CLOUD

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Beyond Limits
World Higher Education Conference amid Digital Transformation of Higher Education

Leading the Pathway to Digital Transformation: ICHEI in Barcelona

Common Actions Shaping the Digital Future: Global Institutions in Barcelona

Excerpts from WHEC2022 Data Report

CLOUD - Connecting Leaders Online for University Digital Transformation

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World Higher Education Conference amid Digital Transformation of Higher Education

• 20-Year Journey of World Higher Education Conference

" Great changes have taken place in the higher education system in the past 20 years. From the 1st World Higher Education Conference in 1998, the 2nd World Higher Education Conference in 2009 to the 3rd WHEC in 2022, all participants have witnessed immeasurable changes in the location, space and mode of higher education.

The 1st World Conference on Higher Education (WCHE): focusing on the potential of science and communication technologies

The 1st World Higher Education Conference was held in Paris in 1998. Participants at the 1st World Higher Education Conference reaffirmed the core mission of higher education, namely, education, training, research, and providing service to society, and the principle that higher education should be based on excellent achievements and that all people should receive higher education equally. Participants adopted the Twenty-first Century: Vision and Action and the Framework for Priority Action for Change and Development of Higher Education. These documents cover the main actions needed for innovating higher education in the 21st century. Also, they pointed out the important driving force of **technology and communication technology** in higher education.
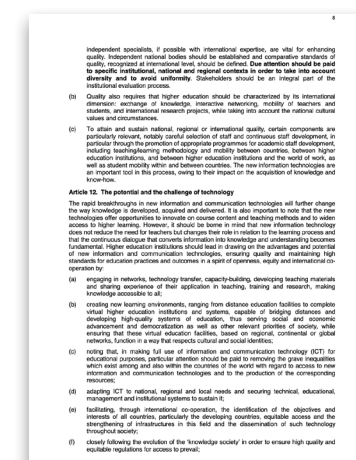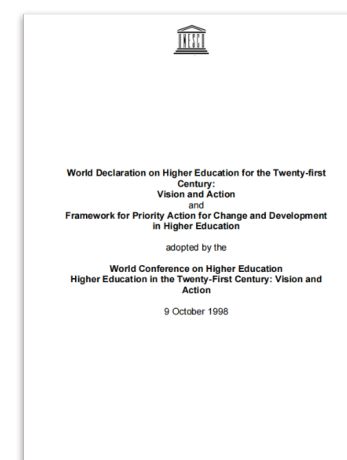
Twenty-first Century: Vision and Action and the Framework for Priority Action for Change and Development of Higher Education

Twenty-first Century: Vision and Action

Article 12. The potential and the challenge of technology

The rapid breakthroughs in new information and communication technologies will further change the way knowledge is developed, acquired and delivered. It is also important to note that **the new technologies offer opportunities to innovate on course content and teaching methods and to widen access to higher learning**. However, it should be borne in mind that new information technology does not reduce the need for teachers but changes their role in relation to the learning process and that the continuous dialogue that converts information into knowledge and understanding becomes fundamental. Higher education institutions should **lead in drawing on the advantages and potential of new information and communication technologies, ensuring quality and maintaining high standards for education practices and outcomes in a spirit of openness, equity and international co-operation**.

Framework for Priority Action for Change and Development of Higher Education

Priority actions at the level of systems and institutions

8.**The use of new technologies should be generalized to the greatest extent possible** to help higher education institutions, to reinforce academic development, to widen access, to attain universal scope and to extend knowledge, as well as to facilitate education throughout life. Governments, educational institutions and the private sector should ensure that informatics and communication network infrastructures, computer facilities and human resources training are adequately provided.

The 2nd World Conference on Higher Education: Higher Education in an Era of Change

The 2nd World Conference on Higher Education held in Paris in 2009 was themed The New Dynamics of Higher Education and Research for Social Change and Development. More than one thousand participants, including global ministers of education and higher education, international experts as well as representatives from enterprises, gathered together and discussed the future of higher education and research. The Conference pointed out that higher education was situated in an "era of change". Against the backdrop of both the information technology revolution and the rapid growth in student numbers, the Conference focused on how higher education could strengthen international cooperation in science, technology, and research, and mobilise multiple stakeholders to jointly promote an inclusive and diverse knowledge society of the future. The Conference also paid special attention to the development and research of higher education in Africa and discussed the new situation and challenges facing the education sector.
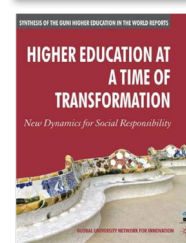
List of documents of the 2nd World Higher Education Conference and related monographs

Overview of the 2nd World Conference on Higher Education

- Developing countries seek international cooperation to make up for the lack of educational resources in their own countries and to raise the level of teaching and research, while developed countries prefer higher education in developing countries to help them expand the market for higher education and increase their influence.

- In the last decade, various forms of international cooperation have been very active, marked by the acceleration of the process of regional integration, with many regions establishing relatively stable cooperation mechanisms. The aim lies in integrating resources, improving research standards, and seeking new growth points for their development through cooperation.

- Higher education institutions should diversify their study programmes and research services and improve the relevance of research and innovation.

- Higher education institutions should adopt new technologies and develop a variety of vocational and technical training as well as entrepreneurship and lifelong learning programmes to adapt human resources development to the needs of society.

DU Yue, KAN Yue. (2009). Overview of the 2nd World Higher Education Conference. Educational Research (358) 108-109.

