2019

International Consultative Meeting on

International Institute of Online Education

Conference Report

December 7 to 8, 2019
Shenzhen, China

Education 2030

Education
2030

2019

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International Institute of Online Education

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International Centre for Higher Education Innovation under the auspices of UNESCO (UNESCO-ICHEI)

The Conference Report is a summary of the 2019 International Consultative Meeting on International Institute of Online Education held on December 7 to 8, 2019 in Shenzhen, China.

International Institute
of Online Education
国际网络教育学院

Content

Preface

From December 7th to 8th, 2019, the International Consultative Meeting on the International Institute of Online Education, jointly sponsored by International Centre for Higher Education Innovation under the auspices of UNESCO (UNESCO-ICHEI) and Southern University of Science and Technology (SUSTech), was held in Shenzhen, China and has attracted more than 70 policy makers, university leaders, teachers, researchers and entrepreneurs from dozens of countries. The International Institute of Online Education (IIOE) initiative is proposed by UNESCO-ICHEI with its partner higher education institutions (HEIs) in developing countries in Africa and Asia-Pacific, its partner enterprises, and HEIs in China. Guided by the Belt and Road Initiative, upholding the Silk Road spirit of "peace and cooperation, openness and inclusiveness, mutual learning and mutual benefit", IIOE aims to promote the establishment of a mechanism of cooperation and development between nations through talent training and exchange.

At the meeting, UNESCO-ICHEI introduced IIOE from three aspects: overall structure and quality assurance system, platform design and technical scheme, course resources and operation. Representatives from the global partner universities, enterprises and course providers discussed the demand, implementation and operation of IIOE.

On the second day of the meeting, a total of 11 HEIs in Africa and Asia Pacific, and 4 HEIs and 8 enterprises in China signed the Initiative on Jointly Establishing the International Institute of Online Education and the cooperation framework agreements with UNESCO-ICHEI, officially becoming co-initiators of IIOE. At the meeting, Ain Shams University (Egypt) was elected as the first rotating presidency unit of IIOE for 2020, and UNESCO-ICHEI as the IIOE Secretariat.

Aligning itself with SDG Goal 4 - "Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all" - IIOE intends to help partner universities in developing countries enhance their capacity to increase their access to quality higher education.

Opening Ceremony

Ms. SHEN Hong

—

Director of Center for Higher Education Research (CHER) of SUSTech

Ms. SHEN Hong, Director of Center for Higher Education Research (CHER) of SUSTech, hosted the opening ceremony. She welcomed all participants with a brief introduction to the university. Established in 2012, SUSTech is young with a very international faculty and low student-teacher ratio. It is closely connected to innovative activities of the city Shenzhen. CHER works closely with UNESCO-ICHEI in several projects, including ICT-enabled higher education and university-industry partnership. "I hope our experience of collaboration can be introduced to other higher education institutions around the world. I trust that our collaboration could promote education quality and equity in Africa and Asia." Ms. SHEN said.

Mr. LI Ming

—

Director of UNESCO-ICHEI

Mr. LI Ming, Director of UNESCO-ICHEI, then delivered his opening speech. He introduced UNESCO-ICHEI with a summary of major projects serving higher education in Africa and Asia, including ICT capacity building programmes for higher education staff sponsored by Ministry of Commerce, coordinating the UNESCO-Shenzhen Funds-in-Trust Project that facilitates higher education quality assurance, and the setting up of Smart Classrooms in twelve universities with the sponsorship of two EduTech companies, Weidong and CreateView.

Mr. LI also gave a big picture of what IIOE is as well as how it evolves. He summarized IIOE's function as "serving HEI in developing countries with a focus on teachers' capacity in ICT application, gathering quality course resources in ICT and conducting various online/offline trainings to promote teachers' professional development, training of talents in the digital era, and adoption of blended learning". IIOE echoes both the Sustainable Development Goals in Education (SDG4) and the Belt and Road Initiative (BRI). Under a strong University-Government-Private Sector partnership, IIOE follows the BRI principal of Wide Consultation, Joint Contribution, and Shared Benefits with attention to UNESCO's global priorities of Africa and Gender Equality. It has been supported by the Shenzhen Municipal Government, the Chinese National Commission for UNESCO and the UNESCO Section for Higher Education, and it is funded by Tencent Charity Foundation with a seed fund of 10 million RMB. Mr. LI looked forward to further improvement of the project through this consultation. He thanked all participants on behalf of UNESCO-ICHEI colleagues.

Mr. XU Jianling

—

Deputy Director of Education Bureau of Shenzhen Municipality

Mr. XU Jianling, Deputy Director of Education Bureau of Shenzhen Municipality, sent regards to all participants on behalf of the Bureau and its Director Mr. CHEN Qiuming. Mr. XU introduced that Shenzhen has been working progressively on the Guangdong-Hong Kong-Macau Greater Bay Area development as well as the building of the Pilot Demonstration Area of Socialism with Chinese Characteristics. The city is open to more exchanges with the rest of the world, to participate in global governance, and to make its own contributions to international education development. Shenzhen government supports UNESCO-ICHEI and expects to deepen its cultural exchanges with Asian, African and other countries through UNESCO-ICHEI's projects. Mr. XU hoped to see more feedbacks and suggestions on IIOE from the meeting participants, and wished the consultation a big success.

Mr. Peter Wells

—

Chief of Section for Higher Education of UNESCO

Mr. Peter Wells, Chief of Section for Higher Education of UNESCO, shared two pieces of news that are very relevant to IIOE. One is the signing of the Global Convention on the Recognition of Qualifications concerning Higher Education two weeks before this consultation. This document facilitates a global framework of certification and quality assurance, making it possible for more higher education opportunities around the world. The other piece of news was on a series of successful conferences held in late 2019 discussing higher education quality assurance in both Africa and Asia-Pacific. Mr. Wells praised IIOE's focus on teachers' professional development as well as pushing on quality improvement in different regions. He appreciated the contribution by Shenzhen Municipal Government and UNESCO-ICHEI on the fulfillment of Education 2030 Framework and SDG4. Mr. Wells ended his speech with two Chinese idioms, 聚沙成塔 (grains of sand can be grouped together to form a pagoda), 众志成城 (our wills unite like a fortress).

Theme Meeting Presentations

On the morning of the first meeting day, members of the IIOE project team respectively delivered presentations on IIOE overall design and structure, quality assurance framework, platform development and technology solutions, as well as the course resources and their operation. The team also answered a number of questions that drew strong interest from the scholars and experts.

The first session of theme meeting was chaired by Mr. WANG Libing, Chief of Section for Educational Innovation and Skills Development, UNESCO Asia-Pacific Regional Bureau for Education. The second session was chaired by Ms. Michaela Martin, Programme Specialist of UNESCO International Institute for Educational Planning (UNESCO-IIEP).

▶ Presentation I: International Institute of Online Education: Harnessing the Belt & Road Initiative to Increase Developing Countries' Access to Quality Higher Education

Prof. Lim Cher Ping, Chief Specialist of IIOE, Visiting Professor of the Centre for Higher Education Research of SUSTech and Chair Professor of Learning Technologies and Innovation of the Education University of Hong Kong, delivered a keynote speech on the framework of IIOE.

IIOE is developed based on the framework of Belt & Road Initiative. It attaches importance to mutual learning among countries and is aimed to establish mechanisms for cooperative development across training through talent cultivation and exchanges. IIOE initiative has received a seed fund of 10 million RMB from the Tencent Charity Foundation.

Under the guidance of Education 2030 Framework to "ensure inclusive, equitable, quality education and promote lifelong learning oppor-

Prof. Lim Cher Ping
—
Chief Specialist of IIOE, Visiting Professor of the Centre for Higher Education Research of SUSTech and Chair Professor of Learning Technologies and Innovation of the Education University of Hong Kong

tunities for all", IIOE aims to help develop ICT-related competencies of teachers in the partner HEIs in developing countries and promote reform in these partner HEIs.

The main beneficiaries of IIOE are teachers from partner HEIs in developing countries. The initiative stresses gender equity, encouraging and supporting more female teachers and students in gaining access to quality higher education opportunities.

IIOE is started with UNESCO-ICHEI's 11 partner HEIs. On the basis of success in the first phase, it intends to embrace more HEIs in African countries that are part of the UNESCO-China Funds-in-Trust and the UNESCO-Shenzhen Funds-in-Trust, including Cote d'lvoire, Malawi, Mali, Namibia, Nigeria, Senegal, Togo and Zambia. IIOE will also be open to develop partnerships with HEIs from other developing countries.

