Dear readers,

The Incheon Declaration calls for urgent attention to education that is holistic, inclusive and aspirational, and stresses the significant role of teachers and educators in transforming education and achieving quality lifelong learning for all. This month’s newsletter highlights how teachers and educators can be empowered, supported and motivated through and for the use of ICT, ranging from an ICT-supported professional learning network in Canada to a preservice training programme in Singapore to an in-service e-learning programme in Korea.

We hope you enjoy reading this edition!

Please let us know if you have any comments or suggestions.

Highlights:

Invest in Teachers (by UNESCO Bangkok, APEID/ICT in Education)

This article underlines the importance of investing in teachers, their training, continuous development and support in the backdrop of the global initiatives of providing inclusive, equitable and quality education.

This year – 2015 – is significant. It marks the end of the Millennium Development Goals (MDGs) and the beginning of the Sustainable Development Goals (SDGs) which will be adopted at the United Nations Summit in New York in September. As a build-up to the event, many working groups have been formed and meetings held to discuss and develop a new set of goals and corresponding targets for the next 15 years, of which Goal 4 concerns education. The Education for All (EFA) movement, which started in Jomtien, Thailand in 1990 has brought about impressive increases in the number of children attending schools. Unfortunately, 58 million children are still out of school, most of them being girls. Even for those who are in school, the quality of their education remains a serious concern.

As the next milestone to the EFA movement, at the World Education Forum in May in Incheon, Republic of Korea, participants issued a declaration on the future of education to finish the unmet EFA and MDG
agendas through the *Education 2030 Framework for Action*. Making a case for the importance of teachers in the education system, Susan Hopgood, the President of *Education International*, said that “... in order to realize any education goals, students in every classroom must be guaranteed a well-trained, professionally-qualified, motivated and supported teacher.”¹

It has been evidenced that in order to reach the Sustainable Development Goals (SDGs) for education by 2030, a total funding of USD 39 billion is needed annually.² Meanwhile, a background paper prepared for the recently concluded *Oslo Summit on Education for Development* affirmed that investing in teachers can transform education and help to deliver the post-2015 education agenda on equity and learning.³ How much of the education budget will be allocated to teacher education to increase teaching competencies, and how the allocation will be utilized are critical questions in the call for investing in teachers. Support is needed in multiple areas, including raising the status of the teaching profession to attract competent candidates, providing quality pre-service training and continuous professional development, improving working conditions, and enabling teachers to contribute more actively to all discourses on education policies, management, pedagogy and content, to name a few.

One particular area comes to mind. In the same period over the past 15 years, technological and infrastructural advancements have brought unprecedented growth in the ICT sector. Data from the *International Telecommunication Union* in 2015 reported 3.2 billion people with access to the Internet globally, out of which 2 billion are from developing countries. More astounding is the number of mobile cellular subscriptions: 7 billion in 2015, compared to 738 million in 2000.⁴ The *One Laptop per Child (OLPC)* initiative, which had spurred many governments to invest in low-cost computer devices, has lost out to increasingly affordable smartphones and tablets as the price of mobile technology continues to drop while the quality of devices and applications continues to rise. The day when everyone on the planet will be connected and have access to information anytime, anywhere is no longer a pipe dream.

It is very attractive for governments to invest in ICT, but will be this a wise use of their education budget? The initial enthusiasm for OLPC has been countered by criticisms for over-focusing on the deployment of the devices – which admittedly seems to be more “newsworthy” – than on content development or teacher training. In fact, several studies have convincingly argued that without changing the teaching practices, technology alone will not bring any significant difference in learning outcomes.⁵

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The role of a teacher in the modern era has changed substantially with the explosion of technology. Consequently, teaching practices have to be updated – now and not tomorrow – to catch up with the IT-savvy Generation Z students. Clearly, investment in the technical hardware and software must be balanced by investment in human resources – the teachers.