The 3rd World Higher Education Conference: Higher Education in Digital Transformation

Ten themes	
01	Impact of Covid-19 on higher education
02	Higher education and the SDGs
03	Inclusion in higher education
04	Quality and relevance of programmes
05	Academic mobility in higher education
06	Higher education governance
07	Financing higher education
08	Data and knowledge production
09	International cooperation to enhance synergies
10	The futures of higher education

Barcelona: A Common Voice for World Higher Education

(©UNESCO)

In May 2022, the 3rd World Conference on Higher Education (WHEC2022) concluded in Barcelona, Spain. Stakeholders engaged in diverse and friendly discussions around the ten key conference themes, achieving fruitful results and proposing initiative documents including Beyond Limits: New Ways to Reinvent Higher Education, which summarised six principles for shaping the future of higher education and proposed six directions for the transformation of higher education.

The Conference was held in a rapidly evolving world and a changing era. The emergence of artificial intelligence, the rise of online and blended teaching and learning, decisions and practices are increasingly driven by big data, and online education models in the context of the COVID-19 pandemic are continuously reshaping the landscape of the world higher education. Therefore, the digital transformation of higher education is one of the main topics of interest at this Conference.

Barcelona, the venue of WHEC2022, is a city of 1.6 million inhabitants and has been recognised as an important center for culture and education in Spain since the 19th century. With more than 30 higher education institutions of all kinds, Barcelona is an active participant in UNESCO's international cooperation and educational innovation activities.

Ms Audrey Azoulay, Director-General of UNESCO, speaking at the Third World Higher Education Conference

Principles to shape the future [1]

The 3rd World Higher Education Conference presented an initiative entitled " *Beyond Limits*: New Ways to Reinvent Higher Education", prospecting the development direction of higher education in the context of current times and future landscape. Six key principles for actions are proposed as follows:
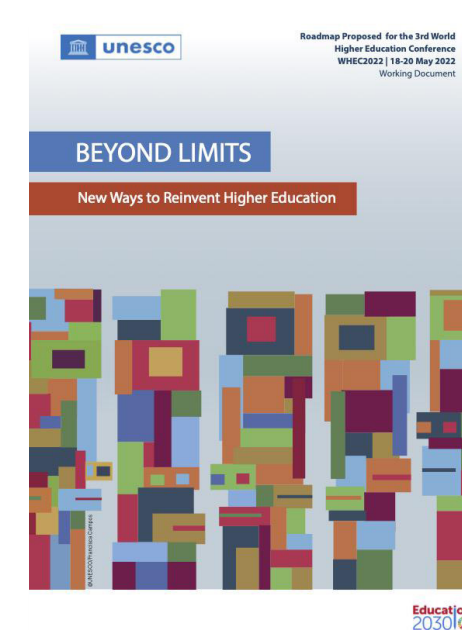
- **Inclusion, equity, and pluralism.** Achieving greater inclusion and promoting pluralism in HED is a strong social justice imperative, an objective reflected in target 4.3 of the SDGs about 'equal access to affordable technical, vocational and higher education.' Effective education and training systems where opportunities are equally distributed are the basis for sustainable development and the construction of fair and peaceful societies.

- **Academic freedom and participation** of all stakeholders. Higher education institutions (HEIs) are well-placed to offer a safe space to present and assess a diversity of views and engage with society in public debates on complex issues. It is essential to protect the academic freedom of staff and students from political interference. This requires a high degree of institutional autonomy and self-governance and an adequate balance between autonomy and public accountability.

- **Inquiry, critical thinking, can creativity.** HEIs have a unique responsibility to teach how to distinguish real evidence from fabricated information and to apply knowledge to problem-solving in every walk of life. Truth-seeking skills should be at the core of every curriculum at every educational level, including in HED. HED has the power to enhance creativity, ignite imagination, and promote divergent thinking, preparing students to find innovative solutions that address the global challenges faced by our society and planet.

- **Integrity and ethics.** HEIs must place a strong emphasis on ethical values and behaviours to promote honesty, tolerance, and solidarity. All graduates should be prepared to become professionals who are agents of social responsibility, champions of sustainability and citizens longing for social justice.

- **Commitment to sustainability and social responsibility.** Through educational programmes, research projects, and engagements with local, national, regional, and global communities, all HEIs can contribute actively to building a more sustainable world. This is central to the development of the green economy and societal well-being.

- **Academic excellence** through cooperation rather than competition. Universities and other types of HEIs can perform their educational missions more effectively through cooperation and solidarity. This helps work in an interdisciplinary manner, pool scientific resources across academic units and institutions, share knowledge and experience through professional networks at the national and international level to achieve synergies.

[1] This is an excerpt from *Beyond Limits: New Ways to Reinvent Higher Education*

Six directions of changing higher education

Based on UNESCO's vision and the principles outlined above, this roadmap identifies six major challenges that need to be overcome in reinventing HED. These include the following transitions and transformations:

● From viewing HED as elitist, discriminatory, and sometimes alienated from its public tasks, to enabling people's rights to HED, through **equitable, well-funded, and sustainable access**. Learning is an essential attribute of human species, and people are entitled to educational opportunities that guarantee their right to learn. To make this a reality in policy and practice means addressing access, equity and nondiscrimination, financing and governance.

● From a restrictive focus on disciplinary or professional training to a **holistic student learning experience.** HEIs need to think of themselves as being, in the first place, educational institutions, ensuring every student can undergo a rich and diverse learning experience (not exclusively restricted to the discipline or the instrumental components of the professional practice) that fosters democratic values and the richness of the humans.