IIOE provides an open online learning platform that pools quality higher education courses and learning tools to meet the professional development needs of the teachers in the partner HEIs. Courses in the platform aim to improve ICT-related competencies of teachers, including discipline-related, technical and vocational related courses, and courses of applying ICT in teaching. IIOE has created an online learning quality assurance framework and mechanisms that will guide partner HEIs to develop and implement quality courses. Meanwhile, it will provide online and on-site professional development training for teachers from partner HEIs.

The IIOE initiative trains a large number of skilled ICT talents in partner HEIs to support economic growth in these developing countries and hence bridge the gap between developed and developing countries. It helps developing countries to realize the Education 2030 Framework, enhances international cooperation on higher education, reinforces knowledge sharing, and offers quality, inclusive and lifelong learning opportunities for all.

▶ Presentation II: Quality Assurance of IIOE

"Why do we need to build the quality assurance system of IIOE?" **Ms. BI Xiaohan, Chief of West Asia and Africa Programme Office of the UNESCO-ICHEI**, started her speech with this question.

Ms. BI said that from IIOE's overall design to the development plan, quality assurance was invariably the main focus because it was related to the quality of online courses and more significantly it ensured the delivery and sharing of quality courses. She also introduced that the team working on overall design and quality assurance consisted of an array of higher education experts in online and blended education who systematically developed the quality assurance. Beginning with literature analysis, they traced and probed into a large amount of literature, mainly focused on the quality assurance, especially that of online and blended learning. Most quality assurance systems have their own models with different focuses including accreditation, benchmarking, certification and advisory framework.

The quality assurance systems mainly cover three areas including management, product and services. In the management dimension, quality assurance involves strategic planning and development; in the product dimension, it involves curriculum design and implementation; in

the services dimension, it involves faculty and student support. The team also conducted situation analysis and cooperated with Asian and African partner HEIs to undergo need analysis, which helped to know their needs for quality assurance system.

Ms. BI showed that IIOE set up its own quality assurance system on the basis of in-depth research on various existing systems. It has two features. First, it concentrates on online and blended learning. Second, it focuses on HEIs in developing countries. IIOE also developed online tools targeted at quality assurance, with which partner HEIs are able to self-evaluate the quality assurance.

The purpose of developing IIOE quality assurance system is to create quality-focused culture and atmosphere in partner HEIs of developing countries, which eventually serves to realize the SDG 4.

Ms. BI Xiaohan
—
Chief of West Asia and Africa
Programme Office of the UNESCO-ICHEI

▶ Comments by Moderator

When summing up the two speeches in the first part, the moderator Mr. WANG Libing commented on the vital role of quality assurance and evaluation. But it would be of no avail to just talk about it with no action. The good news is the preparatory group of IIOE has developed a set of tools for quality assurance. Meanwhile, the focus must be placed on building teachers' competences. UNESCO Asia-Pacific Regional Bureau for Education (UNESCO Bangkok) has put lots of efforts into this aspect. It sets up quality standards, improves mutual recognition of credentials and ensures suitable skill matching to involve all stakeholders.
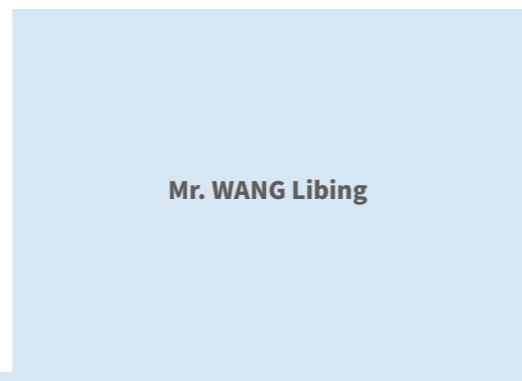

Mr. WANG Libing

Mr. WANG also pointed out that the blended learning needs two or more kinds of quality assurance frameworks. Learning is sometimes online, sometimes offline, and sometimes blended. From the perspective of pedagogy, it will not only influence teachers, but also textbooks, communities and other stakeholders. Much more details need to be considered and work to be done.

▶ Presentation III: Proposal for Platform Development and Technology - A Smart Robust Platform over Cloud Empowering Higher Education Clusters for Future Skills

Ms. LI Fan, coordinator of the IIOE platform development system and Mr. TANG Xiangzheng, coordinator of the IIOE backend support system, introduced the proposal for platform development and technology support of IIOE.

Accomplishing set milestones while implementing IIOE project, the platform is also designed to integrate flexible and different modules. In the first five years of adopting IIOE initiative, infrastructure and hardware will be deployed and tested, while relevant policies and cooperation mechanisms are still under discussions, and also the curricula and repositories are regularly enhanced and continuously expanded.

The IIOE website mainly offers four main functions, namely:
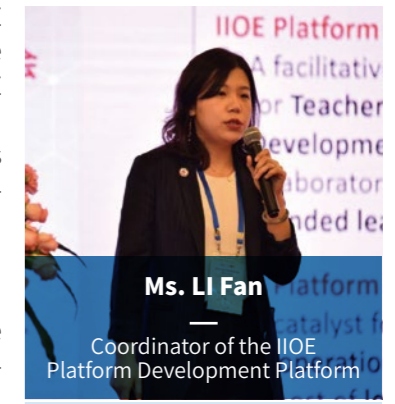
Ms. LI Fan
—
Coordinator of the IIOE
Platform Development Platform

• An Online Learning Platform – Teachers, as learners on the platform, will learn the content for their professional development through the mode of 'online learning, offline training and competency assessment' focusing on ICT-related skills and its application in higher education.

• A Practical Training Platform equipped with Web-based tools – A bank of web tools for T&L and evaluation with tutorials will be integrated to be a practical training platform, in order to facilitate teacher equipped with required ICT skills in a short time.

• An Information Sharing Platform – A repository to enable a consolidated form of online educational resources and information exchange at one place among participating entities, including offline activity, such as trainings and demos.

• A Laboratory for Data analysis – A host that provides teachers with learning statistics of users via IIOE platform, and also supports HEIs to upload data related to the IIOE offline activities. Thus, it will assist universities to conduct evidence-based research on online and blended learning, to effectively assess and evaluate users' activities and current trends.

Mr. TANG Xiangzheng
—
Coordinator of the IIOE
Backend Support System

IIOE platform is deployed based on cloud server, providing application server, file server and user information server which is only accessed by intranet with fixed IP. The platform is equipped with CDN acceleration service. Through node settings in Bangkok, South Africa, France and other places, it can optimize network acceleration in Asian and African partner universities.

IIOE platform pays great attention to data security. It protects data security through HTTPS protocol, design of isolated user information server with intranet access only, asymmetric encryption algorithm, authority setting and other methods.

In terms of copyright protection, IIOE course resources will be watermarked with user ID to track the usage; video resources will be loaded in sections to avoid being downloaded without permission, etc.

Presentation IV: Course Resources and Course Operation-Integrating Cutting-edge Online Courses and Shaping a Joint Contribution and Shared Benefits Ecosystem

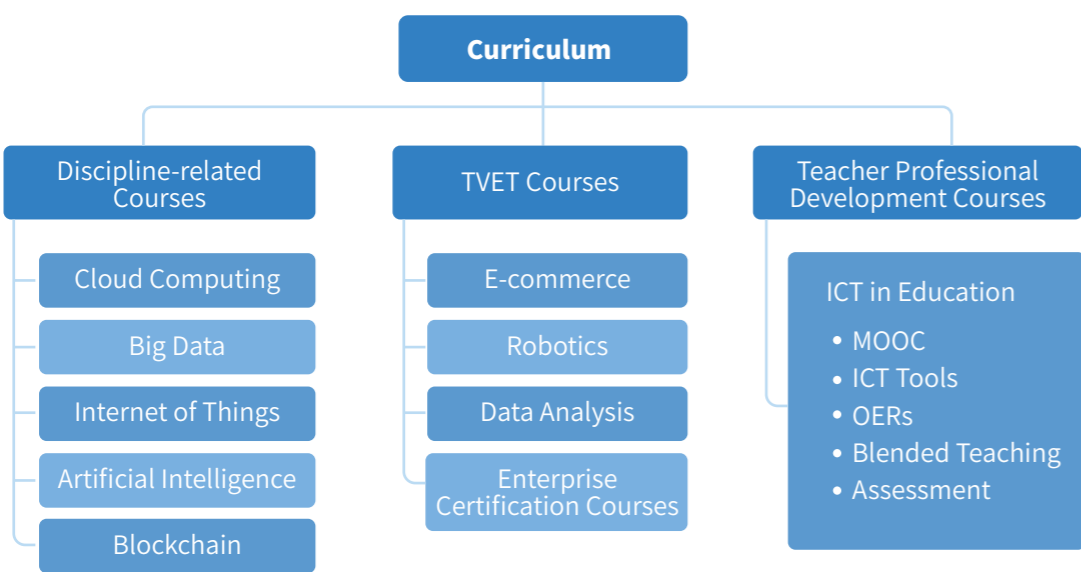"Teaching one how to catch fish is better than just providing one with fish. We want to not only give fish, but also show how to catch them." **Ms. YANG Chaomei, Coordinator for IIOE Online Course Resources Integration**, started with a sharp explanation of how different the IIOE course resource and operation mechanism are. The presentation includes five sub-topics:

