The PHILIPPINE Report

ASEAN Deep Learning Policy Series:

Empower Students with 21st Century Deep Learning Skills

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Photo Credit: Microsoft

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This ASEAN series workshop aims to collate educators' and policy makers' recommendations on the integration and scale up of deep learning strategies in classroom teaching for the region's Ministries of Education.

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The conference, set from 26 to 27 March 2015 in Manila, Philippines gathered 60 educators and policy makers, who attended a series of plenary talks and workshops breakout sessions to produce the project outcomes for the country.

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A group of high-profile speakers give enriching perspectives on deep learning at the global, regional and local context.

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There is a strong consensus among participants that Filipino learners will benefit greatly from deep learning integration in the curriculum. They underscored the need for infrastructure support and capacity building in terms of the use of ICT tools in education and innovative teaching methods.

The ASEAN Deep Learning Series – Philippine leg forms part of a regional forum that aims to identify, document, and integrate the lessons, challenges, and best practices of deep learning outcomes in regional and national school curriculums to increase the employability of today's students for 21st century jobs. It is organised by British Council and Microsoft.



Executive Summary

This document reports on the workshop "Association of Southeast Asian Nations (ASEAN) Deep Learning Policy Series – Philippines" held from 26 to 27 March 2015 in Manila, Philippines organised by the British Council Philippines and Microsoft.

The two-day event convened 60 educators and policy makers in an expert national forum and workshop with the aim to: a) update the participants on the latest policy and current practices on Deep Learning Skills in the ASEAN and the United Kingdom (UK); b) provide a platform of collaboration for policy makers and practitioners to encourage links and policy and practices sharing around Deep Learning Skills; and c) facilitate dialogue to produce a set of recommendation to encourage wider and scalable practices in embedding Deep Learning Skills in the Philippines.

This executive summary briefly presents the two-day proceedings, noting the featured thematic plenary tracks, and recommendations drawn from workshop outputs of participant educators during breakout sessions.

The proceedings of the plenary sessions and workshop breakout sessions addressed the overarching theme of how to match education and employability by focusing on three thematic tracks under Deep Learning Skills: global citizenship, use of ICT for learning, and collaboration.

Additionally, the two-day workshop threaded together the implication of the ASEAN economic integration in terms of employability of Philippine graduates in the 21st century and the current best practices of teaching methods that integrate Deep Learning Skills in their curricula regardless with a strong emphasis on basic education and technical-vocational training. The featured plenary sessions presented are listed below:

Day 1 Plenary

- Overview: 21st Century Skills for Global Citizens
- Education and Employability: A UNESCO Perspective on Skills Development and TVET (Technical Vocational Education and Training)
- Employability of Workers and Competitiveness of Enterprise Enhanced Cluster
- Job-Skill Matching Towards Decent and Productive Employment
- Building Caring Communities: A Renewal and Reform Movement in Our Public Schools
- Technical Education and Skills Development Authority on Deep Learning
- ICT in Education: Microsoft as Partners in Learning
- Global Citizenship Education (GCED) in ASEAN and Challenges in Embedding Global Citizenship in National Curriculum

Day 2 Plenary

- Best Practices in ICT Innovations in the Classrooms: La Salle Greenhills Case Study
- ICT in Education at the Community Level: A Sharing (Kapatagan City, Lanao Deli Norte Case Study)
- The Challenges of Integrating Collaboration Skills in Teaching-Learning (Affordable to Private Education (APEC) Centre Schools Case Study)

The plenary sessions then culminated in a final synthesis session that presented key recommendations on the three thematic areas under deep learning.

It is anticipated that this report, which includes a set of recommendations to encourage wider and scalable application of Deep Learning Skills in the Philippines will be a useful reference document for the Ministries of Education across the region particularly in the three thematic areas: global citizenship, use of ICT in learning, and collaboration and their application under the framework of a) Curriculum Development, b) Classroom Instruction, and c) Student Assessment.

In terms of national implementation, the recommendations also included how deep learning approaches can be integrated in the K to 12 curriculums in Philippine education to harness opportunities for the Southeast Asian integration and produce highly employable graduates with skills for 21st century jobs.

Two critical questions posed at the outset of the Congress by officials of British Council Philippines provided further framing for the workshop breakout sessions: a) How do we educate young people for jobs that do not yet exist? and b) With the upcoming regional integration, how will this impact the current prospects for employability?

This document contains the talking points during the plenary sessions and recommendations (and short analysis thereof) during the three workshops on three deep learning skills development in the Philippines.

Key recommendations forwarded hinged on the circumstances of Southeast Asia in transition to one economic integrated community by end of 2015 and took stock of the given contexts, achievements and current challenges and opportunities in the region.



Photo Credit: Microsoft

The given contexts noted in the workshops include:

- Education's purpose to pass on cultural identity and wisdom from one generation to the next and to prepare students for life and work after graduation.
- Education at the core of regional integration
- Regional transition as both a source of challenges and opportunities
- Education challenges and needs varying in urban and rural settings
- Best practices and case studies in rethinking education by using new teaching pedagogies and ICT to foster deep learning in both the urban and rural setting
- The role of partners such as British Council, Microsoft and the United Nations Educational, Scientific and Cultural Organization (UNESCO) in developing capability of educators through training opportunities and partnerships

The current achievements made towards rethinking education for the delivery of deep learning skills in the Philippines include:

- Policy reform: Philippine Republic Act 10647 or the Ladderized Education Act of 2014
- New learning frameworks in urban and rural settings

- Adoption of global curricula on deep learning in the local context
- Deployment of ICT in school-wide projects
- And collaborations, networks, and partnerships.

The key challenges and areas of opportunity include:

- High unemployment rate of youth (about half of total Filipinos unemployed according to the Department of Labor and Employment)
- Delivery of quality education in rural and urban settings
- Integration of deep learning skills across subjects in all levels
- Global and national skills gap due to education and jobs mismatch
- Lack of clarity of 21st century job skills
- Limited to no budget in creating ICT-enabled classrooms and learning centers

Taking stock of discussions in both plenary and workshop sessions, the key recommendations synthesized from the two-day proceedings included:

- 1) Develop curriculum and student assessment that integrate local, real-world, context-based issues and global topics in lessons and problem solving skills that adopt both standardised rubrics and formative assessment modes:
- 2) Promote ICT-enabled and collaborative learning in inter-school and international levels for a robust local and global cultural education;
- 3) Improve infrastructure and technology access (reliable Internet connection, PC units) especially in public schools with limited to zero ICT budget;
- 4) ICT-enabled Inter-school and International collaborative learning that address global issues with local implementation ("glocal");
- 5) Promote participatory & project-based learning and education, while tapping linkage with multi-stakeholders like ICT providers, LGUs; and
- 6) Increase linkages with partners like (British Council, Microsoft, UNESCO) to share best practices, and resources for capacity building of educators on how to use ICT tools for blended learning interfaces.

These recommendations are purposive and for selective consideration of the Ministries of Education in the regional, national and local level, dependent upon the local context and needs of the community.

The British Council Philippine office realizes the need for continuous training of educators to support quality teaching, especially taking note of the request for skills upgrade in the use of ICT tools to meet present education needs under a global framework.

These recommendations presented during the culmination of the two-day event received endorsement of the British Council for inclusion in the final report to form part of the ASEAN Deep Learning Policy Series, with special focus on the Philippines.

Conference Description

The Philippine conference was held from 26 to 27 March 2015 with the theme, "21st Century Skills For Global Citizens: Empower Students with 21st Century Deep Learning Skills" that convened 60 educators and policy makers to identify gaps, share experiences and collate best practices on deep learning skills to scale them up for all levels of education in view of the upcoming ASEAN economic integration.

The set of eight deep learning skills identified by Michael Fullan and Maria Langworthy in their work for the New Pedagogies for Deep Learning project has inspired this conference and workshop series. Previous workshops were held in Indonesia and Myanmar, with three more slated for Thailand, Malaysia, and Vietnam in the coming months.

Fullan and Langworthy identified eight Deep Learning skills: a) Global Citizenship, b) Collaboration, c) Character, d) Communication, e) Creativity and Imagination, f) Real-World Problem Solving, g) Critical Thinking, and h) Use of ICT for Learning.

These eight deep learning skills are described below:

Global Citizenship: Global knowledge, sensitivity to and respect for other cultures, active involvement in addressing issues of human and environmental sustainability

Collaboration: Work in teams, learn from and contribute to the learning of others, social networking skills, empathy in working with diverse others

Character: Honesty, self-regulation and responsibility, hard work, perseverance, empathy for contributing to the safety and benefit of others, self-confidence, personal health and well-being, career and life skills

Communication: Communicate effectively orally, in writing and with a variety of digital tools; listening skills

Creativity and imagination. Economic and social entrepreneurialism, considering and pursuing novel ideas and leadership for action

Real World Problem Solving. Give students real experiences in creating and using new knowledge in the world beyond the classroom







Photo Credit: British Council of the Philippines

Critical Thinking: Think critically to design and manage projects, solve problems, make effective decisions using a variety of digital tools and resources

Use of ICT for Learning: Technology allows us discover and master content knowledge and to enable the deep learning goals of creating and using new knowledge in the world

Of these eight, organisers British Council Philippines and Microsoft identified three skills as focus thematic areas for the Philippine leg that included: Global Citizenship, Use of ICT in Learning, and Collaboration. These three over-arching themes can help Filipino job seekers to grab work opportunities and thrive in a more interconnected workplace.

CONFERENCE THEME

Southeast Asian countries enters economic integration by December 2015 set to pave way for a highly competitive region characterized by free flow of services, products, and labor. This can have significant implications in terms of the jobs market and how students can survive and thrive when they compete with their regional peers.

In a 2014 report by McKinsey entitled "Education to Employment" that analysed education to employment initiatives across 25 countries and surveyed young people, education providers and employers in nine countries, results show 75 million youth are unemployed with 39 percent of employers mentioning that the main reason for entry-level vacancies is the lack of skills of graduates.

Anticipating jobs that do not yet exist and skills required of them a decade from now and beyond make it difficult to prepare people for employment. Virtually, every education system around the world is struggling with this challenge.

Like its counterparts Indonesia, Myanmar, Malaysia and Vietnam, the Philippines is actively introducing educational system reforms with the recent implementation of the K-12 system, which brings to par the number of years spent in basic education with the rest of the world and the passage of Republic Act 10647 or the Ladderized Education Act of 2014, which allows the flexibility of matching a modular method of obtaining technical-vocational training that can be credited as units for obtaining a college or university degree. This is geared to help students who cannot afford to directly go to college due to steeper fees and longer times of study compared to a technical-vocational course that can be readily applied to in-demand technical jobs.

