SESSION DESCRIPTIONS

11 May 2017, Thursday

1. Keynote Presentation

A renowned ICT in Education expert and practitioner, Mr Paul Kim from Stanford University, will give a 30-minute presentation on how the recent technological advancements generate a vast array of lifelong learning opportunities for all. He will highlight the need for renewed perspectives on education reform and lifelong learning towards creating new education pathways that are necessary to meet the new workforce needs of the future industries. The presentation will be followed by a 20-minute Q&A/discussion with the audience.

For more information, please refer to the presentation abstracts and speakers’ profiles in the Annex.

2. Plenary Session

Taking off from the keynote discussion, the Plenary Session focuses on the role of ICT in achieving the Education 2030 Agenda, and how evidence-based policies and practices, backed by smart partnerships can support related efforts.

Three regional experts, Director Gwang-Jo Kim from UNESCO Bangkok, Mr David Hung from NIE-Singapore, and Mr Brajesh Panth from ADB, will each make a 20-minute presentation, followed by a 10-minute Q&A/discussion with the audience. For more information, please refer to the presentation abstracts and speakers’ profiles in the Annex.

3. Ministerial Dialogue

The Ministerial Dialogue will engage the country delegations in deliberating and endorsing the “Asia Pacific Regional Strategy on Using ICT to Facilitate the Achievement of Education 2030”, that has been circulated to the delegates and relevant organizations prior to the Forum. In relation to this, country delegations are requested to prepare a short two-minute remark on the Regional Strategy that will be shared during the Ministerial Dialogue.

Agreements and concerns raised during the Forum will subsequently be disseminated during the annual Asia Pacific Meeting on Education 2030 (APMED), to be held later in the year. This regional event will

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1 The APMED2030 is a platform for regional consultations and coordination to support Member States in achieving Education 2030 targets. This runs in parallel to the global movement where the SDG-Education 2030 Steering Committee was convened in May 2016 as a democratic, multi-stakeholder partnership, to provide both a global forum for discussion and a forward-looking vision on how to put the education agenda into action.
be an opportunity to obtain validation on the Regional Strategy and gather feedback from other education stakeholders, towards developing more concrete country-level implementation strategies.

4. Sub-regional Action Planning Session

The Sub-regional Breakout Session will engage Member State delegations from each of the five sub-regions to further concretize the action points enumerated in the Regional Strategy. Delegations will use this Breakout Session to agree on specific activities that the Member States, sub-regional bodies, UNESCO, and other relevant organizations can collaborate on within the 2017-2022 timeframe.

Venues:

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<tr>
<th>Region</th>
<th>Venue</th>
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<tbody>
<tr>
<td>Central Asia</td>
<td>Business Center 6</td>
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<tr>
<td>East Asia</td>
<td>Business Center 5</td>
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<td>Pacific</td>
<td>Namsan I</td>
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<tr>
<td>Southeast Asia</td>
<td>Business Center 9</td>
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<td>South &amp; West Asia</td>
<td>Business Center 1</td>
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All presentation files will be uploaded to the AMFIE 2017 webpage (http://www.unescobkk.org/education/ict/current-projects/amfie2017/).
1. School Visit (12 May 2017, Friday am)

The Seoul Metropolitan Education Office will organize a School Visit in the morning of Day 2 to show the Forum participants actual class sessions and ICT-supported implementations at the Changdeok Girls Middle School (Seoul Future School).

“A happy school where students are prepared for the future”

The dream of Changdeok Girls’ Middle School as a Seoul Future School* is to create an environment where learning is fostered to meet the goals of the future society. The School curriculum consists of learning, expression, enjoyment and sharing spaces where students can participate actively in classes by combining IT skills with outstanding learning and teaching methods. All students can freely borrow tablets for learning purpose and can likewise use various media spaces for web searches and open discussions. Changdeok Girls’s Middle School was established in 1945 in the centre of Seoul, the school has total of 32 teachers and 222 students (as of April 1, 2016).

*A Seoul Future School aims to empower students to have 21st century skills such as creativity, collaboration, communication, and convergence. In addition to gaining knowledge, the school aims to focus on a core competency for a future society.

What to expect from the school visit?

Participants will observe practical examples of 1) how digital education resources and smart devices are being utilized in classrooms, 2) how students can develop core competencies for the 21st century, and 3) how teachers can practice effective classroom management skills and improve efficiency of school administration using ICT. Participants will have opportunities to discuss experiences and challenges in the use of ICT in education with teachers and students.
2. Concurrent Sessions (12 May 2017, Friday pm)

The entire afternoon of Day 2 will be organized as concurrent sessions. The purpose of the sessions is to introduce participants to ideas, approaches, and strategies that they can consider adopting or adapting in their country settings.