Ms. YANG Chaomei
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Coordinator for IIOE Online
Course Resources Integration
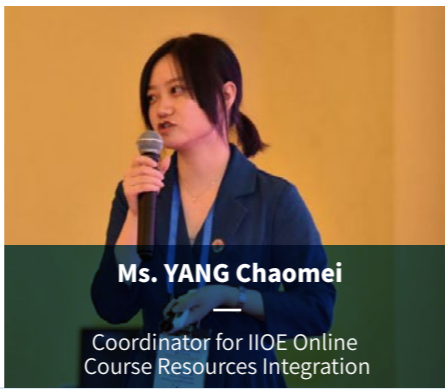
(1) Curriculum: ICT-related Online Courses

Digital technologies have huge potential in promoting the development of higher education in developing countries. For example, 5G could make learner easier to access quality learning resources anytime and anywhere. It could accelerate the development of education and we should integrate digital technologies into education.

At the beginning of 2019, UNESCO released the Futures of Education: Learning to Become initiative. This is a global initiative to re-imagine how knowledge and learning can shape the future of humanity and the planet. We need to ask ourselves "What kind of learning materials should we use in the future?" and "What kind of capacity teachers need in the future?" Firstly, technology should be integrated into our curriculum. Secondly, we need to rethink the role of teachers and to reform their preparation and professional development. The capacity of ICT application is crucial for future teachers. Based on this concern, we designed the curriculum:

Curriculum

- **Discipline-related Courses**
  - Cloud Computing
  - Big Data
  - Internet of Things
  - Artificial Intelligence
  - Blockchain
- **TVET Courses**
  - E-commerce
  - Robotics
  - Data Analysis
  - Enterprise Certification Courses
- **Teacher Professional Development Courses**
  - ICT in Education
    - MOOC
    - ICT Tools
    - OERs
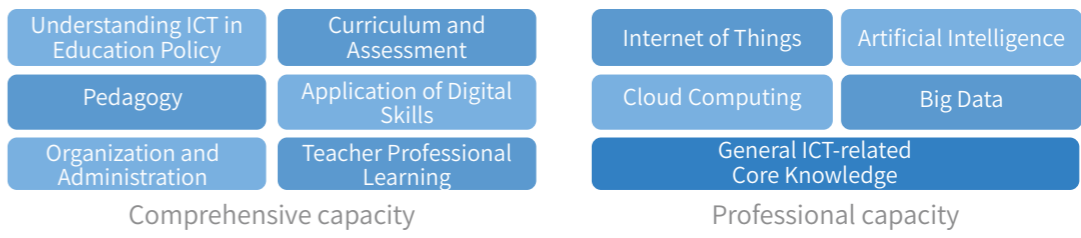   - Blended Teaching
    - Assessment

(2) Course Integration Mechanism: Joint Contribution and Shared Benefits

Future education is open and a matter of sharing. IIOE is a Joint Contribution and Shared Benefits platform. It is also an open educational resources platform. Learners could access quality learning resources anytime anywhere. We plan to integrate the courses by phases according to the curriculum. In the first phase, we will integrate a large number of basic online course resources by series and majors from HEIs and enterprises in China. And the courses will serve for teacher professional development and as references for teachers' teaching. In the future, teachers could develop their own online courses. The courses on IIOE are all free to learn, including certification courses provided by companies. But any re-editing and using for business activities are forbidden.

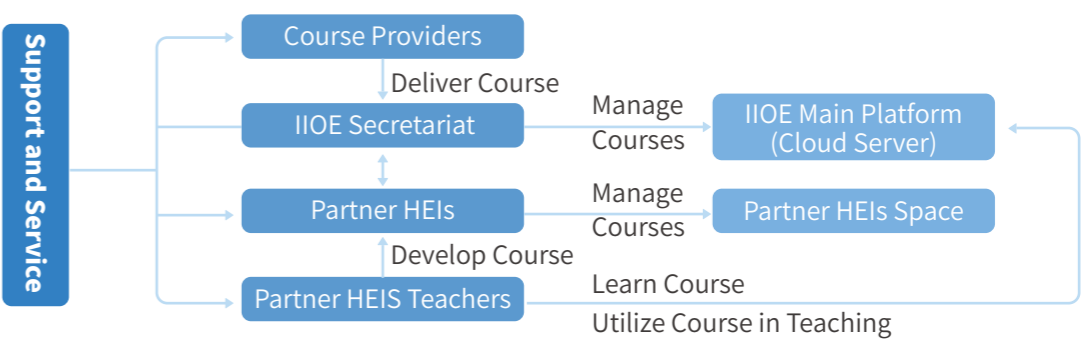### (3) Result-based Professional Development

We will provide online and on-site training for teachers and ICT assessment tool. The training is based on the model of "training of trainers", to ensure the sustainability and scalability. We will train master teachers from partner universities first, and the master teacher will facilitate local training for the university. The training content include three components: how to use IIOE platform for teaching and learning; how to use ICT to enhance teaching and learning; and how to use the courses to enhance teaching and learning. The targeted participants include technical personnel, professional development personnel and discipline-related personnel. A total of six in-person quotas will be given to each partner HEI.

IIOE will develop an assessment system to assess the comprehensive and professional capacity of ICT application for teachers. Assessment of comprehensive capacity in ICT application for teachers is based on the UNESCO's ICT Competency for Teachers. Assessment of professional capacity in ICT application for teachers will be closely connected to the courses on the platform and will generate recommendations of relevant online courses. The detailed contents to be assessed come as followed:

Understanding ICT in Education Policy	Curriculum and Assessment
Pedagogy	Application of Digital Skills
Organization and Administration	Teacher Professional Learning

Comprehensive capacity

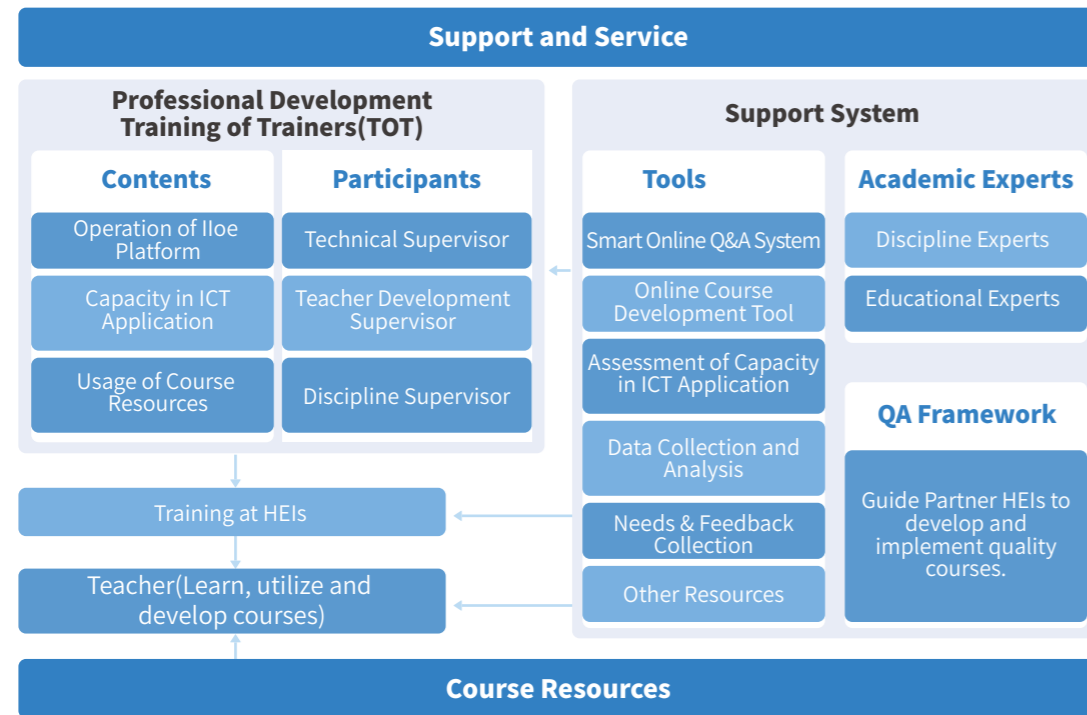| Internet of Things	Artificial Intelligence
Cloud Computing	Big Data
General ICT-related Core Knowledge	

Professional capacity

(4) Maximizing the Usage of the Courses

IIOE Secretariat sets up, manages and maintains the IIOE main platform, which gathers course resources from course providers through different agreed ways. All courses are stored on cloud server, and learners can take the courses online. Teachers need to register and log in to access the courses. They can benefit from the course resources in three ways: learning, utilizing and helping to develop online courses.