Gaps in present Philippine educational system, however, prevent access to quality education for everyone, which produces a gap in the labuor market and impacts both national and individual economies. A study by the University of Philippines (UP) School of Economics revealed that for every 100 children entering grade school, only 45 can finish secondary school and only 13 will eventually finish tertiary school.

To help equip learners with relevant skills for future jobs, educators are turning to Deep Learning as a strategy to develop students who have high employability po-

tential because they exhibit deep learning skills—they know how to learn, can work in a culturally diverse and multi-national team, can communicate in blended interfaces, and can solve problems, among others.

In the Philippines, the British Council and Microsoft set three thematic areas for increasing deep learning skills and competency of learners to help prepare them for future jobs: Global Citizenship, Use of ICT in Learning, and Collaboration.

The deep learning skills highlighted per country are chosen based on the assumption and preliminary research that these are already exhibited with existing best practices and case studies. The challenge is that these examples are not yet properly documented and shared for systematic scale up, replication, and institutionalisation in classrooms across countries.



Photo Credit: British Council of the Philippines

Objectives

The ASEAN Deep Learning Series – Philippine leg aims to:

- 1. Update policy makers and practitioners on the latest policy and current practices on Deep Learning Skills in ASEAN and UK;
- 2. Provide platform for collaboration for policy makers and practitioners to encourage links and policy and practices sharing around Deep Learning Skills; and
- 3. Facilitate dialogue to produce a set of recommendation to encourage wider and scalable practices in embedding Deep Learning Skills in the Philippines.

Expected Output

The seminar series is expected to yield an outcome report based on lessons learned from actual case studies and existing practice in the three deep learning skills, which will form part of a reference document for Ministries of Education across the region.

Specifically, it should touch on the following:

- 1. Awareness and better understanding of the concept and practices currently in placed among policy makers and practitioners on Deep Learning Skills.
- 2. Links established among participants for wider sharing around practices in embedding Deep Learning Skills in schools in Philippines.
- 3. A set of recommendation to encourage wider and scalable application of Deep Learning Skills in the Philippines (particularly in the area of global citizenship, use of ICT in learning and collaboration).

Sub-themes and Workshop Tracks

Topics for the plenary sessions helped provide a general perspective on deep learning as a disruptive trend in global education systems and how this can help prepare local learners for the regional economic integration and the demands of 21st century jobs.

A national perspective of current employment and unemployment rates were also provided to help frame the job-skills gap and mismatch, and how this can become an opportunity with the integration of the three deep learning skills. The plenary is capped by three case studies that highlight best practices and the benefits of introducing the three deep learning skills in a rural setting and two city schools in the Philippines.

The parallel workshops are held after a plenary presentation on each thematic area. Each of the 60 participating educators and policy makers were divided into three groups to discuss how global citizenship, use of ICT in learning, and collaboration can be integrated in school curriculum development, classroom learning, and student assessment. Each group presented in plenary their set of recommendations, which formed the final synthesis of this report.

The three thematic areas of discussion during the Philippine leg of the ASEAN Deep Learning Policy Series are: a) **Global Citizenship**, b) **Use of ICT in Learning**, and c) **Collaboration**. The integration of these three deep learning skills are already happening in some classrooms in the country, with best practices and lessons presenting an opportunity for wide-scale adoption in the country and in the region.



SESSIONS

The British Council and Microsoft ASEAN Deep Learning Series – Philippine leg covers the following sessions during the two-day event:

Opening Plenary Remarks

Participants are welcomed by two speakers from British Council Philippines and Microsoft Asia Pacific helped set up the rationale, agenda, and expected outcomes of the two-day event. The conference was introduced as a platform of collaboration and discussion on challenges, lessons, and opportunities among policy makers and educators representing rural and city settings, and public, private, and nonprofit sectors.

Plenary Sessions: Regional and National Views

There are six plenary sessions with speakers providing regional and national perspectives on educational

trends and deep learning initiatives, and how these can be used to equip learners with competitive 21st century skills in the regional economic integration.

- A. Overview: 21st Century Skills for Global Citizens
- B. Education and Employability: A UNESCO Perspective on Skills Development and TVET (Technical Vocational Education and Training)
- C. Job-Skill Matching towards Decent and Productive Employment
- D. Building Caring Communities: A Renewal and Reform Movement in Our Public Schools
- E. Technical Education and Skills Development Authority on Deep Learning
- F. ICT in Education: Microsoft as Partner in Learning









Photo Credit: British Council of the Philippines

Workshop Plenary Presentations

These section includes the workshop guide presenta tions on the three thematic tracks, which consist of a regional perspective and three Philippine case studies that discuss how deep learning skills can be integrated in a) a rural community with the help of local government units, b) a prominent primary educational institution in Metro Manila which previously oversaw the benefits of ICT tools in grade school, and c) a small school chain that adopts innovative teaching methods that marry classroom learning to community project implementations.

Below are the list of topics that introduced each thematic track:

- Global Citizenship Education (GCED) in ASEAN and Challenges in Embedding Global Citizenship in National Curriculum
- Best Practices in ICT Innovations in the Classrooms: La Salle Greenhills Case Study
- ICT in Education at the Community Level: A Sharing (Kapatagan City, Lanao Deli Norte Case Study)
- The Challenges of Integrating Collaboration Skills in Teaching-Learning (Affordable to Private Education (APEC) Centre Schools Case Study)

Parallel Workshop Sessions

There are three parallel workshops or breakout sessions spread across the two-day event. Educators and policy makers are divided into three groups to discuss the three thematic tracks (Global Citizenship, Use of ICT in learning, and Collaboration) under the subtheme framework of integration into school curriculum development, classroom learning, and student assessment.

Presentation Session

This session involved the plenary presentations of each workshop group by highlighting recommendations on how to integrate the three thematic tracks (deep learning skills) in improving the Philippine education system.

Synthesis Session

Culminating the event is the presentation of the summary of all workshop outputs to regional and national representatives of the event organisers. The main output is a list of recommendations that highlight gaps and proposals on how to teach deep learning skills to Philippine learners so they are equipped with the right set of skills for 21st century jobs and the upcoming regional economic integration.

Conference Speakers

The two-day event convened speakers who provided the general overview on the Asia Pacific region, the national landscape in the Philippines and three case studies that presented the challenges, lessons and opportunities of integrating deep learning skills in schools.

I. Perspectives on Asia-Pacific



Dr. Cheol Hee Kim is a Team Leader and Programme Specialist of TVET and Skills Development in UNESCO's Asia-Pacific Regional Bureau for Education. Prior to joining UNESCO Bangkok, he was on the research fellow at Korea Research Institute for Vocational Education and Training (KRIVET) and was on the education specialist of Korea Labor Education Institute (KLEI).

His major areas of research are on TVET and skills development, international development cooperation, and social security. He also worked as an expert at the government committee where he contributed to planning and implementation on a wide range of issues in TVET and skills development.



Ms. Felicia Brown is the Regional Academic Program Manager within the Education team for Public Sector in Microsoft Asia Pacific. Based in Singapore, she supports Microsoft in the Asia Pacific region to grow Education relationships with particular focus on developing Public Private Partnerships. Prior to assuming her present role in 2009, she served for six years as academic program manager for Microsoft Australia, driving the success of Education community engagement in the country. She held various posts since joining Microsoft in 1992.

Before Microsoft, Ms. Brown was an English and history teacher in Sydney. She is a member of the Australian Council for Education Leaders.

II. General Overview of the Philippine Jobs Market and Education System



Director Katherine B. Brimon is currently designated as Assistant Secretary at the Department of Labor and Employment while concurrently performing functions as its Director for Human Resource Development. Her stint at the DOLE for almost 25 years now has enriched her experience in policy research and program development in various facets of labor and employment.

She provides policy and program management support to the Department's operational units in the area of employment facilitation and manpower development which includes tasks on labor market information, skills and career development, mobility of professionals, support for youth employment, productivity and competitiveness of workers and enterprises, among others. She holds a post-graduate degree on Master of Arts in Developmental Studies from the Institute of Social Studies, the Hague, the Netherlands where she graduated with merit honors.



Fr. Carmelo Tito Caluag II is the Chairperson at Magna Anima Education System Inc. An educator for many years, he served as Vice President of University Development and Alumni Relations at the Ateneo de Manila University from 2000 to 2005. Fr. Caluag served as Principal of the Ateneo de Manila High School, 1995-1998, headmaster of the Ateneo de Manila Grade School, 1998-1999, and the first director of the Basic Education Units of the Ateneo de Manila, 1998- 2000 before founding his present organization.

Fr. Caluag served as an Independent Director of ABS-CBN Broad-casting Corp. since May 18, 2005. He served as Trustee of the Ateneo de Manila University from 1998 to 2005, as well as trustee in Xavier School, Ateneo de Naga, Ateneo de Zamboanga, and various social and civic organizations. He was ordained a priest in 1993. He has a Masters in school administration from Fordham University, New York.



Lawyer Teodoro Pascua is the Deputy Director General for the Technical Education and Skills Development Authority (TESDA) since 2012. He is responsible for building up TESDA efforts in bridging the employability gap of college graduates through tech-voc education. He is optimistic that the passage of Republic Act 10647 or the "Ladderized Education Act of 2014" will promote access to education and jobs to more Filipinos by providing them both the flexibility of learning skills from in-demand courses and earning a decent income, with potential options to continue studies later on.

Aside from his post at TESDA, he is also a Partner of Yulo Aliling Pascua & Zuniga Law Offices from 2003 to present. He graduated from University of the Philippines and passed the Philippine Bar in March 1983. He co-authored the "Overview of Remedial Law" published 1981.

III. Workshop Presenters for Three Thematic Tracks



Thematic Track 1: Global Citizenship

Ms. Lay Cheng Tan is a Programme Officer at the UNESCO Asia and Pacific Regional Bureau for Education based in Bangkok, Thailand. She is currently responsible for projects on teacher education, global citizenship education and entrepreneurship education. Her latest project "Preparing Teachers for Global Citizenship Education," funded by the Republic of Korea, focuses on capacity building for teachers to enable their students to contribute to a just, peaceful, tolerant, inclusive, secure, and sustainable world.