● From disciplinary silos to **inter- and trans-disciplinary,** open dialogue and active collaboration among diverse perspectives. HED should equip students with the capabilities to engage in interdisciplinary dialogue and the foundations, attitudes, and habits to humbly acknowledge and transcend the limits of their own disciplines and specialization fields.

● From assuming HED comes immediately after secondary education to a **lifelong learning approach** aimed at serving the diverse education needs of youth and adults. HED is already changing as more countries are offering opportunities for multiple entry and re-entry. Adopting a lifelong learning perspective and offering **flexible learning pathways** provide a more coherent and richer framework to address the learning needs of human beings.

● From a hierarchical and weakly connected archipelago of institutions and programmes to an **integrated system with diversity of programmes** and flexible learning pathways connecting them to enlarge the educational opportunities for youth and adults and avoid dead ends. Recognition mechanisms considering all types of programmes (formal, non-formal, informal; on campus, hybrid, online) as well as the possibility of transfers among institutions and programmes need to be fostered through good qualifications frameworks, standards for practice, assessment mechanisms.

● From an industrial model of teaching to **pedagogically informed and technologically enriched higher learning experiences** where learners manage their own learner pathways. Artificial intelligence, machine learning, data analytics, collaborative platforms, virtual reality, internet of things, and distributional ledger technology, offer promising ways of improving and enriching teaching, learning and research, on campus and remotely. Technology is a support for pedagogy, and effective pedagogy ensures learning and technology.

[1] This is an excerpt from *Beyond Limits: New Ways to Reinvent Higher Education*
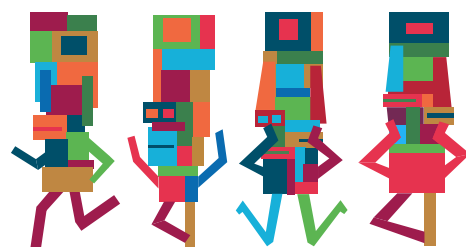
Background: The trend of digital transformation of higher education

With the rapid development of digital technologies including big data, artificial intelligence, blockchain, and 5G, profound changes have taken place in the production and lifestyle of human society. The accelerated development of digital industrialisation and industrial digitisation has put forward new requirements on the knowledge, skills, and abilities of the global workforce, requiring corresponding responses from higher education. The development of the Internet has given rise to digital thinking, distributed cognition, ways of virtual space knowledge dissemination, and interpersonal communication methods, which will lead to systematic changes in the concept, methods, and governance system of talent training. The digital transformation of higher education is inevitable.

Digital technology has great potential for change in higher education. While helping universities achieve high-quality development, digital transformation in higher education can also train talents, incubate innovative technologies and drive economic growth for the digital transformation of society. Various international organisations, governments, HEIs, the private sector, and other stakeholders are both participants and beneficiaries of the digital transformation process. Therefore, the digital transformation of higher education is not only a task for the higher education sector in each country but also a common mission for all countries and social sectors.

Although issues such as how to understand the concepts, features, and paths of digital transformation in higher education and how to effectively promote digital transformation in the context of different countries are still in need of extensive and in-depth discussions to reach a consensus, driven by the pandemic, several reports, such as The Research Report on Digital Transformation of Higher Education Teaching and Learning published by the International Centre for Higher Education Innovation under the auspices of UNESCO (UNESCO-ICHEI) and the Institute of Education at Tsinghua University, have pointed out the necessity and urgency of digital transformation in education, including topics such as improving teachers' information and communication technology (ICT) literacy and upgrading educational devices and content.

Leading the Pathway to Digital Transformation: UNESCO-ICHEI in Barcelona

• Introduction

Computers and the Internet are quickly changing the ways in which knowledge is created, acquired, accessed, disseminated, validated, and used. Much of this is making information more accessible and opening new and promising avenues for education. However, there are still many risks in terms of knowledge accessibility, data privacy, and digital divide. In response to these challenges, the International Center for Higher Education Innovation under the auspices of UNESCO (UNESCO-ICHEI) and the Institute of Education (IOE) of Tsinghua University jointly carried out a research to help countries, especially developing countries, to develop an inclusive, resilient, open, and high-quality teaching and learning system for higher education in the process of achieving UNESCO's Sustainable Development Goal 4 (SDG4) for education by means of digital technologies.

—— Research Report on Digital Transformation of Higher Education Teaching and Learning

▲ WHEC2022 venue (©UNESCO)

During the 3rd World Higher Education Conference, participants from all countries and parties focused on issues related to digital transformation. At the United Nations Transforming Education Pre-Summit held in June 2022, digital learning and transformation were also listed as one of the five key routes of action that received special attention from global ministers of education and senior officials. With the wider application of digital information technology in higher education, **digital transformation** has undoubtedly become a key issue in the future development of higher education in the post-pandemic era.

▲ UNESCO-ICHEI Delegation to WHEC2022

The theme of UNESCO-ICHEI (Shenzhen, China) at the World Higher Education Conference is also related to digital transformation. During 16–20 May, UNESCO-ICHEI was invited to attend the 3rd World Higher Education Conference. During this period, it hosted the UNESCO-Closing Meeting of Shenzhen Funds-in-Trust in Africa Project, the International Institute of Online Education (IIOE) Roundtable Meeting, and the theme exhibition of "Creating the Future of Digital Higher Education" and led the discussion of digital transformation of higher education. It also shared practical experiences related to digital transformation on the world stage with various higher education institutions, international organizations, and enterprise partners around the world.