**Session 1-A : 14:00-15:30, Namsan I**

**Supporting the Achievement of SDG4 through Invigorating the Use of OERs**

This workshop will discuss how to diversify pedagogical methodologies and contents to improve education equity through Open Education Resources (OER). Participants will be invited to discuss how OERs can be used in implementing Global Citizenship Education and will be introduced to exemplary models of OER use in primary, secondary, tertiary, and lifelong education.

Towards this end, speakers will discuss the merits of using OER in the following:
- Flipped learning (or Flipped Classroom) that rearranges how time is spent both in and out of class to shift the ownership of learning from educators to the students
- K-MOOC that launched 27 online courses from 10 domestic leading Korean universities, and will expand to more than 500 courses by 2018
- Global Citizenship Education that involves active student participation in projects to address global issues of a social, political, economic, or environmental nature
- Actual classroom practices in schools

**Session 1-B : 16:00-17:30, Namsan I**

**Changes in Education Policies in Preparation for the Fourth Industrial Revolution**

This workshop session deals with how mid- and long-term education strategies can be reformed in preparation for the Fourth Industrial Revolution. In addition, this session will highlight the direction of future education, with a particular focus on the core capacities of learners, the importance of SW/coding education, and the changes schools will experience in dealing with future curriculum reforms.

This session will tackle the following questions
- What are the characteristics of the Fourth Industrial Revolution and the Information Society?
- What skills and capacities do we need for the Fourth Industrial Revolution?
- What are the international education trends for the Fourth Industrial Revolution?
- How do we establish mid-term and long-term education policy and software/coding education?
- How do we transform the curriculum in SW/Coding education?

The main goal of this workshop is to walk MOE officials through different measures to take in promoting digital citizenship education at the national level. The suggested policy measures are drawn on a recent UNESCO’s work on digital citizenship education and cyberwellness in Asia Pacific, mainly around findings from its policy review study, “Building Digital Citizenship in Asia Pacific through Safe, Effective and Responsible Use of ICT”.

According to the review results, more than half of the 22 surveyed countries have not introduced the concept of safe, effective, and responsible use of ICT to their national curriculum and national standards for teacher qualification have yet to integrate the concept. The talk will discuss what these findings mean to the context of participants respective countries and suggest policy-level recommendations in order to prevent or minimize risks without restricting opportunities that ICT can offer.

The session requires participants for bringing their own devices (smartphones, tablets, laptops, etc.) to participate in the instant online poll.

Please note that Session 2-B will be a repeat of Session 2-A.
PRESENTATION ABSTRACTS

Keynote Presentation

Lifelong Learning for New Collar Workforces of the Fourth Industrial Revolution

From virtual reality to predictive analytics and from online boot camps to interactive simulations, technology is paving new ways to enhance educational access around the world. For lifelong learning, what used to be privileged opportunities for an elite group of learners have become just-in-time on-demand disposable learning for all ages while an increasing number of teacherpreneurs is actively expanding proprietary education enterprises by leveraging a variety of social media networks. This presentation shares lessons learned from multiple global education projects, recent trends of technological advancements relevant to lifelong learning, and critical perspectives on new competencies for the 4th industrial revolution.

Plenary Presentations

Education 2030 Agenda and ICT

The main goal of this talk is to set the stage for the Ministerial Dialogue in the afternoon of Day 1. To do so, it will share an overview of the state of education in Asia-Pacific, potential versus reality vis-à-vis ICT, and its role in achieving SDG4. Although much has been achieved in the EFA goals across the region, educational challenges still remain, especially in reaching out-of-school children and adolescents beyond basic education, improving quality of education to cover the basics at school level and enhancing evidence-based policy implementation and monitoring. The talk suggests how ICT, when used at the full potential, can transform education systems towards lifelong learning society, with special attention to the following three areas: inclusion and access, quality and innovation in education, and governance systems. After reviewing the impacts of the past AMFIEs, the talk will conclude with tangible suggestions for the Member States and international communities for using ICT to achieve SDG4.