Since joining UNESCO in 2005, she has worked on Technical and Vocational Education and Training (TVET), Education for Sustainable Development, ICT in Education, Higher Education, and Teacher Education. Ms. Tan is involved in the conduct of the annual UNESCO-APEID International Conferences and the Wenhui Award sponsored by the Chinese National Commission for UNESCO. Ms. Tan has a B.Sc. in Biology and a Masters in Environmental Design (Environmental Science).



Thematic Track 2: Use of ICT in Education

Mr. Mark Anthony C. Sy is the Educational Technology Coordinator of La Salle Green Hills. He is a former History teacher in Cavite School of St. Mark in 2005. For 8 years, he is a dedicated Grade School Filipino teacher in La Salle Green Hills wherein he developed and mastered his skills of creating interactive instructional tools available in the web to teach Filipino as a subject. His passion for learning innovative things equipped his capacity to be recognized as a Google Certified Teacher. He is actively involved in training a number of schools in National Capital Region for being a Google Educators Group Leader. His major contribution to La Salle Green Hills is the establishment of a concrete, doable and systematize mobile learning program designed in a teacher's perspective that will equipped 21st century learners in a collaborative learning environment involving strong partnership of teachers and parents.



Councilor Johnny Paul Lagura is currently the Chairman of the Committee on Education, Disaster Risk Reduction and Management (DRRM), Tourism, and ICT in Kapatagan City, Lanao del Norte province. His project in the city includes the implementation of an ICT education project in rural community setting. Specifically, the project strongly focuses on providing student immersions in communities as partners of the government's ICT campaigns. He also leverages his role as public servant to promote sustainable organic agriculture, the main livelihood in the province, and the creation of youth leaders and volunteers for community disaster response as the area is vulnerable to natural hazards.

He is also chief executive at Pau Consultancy for Tourism, Investments Promotions, Disaster Risk Management and Marketing Communications and initiated the ICT industry development of rural Mindanao. He has a B.Sc. in Development Communication at Ateneo de Cagayan- Xavier University.



Thematic Track 3: Collaboration Skills

Ms. Shaina Tantuico is a Math and Science Content Expert with Affordable to Private Education Centre (APEC) Schools. In this role, she develops the curriculum and spearheads the creation of learning materials for the affordable school chain. She developed a special subject called Life Labs, focusing specifically on students' skills and values development. In this subject, students tackle issues that affect them and uses design thinking in build solutions to address community issues and problems. Students undergoing the class have produced projects involving reinstallation of streetlamps in the dark alleys of Tondo in Manila and selling healthy vegetable chips in school. The Life Labs class design is implemented across 12 different school sites and aids teachers regardless of prior experience on action research.

Ms. Tantuico is also the co-founder of Jeepneed, a hands-on science lab for rural public schools. The project helps equip schools with science labs for under US\$500, which engages students to practice scientific thinking outside their classroom, a process that has shown to improve standardized test scores.

"Skills that are in demand today are those of complex communication and expert thinking, including the **adaptability to learn** and performance of new tasks with little training."

-- Ms. Felicia Brown,

Microsoft Asia Pacific Regional Academic Program Manager within the Education for Public Sector

Proceedings

This section contains the conference proceedings, inputs, key discussions and recommendations during the two-day event that are synthesised into a list of recommendations.

These recommendations came from the three workshop presentation documents produced and presented by the policymakers and educators with the aim of forming part of a reference document for the Ministries of Education in the region on how to integrate deep learning skills in all education levels.

OPENING

I. Opening Ceremony

This section includes the opening session and the plenary discussions during the two-day event.

Welcome Remarks

Mr. Nicholas Thomas, Country Director, British Council Philippines, welcomed all participants to the Conference, acknowledging the partners, plenary presenters, policy makers and educators. Thomas noted that the ASEAN Deep Learning Policy Series is held in other parts of the region such as Vietnam, Thailand, and Indonesia.

The workshops, according to him, serve as platforms for educators to share ideas and put together a menu of recommendations for Ministries of Education on how students can acquire skills to become successful in their chosen fields and contribute in creating a prosperous society.

Thomas noted, "We cannot predict what jobs students will do in the future." He cited as example outsourcing, a service industry which the Philippines is recognized as a global player today but was relatively out of the radar some 20 years back. The solution can lie in deep learning, which can better prepare students to be more versatile and create value in their jobs, instead of just following instructions to drive national competitiveness.

He introduced the three thematic areas of deep learning for the Philippine leg: a) global citizenship, b) use of ICT in learning, and c) collaboration and how they can be integrated in the curriculum, instruction and student assessment.

In closing his remarks, he posed a question to participants: How do we educate young people for jobs that do not yet exist?

Welcome Remarks

Ms. Felicia Brown, Regional Academic Program Manager within the Education team for Public Sector in Microsoft Asia Pacific, welcomed the participants and noted the commitment of her organisation as a technology partner of British Council in implementing global projects such as the establishment of digital hubs in ASEAN, Sub-Saharan Africa, and Europe. For the next five years, Microsoft is implementing a roll out of projects to seamlessly integrate ICT tools in the teaching and learning practice, one of the three thematic tracks of the Philippine leg of the ASEAN Deep Learning Policy Series.

II. Conference Overview

Plenary Session A: Overview of 21st Century Skills for Global Citizens

Lotus Postrado, Head of Education, British Council Philippines, introduced the conference overview, objectives, and expected outcomes of the conference to speakers, presenters and participants. She also highlighted the 2014 study entitled New Pedagogies for Deep Learning that inspired the deep learning policy series. The study authors Michael Fullan and Maria Langworthy listed eight deep learning skills that equip learners with diverse skills to succeed in the 21st century global jobs market.

Fullan and Langworthy identified eight Deep Learning skills: a) Global Citizenship, b) Collaboration, c) Character, d) Communication, e) Creativity and Imagination, f) Real-World Problem Solving, g) Critical Thinking, and h) Use of ICT for Learning.

Ms. Postrado introduced the skills that organisers identified as three thematic areas (See Table 1) for discussion in the Philippine workshop, owing to existing case studies and best practices, which can serve as reference for the outcome recommendations.

Deep Learning Skills	Description of Outcomes
Global Citizenship	Global knowledge, sensitivity to and respect for other cultures, active involvement in addressing issues of human and environmental sustainability
Collaboration	Work in teams, learn from and contribute to the learning of others, social networking skills, empathy in working with diverse others
Use of ICT for Learning	Technology allows us discover and master content knowledge and to enable the deep learning goals of creating and using new knowledge in the world

Table 1. Deep Learning Skills discussed as thematic tracks for the Philippine workshop.

Under each thematic track, there are three sub-themes for the discussions a) school curriculum development, b) classroom learning, and c) student assessment.

Ms. Postrado closed her remarks with this note: "No one can predict how the jobs market will look like in a decade and beyond but one key trend we see is the need for deep learning skills integration in our schools. A challenge for educators: "With the upcoming regional integration, how will this impact the current prospects for employability?"

PLENARY SESSION

III. Plenary Presentations

Plenary Session B: Education and Employability: A UNESCO Perspective on Skills Development and TVET (Technical Vocational Education and Training)

Summary

- Education and training interventions can help less-educated youth and unskilled adults transition from low-paying jobs to getting decent jobs.
- Gaps in data collection of in-demand skills in the labour market needs to be addressed by cooperation and collaboration with industry players.
- Learners need both life-oriented and work-oriented skills, especially transversal skills that promote critical and innovative thinking, inter-personal skills, intra-personal skills, global citizenship, and physical and psychological health in learning institutions.

Mr. Cheol Hee Kim, Team Leader UNESCO Education Policy and Reform Unit – Skills Development (TVET), provided a general picture of UNESCO's initiatives on education and employability in the region. He introduced his presentation by posing provocative questions to participants on: a) Education's purpose and employability; b) School-to-Work transition; c) Skill mismatch and the role of stakeholders to fix the gap; d) Facilitation of work-to-school transitions of adult workers; and e) Characteristics of the Asia Pacific region.

UNESCO's Post-2015 education targets aim to

ensure equitable and inclusive quality education and lifelong learning for all by 2030, with the overarching goal of promoting learning for peace and sustainable development under the Regional Bureau's Education Support Strategy 2014-2021.

Under the Regional Bureau's strategy, they aim to introduce interventions via modalities of cooperation in these areas: knowledge generation and sharing, policy advocacy and dialogue, capacity development, monitoring, cooperation, and partnership building.

Mr. Kim noted that current education systems still produce less-educated youth who later become unskilled adults, who in turn only get low-paying jobs or worse, turn unemployed due to skills mismatch. Providing training and education to unskilled adults can equip them with in-demand skills required to occupy decent jobs. He added that schools should teach students that education and university degrees should not only be a way to secure employment, but rather as a means to nurture them to become responsible, productive citizens.

A 2013 report highlighted a common challenge of a data collection gap in terms of skills needs, labour market situation, and employer engagement, owing to a lack of long-term strategy and funding. Recommendations for this include a strong advocacy to key policy makers on the crucial role of improved information; development of comprehensive and long term strategy covering various sub components; and activation of policy analysis and capacity enhancement at the

national, provincial, and town levels.

Specifically, there is a strong need to implement regular employer skills needs survey to cultivate a culture of cooperation between industry and education institutions; and strengthening the collective participation of employers at round table discussions.

In another 2012 study on employability of university graduates, report findings suggest that educational institutions should consider the impact of the ASEAN economic community integration in terms of increasing the level of competition and worsen the unemployment situation in Asia.

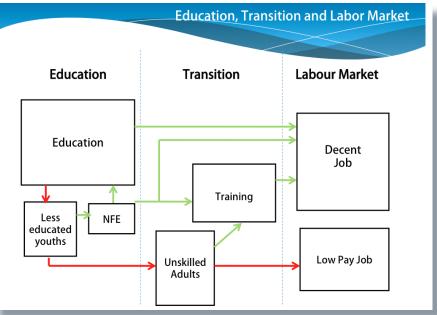


Figure 1. In this diagram, UNESCO's Cheol Hee Kim noted that training can prepare and transition unskilled adults and less-educated youth to leapfrog from getting low-paying jobs to occupying decent jobs. (Source: Mr. Cheol Hee Kim's Plenary Presentation)

In general, learners of today need both life-oriented (non-academic) and work-oriented skills to survive in today's world. A potential avenue of intervention is the introduction of transversal skills or those that are under the domains of critical and innovative thinking, inter-personal skills, intra-personal skills, global citizenship, and physical and psychological health in learning institutions. To complement this, there is a need to collaborate with industries to monitor the in-demand skills that graduates need when they enter the labour market.