Background: International Centre for Higher Education Innovation under the auspices of UNESCO (UNESCO-ICHEI) and digital transformation

In its long-term work, UNESCO-ICHEI believes that the key to the digital transformation of higher education lies in the digital transformation of teachers' competences. This also means that university teachers and administrators promote the reform of higher education by mastering digital teaching, management, and research tools. In developing countries, the digital transformation of university teachers and administrators faces many challenges in capital, facility, equipment, and policy, and the education crisis caused by the COVID-19 pandemic in recent years has forced OBTL to become a change that higher education must respond to.

UNESCO-ICHEI is a practical institution, but in various practices, it also emphasizes the leading role of theoretical research. In 2022, the UNESCO-ICHEI and the IOE of Tsinghua University jointly carried out a series of studies on the digital transformation of higher education, which was officially released at the 3rd World Higher Education Conference. The studies focus on the digital transformation of teaching and learning in higher education, and introduce relevant concepts and ideas, describe current progress and challenges, and propose possible solutions based on the different digital transformation cases in various countries and regions around the world.

 "Extensive consultation, joint contribution and shared benefits" is another important strategy for international cooperation in the field of digital transformation. In its six years of practice, to address the many challenges faced by universities and teachers in developing countries in the process of digital transformation, UNESCO-ICHEI has held online and offline teacher workshops to help teachers around the world master practical skills, including MOOCs production, learning management systems, and online teaching methods during the pandemic. With the help of UNESCO-Shenzhen Funds-in-Trust Project, Asian flagship universities have developed OBTL teaching competences and 10 African countries have established quality assurance mechanisms for higher education, which has become a model of promoting "South-South cooperation" and education development in the UNESCO system. With the support of Weidong Cloud Education, Createview Science-Education, and Seevo, UNESCO-ICHEI promotes the Smart Classroom Project globally, and each smart classroom has become an important carrier of the digital development of universities in developing countries. In December 2019, the International College of Online Education (IIOE) was officially established. With quality educational resources in the six official languages of the United Nations, it serves more than 10,000 university teachers in 135 countries and regions worldwide.

• Common Voices of Digital Transformation

UNESCO SFIT Africa Project was Successfully Concluded

On 16 May 2022, the UNESCO-Shenzhen Funds-in-Trust (UNESCO SFIT) Africa Project Outcome Meeting was successfully held in Barcelona, Spain. The meeting was jointly organised by UNESCO-ICHEI and UNESCO, under the theme Strengthening Quality Assurance Systems to Build an Inclusive and Resilient Future for African Higher Education within the framework of the 2022 World Higher Education Conference (WHEC2022), to showcase the results of UNESCO SFIT Africa project and to discuss quality assurance of online and blended higher education and potential topics of future collaboration. High-level representatives from the Chinese government, the Shenzhen Municipal government, and UNESCO gave opening remarks and congratulated the project on its completion. Programme specialists from UNESCO and representatives from 10 project countries summarised the results of the project and expressed their gratitude to the Shenzhen Municipal government for its generous funding and unwavering support. Finally, UNESCO-ICHEI discussed the quality assurance of online blended learning and the future direction of cooperation with higher education experts from Egypt and Malaysia.

Policymakers, officials from international organisations, and representatives of HEIs from 11 countries across 3 continents participated in the conference.
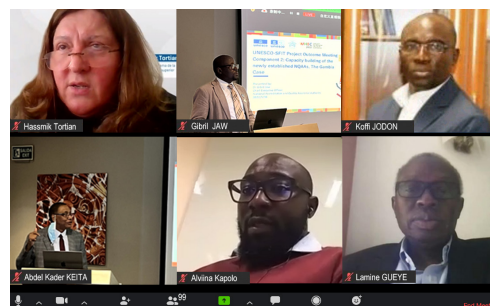
UNESCO SFIT Africa Project Outcome Meeting Successfully Held
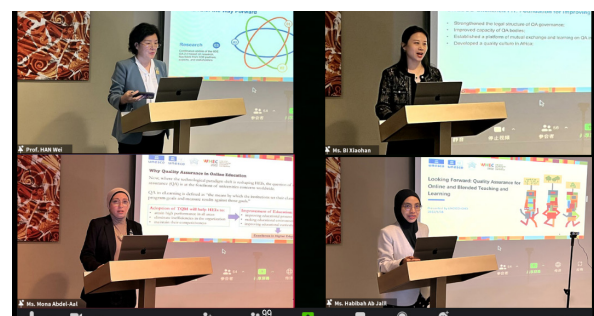
Briefing on the UNESCO SFIT Africa Project (left)

Participating countries of the UNESCO SFIT Africa Project (right)

Egypt
Mali
Niger
The Gambia
Senegal
Côte d'Ivoire
Togo
Zambia
Malawi
Namibia

Component 1
Component 2

Key insights of experts

Mr. Peter Wells, Chief of UNESCO's Higher Education Section

The UNESCO SFIT Project supported a number of African countries to make significant progress in quality assurance in higher education, making a significant positive impact in the 10 participating African countries and the UNESCO system.

Mr. QIN Changwei, Secretary-General of the Chinese National Commission for UNESCO

The UNESCO SFIT project is another remarkable achievement of China-UNESCO cooperation and a model of South-South and South-North-South cooperation.

Ms. Hassmik Tortian, Programme Specialist of the UNESCO Higher Education Section and UNESCO-SFIT Project Coordinator

The project has achieved great success in supporting African countries to establish and improve higher education quality assurance agencies and systems, while also strengthening exchanges, networking and mutual recognition of higher education qualifications among quality assurance institutions in African countries. The project results will have a sustainable impact within the higher education systems of African countries.