Support and Service

- Course Providers — Deliver Course
- IIOE Secretariat — Manage Courses → IIOE Main Platform (Cloud Server)
- Partner HEIs — Manage Courses → Partner HEIs Space
- Develop Course
- Partner HEIS Teachers — Learn Course
- Utilize Course in Teaching

2019
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International Institute of Online Education

2019
Conference
Report

In order to make use of the course resources more effectively and efficiently, besides helping teachers on course learning, more support and service will be conducted for teachers' application of course resources in local teaching and the development of online courses. These support and service include training of trainers for master teachers and supervisors, tools and resources for course utilization and development, organizing discipline and educational expert groups and quality assurance for online course development and implementation. Many of above were already mentioned in previous talks, summarized as below.

Support and Service

Professional Development Training of Trainers(TOT)

Contents	Participants
Operation of Iloe Platform	Technical Supervisor
Capacity in ICT Application	Teacher Development Supervisor
Usage of Course Resources	Discipline Supervisor

Support System

Tools	Academic Experts
Smart Online Q&A System	Discipline Experts
Online Course Development Tool	Educational Experts
Assessment of Capacity in ICT Application	**QA Framework**
Data Collection and Analysis	Guide Partner HEIs to develop and implement quality courses.
Needs & Feedback Collection	
Other Resources	

Training at HEIs

Teacher(Learn, utilize and develop courses)

Course Resources
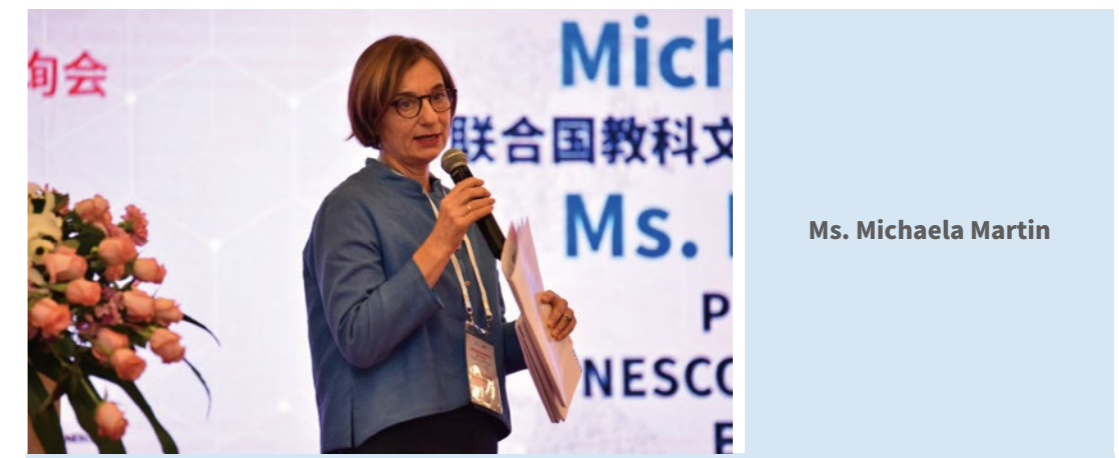
(5) Monitoring and Evaluation

For each participating partner HEI of IIOE, it will need to submit annual performance report by December of each year. The report will cover contents like basic login data generated by the IIOE platform, number of people trained, usage of courses produced and uploaded by partner HEIs, etc. Every other year, IIOE Secretariat will also work with partners to compile an IIOE Global Report, reviewing and sharing IIOE's experience in education innovations to explore better practice surrounding the six IIOE objectives of teacher's capacity in ICT application, HEI's capacity, quality course resource, individualized talent cultivation, serving the market, and gender inclusion.

Mr. YAO Haogen
Senior Education Specialist of UNESCO-ICHEI

"The Belt & Road Initiative embraces wide consultation, joint contribution, and shared benefits. Joint contribution and shared benefits is also the principle of IIOE's course resource and operation. During the rest of this consultation and after this consultation, we look forward to continuing the wide consultation with you for a better IIOE." said **Mr. YAO Haogen, Senior Education Specialist of UNESCO-ICHEI**.

▶ Comments by Moderator

Ms. Michaela Martin commented that, through these speeches, representatives and experts of Asian and African partner HEIs on the spot had a deeper understanding of the short-term goal and long-term vision of IIOE. She noted the next focus was how to implement IIOE initiative in universities. Equal importance should also be attached to the quality assurance framework targeted at online and blended learning and its implementation among the management level and faculties of HEIs.

Ms. Michaela Martin

Ms. Michaela Martin commented that, through these speeches, representatives and experts of Asian and African partner HEIs on the spot had a deeper understanding of the short-term goal and long-term vision of IIOE. She noted the next focus was how to implement IIOE initiative in universities. Equal importance should also be attached to the quality assurance framework targeted at online and blended learning and its implementation among the management level and faculties of HEIs.

Partner Universities Forum: Development and Demand of Online Higher Education in Developing Countries

In the afternoon, presidents and representatives of eleven partner universities of UNESCO-ICHEI delivered their speeches regarding the development and demand of online higher education. This Partner Universities Forum was chaired by **Mr. Freddy Boey, Deputy President of National University of Singapore and President of the International Advisory Committee of UNESCO-ICHEI.**

Mr. Freddy Boey
—
Deputy President of National University of Singapore

Mr. Baatar Ochirbat

President of Mongolian University of Science and Technology (MUST)

—

Mr. Baatar Ochirbat, President of Mongolian University of Science and Technology (MUST), presented his university's achievements in online education, including E-Mongolia, University Information Management System, Open Education Centre, etc. He also introduced the ongoing collaboration with UNESCO-ICHEI including Smart Classroom. He hoped "we can launch the IIOE successfully through this consultation", and promised "MUST will contribute to the IIOE platform with course development and localization, plus the sharing of MOOC resources country-wide, regionally and globally".

Mr. Barnabas Nawangwe

Vice Chancellor of Makerere University, Uganda

—

Mr. Barnabas Nawangwe, Vice Chancellor of Makerere University, Uganda, introduced his university's exploration and engagement in Open Distance and eLearning (ODeL) since late 1990s, such as MUELE the Makerere University E-Learning Environment, the more recent Distance Education Leapfrogging Project (DELP), and Partnership for Enhanced and Blended Learning (PEBL). The VC further reflected that the largest barrier to successful ODeL is traditionalism. "Some teachers' mind-set remains traditional. If we don't help them change the way of thinking, they might go back to the old way of teaching".

Ms. Chandrika Wijeyaratne

Vice Chancellor of University of Colombo, Sri Lanka

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Ms. Chandrika Wijeyaratne, Vice Chancellor of University of Colombo, Sri Lanka, presented ICT-driven programmes conducted by the university. She added that "Most students at University of Colombo have mobile phones and embrace new technologies. The teachers are also mentally ready for ICT-enabled teachings. What are lacking are funding and more serious researches of effective practice". It is notable that the university has already developed blended teaching and learning materials for 50 courses, and drafted a blended learning policy. "Everyone is ready to make blended learning a part of their education experience". The VC invited the attendants to visit the university and to work together on reforming the education practice.

Mr. Faqir M. Anjum

Vice Chancellor of University of the Gambia

—

Mr. Faqir M. Anjum, Vice Chancellor of University of the Gambia, gave a brief introduction of this emerging university, including its staff and students exchange programme, faculty development, fund-raising activities, join degree programmes, joint research projects and school-to-work transition. The VC considered the lack of a research centre and inadequate academic professors the two biggest challenges faced by the university, but IIOE opens a window of solution. He added that IT system has been well integrated into the campus, which prepares the university for deeper engagement in IIOE. He welcomes IIOE and more projects alike.