Plenary C: Job-Skill Matching towards Decent and Productive Employment

Summary

- While overall unemployment rates have slightly improved, there are 1.246 million jobless Filipino youth or about 15 percent of total unemployed Filipinos in 2014.
- According to a January 2015 labour survey, 1.246 million Filipino youth (15-24yo) are jobless, which is about half of the total unemployed population and many of them have reached or graduated high school and college.
- A skills gap has resulted in high unemployment rates.
 A 2012 ADB study noted it takes 3 years for a graduate to find a job and about 4 years to find a decent job.
 To address these issues, DOLE has introduced a four-pronged job-skill matching agenda.

Ms. Kath Brimon, Assistant Secretary, Department of Labour and Employment (DOLE), presented an overview of the labour market in the Philippines and the decreasing trend of unemployment rates while providing in-depth analysis of the figures in terms of youth unemployment.

The Philippine Statistics Authority's (PSA) Labour Force Surveys (LFS) showed that the 2014 unemployment rate of 6.8 percent, is the lowest point recorded since 2006. In terms of youth (15-24yo) unemployment, there is significant improvement in 2014 at 15 percent or about 1.246 million jobless youth, down from 17.3 percent or 1.432 million jobless youth a year ago. While this is good news, Ms. Brimon noted that national youth unemployment rate (15 percent) is still more than twice the national rate (6.8 percent).

According to a January 2015 LFS survey, the youth composed half of the unemployed population at 47.3 percent or 1.246 million jobless youth aged 15-24yo vs the jobless adults aged 25-54yo at 48.8 percent or at 1.287 million. The January 2015 survey also revealed that 45 percent or 1.191 million of the total unemployed population are educated and has reached or graduated from high school. Of these, a third (33.4 percent) or 881,000 Filipinos have reached or graduated college. To address these employment gaps, DOLE proposed a job-skill matching agenda based on four components. First is the implementation of the enhanced basic edu-

cation K to 12 curriculum, ending the country's 10-year basic education cycle. Second is the adoption of the Philippine qualifications framework for producing competent graduates, which provides common standards and qualifications from prior competencies acquired in formal or non-formal modes of learning that address industry skills demand.

The third initiative is on the expansion of reach and accessibility of labour market information (LMI) among the youth and jobseekers. This initiative, through the Career Guidance Advocacy Program (CGAP), aims to help the youth develop self-awareness and resilience, source and evaluate information, and make sound decisions about learning and work. This program is being spearheaded by DOLE and serves as the bridging mechanism of the youth, particularly in the education and training institutions, to their respective career path, according to Ms. Brimon,

Fourth is the use of information, communication, and technology (ICT) to improve employment facilitation and placement through the enhancement of the Phil-JobNet, the Philippine government's official online job site. Complimenting the website is the introduction of the Phil-JobNet mobile application (available via Google Play and Apple Store) and Job Search Kiosks, an offline full content job search and matching delivery system with 110 units deployed.

The skills gap has produced high unemployment rates, such that it takes 3 years for a graduate to find a job and about 4 years to find a decent job, added the official, quoting data from the 2012 Asian Development Bank (ADB) report Are Filipino Youth off to a Good Start? Youth Labour Market Experience in the Philippines.

Employers noted in a survey that entry-level jobseekers are rejected due to several factors: a) lack of competency, b) high salary expectations, c) lack of work experience, d) lack of applicants for vacancies, e) location and work schedule issues, f) lack of license and skills certification, and g) preference to work overseas.

To foster improvements on job-skill matching and youth employment, DOLE launched the JobStart Philippines Program. Ms. Brimon noted that the initiative creates opportunities for youth to improve their technical skills and develop the life skills as defined by WHO necessary for success in today's competitive workplace.

Ms. Brimon noted that the ASEAN economic community integration provides opportunities for tech-vocational graduates, which an ILO and ADB study confirms will be in demand until 2025. The integration will offer about 3.1 jobs such as agribusiness and other services that can serve as niche market for the Philippines. To capture this opportunity, DOLE is initiating a talent-mapping project to know how the Philippines can compete well with its ASEAN neighbours.



Figure 2. The JobStart model borrows good practices in employment facilitation services from Chile, Kenya and the United States. JobStart, a first in the Asian region, is a pilot project under the technical and financial assistance of ADB and the Government of Canada. (Source: Kath Brimon's Plenary Presentation)

Plenary Session D: Building Caring Communities: A Renewal and Reform Movement in Our Public Schools

Summary

- Aside from developing curriculum that will integrate a mastery of new skills and technical subjects, educators should build caring communities especially in public schools.
- Understanding the mindset of learners and the local context where an educational system operates is crucial to a formative system of learning.
- The Filipino youth from low-income families rank getting jobs, even short-term construction labour, as a priority over earning a diploma.

Fr. Carmelo Caluag, Chairman, Magna Anima Education Systems, urged educators and policy makers that building caring communities for learners can help foster mastery of technical subjects.

of an education campaign for youth belonging in low- income families (D and E markets). During the initial meeting, Fr. Caluag was told that the campaign will not success because the target market is more concerned about earning and getting a job to support their family instead of attending school. Another point they made during project research was that any form of economic activity such as construction of malls in a town or city brings hope to these families because it means earning from construction jobs. This led in Fr. Clauag to conclude that there is a significant change from a mindset of victimhood to hope when job opportunities are presented to their target audience.

In view of this, Fr. Caluag urged the conference participants to make education more relevant to the needs of the youth and learners. Applying this concept, his organisation partnered with the University of Leeds during a university shopping project sponsored by the British Council three years ago when it was the only university that explicitly expressed it wanted first to

"Designing a curriculum should integrate the **context** of how students view education's benefit for them, such being able to grab better job opportunities and build careers while contributing to nation-building."

--**Fr. Carmelo Caluag**, Chairman, Magna Anima Education Systems

He noted, "Building caring communities in public schools is needed to encourage a renewal movement and only after a renewal, reform."

Fr. Caluag introduced the key elements of the Magna Anima Education System that aims to promote modular and onsite delivery of key learning outcomes that are hinged on three tracks: learning, formation and performance. He cited that this is needed to propel more growth in the Philippines, as part of the ASEAN region that currently leads global growth in the last 10-15 years. ASEAN countries such as the Philippines, however, need to sustain efforts on education to drive further growth or it may be left behind by Sub-Saharan region that is forecast to improve their disparity gap in the next decade and can consequentially overtake ASEAN.

He also shared his project, including scoping talks with ABSCBN's Jing Reyes to gauge the success

understand the local context of where Magna Anima is operating before proposing solutions on how to improve its education system delivery.

He noted that designing a curriculum should integrate the context of how students view education's benefit for them such being able to grab better job opportunities and build careers while contributing to nation-building.

He added the need to help students identify and work for their passion and meaning in what they do, including the job sectors they want to be part of after graduation. He concluded that good education and teaching cannot be reduced to technique because it is built also on a teacher's integrity and the integrity of the program to promote formative learning among students. "Let us create the infrastructure to give the youth a fighting chance to make something out of themselves," he noted.

Plenary Session E: Technical Education and Skills Development Authority on Deep Learning

Summary

- A good policy reform is the passage of RA 10647 or the Ladderized Education Act of 2014. The law promotes learning equivalencies so students can customised their learning program (depending on the budget and the urgency to enter the job market).
- Integration of deep learning skills in education bodes well for the Philippines which will still have a young population by 2050. Technical-vocational skills already reflect the eight deep learning skills.

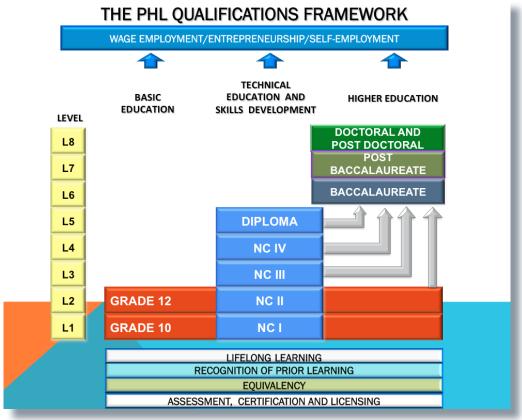


Figure 3. The Philippines adopts the Qualifications Framework that provides learners adequate skills from basic education, higher education, and certification programs to secure decent jobs and pursue higher education as they deemed fit for their needs and aspirations. (Source: Lawyer Teodoro Pascua's Plenary Presentation)

• Skills are the next global currency so we need to equip the youth with skills for 21st century jobs.

Lawyer Teodoro Pascua, Deputy Director General for TESD Operations, Technical Education and Skills Development Authority (TESDA), introduced the service of TESDA in terms of providing technical and vocational training to Filipinos, a system of learning that according to lawyer Pascua has already been integrating deep learning skills. Under the law, TESDA provides technical-vocational education and training (TVET) to address the training needs of out-of-school youth) OSY and graduates for better job-skills fit.

The Philippines has a unique trifocalised education system: basic education, technical-vocational education and higher education. TESDA complements the Department of Education (DepEd) for basic education; and the Commission on Higher Education (CHED) for tertiary and higher education.

With the implementation of the K to 12 program, the Philippines has started adding two years to meet

global standards for the number of years spent in basic education: one year in pre-elementary; six years in elementary; six years in secondary school: four years in junior high school and two years in senior high school. The tertiary education level consists of higher education and post secondary schooling. Higher Education is divided into baccalaureate, masters and doctorate levels in various programs or disciplines.

Though compartmentalisation exists in the Philippine education system, quality is assured through a standards and accreditation system for basic and higher education institutions and through a unified registration and accreditation system for technical-vocational institutions.

He also discussed the Philippine Qualifications
Framework (See Figure 3). Under this framework, it is
expected that basic education, technical education,
and high education will produce competent graduates with skills that can help secure employment. The
framework is built on a modular approach to education and skills certification, wherein learners can tailor

fit their learning needs to meet job skill requirements, with those availing of certifications given an option to pursue and finish a formal degree related to their certified skills.

Lawyer Pascua noted the example of South Korea that heavily invested in overhauling its education system to foster skills development, which paved way for global brands such as Samsung and global leadership in international skills competitions.

He also urged educators and policy makers at the conference to look at Republic Act 10647 or the Ladderized Education Act of 2014 that promotes learning equivalencies so students can customized their learning program (depending on the budget and the urgency to enter the job market).