Prof. Lamine GUEYE, Director of the National Agency for Higher Education Quality Assurance in Senegal (ANAQ-SUP)

The importance of the UNESCO SFIT lies in the fact that most African countries are signatories to the United Nations Sustainable Development Goals. All African countries aspire to strong, quality, inclusive economic growth and the jobs it brings, which requires a quality workforce. In the framework of the UNESCO SFIT, (higher education quality assurance) agencies have been strengthened through training, networking and have also helped other Francophone institutions.

Prof. LI Ming, Director of UNESCO-ICHEI

The UNESCO SFIT project has initiated cooperation between Shenzhen and UNESCO. The two parties will continue exploring cooperation in the field of education while taking into account the current and future trends of digital transformation of higher education and the needs of ICT-driven society, creating a new chapter to support education in developing countries and to promote the realisation of the Education 2030 Agenda.

Overview of UNESCO-Shenzhen Funds-in-Trust

● The transformation of higher education paved by "blended teaching and learning + quality assurance system"

To effectively support developing countries in enhancing the capacity of their higher education systems and strengthening the development and internationalisation of higher education in developing countries, in May 2015, the Shenzhen Municipal People's Government and UNESCO signed the **Framework Funds-in-Trust Agreement between UNESCO and the Shenzhen Municipal People's Government, the People's Republic of China, Regarding Support to UNESCO's Activities in Favor of Higher Education Development in Asia and Africa.** As a result, the UNESCO-Shenzhen Funds-in-Trust was set up, which was divided into two parts conducted respectively in Asia and Africa. UNESCO SFIT Asia Project focuses on ICT-driven higher education innovation and university capacity building. This part was implemented by UNESCO Bangkok Asia and Pacific Regional Bureau for Education in Cambodia and Sri Lanka and was concluded in November 2019. UNESCO SFIT Africa Project focuses on quality assurance in higher education. With a total investment of $1.5 million, this part was implemented by the Higher Education Office of UNESCO Headquarters in 10 African countries (Egypt, Gambia, Senegal, Côte d'Ivoire, Togo, Mali, Niger, Zambia, Malawi, Namibia) to build quality assurance institutions and mechanisms in higher education. In May 2022, the UNESCO SFIT Africa Project Outcome Meeting was successfully held during the 3rd World Higher Education Conference.

As a fund for promoting cooperation in international higher education for developing countries established by the Shenzhen Municipal Government in partnership with UNESCO, it has received extensive attention from the UNESCO system, Asian and African countries, and the international higher education community. In particular, it has been highly praised by the governments of the two Asian countries and ten African countries as well as pilot universities that have directly benefited from the fund. Such positive recognition means that the fund is a paradigm of international cooperation in

higher education and is playing a leading and exemplary role in the region. In 2021, UNESCO praised the SFIT Projects as a unique and remarkable role in supporting UNESCO in fulfilling its mandate in higher education, and also a model of promoting South-South cooperation.

● Brief Introduction of UNESCO-Shenzhen Funds-in-Trust (UNESCO SFIT) Project in Asia

With the rapid development of digital economy in Asia-Pacific, the traditional higher education system is facing unprecedented challenges. Higher education institutions (HEIs) are trying to keep pace with the development of digital economy by formulating flexible lifelong learning strategies. Against the backdrop, it is particularly important for relevant institutions in Asia-Pacific to use technology to ensure the equity and quality of higher education.

With the support of Shenzhen Funds-in-Trust and UNESCO-ICHEI, UNESCO officially launched a two-year project on ICT-driven innovation in higher education in Cambodia and Sri Lanka in Asia in 2016, to explore the role of blended learning and MOOCs in improving teaching and learning and strengthening institutional governance. This project is implemented by UNESCO Asia and Pacific Regional Bureau for Education (Bangkok, Thailand). Entrusted by the Shenzhen Municipal People's Government, UNESCO-ICHEI participates in the project as the supervisor and coordinator of implementation.

● Project Process ●

2017
- Feb.–Mar. The Shenzhen Funds-in-Trust Project was officially launched, and a book conference on Blended Learning for Quality Higher Education was held in Phnom Penh, Cambodia and Colombo, Sri Lanka, and preliminary consultations were held on the needs and project plans of the two universities
- Apr. The two universities received "financial appropriations for innovation" and determined priorities according to the feedback of assessment results
- Jun.–Aug. The Royal University of Phnom Penh and University of Colombo conducted institutional self-assessment, submitted assessment result reports, and formulated action plans respectively
- Aug.–Dec. The University of Colombo conducted eleven school-level competence training sessions, and ten colleges submitted blended learning programmes

2018
- Jan.–Feb. The Royal University of Phnom Penh conducted three competence training sessions, covering curriculum design and development, digital content development, and the operation of the Moodle learning management system
- Feb.–Jul. The University of Colombo carried out 20 college-level competence training sessions, organised a special college-level work group, and selected and implemented 49 blended learning courses
- Jun. The UNESCO Asia-Pacific Regional Seminar on MOOCs for Higher Education was held
- Aug.–Nov. The University of Colombo carried out applied research and selection based on curriculum implementation, and completed Extracts of Seminar on Blended Learning for Quality Higher Education (49 articles) and Comprehensive Applied Research Report (130 pages)
- Dec. The final review meeting of the project was held to release the new online self-assessment tool for blended learning in Asia-Pacific

2019
- May–Sep. The Universiti Putra Malaysia (UPM), as a third-party expert, evaluated the project and drafted a joint UNESCO Policy Brief
- Sep. The Regional Consultation on ICT-Driven Innovation in Higher Education in Asia-Pacific was held and the policy brief was peer reviewed