Evidence-Based Policy and Practice in ICT-Transformative Education

This presentation will describe the challenges of how East Asian education systems can cope with managing the change process towards 21st century learning yet maintaining strong fundamentals in the basic foundational disciplinary domains. The Singapore experience will particularly be discussed at length from policy to translations in terms of practice enactments in classrooms (broadly conceived) for school leaders, teachers, and students. Importantly, the presentation will delve into the tenets relating to centralization-decentralization balances as a system, leadership from the middle, teachers’ epistemological shifts needed for inquiry based learning, and student agency in learning. The tenets are intertwined and co-influence each other ecologically. Research evidences from the Singapore context in the implementation of ICT-mediated learning will be shared and implications would be drawn for other East-Asian education systems. Armed with a model of system change, the presentation will also discuss how scaling of educational innovations for an ICT-transformative education can thus occur. Scaling up innovations cannot be divorced from a sound basis of learning informed by the sciences of learning which is both participatory and embodied. Transformative education is a complex ecological process of change beginning with teachers as the highest leverage point for the change process, school and system leaders are the movers and shakers of change itself, and learners themselves being the agents that desire for change.
**Smart Partnerships for Effective Education**

Investment in human capital development is critical for the overall development of any country. Successful countries such as Japan, South Korea, and Singapore have transformed themselves by investing in the education of their citizens, and all of them have emerged as prosperous nations despite lacking natural resources. Research is showing that more than average years of schooling, the quality of education is more important for the economic development of a country. However, research is also showing that many developing countries are lagging behind in quality despite significant improvements in access to education. Unless serious efforts are made to significantly improve the quality of education these nations will not be able to achieve the target set in the sustainable goal 4 by 2030.

So, how is it possible to boost the quality and relevance of education? Business as usual approach will not work. Innovative approaches combined with smart partnerships are key to improving the quality of education. Innovative approaches must draw on disruptive use of information and communication technology (ICT) and public-private partnerships (PPP). ICT is critical to improve the quality of teaching and learning, promote self-paced learning for students, assist teachers to become effective in targeting lagging students, improve access to interactive teaching and learning materials, benchmark performance to ensure everyone is learning, and conduct timely assessment and feedback to students to demonstrate progress. Different types of partnerships are crucial to involve all key stakeholders to reinforce learning of everyone under the umbrella leadership of respective governments and their policies and strategies. Non-traditional partners are growing and can bring innovative approaches to complement different aspects such as school health and nutrition, water and sanitation, access to internet and digital and financial literacy and drawing on international good practices to sharpen the skills needed to cope with emerging labour market needs. The SDG and COP21 provide us with historic opportunity to come together to improve the quality of education.
SPEAKERS’ PROFILES

Paul Kim is the Chief Technology Officer and Assistant Dean of the Graduate School of Education at Stanford University. He served as an advisory committee member for the National Science Foundation (2012-2015), member of the Grand Challenges for International Development Committee at National Academy of Sciences (2011-2013), a member of the board at WestEd (2010-2013) and a member of the board at Stratford Schools (2015-Present). He has taught graduate-level courses and MOOCs related to educational entrepreneurship, technology design, and international development for the past 16 years at Stanford University. His recent government-backed international development projects include the design of a new science and technology university for the Sultan of Oman, the strategy design for the national online learning initiative of Saudi Arabia, and the national e-portfolio system for public universities led by the Ministry of Higher Education, Mexico.

Gwang-Jo Kim is the Director of the UNESCO Asia-Pacific Regional Bureau for Education. Dr Kim and also serves as the UNESCO Representative to Thailand, Lao PDR, Myanmar and Singapore. In this capacity, Mr Kim is responsible for the management of partnerships and external relations, human resources, as well as budget and financial management. His main tasks include advocacy work on UNESCO’s mandate and priorities, building strategic partnerships, setting directions to achieve objectives, monitoring and evaluation of programmes, and ensuring compliance with existing human resources and financial regulations, among other things.

An education expert, Mr. Kim has worked in various capacities for the Government of the Republic of Korea. As the Deputy Minister of Education and Human Resources Development, Mr. Kim initiated the Global Human Resources Forum aimed at providing an international platform for sharing information, knowledge and best practices in human resources issues among leaders. He also worked in the Office of the President of the Republic of Korea, where he played a key role in education reform that contributed to the restructuring of the entire Korean educational system. From 2001 to 2003, Mr. Kim was seconded as a senior education specialist to the World Bank, working mainly in the Latin American, and Caribbean regions. He served as a professor at the Graduate School of Education at Keimyung University in Korea before joining the UNESCO Regional Bureau for Education in Asia and the Pacific in early 2009. Mr. Kim has a Bachelor’s degree in Public Administration from Korea University. He also holds a Master’s degree and Doctor of Education in Economics of Education from Harvard University, USA.