The integration of deep learning skills in Philippine education will bode well for the country in terms of producing competent workers. Unlike its Asian counterparts, the country is forecast to have a young population until 2050.

TESDA is making its 29 course materials more accessible to Filipinos by offering them as free content online and by introducing education campaigns to encourage Filipinos to visit the website for 30 minutes daily to learn marketable skills instead of spending too much time watching TV soap operas.

TESDA trains its students to master the subject, work in teams, exhibit career professionalism, and implement health and safety procedures while at work. These means that the eight deep learning skills are strongly integrated in TESDA course modules.

Plenary Session F: ICT in Education: Microsoft as Partner in Learning

Summary

- Microsoft's learning projects in ASEAN demonstrates its vision for education, "anytime, anywhere learning for all".
- More than 50 percent of today's jobs require some technology skills, and this will increase to 77 percent in the next decade.
- Skills that are in demand today are those of complex communication and expert thinking, including the adaptability to

learn and performance of new tasks with little training. Less in-demand skills include the more basic routine cognitive and manual skills. Identifying which skills will help students adopt in future labour markets is essential.

Ms. Felicia Brown, Director for Public Sector, Microsoft Philippines, introduced the organisation's initiatives on promoting learning based on key global trends and in-demand skills for using ICT tools and

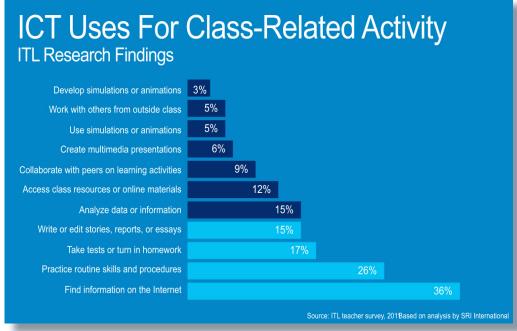


Figure 4. According to ITL Research Findings, seaching information online remains the top use of ICT for class related activity, followed by practice of routine skills and turning in home works or taking tests. Very few still use ICT to develop simulations and to work with others outside class. (Source: 2011 ITL Teacher Survey)

technology to aid blended learning interfaces and collaboration, one of the three thematic tracks in the Philippine leg.

Ms. Brown opened her talk by sharing that technology has opened up new avenues for education modalities such as blended face-to-face and online classroom learning, including just-in-time learning, which trains students to know how to synthesize, vet, and organize to vast amounts of information in today's era when the

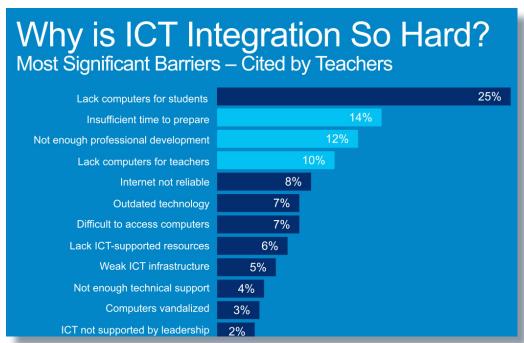


Figure 5. Lack of access to ICT tools and lack of teacher competency on using ICT for education hinder the integration of ICT tools in most classrooms. (Source: 2011 ITL Teacher Survey)

amount of information doubles every two years. For example, 4 exabytes (EB) of unique digital content will be created this year, which is more than what was produced in the last 5,000 years.

Evolving global trends are currently challenging traditional models of education on how to best prepare students of today for jobs by 2050, she noted. She added that today's workforce tackle traditional process skills in most offices mixed with technology such as ICT tools to pave way for more complex tasks such as collaborative problem solving. Over 50 percent of today's jobs require technology skills, and this will increase to 77 percent in the next decade, according to experts.

Ms. Brown noted that job skills over the past 50 years has changed to tasks that require complex communication and expert thinking, including adaptability to learn and perform new tasks with little training.

Several studies suggest there will be a significant gap in the next decade between the demand for and supply of IT professionals with the right technical skills.

Ms. Brown moved on to discuss students show high adaptability to demonstrate 21sy century skills when these are introduced in class but many educators have yet to fully integrate them in learning activities and curriculum. At present, most classrooms still use ICT for

basic information search (See Figure 5).

A 2011 ITL survey analysed by SRI International noted that ICT integration in classroom teaching remains difficult due to the lack of computers for both students and teachers, the lack of time to prepare modules that integrate ICT in teaching lessons and the lack of professional development for teachers (See Figure 5).

To aid this lack of access to ICT tools and capacity building, UNESCO has introduced the ICT-Competency for Teachers (CFT). Under this framework, the technology literacy strand provides an assessment and certification for teachers on how they can use ICT for education.

Ms. Brown explained Microsoft's TEI workshop program, which is designed to help college and university faculty improve their use of technology in their teaching and instruction. It assists educators to develop competencies that will enable them to plan systemically for the selection, utilisation, and evaluation of technology tools and resources in a pedagogically appropriate manner. It was also noted during the presentation that expertise in the use of Microsoft Office suite is a top technology skill required across industries today.

In the Philippines, Microsoft has been providing 4,000 teachers and 300,000 students its Education Delivery high-quality reference material for Math, Science, En-

glish and Values Education to complement Grade 5 and 6 school curriculum.

The rich media are played via a TV or projector during class. They are shown to result in improved learning gains, higher retention of lessons, and decreased

dropout rates. Owing to the model of the success, the Philippine Department of Education is now scaling the project to 38,000 public elementary schools, and some 13 millions students.

WORKSHOP PRESENTATIONS

IV. Workshop Plenary Presentation - Experts (Introduction for Three Thematic Tracks with Philippine Case Studies and Best Practices)

Workshop Presentation 1: Global Citizenship – Thematic Track A

Presentation Title: Global Citizenship Education (GCED) in ASEAN and Challenges in Embedding Global Citizenship in National Curriculum

Summary

- Global Citizenship Education (GCED) has no clear definition yet but it is happening at the early stages today.
- The three core competencies in GCED are: cognitive skills, socio-emotional skills, and behavioural skills development.
- Stories and games can be used to tech students global citizenship and education. Adding ICT for collaboration can foster collaborative learning outside classrooms to enhance the diversity of ideas and innovations that may come out of a learning project.

Ms. Lay Cheng Tan, Program Officer, APEID UNESCO Bangkok, introduced the first thematic track of the workshop: global citizenship. In international parlance, this is referred to as Global Citizenship Education (GCED). And while there is no formal definition of it is already a movement happening across countries as adopted in school subjects (See Figure 6). The key challenge is to build capacity of educators so they can harness tools to better integrate global citizenship as a deep learning skill in classroom learning and use innovative student assessment frameworks (such as the Learning Matrix Taskforce) to complement existing standardized and high stake tests.

Ms. Tan gives a possible working definition of the term as follows: Global citizenship education aims to empower learners to engage and assume active roles, both locally and globally, to face and resolve global

challenges and ultimately to become proactive contributors to a more just, peaceful, tolerant, inclusive, secure and sustainable world. GCED is about what students learn just as much as how they learn.

According to the final report of the UNESCO 2014
Asia Pacific Regional Conference with the theme,
"Envisioning Education Beyond 2015: Asia Pacific
Regional Perspectives," The three core competencies
in GCED are:

- a. **Cognitive skills**: Knowledge, understanding and critical thinking about global issues and the interconnectedness or interdependency of countries and different populations
- b. **Socio-emotional skills**: sense of belonging to a common humanity, sharing values and responsibilities, and holding rights; empathy, solidarity, and respect for differences and diversity
- c. **Behavioural skills development**: act effectively and responsibly at local, national and global contexts for a more peaceful and sustainable world

Around the world, there is a general interest on global citizenship and education since it first appeared on newspaper discussions in 1980, said Ms. Tan. In Asia Pacific, it is interpreted to foster being a good person and good citizen, global competitiveness, an integrated not separate subject, participatory actions and knowledge and politics-morality balance, and respect for emerging multiculturalism, noted Ms. Tan, quoting a presentation by U. Chang in a 2013 GCED consultation conference held in South Korea.

The urgency to integrate global education and citizenship stems from the need for appropriate skills to tackle global challenges such as the following: first, a rising population that will impact the use of finite resources and create shifts in age structures of populations, especially young populations in developing nations who will need better education; second, persistent poverty and income inequality; third, armed conflicts and justice issues; fourth, diversity and pres-

ervation of local language in a globalised economy as natives find it hard to communicate and preserve their mother tongue when development workers use English mainly for discourse; and fifth, Internet and mobile broadband penetration.

Within ASEAN, there are efforts to promote global citizenship and education. For its part, UNESCO is preparing teachers for GCED through general capacity building initiatives on the delivery of global citizenship content and implementation in school institutions via teacher education curriculum and innovative pedagogies. Ms. Tan cited the power of storytelling and gamification or role-playing to engage students and introduce concepts, skills, values and problem solving for global citizenship and education.

The Philippines, according to Ms. Tan, is one of the target countries of UNESCO Bangkok in the region to pilot and scale up GCED initiatives and innovations.

Projects supported by Korean Funds-in-Trust tap ICT-enabled collaborative learning to foster digital citizenship and responsible use of technology. Using free video conferencing tools such as Skype, the pilot case studies sowed the beauty of collaborative learning's process.

At its very essence, collaborative learning is not just

concerned about the product or outcome but the actual process of students and teachers learning together and addressing challenges together from a micro-setup such as school classrooms and their possible application in labour markets when they join the workforce, noted Ms. Tan.

UNESCO Paris is set to release in May 2015 a GCED curriculum with age specific topics and learning objectives to allow adaptation for local contexts, noted Ms. Tan. The curriculum will feature examples of approaches to GCED in different settings, considerations in the teaching and learning process environment and assessment of GCED goals. It will also feature multi-modal delivery of GCED: school-wide or cross-curricula, integrated with different subjects, as a standalone subject, and via non-formal education projects.

Ms. Tan cited a sample case from ASEAN is the genocide education and global citizenship curriculum developed in Cambodia. The topic highlights four values: memory to connect the youth with their history, genocide prevention to avert other human rights abuse, reconciliation done by reconnecting the past to the present and move forward with peace and harmony, and historical empathy to teach compassion and tolerance and guide students away from hatred and revenge.