2020
- Feb. The joint policy brief ICT-Driven Innovation for Inclusive, Quality Higher Education in Asia-Pacific was officially released

Expert Group Meeting on Institutional Blended Learning Assessment of Two Flagship Universities

Asia-Pacific Regional Seminar on MOOCs for Higher Education

Group Photo of All Participants of Regional Consultation on ICT-Driven Innovation in Higher Education in Asia-Pacific

Closing Session

• Action Items •

The **UNESCO SFIT** seeks to increase the opportunities for Cambodia and Sri Lanka to obtain more quality higher education by developing the potential of ICT and expanding strategic partnership. According to the requirements of the United Nations SDG 4.3, this project is designed to help member countries respond to the challenges of equity and quality of higher education. In view of the above considerations, the two main objectives of the project are:

1. Increase quality teaching opportunities and expand learning pathways through ICT (including blended learning and MOOCs);

2. Strengthen the management of higher education and the establishment of partnerships to promote ICT-driven innovation.

During the project, UNESCO piloted a **new self-assessment framework on blended learning for quality higher education** in Cambodia and Sri Lanka. Another important component of the project focused on the role of **MOOCs in Asia-Pacific**.

Cambodia

As an underdeveloped country, Cambodia is facing structural defects that seriously hinder its sustainable development. While the enrollment rate of higher education institutions has dropped sharply for 20 consecutive years, the quality of teaching and learning is also the biggest predicament faced by Cambodian policy makers and educators. In order to improve the quality of teaching and learning, the Cambodian authorities become aware of the need to master ICT innovation skills, increase pathways to new knowledge and research (such as virtual libraries, open-source academic journals, etc.) by upgrading the Learning Management System (LMS), and strengthen the management level of higher education. National flagship universities, such as the Royal University of Phnom Penh and other HEIs, should play a leading role in the reform of the national higher education system, including the development of blended learning model and open educational resources (OERs).

Sri Lanka

ICT-driven innovation is also particularly important for education planners in Sri Lanka. At that time, Sri Lanka was paying attention to ICT-driven efficient management and strategic partners in the development of higher education. The whole country paid more and more attention to the quality of higher education and the connection between industry and university, including the lack of cooperation between HEIs and industries and the high unemployment rate of young people. Sri Lanka hopes to provide more opportunities for graduates through ICT-driven innovation consultation meetings and talent training. Universities also hope to re-establish learning goals and achievements and adjust higher education curriculum according to the requirements for talents.
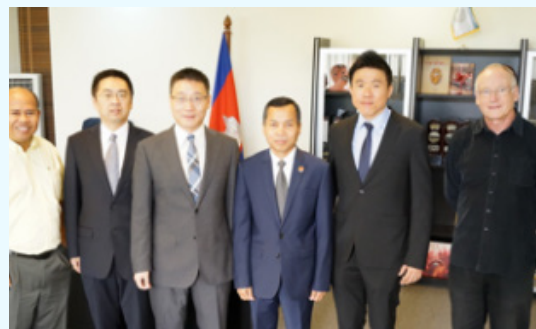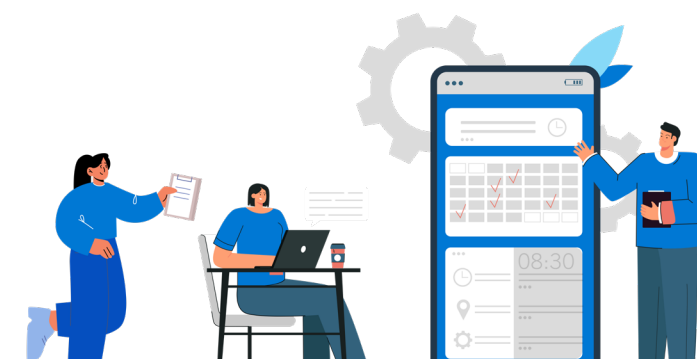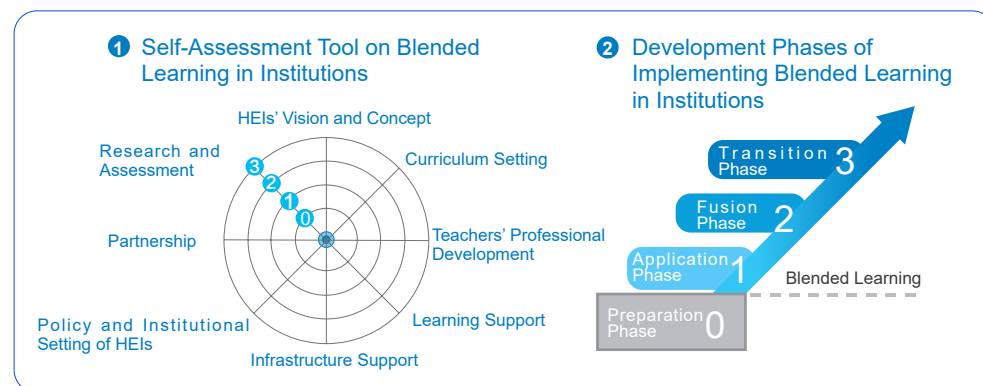
Phase I (February 2017–February 2018)

Competence assessment: The two partner universities initiated an **institutional competence assessment review** and developed an institutional strategy on ICT-driven innovation. The assessment is based on the important research result of Blended Learning for Quality Higher Education published by UNESCO in 2016—the self-assessment framework of blended learning in HEIs.