In this regard, UNESCO has been assisting its Member States to train and support teachers to use technology more effectively and appropriately through various channels. The ICT Competency Framework for Teachers (ICT-CFT) is one such example. This framework is a major reference for a 4-year project undertaken by UNESCO Bangkok to support Member States in the Asia-Pacific region in determining and developing the required ICT competencies for teachers that are clearly aligned with their policy vision, goals, and ICT in Education Master Plans. The project, supported by the Korean Funds-in-Trust, aims to contribute to the meaningful localization and adaptation of the ICT-CFT at the national level. Hopefully, the outcomes of the project will also influence the decisions on investment in education, particularly on the importance of investing in teachers.

As this newsletter aims to highlight the importance of teacher training, continuous professional development and support, this issue will feature some of the exemplary projects from the experiences of Singapore and Korea for pre-and in-service training. Additionally, the article about the benefits of Communities of Practice for teachers and the ways they can be formed is featured in order to underline the importance of enabling and supportive environments, while providing experiential suggestions to facilitating teacher engagement. The Projects section introduces CASIE 2015, a recent conference in Central Asia on empowering policy environments for teachers, UNESCO Resource Distribution and Training Centres (RDTCs), aimed at supporting and developing capacities in training teachers to use ICT effectively, and Malaysia Virtual Learning Environment (VLE), a good example of a national platform for teachers, students and parents, emphasize the importance of investing in teacher growth and quality tools for teaching and learning. In the News and Events section, two conferences are featured in the year 2016 in Singapore and UK on ICT. The Resources section offers some useful platforms for teachers, such as the UNESCO Portal for Teachers and the Intel Education Galaxy, while also providing some guiding frameworks for teachers developed by UNESCO, and Southeast Asian school heads by SEAMEO-INNOTECH. Finally, in the new publications, such international organizations as UNDESA, UNICEF, UNGEI, and OECD are featured on the themes of Millennium Development Goals, girls’ and women’s leadership and policy reform.

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This article provides an overview of the Technological Pedagogical Content Knowledge (TPACK) for 21st century learning designed to promote teacher ability to develop meaningful classroom activities, underlining the importance of technological, pedagogical and content knowledge.

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Education researchers who are interested in promoting 21st century learning have identified Information and Communication Technologies (ICT) as the primary driving force. ICT can engender collaborative learning that involves students in the solving of authentic problems through a range of higher order thinking strategies. However, it is also clear that merely providing technology to teachers and students will not change teaching and learning. To date, there are still wide-spread concerns about teachers’ ability to design lessons that can engage students in adventurous and meaningful learning activities. The authors proposed that the key to resolving this problem lies in enabling teachers to create Technological Pedagogical Content Knowledge (TPACK) for 21st century learning. This article encapsulates ways of promoting TPACK that the authors have been engaged in for the past 5 years under the support of the Office of Education Research in the National Institute of Education (Singapore).

The notion of TPACK was derived from the notion of Pedagogical Content Knowledge (PCK) (Shulman, 1986) with the recognition that 21st century learning necessarily involves technology. In short, technology integration involves the interaction of technological knowledge, pedagogical knowledge and content knowledge. When such knowledge resources interact and are synthesized through teachers’ lesson design, opportunities to transform the teaching and learning of specific subject matter with technologies are created. In addition to TPACK, some general principles about the pedagogical use of specific technology across different subject matter (i.e. technological pedagogical knowledge) and specific use of technology to represent specific content knowledge (i.e. the technological content knowledge) could be created. The TPACK framework emerged around 2005 and even though it is a relatively new framework, it has been widely applied in teacher education and has generated more than 600 research articles (for more details, see Koehler et al., 2014). Like the PCK framework, TPACK is likely to be a lasting framework for researchers to understand technology integration.

Singapore’s Ministry of Education recognized the importance of ICT and is one of the early adopters of 21st century learning. It has formulated and implemented three ICT Masterplans and it has just launched its fourth Masterplan for ICT. The efforts in the past fifteen years have changed the ICT infrastructure in schools, shaped teachers’ pedagogical beliefs towards constructivist learning and engaged many teachers in designing lessons oriented towards 21st century skills. In continuously supporting the masterplans, the National Institute of Education periodically reviews and updates its pedagogical foci. The TPACK framework has been employed to design pre-service and in-service courses for teachers.
the pre-service courses, the pre-service teachers are tasked to research and perform reciprocal teaching to build deep pedagogical understanding about the different aspects of 21st century learning. Technologies were introduced through experiential learning. After a brief demonstration of mainly Web 2.0 tools, the pre-service teachers used the technology to learn. They were then guided to articulate the pedagogical reasoning behind the use of that the tools to build their technological pedagogical knowledge. The learning of pedagogical and technological knowledge is further enhanced through multiple cycles of designing lesson ideas. The pre-service teachers review their content knowledge and design ways of helping students to construct understanding about the subject matter.