Dr. David Hung is Professor at the National Institute of Education, specialising in the Learning Sciences and ICT. In 2004, Prof Hung initiated the set-up of the Learning Sciences Laboratory whose primary mission was to engage in school-based interventions with the view to changing pedagogy and practice. Grounded on the socio-cultural and cultural-historical traditions, Prof Hung’s interest lies in designing for students’ learning in both formal and informal contexts, maximising learner potential. Another significant part of his present work is on the translation and diffusion of educational innovations, which the eduLab initiative is trying to advance. In this work, he documents the ecology of diffusion efforts in the education system, leadership and school improvement, professional learning communities and teacher learning, and socio-technical infrastructure considerations needed at the classroom, school, cluster, and system levels.
Dr. Brajesh Panth serves as the Technical Advisor (Education) for the Sector Advisory and Service Cluster at the Asian Development Bank (ADB). He provides technical leadership to the education sector group (ESG) in ADB, leads the preparation of the ESG work plan and facilitates collaboration across sector and technical groups in ADB. He has over 25 years of experience in the education sector including sector assessment, project processing, implementation, evaluation, and policy dialogue, covering all levels of education (school, technical and vocational education and training, and higher education). He has made presentations on education reforms in various international fora and published articles on education reforms in different publications. He has worked in over 12 countries. He holds a doctorate in education administration, planning and social policy from Harvard University. He also holds an MBA from the University of New Hampshire in the US. He worked with the World Bank as senior education specialist in Nepal before joining ADB in 2001.

Ms Jonghwi Park leads the regional programme on ICT in Education at UNESCO Asia Pacific Regional Bureau for Education, supporting 46 Member States of the region. Her team at UNESCO Bangkok focuses on policy-level supports for Member States, including ICT national policy reviews, ICT in education master plan development and regional comparative research on the current issues. She oversees the organization of various high-level policy fora, including Asia Pacific Ministerial Forum on ICT in Education, Central Asia Symposium on ICT in Education, and Regional Seminar for Teacher Education Institutions, to name a few. Prior to joining UNESCO, she had worked as e-Learning Designer in South Korea for universities and business trainings. She obtained her Master’s degree in Educational Technology from Hanyang University, Korea and her PhD in Learning Sciences from McGill University, Canada.

Mr. Jongwon Seo serves as Chief of the Global Policy Research Center at the Korea Education and Research Information Service (KERIS). Over his career, he has engaged in research work and field projects covering various topics, such as Korea’s ICT in education policy study, u-learning model schools, evaluation of ICT use in teaching and learning and the design of ICT-enhanced learning environments. Additionally, he has conducted ICT in education policy consultancies for developing countries, researched international ICT in education indicators, and managed a number of international cooperation projects in the area of education for the Korean government.

Working closely with international organizations and UN agencies including APEC, UNESCO, ITU and the World Bank, Mr. Seo has participated in a variety of collaborative projects that aim to improve ICT in education policy and build the capacity of teachers in developing countries. He completed his MS in Management Information Systems at the University of Nebraska in the USA, and is currently a Doctoral Candidate on Educational Technology at Korea University in Seoul.
Dr. Jin-Hyouk Im is a Professor at the Graduate School for Information Technology, Pohang University of Science & Technology. After teaching for 22 years as a college professor in the U.S.A., he came back to Korea as a founding member of the Ulsan National Institute of Science and Technology (UNIST) in 2008. Since then, he has been pioneering educational experiments with flipped learning as an alternative to the lecture-based traditional approach in order to overcome the twin challenges: education quality improvement and cost containment/saving. Thanks to him, more than 30% of courses in UNIST have been flipped. He was also instrumental in launching the K-MOOC initiative in Korea.

After retiring from UNIST, he joined POSTECH, ranked by the London-based Times Higher Education (THE) in March 2017 as the 4th best small university in the world for education innovation. He has written many articles and columns for academic and practical journals and has delivered more than 170 invited lectures. He is regarded as a top authority on flipped learning and MOOC in Korea.

Ms. Hyejung Im is an elementary school teacher who has a keen interest in bringing Information Technology into the classroom setting. Having graduated with a BA in Education from Seoul National University of Education, she is currently taking her Masteral studies on Curriculum in the same university. She would like to discover new ways in utilizing Information Technology in Education, and is very much interested in interacting with educators from around the world working on this area.

Professor MiLee Ahn is a Professor of Educational Technology at Hanyang University, Republic of Korea. She also leads the Research Institute for Global Education & Leadership at Hanyang University, a research entity initiating various collaborative educational projects, capacity-training programmes, and research activities in the area of developing more effective learning methodologies and environments.