❶ Self-Assessment Tool on Blended Learning in Institutions

❷ Development Phases of Implementing Blended Learning in Institutions

- HEIs' Vision and Concept
- Curriculum Setting
- Research and Assessment
- Teachers' Professional Development
- Partnership
- Learning Support
- Policy and Institutional Setting of HEIs
- Infrastructure Support

Transition Phase 3
Fusion Phase 2
Application Phase 1
Preparation Phase 0
Blended Learning

Eight Key Dimensions for HEIs to Carry out Blended Learning

Financial appropriations: After clarifying the needs and development priorities of the two universities, UNESCO launched financial appropriations for innovation based on the self-assessment results, which were carried out in two phases. Phase I of **financial appropriations for innovation** mainly focuses on curriculum development and supporting management system research and development.

Competence seminar: UNESCO-ICHEI organised three **ICT competence building seminars** for the two universities with a total of 53 days and 25 participants, funded by the Ministry of Commerce of China, in conjunction with the activities of Shenzhen Funds-in-Trust.

Phase II (February 2018–December 2018)

Upgrade hardware: In March 2018, UNESCO-ICHEI signed agreements with the two universities to jointly build a multi-functional learning centre—**Smart Classroom**, and all equipment was donated by Chinese enterprises. Consequently, UNESCO was able to adjust the funds originally planned for hardware equipment and made additional financial appropriations for innovation based on the remarkable achievements made by the University of Colombo (Sri Lanka) in Phase I.

Adjust appropriations: The financial appropriations for innovation have been adjusted in Phase II of project implementation according to the demand and progress, so that the funds can be used more effectively and reasonably. **Phase II mainly focuses on applied research and teachers' professional development.**

MOOCs seminar: In June 2018, **UNESCO Asia-Pacific Regional Seminar on MOOCs for Higher Education** was successfully held in Shenzhen. A total of 117 participants from 30 countries in Asia-Pacific attended the seminar, during which the then President of the University of Colombo gave a keynote speech.

Release of assessment tools: In December 2018, UNESCO and experts from the Education University of Hong Kong held a **final assessment meeting** in Colombo, and **officially released the "UNESCO online self-assessment tool for blended learning"**.

Phase III (January 2019–September 2019)

Develop a policy brief: In order to further consolidate and summarize the project experience, UNESCO applied to Shenzhen Municipal People's Government for extension of the remaining funds of Shenzhen Funds-in-Trust at the suggestion of UNESCO-ICHEI, and used the remaining funds to organise experts to develop a **UNESCO Policy Brief based** on the achievements of Shenzhen Funds-in-Trust.

Organise innovation advisory meeting: With the support of UNESCO-ICHEI, the **UNESCO Asia-Pacific Innovation Advisory Meeting** was organised. On the meeting, the Vice President of the Royal University of Phnom Penh and the President of the University of Colombo gave keynote speeches, which fully demonstrated the achievements of the two universities and their positive impact on the two countries. The consultation meeting conducted peer review on the policy brief.

● **Important Achievements** ●

Blended Learning for Quality Higher Education

Blended Learning for Quality Higher Education is a scientific work co-authored by UNESCO and the Education University of Hong Kong, which gathers abundant HEI case studies in Asia-Pacific. It was released at the same time as the Shenzhen Funds-in-Trust Project was officially launched, mainly to evaluate the current situation of blended learning capability in the Royal University of Phnom Penh, Cambodia and the University of Colombo, Sri Lanka, so as to further analyse the requirements. At the same time, it also provides an important research theoretical basis for discussing institutional priorities, formulating capacity building plans, and promoting effective governance. As demand outstrips supply, it has been reprinted for the third time. UNESCO-ICHEI has also promoted online assessment tools in 12 partner universities in Asian and African project countries, and the outcomes of the Funds-in-Trust have expanded from Asia to the whole world.

▲ Project Launching Ceremony and Book Conference of the Royal University of Phnom Penh, Cambodia

Online Self-Assessment Tool for Blended Learning for Quality Higher Education in Asia-Pacific

Participants of the project developed and launched a new online self-assessment tool for blended learning in HEIs (blendedlearning.bangkok.unesco.org). The assessment framework was adjusted according to the experience gained by the two countries in implementing the Shenzhen Funds-in-Trust Project. After formal peer review in December 2018, it was further revised and developed in January 2019, thus forming a new online assessment tool. The tool was officially launched on the websites of UNESCO and ICHEI and will be promoted and localised in Asia-Pacific. HEIs in various regions can complete the self-assessment online or by other means.

ICT-Driven Innovation for Inclusive, Quality Higher Education in Asia-Pacific Joint Policy Brief

The brief will summarize the project experience, consolidate the project achievements, and identify policy guidance and practices for ICT-driven innovation in Asia-Pacific according to the requirements of the five core aspects. The five aspects are: policy measures; promoters and platforms; education and training institutions; young and adult learners; partnerships including cross-disciplinary cooperation. The policy brief contains not only the five key elements of ICT-driven higher education innovation, but also the cases of SFIT practitioners including Cambodia and Sri Lanka, as well as the International Institute of Online Education (IIOE), the flagship project of UNESCO-ICHEI.