For the in-service teachers, a redesigning approach through school-based teacher learning communities was adopted. The teachers were provided with rubrics that illustrate different levels of 21st century learning. They reviewed and assessed their lesson using the rubrics in order to decide on the design goals they wanted to achieve, select and/or explore specific technological tools and to revamp their lessons. Both pre-service and in-service teachers are treated as knowledge creators, while collaborative design is used as the means to create the knowledge needed.

To date, the authors have published a number of researched articles (see for example, Koh, Chai, Wong & Hong, 2015). Congruent to other TPACK studies from a number of countries, it was found that learning by design for technology integration is generally effective for enhancing the quality of the technology integration lessons. The teachers also gained a stronger sense of efficacy for technology integration. Some lessons that the authors have learnt are: i) it may be important to have experienced educational technologies to facilitate the collaborative design of TPACK at the initial stage; ii) multiple design cycles are needed to foster design capacity of the teachers; and iii) support from school leaders in creating opportunities for teachers to be deeply engaged in design work.

On a larger scale, the case for Singapore’s relative success in promoting the use of ICT can be attributed to continuous policy and financial support from the Ministry of Education (the four Masterplans); the proactive and responsive adoption of relevant theories (the TPACK framework and 21st century learning); and the efforts that school leaders and teachers devoted to innovative pedagogical practices through professional learning communities.

References


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Policies to Promote e-Learning Teacher Training: Korean case (by Dr Jin Sun Yoo)

Written by the KERIS Research Fellow, Jin Sun Yoo, the article shares the Korean approaching to e-learning at a mode for teacher training. The author provides the background information of the training program procedure in the country, incentives used to attract more teachers, the benefits of public and private partnerships, as well as some useful recommendations for the interested governments in developing such a policy and programme.

With the development of information and communications technology, e-Learning teacher training attracted great attention as a means of in-service education of teachers. In order to promote e-Learning teacher training, training programs should be excellent, above all. Also, teachers should be provided with an environment where they can actively participate in the programs. South Korea has introduced and operated e-Learning teacher training system for teacher training since the year 2000. We will briefly examine the Korean case of implementing policies to promote e-learning teacher training and their implications.

Provision of Customized Training Programs: Reflecting Teacher’s Life Cycle

Training programs should meet the demand and needs of teachers in order to encourage their participation. This is to say that training courses should be highly relevant to job descriptions of the education field. To this end, Korea made customized training programs according to teacher’s life cycle, from their appointment to retirement. According to teacher’s life cycle, training programs can be divided into four stages. 1) At the beginning stage of the education career, training helps novice to four-year teachers develop skills necessary to adapt to teaching job. 2) At the growing stage, training helps five- to ten-year teachers develop skills for making their own model lessons and establishing class management philosophy. 3) At the advanced stage, training focuses on the lesson-consulting role of eleven- to fifteen-year intermediate teachers. 4) At the maturity stage, training helps develop abilities needed for leadership, lesson coaching, and mentoring for teachers with a career of over fifteen years. According to a survey conducted by a provincial office of education, trainees showed over 95-percent satisfaction with the training programs.

Enhancement of Training Content Quality: For High Quality Content Development

For successful development of professional competency, educational content is far more important than anything else in e-learning teacher training. Therefore, a system is needed to promote high quality content development. By law, Korea prescribed mandatory content quality certification to operate e-learning teacher training courses. E-learning content quality certification sets standards for content accuracy, relevance, functional errors, ethics, and copyrights.