Mr. Ibrahim Garba

VVice Chancellor of Ahmadu Bello University (ABU), Nigeria

—

Mr. Ibrahim Garba, Vice Chancellor of Ahmadu Bello University (ABU), Nigeria, delivered his speech titled The Imperative of ICT in learning Development. As the oldest and largest university in the country, ABU has invested a lot in enhancing the IT Eco-System, including an over 35km long metropolitan fibre linking all campuses, Data Centre, ICT Innovation Lab, etc. The university also established Cisco, Oracle and Huawei Academies to help blend the classroom experience with industry standard certifications. From a national perspective, the VC stated that "regardless of gender, location and age, Nigerian have huge demand for quality education. We are working on meeting this demand".

Mr. Abdel-Fattah Saoud

Vice President of Ain Shams University, Egypt

—

Mr. Abdel-Fattah Saoud, Vice President of Ain Shams University, Egypt, started his speech by showing the university's long history and achievements in online medical and healthcare education. The university is huge with 14,000 faculty members, 30,000 postgraduates and 200,000 undergraduates, and it has 35,000 open learning programme students. Its online learning platform receives 60,000 visits per year. The university has its own e-learning platform, virtual microscopy platform, and a virtual hospital. It has future plans of online programmes and applications of AI/VR/AR. The Vice President fully concurred with the idea of IIOE. "If we teach today's students as we taught yesterday's, we rob them of tomorrow." He ended with a quote by John Dewey .

Ms. Emebet Mulugeta

Academic Vice President of Addis Ababa University (AAU), Ethiopia

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Ms. Emebet Mulugeta, Academic Vice President of Addis Ababa University (AAU), Ethiopia, introduced AAU's effort in ICT application. Distance learning and blended learning have already been introduced to some of the courses, covering education, business and economics. The Vice President also pointed out that the major challenges of ICT-enable education are infrastructure and teachers' mind-set. She further explained that, "if we offer more online education programmes, our teachers will be able to teach more student outside the AAU campus without stepping out of the campus. In other words, we will be able to benefit more people in the city and around the nation".

Mr. Chamroeun Khim

Deputy Director of the IT Centre of Royal University of Phnom Penh, Cambodia

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Mr. Chamroeun Khim, Deputy Director of the IT Centre of Royal University of Phnom Penh, Cambodia, introduced not only the university's application of ICT in education, but also its future plan of IIOE implementation. "In our Faculty of Engineering and Institute of Foreign Languages, ICT application has been integrated in some of the courses. Moodle has been used for course management and online exams. Sponsored by UNESCO-ICHEI and Weidong Cloud, a smart classroom was established inside the campus. The university also drafted IIOE-related policies to make sure that the Smart Classroom and the IIOE platform will be used for better teaching and course development by its faculty members."

Ms. Harriet Jepchumba Kidombo

Deputy Director of ODeL Campus of University of Nairobi, Kenya

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Ms. Harriet Jepchumba Kidombo, Deputy Director of ODeL Campus of University of Nairobi, Kenya, also presented her university's practice of online and blended education, as well as the preparation done for IIOE's implementation. The university's ODeL campus serves 13,000 students at certificate to PhD levels using blended and online modes of delivery. It has three main functions of (1) courseware development and production, (2) programme delivery and learner support, and (3) quality assurance and short lifelong learning courses. The university strengthened its infrastructure and institutional policies including a modified Strategic Plan 2018-2023 to better facilitate open and distance e-learning. "We need to prepare the next generation for a digital era", the Deputy Director re-emphasized.

Ms. Souma Alhaj Ali

Director of Center for Excellence and Governance at Hamdan Bin Mohammed Smart University (HBMSU), UAE

—

Ms. Souma Alhaj Ali, Director of Center for Excellence and Governance at Hamdan Bin Mohammed Smart University (HBMSU), UAE, introduced the innovations conducted in this young university founded in 2002. The university embraced five core values of Learners Centricity, Fuelling Innovation, Passion for Results, Together We Grow, and Game Change. She then extended the introduction to smart applications in use by the university, including Smart Campus, Sawti (an open communication channel among all HBMSU communities), Cloud Campus, Gamification, Smart Advising, and Smart Portfolio. The university has also actively engaged in Quality Assurance, another focus held by IIOE.

Mr. Waqar Mahmood

Director of Al-Khawarizmi Institute of Computer Science, University of Engineering and Technology, Lahore (UET Lahore), Pakistan

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The last speaker is **Mr. Waqar Mahmood, Director of Al-Khawarizmi Institute of Computer Science, University of Engineering and Technology, Lahore (UET Lahore), Pakistan**. He showcased what UET has done in the four fields of AI, Could Native, Blockchain, and Internet of Things + AI as a response to the Presidential Initiative for Artificial Intelligence & Computing (PIAIC). UET Lahore has a one-year programme for AI, Could Computing and Blockchain, and six additional PIAIC-related programmes in development. The Director then introduced UET Lahore's progress in the development of online course resources as well as a wide range of usage of the Weidong Smart Classroom, and summarized four future expectations held by UET Lahore: AI integration in Smart Classroom, fully interactive conference sessions classes, international resource access, and MOOC development.

After the speech, Mr. Mahmood called his colleagues in Pakistan for a live-tour of the Smart Classroom. He ended his session with a wish for more innovative usages of Smart Classroom. "This is just a tiny first step, a lot can be and will be done later with the Smart Classroom".

Dr. Waqar Mahmood is connecting with the Smart Classroom in UET Lahore during the meeting

Technology Forum:
Hardware and Technical Support of IIOE

The forum of platform and technology was hosted by **Professor HUANG Rong-huai, Co-Dean of Smart Learning Institute of Beijing Normal University and Director of UNESCO International Rural Educational and Training Centre.** Representatives from Huawei, Weidong Cloud Education Group and IFLYTECH shared their experiences and action on how to ensure effective hardware and software, and reap effective results in teaching and learning.

Professor HUANG Ronghuai
—
Co-Dean of Smart Learning Institute of Beijing Normal University and Director of UNESCO International Rural Educational and Training Centre.

Mr. XUE Feng
Chief IT Architect & Programme Director
of Huawei Technologies

Mr. XUE Feng, Chief IT Architect & Programme Director of Huawei Technologies, said that Huawei was invariably devoted to building a talent ecosystem and cooperated extensively with HEIs and training institutions, thus spreading the Huawei certification. There are 220,000 professionals obtaining the Huawei certification around the world. Huawei has over 900 partners of ICT academies and 1500 certified instructors, offering certification-related courses for more than 50,000 students in the world. In 2019 over 100,000 students from 61 countries participated in Huawei's ICT competition. With the use of Kunpeng system, the recently released Huawei certificate project involves 22 technical fields. Huawei also held over 40 job fairs proving more than 3,000 jobs on marketing, after-sale and other sectors.

Mr. XUE added Huawei rolled out a new programme "Huawei Talent Online" last year which focused on college students, institution partners and customers. It's Huawei's hope that this online platform for talents would provide customized learning, certificates and jobs. Centered on making certificate-related learning easier, the platform has already offered over 300 bilingual ICT MOOCs and many opportunities of online experiments for learners. On the platform they are able to get in touch with more than 5,000 global research centers and book an exam. Those who pass the exam are qualified to send their CVs. The platform provides over 2,000 ICT-related jobs, which remarkably increases job opportunities. It also enables ordinary individuals to quickly grasp the latest information and relevant professional knowledge. Partner institutions will also provide some online courses.

Mr. SHEN Dai, Senior Vice Chairman of Weidong Cloud Education Group, said Weidong Cloud fixed its eyes on how to build an international digital education system. In the past three years the company has cooperated with other institutions based on "Infrastructure + Digital devices + Platform + Course + Training", thus setting up a digital education ecosystem. It also took over Demos, a French digital vocational education training group, and Brest Business School.

Mr. SHEN Dai
Senior Vice Chairman of Weidong Cloud
Education Group

Mr. SHEN also briefed on Weidong Cloud's two major projects. Weidong Cloud Education signed a project cooperation agreement with the Ministry of Higher Education of the Republic of Congo. The company will provide Weidong Smart Classroom equipment and the WeLMS platform for Congo's three largest public universities and help them set up their own curriculum. Second is the vocational training system of Côte d'Ivoire. The company will help to build 12 training campuses and provide training to young workers, creating a huge e-commerce complex. Weidong Cloud Education finally aims to help Côte d'Ivoire create an organic synergy between its commercial, educational, and manufacturing system.

Mr. SHEN also added that the training for teachers played a pivotal role in IIOE. Teachers should be trained to think outside the box and have access to more methodologies so as to create new courses and fresh educational methods. This is the key to success of online and blended learning. Weidong is a company with technological platform and courses in English and French. It will provide these courses to IIOE and cooperate with European companies to further introduce first-class courses from Switzerland, France and Belgium. Weidong Cloud Education is also developing a series of interfaces of IIOE and Weidong system, hoping to help all participants make full use of these courses.

