include UNESCO Offices, other UN agencies, other international or (sub-) regional organizations for developing countries (such as SEAMEO), MoEs of developing countries in this region, policy makers, teacher trainers, teachers and individuals.

We will continue to disseminate the CD-ROMs in our training workshops. The material has also been presented at the World Didac 2009 – International Exhibition for Educational

Materials and Professional Training (28-30 October, Bangkok), the Free & Open Source Solutions for Education Conference (31 October – 1 November, Bangkok) and the 13th UNESCO-APEID International Conference on Education and World Bank-KERIS High Level Seminar on ICT in Education (15 – 17 November, Hangzhou, China).

- **Requests and Feedback on the Materials**

We received requests for joint resources packaging and distribution (British Council) and translation in the local language (UNESCO Tashkent). The overall feedback is very positive.

- **Localization of ICT in Education Teacher Training Materials**

Besides the increasing requests and the positive feedback from teacher training institutions of developing countries, some member states or institutions have showed interests to localize the materials. Among others, UNESCO Bangkok has just delivered technical assistance to a workshop on review and localization of the above-stated ICT in education materials organized by UNESCO Tashkent Office from 19-23 October, 2009. UNESCO Tashkent, in coordination with Ministry of Public Education, Uzbekistan, is localizing UNESCO ICT in Education Multimedia teaching and self learning materials. For this purpose, the resource person from UNESCO Bangkok explained the programmatic framework and the pedagogical principles of the materials, and then worked together with responsible MOPE officials and master teachers to review the software, resources package, and courseware one by one based on the local curriculum. Relevant and high-quality materials have been identified for Tashkent Office to translate into Russian language. After the localization, the materials will be integrated into the national database of digital learning materials of Uzbekistan, and teacher training on how to effectively use the materials will be organized.

## **Component 5**

- **Online Learning Modules on ICT-pedagogy Integration**

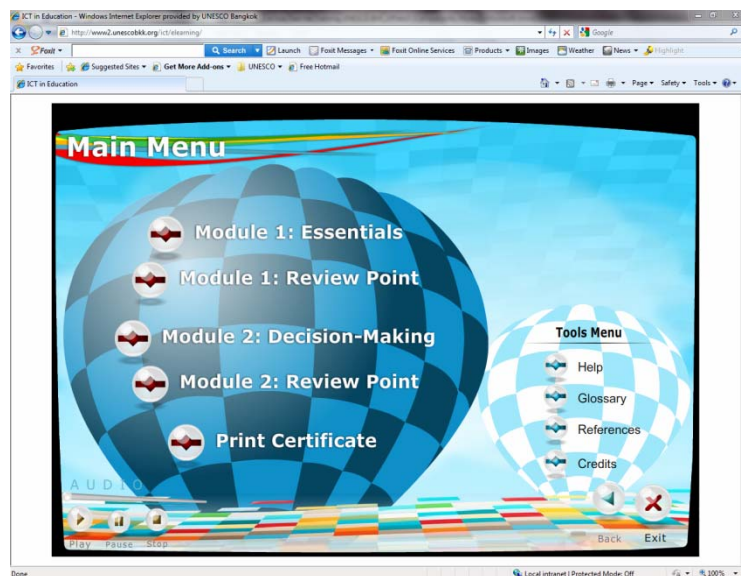
Materials and resources from UNESCO-facilitated National Training Workshops for Teacher Educators have been collected, the framework and the first version of online training modules has been developed (<http://www.unescobkk.org/education/ict/ict-in-education-projects/training-of-teachers/ict-in-education-teacher-training-modules-for-developing-countries/training/>). The following learning modules can be viewed online: [Overview of ICT in Education Programme of UNESCO](#); [Regional Guidelines on ICT-Pedagogy Integration](#); [ICT Standards for Teachers](#); [ICT Pedagogy Content & Methodology](#); [Effective Training Strategy on ICT-Pedagogy Integration](#); [Facilitate Teachers' Professional Development on ICT-pedagogy Integration](#); [ICT for Higher Order Thinking](#);

- **Online Modules on ICT in Education Essential I and II**

Based on the CD-ROM-based e-learning capacity building modules on ICT in Education: Module 1 – ICT in Education Essentials; Module 2 – ICT in Education Decision Making, we have completed the creation of the online version of the E-learning series on ICT in Education. The program operates as interactively exactly as it does on the CD-ROM and facilitates more

project-based learning processes, and certificate of completion is provided after online learners pass the final test. The online version will further increase the reach of the modules and provide even greater impact in increasing awareness on ICT in Education issues and topics.

The online modules can be accessed through: <http://www2.unescobkk.org/ict/elearning/>



#### ▪ **Online Supporting Tools or Resources on ICT in Education**

All the tools, software, resources developed under the project (see details of the software and resources in “Development of Supporting Software and Resources on ICT in Education under following components 3) have been introduced in the learning platform (<http://www.unescobkk.org/education/ict/ict-in-education-projects/training-of-teachers/ict-in-education-teacher-training-modules-for-developing-countries/>), where ordering information and link to the online training modules provided.