Qualitative Upgrading of Training Operation Service

To upgrade the quality of e-learning teacher training, Korea assesses e-learning teacher training institutes every year. The assessment includes training operation performance, efforts to improve service levels and customer feedback, as well as innovation cases. If a training institute shows excellent
performance, the institute is given opportunities to expand trainee recruitment through public relations. But if an institute continuously shows poor performance, the training institute is recommended to close. To promote teacher training, excellent e-learning private businesses are given the same legal status as government training institutes. Of course, to be approved as training institutes, they must pass a strict screening process. Cooperation and competition between the public and private sectors create opportunities for the training institutes to develop and run outstanding courses.

**National Reward Policies: Maximizing Training Participation**

To improve training participation, Korea supports training expenses for teachers. The funds come from provincial offices of education, supporting $200 per teacher each year. It costs $40 per teacher to participate in an e-learning teacher training course. Another reward policy is to provide teachers with excellent training performance with a possibility of their promotion to vice principal or principal. Provincial offices of education conduct school assessments every year. They then reflect teacher training performance in the assessment, judging whether training participation performance reached 60 hours per teacher.

**Policy Implications**

The Korean case of operating e-learning teacher training can have major implications for other countries.

Firstly, before introducing e-learning teacher training, economic conditions of each country should be taken into account. Many say that the learning management system, learning content, and network environment are the most important elements for enhancing e-learning teacher training. Considering the features of e-learning, this argument is not wrong. However, applying the latest information technology is not always the essential element of training performance. We can also raise the effect of training with non-synchronous interaction, such as questions and answers, as well as discussion. Therefore, operating activity-centered training programs is more important than anything else.

Secondly, a central government needs to have strong policies on teacher training. Among the policies, it should first make training participation mandatory and give incentives for training participation. The government also needs to create an assessment system to manage qualitative levels of training program operation and to encourage private participation in teacher training by using the facilities and experiences of private enterprises. To this end, Korea has established the e-learning teachers training service (ETTS). ETTS performs content quality certification, supports tutor training, develops guidelines for operating e-learning teacher training, and evaluates the operation performance of training institutes.

Finally, conditions for using computers and the Internet should be considered, as it is after all e-learning. Computer performance and network speed have impact on training methods, in real time or not, and content modalities, such as video or text. It should also be considered if teachers can secure time for training and their passion and motivation for self-development. This is an aspect we should pay great attention to not just in e-learning, but also in collective training.

E-learning teacher training demands a lot of initial investment, but in many cases, e-learning training systems built with high costs may not be used as much as expected. Therefore, we must sufficiently consider teachers’ social and cultural conditions when planning the operation of e-learning teacher training at the initial stages.
Programmes and Projects:

- **Central Asia Symposium on ICT in Education 2015** (7-9 July, Bishkek, Kyrgyz Republic)
  This article provides an overview of the completed CASIE 2015, held in the Kyrgyz Republic, on the theme of “Fostering an Enabling Environment for Teacher Innovation: From Policy to Practice”.

Meant as a sub-regional platform for the Central Asian countries to collectively deliberate on possible solutions to the current challenges as well as opportunities, with a focus on integrating technologies in the education systems, CASIE 2015 took place in Bishkek, Kyrgyz Republic, the 4th of its kind since its inception in 2011. In response to the previous Symposium’s feedback from the participants, this year’s event continued to focus on the importance of policies, strategies, initiatives and supportive environments for innovative pedagogy and systematic teacher education and professional development, as well as the effective integration of ICT into teaching and learning. Aligned with the Post-2015 Development Agenda, the Muscat Agreement and the Bangkok Statement for the Asia-Pacific region, governments must collectively ensure the development of qualified, professionally trained, motivated, committed and well-supported teachers who use appropriate pedagogical approaches by the year 2030. Additionally, with the support of the Sustainable Development Goals that further highlighted the key role of teachers, the theme of CASIE 2015 was “Fostering an Enabling Environment for Teacher Innovation: From Policy to Practice”. The Symposium addressed various aspects to bring about such an environment, including 1) comprehensive teacher development policies and programmes for quality and relevance, 2) the importance of school leadership in creating a conducive and sustainable environment for teachers, 3) the necessity of quality digital resources for teachers, and 4) the role of EMIS and education data in enhancing policy and supporting teachers.