Mr. YING Jun
General Manager of IFLYTEK's Shenzhen
subsidiary company

Mr. YING Jun, General Manager of IFLYTEK's Shenzhen subsidiary company, introduced that IFLYTEK integrated Artificial Intelligence (AI) into every links of higher education, forming a complete cycle composed of AI classroom, AI learning, AI test, education evaluation and data center. AI classroom provides a platform for teachers and students to interact, and will produce big data in teaching as teachers give lectures. AI learning allows students to study online or take extra-curriculum courses, and includes oral English training, online platform of courses, curriculum system and repository of foreign language-learning materials. AI test applies IFLYTEK speech technology into oral English evaluation and utilizes AI technology to automatically group, mark and analyze papers, forming an all-round cycle of testing. Besides, the online and on-site tests provides more convenient access to manage test data. The teaching evaluation and data center generates big data of teaching and sets up a system of teaching evaluation based on the lecturing of teachers, learning of students and their interaction. With the technology of visualization, an information center of teaching evaluation is also built.

Course Resources Forum:
Demand, Supply and Operational Mode
of Online Course Resources

The second day of the consultation started with a **Course Resources Forum chaired by Mr. TANG Qian**, former Assistant Director General for Education of UNESCO and Governing Board Member of UNESCO-ICHEI. Representatives of seven universities and enterprises shared their insight on the demand, supply and operational mode of online course resources as IIOE course providers.

Mr. TANG Qian
—
former Assistant Director General for Education of UNESCO
and Governing Board Member of UNESCO-ICHEI

Mr. SUN Yong
—
President of Shenzhen Institute of Information Technology

Mr. MA Xiaoming
—
Vice President of Shenzhen Polytechnic

Mr. SUN Yong, President of Shenzhen Institute of Information Technology presented to the attendants the establishment, usage and future plans of its online resource hub, which has already covered four groups of disciplines, eleven majors, 100 courses, and 500 micro-courses. It reaches about 50,000 learners residing in different parts of China. Inside the campus, its Blackboard platform hosts 1,000 courses and 20,000 active users. "Under the Belt & Road Initiative, we are ready to share quality teaching and learning resources and standard with other countries." The President added.

Mr. MA Xiaoming, Vice President of Shenzhen Polytechnic emphasized the importance of school-private sector partnership. The university has introduced technical standards held by companies like Huawei, Ping'an and BYD, and designed courses and curriculum together. The Vice President further raised examples of structural curriculum design. For example, the microcontroller course was deconstructed to 13 modules, 25 tasks and 250 knowledge skill points. The Vice President also shared other ongoing attempts of teaching on the cloud. "We embrace the informatization of work and education", he said.

Ms. XIAO Song
—
Executive Vice-Dean of Undergraduate College and Head of Department of Teaching Affairs, Xidian University

Ms. XIAO Song, Executive Vice-Dean of Undergraduate College and Head of Department of Teaching Affairs, Xidian University, introduced how Xidian has explored ICT-based innovations in daily teaching. Currently, over 50% of its courses are uploaded online, with an expectation of 100% by the end of 2020. Its piloting AI + Education course modality has been in use in six courses, for which students are taught by both real teacher and AI teacher. The current practice in C language course looks particularly promising.

Mr. YAO Le
—
President of CIOTimes

Mr. YAO Le, President of CIOTimes, started his presentation with an introduction of how the term CIO evolves from Chief Information Officer, to Chief Innovation Officer, to Chief Internet Officer, and now to Chief Intelligence Officer. The company has constantly adjusted its programme to support the training of talents in a digital age. The President called on a move from PC to mobile platform in online education. He believed "the cultivation of future talents should catch up with the demand of future industries. We should work together on IIOE to serve this purpose."

Mr. QIN Zengchang
—
Chief Scientist & President of Artificial Intelligence Research Institute, Shenzhen Dianmao Technology

Mr. QIN Zengchang, Chief Scientist & President of Artificial Intelligence Research Institute, Shenzhen Dianmao Technology, focused on future-oriented programming education. He pointed out that "all machines we have today are pre-programmed, and maybe someday everyone should learn their ways of communication with machines through programming". He further introduced the graphic programming software and app developed by the company, which allow people of different ages to learn programming. "We also design course and even curriculum for our partner schools, and our product is now used in four continents."

Mr. YAO Shanglang
—
Founder & CTO of Jiker

Mr. YAO Shanglang, Founder & CTO of Jiker, shared his insights about doing evaluation in education. "After years of learning and teaching, we noted that assessment is the core and priority in any education programme. In ancient China, length, capacity and weight (度量衡) were called measurement, which also applies to today's education." He then introduced the category and process of ICT competency evaluation in an online environment. "Evaluation is a tiny yet crucial component of all sorts of education, lots can be done following a well-implemented evaluation that identifies level, weakness and demand of individual learners, such as customized curriculum and more tailored teacher training."

Mr. WU Peng

—

General Manager of
Overseas Marketing of UBTECH

The last speaker in this session is **Mr. WU Peng, General Manager of Overseas Marketing of UBTECH.** He gave a vision that "every household shall have one to two robots in the future". In education, UBTECH is going to offer an online platform integrating all sorts and levels of education solutions. Mr. Wu brought a robot to the stage and showed to the attendants how that robot made facial recognition and tracking, and even controlled a drone itself. Mr. Wu turned back to the topic of course resources UBTECH provides. "What we did is simple. We archive all the difficulties and corresponding solutions encountered during our robot business, and make them a series of very practical and relevant robot courses, and then deliver them to learners though partner institutions, including universities."
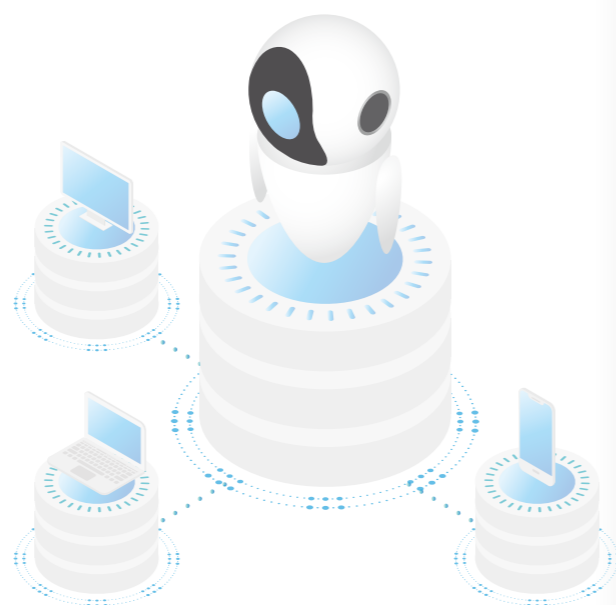
IIOE Co-Initiation Ceremony

The IIOE Co-Initiation Ceremony was chaired by **Mr. Yue DU, Director of Division for Cooperation, Intersectoral Follow-Up and Partnership of Africa Department, UNESCO, and Coordinator of the Belt and Road Initiative between China and UNESCO**. He pointed out that through the one-and-a-half-day meeting, all stakeholders had a full understanding of the IIOE initiative, and all parties expressed a strong vision of cooperation. All partners, stakeholders, experts and scholars witnessed the Co-Initiation Ceremony of IIOE.

Mr. Yue DU

—

Director of Division for Cooperation, Intersectoral Follow-Up and Partnership of Africa Department, UNESCO, and Coordinator of the Belt and Road Initiative between China and UNESCO

First, **Ms. HAN Wei, Executive Deputy Director of UNESCO-ICHEI,** briefed the drafting process of the cooperation framework agreement. During the drafting process, UNESCO-ICHEI had communicated repeatedly with its partners through various methods such as e-mail and teleconference, which fully embodies the spirit of consultation and sharing. The agreement has reflected the common interests of all parties of the cooperation.

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Ms. HAN Wei

—

Executive Deputy Director of UNESCO-ICHEI

Subsequently, **Prof. ZHAO Jianhua, senior expert of UNESCO-ICHEI**, read out the Initiative on Jointly Establishing the International Institute of Online Education. UNESCO-ICHEI calls on partners from universities, enterprises, research institutions and international organizations to use IIOE to promote the opportunities and quality of higher education in developing countries and regions.

▶ ▶ ▶ ▶

Prof. ZHAO Jianhua
—
Senior expert of UNESCO-ICHEI

A total of 11 HEIs in Africa and Asia Pacific, 4 HEIs and 8 enterprises in China as the co-initiators, as well as UNESCO senior officials and education experts as the witnesses, signed the proposal together. Furthermore, UNESCO-ICHEI signed the cooperation framework agreements with each co-initiator, and all the parties have reached cooperation consensus.