### **Component 6**

#### ▪ **Promotion of the Developed ICT in Education Teacher Training Materials**

We are using any opportunities available to promote the online platform and training materials we developed, including the 13<sup>th</sup> UNESCO-APEID International Conference held in November, The 4th Dean’s Forum on ICT in Education held in June, Inter-UN Agency Meeting on ICT in Education Indicators held in July, and national workshops on ICT in Education Teacher Training in Mongolia, Cambodia, Philippines and Malaysia.

#### ▪ **Promotion of Online Forum**

The Online Community of ICT in Education Teacher Training has been created and restructured (<http://www.unescobkk.org/education/ict/forum/>).

FORUM & COMMUNITY	TOPICS	POSTS	LAST POST
<b>Forum News</b> Read and discuss information and news about this community	8	14	by kateky on Sat Jul 25, 2009 12:29 am
<b>Community Chat</b> Use this Forum to introduce yourself and make friends	113	267	by Hartfried Schmid on Thu Oct 22, 2009 5:18 pm
<b>ICT in Education Events</b> Announce your conferences, workshops, events etc. which relate to ICT in Education	26	37	by benjamin2009 on Thu Oct 15, 2009 12:54 pm

UNESCO ICT IN EDUCATION PROJECTS & EVENTS	TOPICS	POSTS	LAST POST
<b>NextGen Project</b> Subforums: D 4th Deans' Forum of the Next Gen Project, D The Second Regional Workshop on ICT-Integration for the Next Generation of Teachers, D 1st Asia-Pacific Deans of Education Forum, D Regional Workshop on ICT-Integration Training for the Next Generation of Teachers	35	94	by arkim on Mon Jul 27, 2009 1:08 pm
<b>Innovative Practices Project</b> Subforum: D Introductory Course on ICeXCELS	1	2	by englyee00 on Fri Nov 21, 2008 4:21 pm
<b>Policy Project</b> Subforums: D Brunei: Telecollaboration, D Brunei: Policy Toolkit, D Sri Lanka: Telecollaboration	25	74	by Hartfried Schmid on Mon Mar 24, 2008 11:41 am

The forum has been introduced to participants at the following Conferences and workshops: [13<sup>th</sup> UNESCO-APEID International Conference](#) , [ICT POLICY WORKSHOP BANGLADESH](#); [First Curriculum Development Workshop](#), Ulaanbaatar (Mongolia), and [Next Gen Dean's Forum](#), UNESCO Bangkok, Bangkok (Thailand), June 29-30; To improve the visibility of the Online Community, we have provided references and hyperlinks in concerned topics or articles of UNESCO website and ICT in Education e-Newsletters. As of 19 February 2010, there are 484 topics and 950 posts.

### ▪ Establishment of Local Focal Points of ICT in Education Teacher Training

We have contacted more than 50 teacher training institutions from 15 developing countries to act as the local distributing centers of all ICT in Education teacher training materials we have developed. 31 teacher training institutions have expressed consent to act as **“local distributing and training centers”** of UNESCO Bangkok’s ICT in Education Resources. Upon receiving the materials, the distributing centers will reproduce and disseminate them to local teacher educators, teachers, and other educator in need. And the local distributing and training centers will organize at least one workshop a year on how use the materials in teacher training and teaching.

## 2.2 Factors of impediment

N/A

## 2.3 Sustainability

Institutionalization will be the main strategy we use to sustain the impact of the project. We have targeted institutions to receive the materials and helped them institutionalize the ICT in education teacher training activities based on our inputs. And we have a network of over 20 MOEs and a network of over 100 teacher training institutions from about 20 countries, which are good foundation of the institutionalization strategy.

## 3. Assessment of project progress

See above

### **3.2 Impact assessment**

The ICT teacher training materials we developed have gained high and extensive recognitions, MOEs, teacher training institutions, teacher trainers, and teachers from developing countries. Most of the materials are sent out upon request; therefore, the recipients are putting them into teacher training and teaching.

### **4. Recommendations**

In order to finish the updating and publication of the above stated Regional Guideline on ICT-pedagogy Integration and institutionalize the use of the materials developed under this project, we herewith apply for the first project extension until the end of June 2010. And amid efforts to sustain the project impact and benefit more developing countries, UNESCO Bangkok has planned an extra-budgetary project on "Scaling-up South-South Cooperation Project on ICT in Education Teacher Training" under 35 C/5 CAP programming framework to seek more funding.

### **5. List of project personnel**

#### **UNESCO**

- Dr. Fengchun MIAO, Programme Specialist of ICT in Education
- Mr. Schmid, Hartfried, Information Officer of ICT in Education, Project Officer of ICT in Education Clearing House

#### **National counterparts**

Local Focal Points in 16 countries **Bangladesh, Cambodia, China, India, Indonesia, Kazakhstan, LAO PDR, Malaysia, Mongolia, Nepal, Pakistan, Philippines, Sri Lanka, Thailand, Uzbekistan, Vietnam**

#### **International experts**

- Professor Jonathan Anderson, Flinders University, Australia, [jonathan.anderson@flinders.edu.au](mailto:jonathan.anderson@flinders.edu.au)
- Professor Zhiting ZHU, East China Normal University, China,

### **6. List of technical reports**

**“ICT TRANSFORMING EDUCATION: A Regional Guide” (Draft) (the Updated Regional Guideline on ICT-pedagogy Integration)**  
**Literature review on Gender issues relating to ICT in Education (Framework and First Draft)**

Both reports are available upon request.