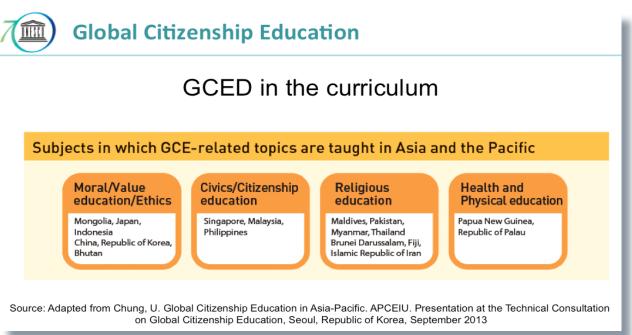


Figure 6. While there is no formal definition of global citizenship education at present, it is currently integrated in various subjects across countries in Asia-Pacific. (Source: Lay Cheng Tan's Plenary Presentation)

Overall, the challenges in global citizenship and education that need to be addressed include a clear separation and harmony of individual identity and the interests of the collective.

Ms. Tan concluded her talk by saying that global citizenship and education should empower learners to be active consumers of knowledge, not just passive learners. Gone is the setup for rote learning and one where the teacher serves as the only information source. Both teachers and students can learn from each other and that enriches the diversity of ideas during discussion to come up with better solutions to common problems.

Workshop Presentation 2: Using ICT in learning – Thematic Track B

For this thematic track, two case studies were presented: a) an urban-based private learning institution, and b) a rural education project supported by the local city government.

Workshop Presentation 2A

Presentation Title: Best Practices in ICT Innovations in the Classrooms: La Salle Greenhills Case Study

Summary

- Teachers should be more creative and vigilant in integrating ICT tools in their teaching method, regardless of subject. Researching on free tools and tutorials available online can be a good star to this initiative.
- To develop an ICT-enabled classroom, he shared that teachers should get the full support of school administrators and parents to facilitate the sustainable implementation of the project.

Mr. Mark Sy, Education and Technology Coordinator, La Salle Greenhills, narrated the case of how teachers can take a pivotal role in driving institutions to adopt ICT in enhancing instructional learning tools and provide quality education and collaboration (See Figure 7). Through his personal initiative, he built the pilot ICT-enabled classroom in his institution by creating from scratch interactive instruction materials to aid classroom instruction and student assessment.

Through this project, he was able to create innovative materials such as an alphabet composed of technology icons familiar to tech-savvy students, online and offline instruction materials such as crossword puzzles inspired from Filipino riddles (translated to bugtong), and interactive exams that use drag-and-drop method for matching concepts and meanings, among others.

Without a background in computer science, Mr. Sy noted that he taught himself how to create websites and teaching aids online, including the creation of a content management system for the school. He referred to online videos for instruction, use free trial software to test projects, and sometimes, ask friends who are experts in coding for tips on questions he cannot find answers to online.

He outlined a six-component framework to help establish an ICT-enabled classroom. These include:

- Infrastructure setup: Tools must be made available to both teachers and students to enable an ICT-enabled classroom, which can be realized with basic PC setup with reliable Internet.
- Training of administrators, faculty, and staff: These three work together to make a school system work. The teachers serve as frontlines in the learning institution, the admin staff serve as backend for operations, and the school administration draft plans and budget allocations for the school services. For this item, Mr. Sy advised that school administrators should also be invited to attend ICT workshops for teachers to learn the benefits of ICT in learning.
- **Digital citizenship of parents**: Learning begins at home and parents can be allied partners to help champion the cause and assist their kids when they are doing their homework or studying at home.
- Cyber wellness program of students: Learners must be kept aware of digital world so they know the responsibility of using technology tools and protect themselves and not use it to harm others (cyberbullying).
- Bridging pedagogy and technology: ICT is a channel to help enhance learning by delivering content in rich media such as audio and text for reading and comprehension exercises or timed quizzes, of which the latter helps cut the time spent in checking papers. Likewise, technology should be partnered with quality content and learning materials to fully maximize the learning potential of students.
- **Support and budget**: The last piece of the framework involves the provision of budget and the full support of the school board to back and scale up the program after the trial period.

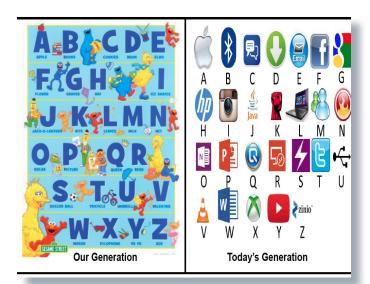


Figure 7. Teachers can be more creative to produce teaching aids such as a modern alphabet based on software and other technology tools. (Source: Mark Sy's Plenary Presentation)

Some of the co-benefits of establishing an ICT-enabled classroom is the increased competency and creativity of teachers in the production of rich media and availability of traditional classroom content from papers to online and offline computer systems accessible to students and faculty. Both students and teachers come up with interactive, collaborative projects, noted Mr. Sy.

In terms of classroom exercises, tests and notes the ICT tools enabled the shift from traditional paper-andpen to the use of interactive lesson exercises, interactive examinations with real-time assessment, and class notes that are available anytime, anywhere, he added.

He also shared for technology integration to work, ICT-enabled classrooms should understand student profile needs, pedagogical examples, smart material design, and interactive evaluation reports. Moreover, professional development for teachers should be complemented with support from policy and administration for ICT, finance, and technology support.

Mr. Sy concluded his presentation by saying that technology won't replace teachers but teachers who use technology will probably replace those who do not.

Workshop Presentation 2B: ICT in Education at the Community Level: A Sharing (Kapatagan City, Lanao Del Norte Case Study)

Summary

- ICT in education in rural settings can revolutionize education for provincial students who can immediately apply their classroom lessons in their community and thus develop essential deep learning skills.
- Local government units can serve as active education partners, especially in instituting policy reform that support student immersion projects to help promote community participation among the youth.
- Competency in the use of ICT tools can help them secure decent IT jobs in rural areas, instead of seeking opportunities in overpopulated cities and moving away from families.

Mr. Johnny Paul Lagura, Councilor and Chairman of the Committee on Education, DRRM, Tourism and ICT, Kapatagan City, Lanao Del Norte, narrated how he helped in the creation of ICT-enabled classrooms in his province and by tapping students to demonstrate deep learning skills when they do their community immersion projects. Key to this initiative is the supportive role of the local government to help identify priority project areas that students can work on to help improve the local economy or simply participate in promoting community projects on culture and tourism.

As a public servant occupying committee chairmanship in important sectors such as Education, DRRM, Tourism and ICT, Mr. Lagura was able to make a local ordinance that integrated community organic farming and disaster risk reduction in the school curriculum, as well as the establishment of student immersion projects wherein students become partners of the local government in information, education and communication campaigns such as the use of ICT in education, among others.

As a community located in Mindanao, Kapatagan has been subject to negative publicity due to kidnapping reports in mainstream media, noted Mr. Lagura. Potential livelihood sources such as tourism remain untapped, while new businesses and jobs are very limited due to perceived safety and peace issues.

This results in most students wishing to get out of the community for jobs in big cities, instead of working or starting their own company in their own locality.

Low-income communities, especially those in Mindanao with limited budget and access to most resources that cities have can benefit in general from using ICT tools as source of information and as a tool for collaboration with partners to implement community projects.

More than enhancing teaching strategy and content delivery, ICT in education can help nurture social responsibility among students. Coupled with local community projects, students can learn from class while implementing projects that tackle pressing community issues.

This is where active participation and collaboration with the local government unit comes in, noted Mr. Lagura. Public servants can help identify key development sectors, which can benefit from student projects and participation. Examples of these include Kapatagan students who serve as cultural ambassadors and tourism guides, student volunteers who help raise awareness on disaster reduction, financial literacy in peace education, and other youth-related local government units (LGU) projects.

One of the powerful messages of Mr. Lagura was that educating the youth is not a sole responsibility of teachers but of all the people and stakeholders in the community. The local government unit can be a good partner of educators by implementing policies and ordinances that foster deep learning and community immersions for students, and even issuing simple reminders to parents to take some time to visit their kids at school

Interventions such as the provision of reliable Internet connection are key to bring more jobs to rural communities. An example of this is the provision of non-voice services in the outsourcing sector, which translates to more income flow in the rural economy while decongesting cities and preventing overpopulation and its related resource and environment issues.

Mr. Lagura also urged educators to be vigilant in seeking partnerships in both private and public sector. For example, a computer literacy project in



Figure 8. By providing ICT education in a community, rural youth has a chance to acquire employable ICT skills, which make them attractive candidates for the outsourcing sector. (Source: JP Lagura)

Kapatagan became possible when they inquired with Microsoft. Most small communities may feel inferior and overwhelmed in tapping industry partners but the first way to achieve something is to try inquiring and to present a good case on the project's relevance to community learners. Today, the city operates a small computer centre, which is used for distance e-learning projects on employable skills such as basic computer operation and search engine optimization and community projects such as digital tourism and business process outsourcing.

He also urged teachers to allocate a time for their students to visit a government meeting so they will be acquainted of the process, and meet their local government officials to inquire of possible projects that may involve and benefit the youth.

Workshop Presentation 3: Collaboration Skills – Thematic Track C

Presentation Title:

The Challenges of Integrating Collaboration Skills in Teaching-Learning (Affordable to Private Education (APEC) Centre Schools Case Study)

Summary

- Involving students to take up group/collaborative projects or case studies in the community can facilitate better mastery of the topic and the development of other relevant soft skills not usually thought in schools such as practical project management skills, interpersonal communication skills, safety skills, compassion for others in Life Labs, etc.
- Free tools on non-traditional learning methods are

available online such as Human-centred design, design thinking for educators, etc. Teacher participants are also encouraged by Tantuico to partner with them to look at common areas for collaboration with their available learning modules.

• Exposure to industry practitioners and mentors to help the students in their subjects or topics at school. At the same time, teachers also form their own support groups to enable sharing of lessons, challenges and proposals on how to resolve them.

Shaina Tantuico, Content Expert, Affordable to Private Education Centre (APEC) Schools, explained how she has started developing a school module called Life Labs for implementation in the APEC school chain that seeks to provide affordable quality education for rural students at Php70 per day.

She noted the idea behind Life Labs, a subject that integrates deep learning skills in learning modules, is to provide learners a creative hands-on learning experience by implementing school or community projects that integrate their classroom lessons. In doing so, learners are reported to have better mastery of the subject while developing life skills outside the classroom such as project planning and implementation, safety skills, interpersonal communication, and community partnerships, noted Ms. Tantuico.