With the support from the Kyrgyz government, the National Commission for UNESCO of the Kyrgyz Republic, Korea Education and Research Information Service (KERIS), UNESCO Almaty, UNESCO IITE, and Intel, UNESCO Bangkok together with its partners provided a platform for almost 70 participants, namely Ministry of Education officials from five countries (Kyrgyz Republic, Republic of Kazakhstan, Republic of Tajikistan, Republic of Uzbekistan and Mongolia), as well as local and international speakers and experts who represented more than 10 countries, such as Korea, Singapore, Ukraine, Malaysia, Philippines, France, Canada, and more. All the participants engaged in fruitful, rich and multi-directional discussions to enable and support efforts in building national capacity in the use of ICT in Education at all levels. Through country presentations and the roundtable discussion, the delegates had the opportunity to individually present their initiatives, progress, and challenges as well as find new ways to collaborate with the partners and governments in the region and beyond. The Roundtable Discussion likewise served as an opportunity for the delegates to discuss individual country plans for CASIE and ways to effectively utilize this platform, voice their challenges as well as opportunities and chances of collaboration, as well as receive support from local and international organizations in addressing these challenges and building on each other’s potential.

The Gallery Walk, which focused on the digital resources for teaching and learning, featured ten local and international organizations and their resources, tools and programmes that can enhance the
teaching process, such as the UNESCO Bangkok Digital Resources, UNESCO IITE MOOCs for teachers, school leaders and policymakers, OER in CIS countries, KERIS KOOW and access to online lectures, Republic of Uzbekistan multimedia resources, University of Central Asia eBilim mobile digital library, Republic of Kazakhstan digital educational resources, and ICDL training modules for essential skills. Conducted in a model of demo sessions, participants and presenters had the chance to directly discuss potential points for exchange, collaboration or improvement of the given tools.

Two parallel workshops were also held by UNESCO Bangkok and Intel CIS on developing national ICT competency standards for teachers and the Intel Education Galaxy, respectively. Both sessions provided participants with ideas of how to further support their teachers, highlighting the importance of teacher communities, as well as clear competency standards that are essential for preparing, monitoring, assessing and supporting teachers.

Finally, the participants had a chance to visit two study sites, teacher training centre and a school, upon the end of the Symposium in order to learn and see how teachers are trained and how students can utilize technology in innovative ways to learn and collaborate with each other, as well as students from across the world.

Overall, the Symposium proved to be useful and fruitful, collecting many positive reviews from the participants as well as suggestions for future improvements and possible themes for the upcoming event, currently planned for the year 2016 in the Republic of Kazakhstan.

For more information about the CASIE 2015 and previous CASIEs, please visit: [http://www.unescobkk.org/education/ict/current-projects/casie2015]

Cultivating a Community of Practice for Teacher Professional Development (by Dr. Gyeong Mi Heo)

In this article, Dr. Gyeong Mi focuses on the benefits of Community of Practice (CoP) for teachers, as well as ways to it can be formed. She presents The Creating, Collaborating, and Computing in Mathematics (CCC-M) project as an example, and provides experiential suggestions to facilitating teachers' engagement in a CoP.

Dr. Gyeong Mi Heo is a Research Associate in the department of Educational and Counselling Psychology at McGill University in Canada. As a researcher and facilitator, she has been working in various projects related to communities of practice for teacher professional development, for example the Creating, Collaborating, and Computing in Mathematics (CCC-M) project and the Building Community through Telecollaboration (BCT) Network. She also conducted research for the KFIT International School Project (KISP) initiated by UNESCO BKK as a principal investigator and TEI coordinator. Her research inquiry focuses on how technology can support teaching and learning in different educational settings, including formal, non-formal and informal learning contexts.

For teacher professional development, a Community of Practice (CoP) is considered as an effective and situated learning environment for enhancing teachers' capacity for teaching and learning in practice
through collaborative learning processes. This is in contrast to one-shot workshops or training sessions that are more individual and isolated professional development process.

