Despite the rapid changes that the advancement of Information and Communication Technologies have triggered in our lives during the recent decades, there is one place that has not been changed much: our schools.

In most classrooms, with or without ICTs, teachers still act as the main source of information and authority who tell students what to do.

In such cases, ICTs are mainly used, if at all, as presentation tools that help teachers present more information, further reinforcing the traditional mode of classroom teaching. In other words, ICTs in our schools are still far from being fully integrated into the teaching and learning process.

UNESCO Asia Pacific Regional Bureau for Education took an initiative to address this gap in the education reality by undertaking the “Facilitating the Effective ICT-Pedagogy Integration” project in 2010-2013, which aimed to establish building blocks for mainstreaming pedagogical and pervasive use of ICTs to enhance student-centred classroom practices.

Getting Digitally Connected

This breakthrough project was started to promote a new approach to teaching and learning with ICT. It aimed to help teachers create a learning environment that empowers students to construct knowledge and skills that they would need in a digitally connected world.

The project targeted teachers and teacher educators in seven selected countries across the region: Bangladesh, China, Malaysia, Pakistan, the Philippines, Thailand and Vietnam.

One of the main components of the project was to build teachers’ capacity in designing and facilitating ICT-supported student-centred learning activities.

Educators participated in the four-day workshop that helped them walk through the step-by-step process of designing an ICT-supported project-based learning (PBL) activity plan. PBL is one of the student-centred approaches, where students are asked to work on a project within a team to find a solution to real-world problems and issues by employing expert-like thinking.

Through the various activities and tasks involved in PBL, students learn how to learn, unlearn and re-learn, which can hardly be possible in a traditional knowledge-transmittal approach. Table 1 shows the “CREATE” criteria that educators used to self-reflect on their PBL design.

Since most of the participating educators were not familiar with the PBL design, one of the common mistakes among teachers is assuming that students would know what to do with whom, when given a task.

While it is true that students are encouraged to construct their own knowledge through their own ways, the activity has to be structured properly for such unstructured learning to happen.

Therefore, the project team provided a PBL activity plan template to explicitly guide educators in designing and describing: key activity steps, the timeframe for each step, what roles students are expected to play in each step, teacher’s facilitation strategies, required resources/materials needed, expected students’ outputs from each step, and how the outputs will be evaluated.

Table 1. Criteria for PBL Design

| C | Curriculum-based: The topic aligns with school curriculum. |
| R | Real-world issues: The topic is relevant to student life and engages them in meaningful and productive learning. |
| E | Expert thinking needed: The topic presents an open-ended problem that needs higher-order thinking to solve or expert thinking in creating products |
| A | Achievable and measurable results: The topic and output are achievable and measurable based on students’ prior knowledge and competence. |
| T | Team work: The topic and outputs provoke collective construction of knowledge and collaborative learning. |
| E | Extending learning time beyond classroom boundaries: The topic needs extended time to complete the project beyond classroom. |
More than 450 educators from 140 schools, nine Teacher Education Institutions and two local partner organizations were trained across the seven countries. In addition, 35 participants from policy-making agencies/organizations were also trained.

Participants were able to collaboratively develop 65 PBL plans and 15 active-learning lesson plans during the workshops, with the potential for enhancement in the future and for implementation in their respective schools.

Consolidated evaluation results from the Capacity Building Workshop on PBL and Telecollaboration indicated that participants found the workshops interesting, useful and relevant.

Participants also reported that they gained new insights and practical knowledge on ICT-Pedagogy Integration through the different modules.

**Working Together across Global Lines**

As an offshoot of this project, the KFIT International School Project (KISP) was initiated to provide teachers and students an opportunity to expand their boundaries, collaborate with other groups internationally and learn about other countries.

Implemented from March to July 2012, KISP brought together approximately 300-plus unique students from Grades 3 to 7 of 10 schools in six countries (Canada, China, Philippines, Republic of Korea, Malaysia and Bangladesh) to work on their ICT-supported collaborative PBL projects. UNESCO Bangkok’s Education Community (EC) was used to provide the online collaboration platform.

Since the student profile showed that most of the students were not experienced in international projects, the project team designed three sequential activity phases to help students immerse in the project without scaring them away.

**Phase 1: Introductions**

Participating teachers and students were asked to develop a short digital story per school to introduce themselves to other participants from different schools/countries. The digital stories were in the form of videos, slides and/or photo stories which could capture characteristics of their schools, their culture and their countries.

Participants shared the digital stories through the EC and were also encouraged to view and comment on others’ digital stories.

**Phase 2: National Collaboration**

For this phase, in order to experience PBL, participating teachers and students implemented their respective projects within class. Some chose to collaborate with other schools from the same country, coordinated through their contact educators. Sample national projects included an introduction to local tourist spots (Philippines) and an analysis of local air quality (China). Outputs were then uploaded and shared through the UNESCO EC portal.

Students were highly encouraged to comment on the projects of other countries to promote their understanding of different projects and school cultures.

**Phase 3: Collaborative International / Intercultural Projects**

The final phase of the project intended participating students to work on collaborative projects with their counterparts from other countries. A total of 151 students and teachers from six schools across Korea, Philippines, Malaysia and Bangladesh participated in the third phase of the project.

The topic of the project (“Creating a Weather/Culture Calendar”) was agreed upon after a lengthy consultation amongst teachers and the project leadership team.

Participants were divided into 12 groups of mixed nationalities with each group required to collectively complete the calendar of a particular month with their traditional cultural events and festivals, with the aim of providing potential tourists with useful information about their respective countries, including what to wear, where to go, what to see and expect during their assigned allotted months.

**Sharing Is Learning**

Annual regional seminars were held as a platform for selected teachers from different countries to share their PBL implementation and experiences as well as build a network for international PBL activities and innovative teaching practices.

These measures reinforce the need for building teachers’ communities of practices, where groups of people share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interaction on an ongoing basis.

Thirty innovative practices of collaborative PBL were selected and showcased during the Regional Seminars as a means to cross-share best practices and to gather ideas on potential collaborative projects with speakers and other participants.

It also served as an opportunity for teachers to refine their concepts and project designs through feedback collected from other teachers of diverse academic background and pedagogical exposures.

**Clicking Away into Future**

This project succeeded in advocating and raising awareness amongst multiple actors in education, including policy makers and district officials, on the importance of ICT-supported new pedagogy in preparing our young generations for the needs and required skill sets in the 21st century.

Key success factors of the project can be attributed to its systems approach to ICT training for teachers, addressing not only capacity building of teachers but also strengthening local partnerships between TEIs and school teachers, soliciting support and leadership from school administrators, and the provision of regular platforms for sharing teachers’ experiences and building voluntary communities of practice.

UNESCO Director-General Irina Bokova asserted the importance of teachers’ role in integrating ICT in education by saying, “Technology can be a powerful education multiplier, but we must know how to use it.”

A continued support is needed to empower teachers to be competent and confident in employing innovative ICT-supported pedagogies until such new culture of learning becomes mainstreamed in our schools.