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After the negotiation of all parties, Ain Shams University (Egypt) was elected as the first rotating presidency unit of IIOE, responsible for organizing the IIOE annual meeting in 2020, which is a platform for participants to exchange annual results of the IIOE online learning. **Mr. Abdel-Fattah Saoud, Vice President of Ain Shams University**, said that it is a great responsibility to be the first rotating presidency unit and to fulfill that responsibility is crucial to the sound and sustainable development of IIOE's overall cooperation.
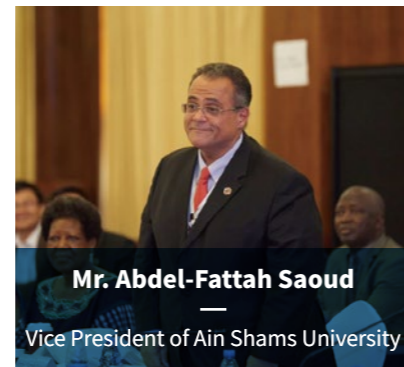
Mr. Abdel-Fattah Saoud
—
Vice President of Ain Shams University

It is also agreed during the meeting that the IIOE Secretariat will be permanently set in UNESCO-ICHEI. The Secretariat coordinates the relations and liaison among all parties and takes charge of the daily affairs of IIOE.

Closing Ceremony

Representatives from UNESCO Headquarters, Chinese National Commission for UNESCO (NatCom), and UNESCO-ICHEI delivered their notes in the Closing Ceremony, moderated by Ms. SHEN Hong, Director of Center for Higher Education Research (CHER) of SUSTech.

Mr. Peter Wells
—
Chief of Section for Higher Education of UNESCO
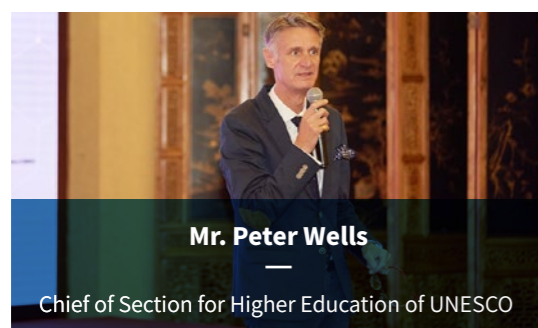
Mr. Peter Wells, Chief of Section for Higher Education of UNESCO summarized his thoughts of this consultation with "MIND" - Motivation, Inspiration, Normalisation, and Determination. He was impressed by the joint effort spent on IIOE as well as the inspiring experience and rich discussions shared during the consultation. He wished that through IIOE educators can get rid of the stigma of online education and release its full potential to reach more learners. "Through collaboration the collaboration between higher education institutions and enterprise, we can disseminate knowledge effectively," Finally, he hoped that "we can sit together again to reflect on the achievement next year".

Mr. QIN Changwei, Secretary General of NatCom congratulated on the successful consultation and IIOE launch on behalf of Mr. TIAN Xuejun, Director of NatCom and Deputy Minister of Education of China. He pointed out two key characteristics of today's world. First, the human society is in a new wave of industrial and technical revolution. Second, we need to make choice between globalisation and de-globalisation. IIOE is indeed a right response to the digital era and a

Mr. QIN Changwei
—
Secretary General of NatCom

right practice of Wide Consultation, Joint Contribution, and Shared Benefits. Mr. QIN praised IIOE's systematic approach and its attention to partnership building. "IIOE has a bright future and shall benefit tens of millions of people. We have a good start here, and we count on a strong partnership for its steady and solid development".

Mr. LI Ming
—
Director of UNESCO-ICHEI

Finally, **Mr. LI Ming, Director of UNESCO-ICHEI,** delivered his closing speech. He congratulated on Ain Shams University on being elected as the first presidency unit of IIOE, and on the sign-off of IIOE launch. He asked attendants of partner HEIs to follow up on the setting-up of infrastructure and to recommend six master teachers to take part in upcoming IIOE trainings. The Director also referred to the importance of using IIOE to push for continuous improvement in hardware, software, teaching modality and most importantly teachers' capacity in ICT application. In the long term, he expects IIOE to be able to offer courses in six UN official languages. He is also confident that all Belt & Road countries can promote their higher education just like what China has achieved in the past decades.

Mr. LI thanked again Shenzhen Municipal Government, NatCom, UNESCO Section for Higher Education, Tencent Charity Foundation and all IIOE partners for their support.

"Wish we can work together for a successful IIOE. See you next year!" He said.

Initiative on Jointly Establishing the International Institute of Online Education

To the partner universities, enterprises, research institutes, international organizations and non-governmental organizations:

At present, countries in the Asia Pacific, Africa and other developing regions face the challenges of managing the transformation of higher education and addressing the tensions of its quality and equity. Due to the lack of expertise and experience of their teaching staff, most of the higher education institutions (HEIs) in the aforementioned areas do not have the capacity to develop and implement quality programmes/courses. There is also limited access to higher education for local people.

With the advancement of science and technology, information communications technologies (ICTs) provide HEIs with opportunities to enhance the quality of higher education, improve the access to higher education and enhance the efficiency of higher education. To help its partner HEIs with capacity building, we, the International Centre for Higher Education Innovation under the auspices of UNESCO (UNESCO-ICHEI), propose the International Institute of Online Education (IIOE) initiative and invite you to be one of the initiating parties. Leveraging the Belt and Road Initiative, IIOE aims to fulfill its mission by:

(1)developing the **ICT in education capacity** of teachers from partner HEIs in Africa and Asia-Pacific, and supporting them to conduct quality teaching with ICT;

(2)building **partner HEIs' capacity and environment for an online and blended learning** eco-system to realize higher education reform;

(3)providing quality online courses for partner HEIs to meet their **demand for quality higher education resources;**

(4)using **AI** for partner HEIs to improve **personalized talent cultivation** based on the **talent demand of socio-economic development in the digital era**;

(5)establishing a bridge between **higher education graduates and competencies demand of labour market** so as to enable higher education to meet the demands of the countries' economic development; and

(6)enhancing access to quality higher education for **female teachers and students** and marginalised communities in developing countries.

Dear colleagues from UNESCO-ICHEI's partner HEIs, enterprises, research institutes, international organizations and non-governmental organizations, jointly initiating and establishing the IIOE is a great effort to improve the quality and equity of higher education in developing countries and regions. We sincerely invite you to be part of the endeavor and to provide consultation and advice and resource guarantee for the design and implementation of IIOE!