During the open time, students of a Life Labs class can survey their school or community to look for issues or problems and propose solutions. Students worked on community issues such as road safety, financial literacy, health and sanitation campaign against dengue, and street lamp installation for crime prevention.

Under project implementation, students are also assessed on skills demonstrated in terms of the practice of integrity, responsibility, compassion, curiosity, determination, and progressive and skills learned such as communication, thinking, leadership, and employability. Ms. Tantuico noted that the focus of the activity is the development of these skills among learners and not necessarily the output of the project.

She encouraged educators to look up free resources on developing deep learning skills among students such as: a) Design for Change; b) Design Thinking for Educators; and c) Human Centered Design.

Ms. Tantuico referred to these free sources online to design the Life Labs modules while taking into consideration the local context of Philippine education, and through lessons from the pilot classes.

One of the key areas of skills development is building group dynamics and teamwork among students when doing their project cases. Aside from overcoming communication barriers in terms of designing their problem, they are also encouraged to practice an honour system wherein students performed tasks assigned to them to help fulfil the group's objective.

Nine weeks into the quarter, a mentor, who is involved in the field related to the problem case of a student group, will check-in to comment on the status of the student's project and how they are doing it. This helps in the faster turnover of projects when students are encouraged by an expert and in knowing that what they are doing is something of benefit to the community.

On a daily basis, students also have reflection exercises wherein they have a simple set of questions on the soft skills they performed during group work, such as the practice of compassion to classmates, what are the thing that went well, and how to plan to better execute the project tomorrow. This translates to multiple skills such as record keeping, reflection and synthesis, analysis of actions, and planning for new action.

For educators, Ms. Tantuico encouraged the creation of a teacher support group or teachers' lounge. This maybe a simple meeting at the faculty area or online via social media wherein teachers can create a supportive culture for fellow educators to share difficul-

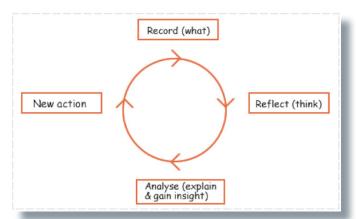


Figure 9. A skills-focused reflection is part of the Life Labs class design. It enables learners to record their action and reflect on them to produce an analysis or a new insight. (Source: Shaina Tantuico's Plenary Presentation)

ties, share surprises from student project outcomes, and to help monitor feedback.

One example that Ms. Tantuico cited is when a student group funded a feeding program by collecting and selling recyclable bottles. Initially, the group urged everyone to cap their spending and have a set amount of donation for the project but they moved to augment their budget from selling scraps. A teacher reported that one student reported to class a realization of how difficult it is to raise Php500 for their project from selling scraps, and she could just imagine the difficulty of people who rely on it for a living.

Open Forum

During the open forum, Ms. Tantuico was asked the following questions:

Q: How can Life Labs be replicated in a public school setup, given that public schools have an average of 50 students in a class and have varying levels of basic competency such as knowledge of basic alphabet, which used to be a non-issue in private school students?

A: A typical Life Labs class in our school chain has 45 to 50 students so it is the same in class size. In terms of the differences in competency level, I have several tips. When you read about design thinking, it has very lofty goals but to simulate Life Labs, keep these things in mind. First, it takes time for kids to get used to a routine. About 70 percent of our kids from public schools takes about two quarters to follow the system and the key to that is consistency. There are topics in math and science class laboratory sessions that can cover more than two meetings. This is a good time to talk, what roles the kids will play in the honour circle, how they can nudge classmates to perform better as part of the group and not only for their individual selves, and so on.

Design thinking is like the scientific method—there is a process to it so it is not far out. For subjects such as English, there are communication and collaboration skills that can be developed.

Q: How do we make sure that when applying this approach, we still have time to achieve what is mandated by law such as ensuring good performance in standard student examinations?

A: Yes, there have ben studies for the past 15 years that group work and hands-on activities allow students to do 70 percent better than those who are not engaged in these activities. They teach each other during this process so they remember more.

When I was working in public schools for science education, we watch the National Assessment Test (NAT) scores and these went up by 20 points in just seven months of engaging students in a pilot Life Labs class. The students do not take notes during the classes but since they create projects, their retention of the subject also went up by 70 percent. We must remember that NAT scores are standard measures installed in the system and that we are rated for them based on our students' performance but these scores do not represent everything we have done in the classroom.

I understand the concern of how and on which subject to do this as there is so much pressure to do well for students to do their NATs and my rating relies on that. Maybe, you can try to test that of the 40 hours devoted for this semester, you can devote 4 or 5 hours of the class for group work and collaboration and monitor how it affects the retention and mastery of the subject based on the NAT scores.

Q: As the project will be scaled up to 44 schools this year, how will you keep that the model implementation is uniform and up to standard?

A: In terms of monitoring, there are lesson guides that each teacher follows. These are comprehensive materials that help guide teachers on how to integrate the lessons for their classroom activities. Next is the quality of implementation. It is not 100 percent perfect but there are things that make the quality as good as we want it to be. Mentors who provide coaching and assistance support new teachers during the semester. Teachers are also provided an intensive two-month training, followed by regular quarterly trainings.

Q: What are your long-term plans for expansion?

A: Our big, seemingly impossible goal is to have 500 schools and 1 million students. We have plotted our course for 25 years to achieve this target and we know that this is just 0.5 percent of all students who need good education in the country. We are open to discuss partnerships and spread what we can do.

Q: How do you screen students and how representative are your students of those in our public schools today?

A: The first screening question: are they literate? We screen if they can read, comprehension not required and perform simple math computation such as multiplying 2 by 4 to gauge their readiness for algebra. We cannot do verbal math yet as this is a special needs basis and our resources for this are limited at the moment.

Q: How do you maintain the safety of students especially when implementing community projects?

A: Safety goes into the project design. We have an open time during class so students can visit the community while accompanied by either the teacher, or parents who volunteer to take time off work for the activity. In terms of safety skills, you will be surprised that most students, even the elementary pupils, commute when going to school and can handle themselves well.

Sometimes, safety issues become integrated as part of the project management as well. For example, a group proposed to repaint pedestrian walkways in Manila. Initially, they decided to do it after class on a Friday at 6pm, a rush hour. The teacher accompanied them and when students arrived on site, they realized how busy the roads were, especially with trucks plying the route. They learned to improve their project planning so as a result they contacted the barangay chairman on what best time to do the project. They went on a Monday at 3-4am, wherein the barangay captain barred the areas so the students can paint the pedestrian lanes safely. With proper monitoring from the teacher, the students are able to learn from themselves better project management skills.

Q: Do you have partners?

A: We do but not in a formal way. We make students write letters to them. For example, they write a letter to the barangay chairman, and the letter can be delivered either by the teacher, parent volunteer, or the students themselves.

Ms. Tantuico also welcomed the inquiry of a Quezon City education official to partner in terms of implementing the project for senior high schools in the city's first district.

In conclusion, Ms. Tantuico left a challenge to educators: "Find the strength of the classroom in the collaboration of the teachers and learners."

Workshop Recommendations

Educators and policy makers who attended the ASEAN Deep Learning Policy Series were divided into three groups for the three parallel workshop sessions based on the three thematic tracks: a) Global Citizenship, Use of ICT in Education, and Collaboration. Under each thematic tracks, groups proposed a set of recommendations on how to implement it under curriculum development, classroom instruction, and student assessment.

This section highlights the set of recommendations proposed under each thematic track, first with the summary and followed by a discussion.



Figure 10. A gradeschool student benefits from using ICT tools as a deep learning initiative in his schools. (Photo Credit: Mark Sy)



Figure 11. Mentor check-ins are part of each Life Labs class to enable collaboration and conservation among industry subject experts or retired educators and young students. (Photo Credit: Shaina Tantuico)

Summary

Overall, some of the Philippine participants (pioneers) have been practicing these three focus areas, while some (followers) have yet to transition in adopting the integration of deep learning in the local basic education model. There is also a strong need for capacity building for both public and private teachers on how to effectively integrate the use of ICT tools in their subjects, a project that UNESCO can help with using existing best practices in the region.

The use of ICT in promoting global citizenship, education and collaboration has been a key unifying thread in the three focus areas. The power of ICT to link classrooms with other schools in the Philippines and overseas paved the way for collaborative learning models that integrated a blended (face-to-face and online) learning interface for a global classroom setup. For its part, Microsoft mentions that it is expanding its projects on deep learning that involve the use of ICT tools in more Asia Pacific countries including the Philippines.

In terms of curriculum development and assessment tools, there is a need to review the current models

to adopt evolving education paradigms such as the integration of deep learning skills while complying with the basic requirements underscored by the Department of Education.

Collaboration both in the classroom and outside the classroom with peers and other stakeholders in society such as government, NGO and private sector when implementing projects that can address society's issues can also help students apply the theories they learn from school and at the same time, learn the process of actual project management and implementation, and how to address challenges onground.

In terms of participation, there is a high level of participation among participants, especially those who have been practicing the integration of deep learning skills in their respective classes as noted by one of the UNESCO officials. This resulted in a rich discussion for the set of recommendations on the types of training needed by educators and how to address existing gaps with the ultimate goal of improving basic education methodologies.

Thematic Track 1: Global Citizenship

Global Citizenship includes the development of global knowledge, sensitivity to and respect for other cultures and active involvement in addressing issues of human and environmental sustainability among learners.

Summary

- 1) In curriculum development (and student assessment), incorporate local, real-world, context-based issues and global topics in lessons, problem solving (beyond the Deped curriculum, why they need to learn)
- 2) Promote ICT-enabled and collaborative learning in inter-school and international levels for a robust local and global cultural education
- 3) Performance product across all learning areas with tools such as standardised rubrics and formative assessment modes
- 4) For instruction, combine active play, values integration, creative storytelling, and multicultural education
- 5) Tap government, NGO, private sector and parents to understand GCED, use ICT tools, and support learners

Discussion

Under curriculum development, which also forms part of student assessment, there is a strong recommendation to incorporate local real-world, context-based issues that students can observe and experience in their own locality.

When developing curriculum and lesson plans, teachers can merge skills practiced and acquired in subjects with its possible real-life applications. For example, Math word problems can include how a family can efficiently budget for a month or how a student can save for a new book using his allowance. In doing so, students can generate ideas on how they can apply the lessons in school to become street-smart, or in the colloquial, a person with diskarte.

Likewise, global issues should also be included to reflect if local community or national issues are also present in communities overseas, or highlight how national holidays, traditions, or celebration is observed in a particular country as shaped by its history.