Professor Ahn has also led various national-level activities, one of which includes the research on establishing general policies for e-Learning quality assurance standards. She also served as Commissioner for the Korean Federation of Teachers’ Association, Republic of Korea, where she was in charge of the organization’s international networking activities with counterparts around the world. Currently, she serves as Commissioner of the Education Division at the Korean National Commission for UNESCO and continues to share insights on various global initiatives on education in various fora. Professor Ahn holds a Ph.D. on Educational Technology, Purdue University, USA.
**Dr. Sungho Kwon** serves as Emeritus Professor at Hanyang University. She is also the Chairman of the Advisory Committee for the Institute of Educational Technology. She also led organizations in varying capacities including serving as President of the Korean Society of Educational Technology, President of the Korean Association for Educational Information Media, and member of the Advisory Committee on Digital Textbooks at the Ministry of Education.

She is an expert in many areas with regard to building learning ecosystems for international cooperation, building Innovation capacity through international leadership, and expanding SMART educational environments. Her experience of over 30 years spans academia and consulting for the high tech industry within Korea as well as in other countries, such as those in South American and Southeast Asia. She received the Best Professor Awards for her outstanding research work at Hanyang University and was likewise awarded a commemorative medal from the Korean government for her over-30 years’ worth of contributions to education development in Korea. She received an Ed.D. in Educational Technology from the University of Washington.

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**Mr Soonshik Suh, PhD** is an educational technology expert in Korea who has contributed immensely to the field of ICT in education, e-learning in K-12, and pre-service and in-service teacher training. After he completed his masters and doctorate degrees in educational technology at the Florida State University in the US, he came back to South Korea to take the position as the first ever director of the National HRD e-learning Center, reporting to the Ministry of Personnel Management. His tasks in the position involved establishing the centre’s e-learning system and developing various educational digital contents. He consulted for the development of the Association of South East Asian Nations (ASEAN) Cyber University and collaborated with experts from other ASEAN countries, including Cambodia, Laos, Myanmar and Vietnam, in designing the e-learning programme. He currently serves as a professor at the Chuncheon National University of Education in Korea.

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**Dr. Hyeoncheol Kim** is a Professor in the Department of Computer Science and Engineering at the Korea University, Seoul, Korea. He serves as Chair of the KACE (Korean Association of Computer Education), a membership organization of about 2,000 K-12 computer educators, academic researchers and other supporters in Korea. He also advises many organizations, including Korean government agencies, on matters related to K-12 computing curriculum and pedagogical approaches. He is also the author of computing textbooks and more than 70 research papers. His research interests include machine learning, human learning and their interactions. He received his Ph.D. in Computer and Information Sciences from the University of Florida.
Changdeok Girls’ Middle School

1 INTRODUCTION

The dream of Changdeok Girls’ Middle School as a Seoul Future School is to create an environment where learning is fostered to meet the goals for future society. This is done by utilizing cutting-edge facilities, implementing new teaching methods and high-quality materials, and use of distinctive classrooms (e.g. Ondol-style sitting room, Performance Theater, etc.).

2 SCHOOL MISSION

“A Happy school where students are prepared for the future”
- Creative education which fosters 21st century skills
- Mindful education which creates warm-hearted students

3 WHAT IS SEOUL FUTURE SCHOOL?

A Seoul Future School aims to empower students to have 21st century skills such as creativity, collaboration, communication, and convergence. In addition to gaining knowledge, the school aims to focus on core competences for a future society. We enable students to participate actively in classes by combining IT skills with outstanding learning and teaching methods.

Students from a Seoul Future School will be global citizens who can share what they have learned and experienced by learning together.

4 CHARACTERISTICS OF SCHOOL SPACE
### CURRICULUM DEVELOPMENT: PARADIGM SHIFT IN EDUCATION

<table>
<thead>
<tr>
<th>How We Changed</th>
<th>How We Applied</th>
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<tbody>
<tr>
<td>from teacher-led lectures to learning-centered class</td>
<td>▶ Time-blocking for applying various teaching techniques and methods</td>
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<tr>
<td>from knowledge-delivery education to knowledge-creating education</td>
<td>▶ Havbruta learning ▶ Theme-based integrated class</td>
</tr>
<tr>
<td>from strengthening of cognitive competences to strengthening of social, emotional, aesthetical, physical competences</td>
<td>▶ Creative art ▶ Musical ▶ Sports Club</td>
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<td>from competition to collaboration and networking</td>
<td>▶ Process-oriented assessment ▶ Smart Devices</td>
</tr>
<tr>
<td>from separated subjects to integrated learning</td>
<td>▶ Creative Experiential activities (clubs, camps, and field trips) ▶ Student Council</td>
</tr>
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### SCHOOL ACTIVITIES

- **School Campus**
- **Choir Competition**
- **Science Day**
- **Cross-country Traveling**
- **Drama Festival**
- **Sports Club**
- **Havbruta Learning**
- **Orchestra**
- **Library activities**