International Centre for Higher Education Innovation under the auspices of UNESCO (Preparatory Group for IIOE)
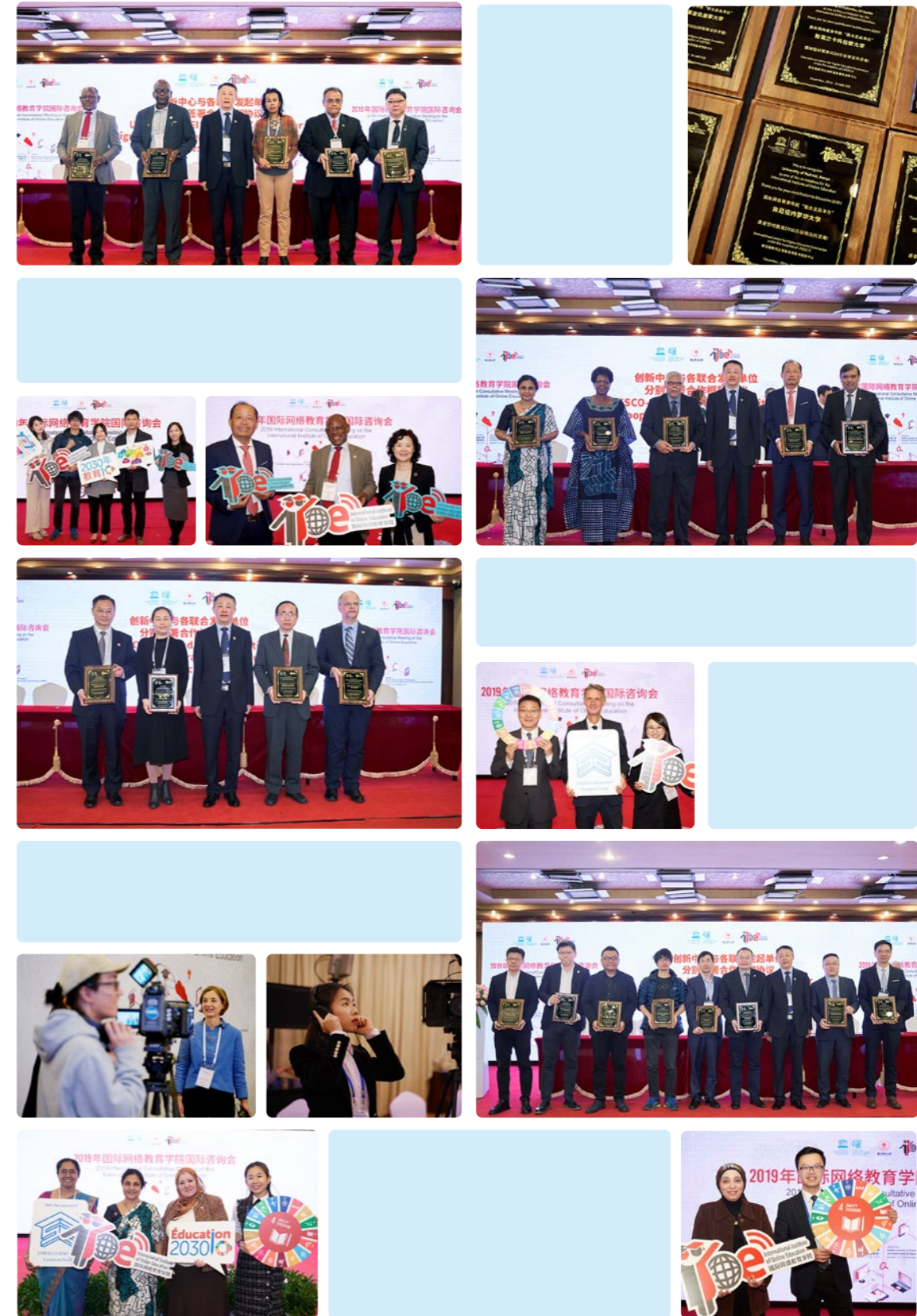
Co-initiators of IIOE

Name of Organization	Country
Addis Ababa University	Ethiopia
Ahmed Bello University	Nigeria
Ain Shams University	Egypt
Makerere University	Uganda
Mongolian University of Science and Technology	Mongolia
Royal University of Phnom Penh	Cambodia
University of Colombo	Sri Lanka
University of Djibouti	Djibouti
University of Engineering and Technology, Lahore,	Pakistan
University of the Gambia	the Gambia
University of Nairobi	Kenya
Southern University of Science and Technology	China
Xidian University	China
Shenzhen Polytechnic	China
Shenzhen Institute of Information Technology	China
Huawei	China
Weidong Cloud Education Group	China
Guangzhou CreateView Education Technology Co., Ltd	China
Iflytek Co., Ltd	China
UBTech	China
CIOTimes	China
Codemao	China
Jiker	China

Feedback from Participants

Mr. LIM Cher Ping | Chief Expert of IIOE, Visiting Professor of Center for Higher Education Research of SUSTech, Chair Professor of Learning Technologies and Innovation of the Education University of Hong Kong

The IIOE project is not a one-sided proposal. Instead, it is through rounds and rounds of conversations with partner HEIs and enterprises that it is designed, improved and proposed. The constant feedback we received in this process played the crucial role in perfecting the initiative. Like mentioned by the newly elected Presidency Unit of IIOE, this will be a win-win situation. However, to achieve that, there needs to be mutual respect, mutual learning and mutual engagement. This is a true embodiment of the Silk Road Spirit.

Mr. Peter Wells | Chief, Section for Higher Education, UNESCO

I can definitely feel the motivation and inspiration from all the participants of the project. In terms of widening quality access to education opportunities, as highlighted in SDG4, IIOE really provides the perfect platform to allow different types of learners to experience learning in ways they haven't experienced before. That means there will be inclusion of non-traditional learners, learners outside of the urban areas, as wells as disadvantaged learners. IIOE has huge potentials. To ensure a more effectively implementation of the project, a final piece of the puzzle will be the employers (the labor market). Employers from both public and private sectors will need to come on board as stakeholders of this project as a way to contribute to its quality assurance.

Ms. Michaela Martin | Programme Specialist, UNESCO International Institute of Educational Planning

I think IIOE is important as we are experiencing major expansion in higher education worldwide. Higher education systems, particularly in developing countries, are receiving many students, and therefore we need to develop new models to receive these students. The proposal of IIOE is aligned with the International Development Agenda, which is to offer as many learning opportunities that are of quality and equality as possible to students. That said, quality and its delivery mode will be the two major challenges in this process. From the perspective of IIEP, we think we can collaborate to work and develop a quality assurance framework that looks into this particular type of learning, and design new ways of training that are applicable.

Mr. Barnabas Nawangwe | Vice Chancellor, Makerere University, Uganda

Makerere University is very happy to be on board because we believe IIOE will bring a lot of benefits. It is a wide community with a lot of different participants. From it, we will have a lot of interesting courses on the platform. We will receive expertise, and share resources. This will also help us disseminate the content to the community more efficiently. We have already started making arrangement to ensure the smooth implementation. We are also training our staff and preparing them for online education programmes. We are improving our internet connectivity and functionality.

Ms. Chandrika Wijeyaratne | Vice Chancellor, University of Colombo, Sri Lanka

The reception of the previous online blended learning has been good, and both the Smart Classroom and IIOE will be based on that. With the Smart Classroom being located in a common area on campus, with all the support from different departments, we believe that it will reach its full capacity to match the needs of student expectation and learning as well as teachers. We have created a little cell within each faculty and school, with a team to link it up to quality assurance of the curriculum. IIOE will build on the Smart Classroom, bringing the concept of digital transformation in higher education, as a catalyst to traditional teaching and learning. There will be a greater uniformity and access to the opportunity.

Ms. Souma Mahmoud Ahmad Alhaj Ali | Director of Center for Excellence and Governance, Hamdan Bin Mohammed Smart University, UAE

I think IIOE has great potentials in many aspects, such as quality, content development, and teacher development. I personally believe that online education is very important to the future of higher education. It will become very crucial if we are serious about expanding the access through providing flexible and individualized learning tools to everyone regardless of gender, region and sector. At the same time, the advancement in AI and information technology will contribute to this process, making this type of education more and more feasible, practical and value-added, as well as enhancing the learners' experience. You should not only look at it as a substitute of conventional education, but as a support and support.

Mr. Waqar Mahmood | Director of Al-Khwarizmi Institute of Computer Science, University of Engineering and Technology, Lahore, Pakistan

It's been a great working experience with UNESCO-ICHEI, coming from the leadership level to the execution level. UET Lahore is very keen on working with UNESCO-ICHEI to bring more educational technologies to Pakistan to enhance learning experiences and expand learning opportunities. Based on the Smart Classroom, we are very hopeful about the IIOE project as well. However, in this process, we need to remain steadfast and be aware of all the steps we need to take in order to move it forward. One specific thing we have been doing to execute it quickly is that we have involved some faculty members who are young and familiar with these products. This is crucial as not only are they familiar with these technologies, but also believe in the potentials of them.

Ms. Mona Elzahry | Professor of Public Health at Faculty of Medicine, Ain Shams University, Egypt

I was lucky to have joined the project from the very beginning and started exchanging expertise on this proposal. I remember participating in the Seminar on ICT Application in Higher Education in September where we had different discussions in person on this topic. Later, we held cyber sessions to further discuss it. Not only were we able to share our insight and concerns, but also communicated to have some issues addressed. This shows that this is a true collaboration. I think IIOE is a very important initiative as well as a challenging one, but it will definitely have a lot of potentials.

Mr. SHEN Dai | Senior Vice Chairman, Weidong Cloud Education Group

Weidong Cloud Education Group is very honored to co-initiate the IIOE project with UNESCO-ICHEI. Based on the success of the Smart Classroom project, we will continue to join hands with UNESCO-ICHEI to build this platform. We will integrate more good course resources with the partner HEIs. In the future, we aim to summarize and sort out more ICT courses in both English and French, as well as to better promote theories and concepts of online education.

Mr. ZHANG Yu | CEO, CreateView Education Technology

We hope that the six Smart Classroom sponsored by CreateView will be completed in the year 2020. Through the embedded smart classrooms and cloud broadcasting system, it will allow partner HEIs to interact and share course resources. As an IT solution provider, CreateView will be able to offer more specific solutions addressed to the potential IT challenges, and to tailor to the needs of various stakeholders, such as the teaching platforms, and the recording and broadcasting systems. We look forward to providing more strong IT and product support in the future.