What is a Community of Practice (CoP)? The term CoP has been used in different ways by different people or in different contexts. As a narrow and concrete concept, a CoP simply refers to “a group of people” or “a space (e.g., an online platform) in which a group of people is together.” Various terms have also been associated with “community” to refer to different dimensions --or types-- of community, such as domains of knowledge and profession (e.g., communities of inquiry, knowledge communities, and learning communities/networks) and types and modes of communities (e.g., virtual/online/web-based CoPs and distributed CoPs). According to Wenger, McDermott, and Snyder (2002), a CoP is a group of people “who 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 (p.4).” In addition, the notion of CoPs that was intensively expanded by Wenger (1998) provides a useful conceptual framework for developing and cultivating an effective learning environment for professional development. Wenger and his colleagues (2002) highlight three structural components of a CoP: Domain (i.e., a set of issues which is shared among members in a CoP), Community (i.e., people who care about this domain), and Practice (i.e., what members of the community are developing to be effective in their domain).

A CoP can be formed in a face-to-face (F2F), online, or a blend of online and F2F contexts. As Information and Communication Technologies (ICT) evolve, they can be used in a CoP for teachers, which is often referred to as professional learning community (PLC) or professional learning network (PLN), and allow teachers to have more opportunities to interact with other teachers and to participate in collaborative learning activities regardless of differences of time and place more easily and dynamically. Within a CoP, teachers can:

- Interact with others who have different levels of expertise in teaching practice and have various experiences in diverse contexts,
- Share personal experiences, thoughts, information, skills, knowledge, and resources with others who have common interests, issues, concerns, and practice,
- Reflect and develop their practice by authentic interaction with others,
- Collaborate with others to achieve a shared common goal,
- Explore new possibilities, solve problems, and build new knowledge together, and hence
- Engage in ongoing professional learning, sustained interaction and communication, and transfer of knowledge in practice.

Here is an example of a CoP for teacher professional development: The Creating, Collaborating, and Computing in Mathematics (CCC-M) project. The CCC-M project aims at cultivating a CoP for (and with) teachers in a school board in Quebec, Canada.

Following the three structural components of a CoP, first, the domains of practice highlighted in this project are mathematics as a subject, integration of technology into classrooms, and the transition from elementary to secondary school. As a joint enterprise, the leadership team (including educational researchers and consultants of the school board) and 13 participating teachers from elementary and secondary schools, share common goals in the project and develop mutual understandings and collective knowledge about the situation at different school levels.
Second, in terms of the community for mutual engagement, the participating teachers attend four to five face-to-face (F2F) meetings in each school year. The F2F meetings provide hands-on sessions with various ICT tools (e.g., Educreation, instaGrok, iMovie, Padlet and Smart Math tools) to develop their practice of integrating technology into their mathematics classrooms. Between the F2F meetings, the teachers interact and collaborate with each other in Edmodo, which is a web-based space for K-12 social learning communities. The web-based activities on Edmodo enable the teachers to engage in ongoing interaction and collaboration with each other by sharing their experiences, thoughts, and information for their professional learning. To develop the community, first, we made an effort to build trust and mutual respect among the participants. Then, we focused on fostering the teachers' engagement (from peripheral to full participation) in more reflection and inquiry processes beyond sharing by identifying lead teachers who play a role as core members with the leadership team.

Third, practice built through the iterative processes of participation and reification is developed as the shared repertoire, for example a list of digital tools with useful annotations, outputs from hands-on
sessions, organizers used at the F2F meetings, a summary book of classroom activities and the teachers’ reflection, and so on.

Overall, the participating teachers appreciate the values of sharing and collaborating with other teachers within the CoP for professional development. Compared to the F2F meeting, however, the teacher’s online engagement in Edmodo have been limited with regard to the number of postings, the level of reflection and the interaction pattern. The teachers indicate that time constraints are one of the major concerns for them to engage in online interaction and participation.