Beyond the curriculum provided by the Department of Education, teachers are encouraged to promote problem solving and include the value of education itself and how learning skills provides students with better chances of surviving and thriving in a 21st century marketplace.

There is also a recommendation that existing models in the Philippines are existing but there is a need to document and provide these proto lesson plans or designs to help study how it is being implemented and draw out the best practices to scale up implementation at the national and regional levels.

There is also a need for ICT-enabled and collaborative learning to bring class discussions and group work to inter-school and international levels with the end goal of paving the way for a robust local and global cultural education. To achieve this, there is a need to increase the competency of teachers in using ICT tools for more collaborative learning and education through continuous training and sharing of best practices with other educators, even those in schools outside their community and overseas.

Under class instruction, the educators also noted the need to address issues in early childhood education (ECE) such as the sparse training of teachers on child development and insufficient resources for laboratory work and lack or limited access to online content due to poor Internet infrastructure in most public schools in the country. In terms of group work and collaboration outside class, there is a tendency for teachers to contain the students with activities inside the classroom. There is also the challenge to tap non-performing students in class, first in terms of identifying who exhibit poor performance and the lack of time of teachers to focus on student remediation due to multiple workloads. Educational trips are also very limited.

Tapping storytelling is one suggestion to give students an opportunity to share their own personal and community stories in class, in place of the field trips, if they are difficult to conduct. Other tools include the combination of active play and games, values integration, and multicultural education, wherein students

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are given opportunities to explore their subjects using multiple learning modes. Exploring local history and how it ties up to their subjects, especially in the social sciences and even languages can be another avenue to help improve teaching methods.

Encouraging students to learn beyond the classroom by participating in inter-school and international competitions will be a good way to promote collaboration among peers and skills improvement.

In keeping with the prescribed K to 12 basic education policy of the Department of Education, there is still a strong need to have performance products across learning areas to be measured using standardised rubrics and formative assessment.

There is also a strong need to partner stakeholders such as tap the government agencies, nongovermnet organisations (NGOs), private sector players and parents to increase the awareness on how global citizenship education can help the country produce a talent pool suited for 21st century jobs. Tapping partners

will pave way for the creation of more purposeful and meaningful programs that help serve this general objective while producing co-benefits such as benefiting from ideas of student volunteers who join government or CSR programs of industry players.

Notes

Comments from Ms. Lay Cheng Tan, Programme Officer at the UNESCO Asia and Pacific Regional Bureau for Education based in Bangkok, Thailand.

- 1) To make the program sustainable, there is a need to develop the creativity of teachers when integrating deep learning into their classes. Trainings may go to waste if the people who will deliver them are unable to integrate these new methods because they are challenged with the lack of creativity.
- 2) She praised the enthusiasm and confidence of teachers to share their experience eloquently and purposively during the workshop to come up with a good quality of conversation and output.

Thematic Track 2: Use of ICT in learning and education

The use of ICT in education: technology allows learners to discover and master content knowledge and to enable the deep learning goals of creating and using new knowledge in the world.

Summary

- 1) Improve infrastructure and technology access (reliable Internet connection, PC units) especially in public schools with limited to zero ICT budget
- 2) Formulation for guidelines/standards for learning management systems
- 3) Continuous capacity building for both private and public educators (with emphasis on how ICT will benefit learning and collaboration)
- 4) Blended learning for students and performance task coherence in objectives and assessment
- 5) Increase linkages with partners like (British Council, Microsoft, UNESCO) to share best practices, existing guidelines and resources for customized adoption in local context

Discussion

In terms of current efforts to tap ICT for education in the Philippines, there are existing models such as those shown in the introductory presentations for the thematic area.

In early childhood, the present curriculum is based on the use of play and use of ICT as a teaching tool. However, there is still a gap in terms of using ICT across all schools in the country because of access to infrastructure in most public schools and the age of learners who have to balance values formation and the use of technology to facilitate their learning. At best, students in early childhood education are too dependent on their teachers for education and may not yet fully maximise the potential of using ICT tools. To address this gap, there is a suggestion to strengthen ICT as a mode of delivery of content in combination with storytelling, music, and dance.

In primary school, ICT is seen integrated in most subjects, especially in Grades 5 to 7. Limited time involved in teaching those subjects prevent the full realisation of those outcomes. A good resolution for this is continuous capacity training for teachers to equip them with pre-requisite skills in ICT and how to best integrate it in their subjects to meet their learners' profile needs.

In secondary school, ICT is integrated in technical education such as computer science subjects. This helps students to assess the subject as a potential career track in technical and vocational education or as a university degree. Skills inventory is also integrated as the subject is part of the general secondary

curriculum implemented nationwide. A gap to be addressed is the need to train educators to match student learning approaches; as often with today's tech-savvy youth, most students who have access to these ICT tools and have the general interest and enthusiasm to study them have more advanced skills in using computers than their own teachers.

In general, there is a strong need for capacity building of educators on how to use ICT tools and how to integrate them in the curriculum. While there is a policy that defines this task, the lack of infrastructure, budget support, and limited skills training for teachers create this gap in education, especially in public schools with limited to zero budget for ICT to begin with. This is complicated by the fact that most students in public school will have very limited access to using these tools even outside school, thus creating a gap in learners' skill levels.

To address these needs, there are particular recommendations such as structuring a differentiated program to meet the particular needs and profiles of students classified as basic, intermediate and advanced, aligning the use of ICT in education with improvements in curriculum when deep learning skills become more integrated in education, and putting into context the use of ICT tools in terms of creating well-rounded students who can propose class or school projects that can help address community needs and issues.

There is a strong need to emphasize how ICT is a powerful tool to improve instruction, collaboration, and even monitor via measurable metrics of how well students learn in today's classrooms. In aid of this, schools can partner with community stake-holders such as local government units who send donations to build classrooms and facilities in most public schools. In addition to these essentials, there could be request for the provision of a PC center in the school or one PC per classroom packaged with multimedia tools for teaching and instruction.

In the policy front, there is a good opportunity to create certification programs that will encourage teachers to use ICT tools as part of instruction and for schools to consider investment on ICT to augment reference textbooks with the availability of free online content. The latter is in keeping with the moratorium of the Department of Education to limit textbook acquisition.

There is also a challenge to integrate ICT tools under student assessment. A good way to move forward here is to provide learning tools such as instructional videos and free online tools that teachers can use to explore how to enhance student assessment protocols using ICT. A recommendation here is the use of performance task coherence in objectives and assessment. For example, students can be tasked to create videos as part of schoolwork to determine their mastery of the lesson and at the same time, to document the skills learned during the semester.

While the use of ICT tools in education is a big move to digital learning, it should not replace face-to-face classroom interaction. A good balance for this is a blended learning interface for students, wherein they will be able to interact with their classmates in their own classroom and even those in the same school community, while extending their reach for collaboration and discussion with those in schools overseas.

Thematic Track 3: Collaboration

Collaboration skills require students to work in teams, learn from and contribute to the learning of others, social networking skills, empathy in working with diverse others.

Summary

- 1) ICT-enabled Inter-school and International collaborative learning that address global issues with local implementation ("glocal")
- 2) Capacity building for educators to use ICT tools e.g., social media (FB, Skype), LMS (Moodle) to facilitate cross-border conversation and collaboration, and enhance blended learning
- 3) Team/peer coaching to encourage constructive learning and mentoring b/w retired educators & young students to form consultative networks, share learning process & record lessons in blogs
- 4) Promote participatory & project-based learning and education, while tapping linkage with multi-stakeholders like ICT providers, LGUs
- 5) Clear assessment parameters of individual-, group performance/s based on standard vs task-based tests with monitoring & evaluation

Discussion

An ICT-enabled classroom can promote collaboration both inter-school and international. Collaborative learning raises the levels of deep learning skills that students need to discuss ideas and more so, to implement projects—in addition to master of the subject material. One way to encourage the use of ICT and collaboration is to encourage students to visit and create community projects that help address global issues but with a local implementation.

Online collaboration is a disruptive learning process that allows for the creation of school projects that can help convene team members from across distances and different time zones to come up with more complex projects. Online collaboration tools extend beyond learning management tools as free social media and networking sites can be a good avenue as well for informal meetings and discussions. This allows for more flexibility in terms of capturing a wider range of communication and working styles that can complement personal meetings.

The rich conversation and generation of ideas from collaboration do not come with challenges such as fluctuating Internet speeds and time zone differences that may cause some delays or technical glitches in communications but overall, this can better help students see how to best create project management plans that can address actual project implementation.

A good way to keep things on track is the creation of a calendar of activities, marked with specific goals at the end of the semester and the milestones at each stage of the project implementation. Some schools perform this, with teachers introducing the system at the beginning of classes.

In terms of integrating this into student assessment protocols, there could be two ways to best assess learners' performance: their mastery of the subject and demonstration of this mastery of subject when working in teams. By promoting a learner-centric assessment, teachers can take note of the strengths and weaknesses of each student when subject to different styles of teaching such as standardised classroom teaching and group collaboration in small groups (class) and in big groups (inter-school and overseas).

To further enhance collaboration, there is a recommendation to tap experts in the industry related to the subject and even retired teachers who can mentor younger students during the course of the semester. This creates consultative networks wherein both young and old meet to share their learning process, identify gaps and propose solutions, and move forward to create an evolving education process. It is essential that such discussions are also recorded online such as blogs, video or a combination of rich media to help see how the process evolves and thus create a reference repository of best practices, challenges, and lessons for future use.

In keeping with the collaborative learning experience,

teachers are encouraged to tap community stakeholders in the promotion of participatory education. A prescribed number of hours during the semester can enable students to conduct community visits and immersions to help identify problem cases that they can work on as part of their class requirements.

In terms of support, local government units can help foster this collaborative learning by instituting ordinances that allow for students to become volunteers and ambassadors of local government projects that may impact the youth in their community. This enables students to develop a good understanding of their community while at the same time, developing the necessary communication and networking tools with local leaders and even industry players to help

implement a program.

Clear assessment parameters of individual and group performances should be based on standard versus task-based tests coupled with overall project monitoring and evaluation of the projects. It is crucial that students will learn the importance of the process, more than the actual product or outcome of the project since collaborative learning puts more prime on the skills and lessons that students can learn such as team work, working with respect for a diversity of cultures, picking the best idea or solution for implementation based on the team's rich conversation and enhancing the impact of a classroom project by providing solutions or simple proposals for the community.

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