Here are some suggestions for facilitating teachers' engagement in a CoP, in particular in a web-based CoP, based on my experience working with CoPs for teachers (e.g., CCC-M, BCTN, and KISP).

a) The shared visions and goals should be developed through group consensus. Teachers’ motivation for engaging in the CoP is derived from their needs and expectations.

b) Building trust and creating a safe, respectful, and supportive environment are important though it takes time and persistent effort. To cultivate social relationship, F2F meetings can play a leading role for the evolution of the community.

c) The roles of core members who are identified among the participants are crucial. They can represent the teachers’ actual needs and expectations and reflect their practical situations.

d) Teachers need some time to gain technological proficiency and familiarity with ICT tools applied in the CoP.

e) Teachers require more structured participation guidelines set out by mutual agreements in consideration of their scarce time and busy schedule.

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References


UNESCO Resource Distribution and Training Centres (RDTCs)
The goal of this project is to strengthen a network of Teacher Education Institutions (TEIs) in the Asia-Pacific region by developing their capacities in training teachers to use ICT effectively. The Network consists of 24 teacher education institutions in 12 countries in the region who have committed themselves to serve as RDTCs. Annually, UNESCO Bangkok in collaboration with its partners holds a Regional Seminar for UNESCO RDTCs.

Malaysia Virtual Learning Environment (VLE)
The first country in the world to have a single, nation-wide cloud-based learning platform accessible from anywhere with an Internet connection. It aims to help teachers, students and parents. Teachers can manage students’ records, create their own teaching resources, provide feedback and communicate with the students, plan their curriculum and more. Students can
keep track of their progress, upload and save files, communicate with teachers and classmates. Parents can stay in tune with school events, reports, find the contact information, download forms and more.

**News and Events:**

  The biennial conference focuses on advancing 21st century teaching and learning through the use of technologies. The 2016 theme invites participants to share practices, experiences and research on emerging trends in the field of educational technology.

- **Education ICT 2016 (June 2016, London, UK)**
  This event will bring over 300 teachers, schools leaders and ICT experts to explore the future of technology for learning and curriculum development from across the education sector.

**Resources:**

- **UNESCO ICT Competency Framework for Teachers**
  This free publication developed by UNESCO serves as an international benchmark with the competencies required to teach effectively through the use of ICT: UNESCO ICT Competency Framework for Teachers (ICT-CFT). As ICT competencies are not enough, teachers need to also be able to equip their students with the necessary skills, which are addressed in the Framework. It consists of three different approaches to teaching, such as: technology literacy, knowledge deepening, and knowledge creation.

- **UNESCO Portal for Teachers**
  This portal provides ICT in Education information for teachers and educators, particularly in the Asia-Pacific region, such as teaching guidelines, lesson plans, and links to online ICT teacher training courses.

- **Intel Education Galaxy**
  For Russian speaking teachers, this platform focuses on ICT in education: innovative solutions, perspectives and practices. Here, teachers can create and read blog posts, participate in competitions and online conferences, share projects and methodologies, find online resources, and more.

- **SEAMEO INNOTECH Competency Framework for Southeast Asian School Heads**
  This Framework aims to provide a benchmark for defining the skills needed for school heads to lead their schools. It consists of 5 domains, more than 50 competencies, and 170 indicators.
New Publications:

- **Millennium Development Goals Report 2015**
  This UNDESA report provides an analysis and data through the Millennium Development Goals (MDGs) to learn from and make decisions for the future development. It also provides the challenges and achievements made throughout this historic effort.

- **Progress for Children Beyond Averages: Learning from the MDGs (No. 11)**
  This UNICEF report on the child-related MDGs presents the data that show the hard lessons learned and provides recommendations for future consideration and attention in regard to the most vulnerable children.

- **Today’s Challenges for Girls’ Education**
  This UNGEI report provides the progress made in girls’ education, as well as the remaining challenges and work that need to be done, especially in poorest and disadvantaged contexts. The report also provides recommendations for women’s and girls’ leadership by focusing on civil society and the private sector.

- **Education Policy Outlook 2015: Making Reforms Happen**
  This OECD report is aimed to guide education policy makers in improving their education in a comparative style, taking into consideration the local contexts.

Next issue: The August issue will focus on the theme of ICT for Digital Equity. If our readers are interested in contributing to this edition, please do not hesitate to contact us.

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