Building Ecosystems for Online and Blended Learning: Advancing Equity and Excellence in Higher Education in Asia-Pacific Policy Brief
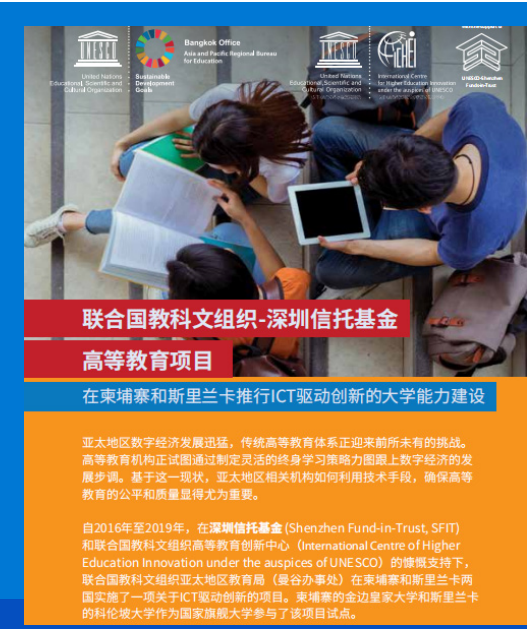（https://unesdoc.unesco.org/ark:/48223/pf0000375474_
chi?posInSet=1&queryId=d8cc95ee-a412-4f6c-bb80-43e80ab20b38）

Shenzhen Funds-in-Trust Manual

In order to document and promote the activities of the Shenzhen Funds-in-Trust Asia Project, UNESCO and ICHEI jointly prepared a bilingual version of the project manual to publicize the online self-assessment tool and the practical results achieved. This manual has been officially launched in the UNESCO Digital Library, which further ensures its sharing and circulation on a global scale.

《UNESCO-Shenzhen Funds-in-Trust Project for Higher Education: Building Staff Capacity for ICT-Driven Innovation in Cambodia and Sri Lanka Sino-British Results Report
(https://unesdoc.unesco.org/ark:/48223/pf0000370777_chi)

● Relevant Comments ●

UNESCO Asia and Pacific Regional Bureau of Education

Given increased demand for quality higher education and training in the region, MOOCs and blended learning are important means to ensure equitable access to quality higher education and lifelong learning opportunities for all. However, there are concerns about the gap in ICT use that may cause more serious social polarisation in the future.

Prof. LIM Cher Ping, Chair Professor of Learning Technologies and Innovation, Education University of Hong Kong, Visiting Professor of Higher Education Research Center of Southern University of Science and Technology (SUSTech) of China in Shenzhen, China

The new blended learning self-assessment tool sends a loud and clear message to higher education institutions that introducing an innovation into an institution requires a systematic change; a holistic approach towards strategic planning is essential to enhance access to quality higher education. It is only when such an approach is adopted that the potential of blended learning for the achievement of Sustainable Development Goal 4 (SDG4) is more likely to be fulfilled.

Mr. XU Jianling, then Deputy Director of Shenzhen Municipal Bureau of Education

As the donor of the SFIT projects, Shenzhen Municipal People's Government pays close attention to and actively supports the development of Shenzhen Funds-in-Trust projects. As the executor of the specific projects, UNESCO Asia and Pacific Regional Bureau of Education leads the development of the projects and provides a sound guarantee for their smooth implementation. As the supervisor and coordinator of the SFIT projects, UNESCO-ICHEI has made a lot of active efforts and explorations for the planning and development of the project by taking the advantages of the excellent academic and industrial resources of Shenzhen.

Mr. ZHOU Jiagui, then Deputy Secretary-General of the Chinese National Commission for UNESCO

On the one hand, the Chinese government attaches great importance to education informatisation, insists on promoting the deep integration of information technology and education and teaching, adheres to application-driven and mechanism innovation, and strengthens top-level design and multi-party collaborative promotion. On the other hand, China and UNESCO have carried out a series of arrangements and cooperation in promoting education informatisation. The success of Shenzhen Funds-in-Trust Project is another remarkable achievement following the International Conference on ICT in Education in Qingdao and the International Conference on Artificial Intelligence (AI) and Education in Beijing, which has a positive and lasting impact on promoting the development of global education informatisation and allowing equitable, inclusive, and quality education and lifelong learning opportunities for all.

Brief Introduction of UNESCO SFIT Project in Africa

In recent years, the massification of higher education in Africa has witnessed a rapid increase in student enrolment, as well as the number and types of higher education providers. Therefore, it is necessary to set up quality assurance (QA) systems to ensure quality and promote the mobility of higher education in Africa. UNESCO SFIT Africa Project is the first UNESCO international cooperation project dedicated to strengthening quality assurance in higher education in Africa. It aims to develop quality assurance mechanisms for higher education in Africa and to strengthen the capacity of African higher education systems, thereby supporting the implementation of the Addis Ababa Action Agenda.

The UNESCO SFIT Africa Project has greatly enhanced the capacity of higher education systems in 10 African countries, effectively contributing to the overall development of QA in higher education in Africa, and has had a positive impact on the African higher education community and UNESCO. During the 3rd World Higher Education Conference (WHEC 2022), UNESCO-ICHEI and UNESCO co-organised a closing session of the UNESCO SFIT Africa Project to showcase its outcomes and positive impacts in a comprehensive manner, and to discuss how to continue to use the outcomes generated by the project for the development of higher education in Africa after its closing.

• Timeline of Project •

2017 年

March the project inception meeting was held at UNESCO Headquarters (HQ) in Paris.

2018 年

November the project mid-term evaluation meeting and launching of component 3 of the Project was held in Johannesburg, South Africa.

2019 年

March UNESCO HQ and UNESCO-ICHEI agreed that an outcome meeting will be held upon conclusion of the Project.

2021 年

31 May to 2 June a workshop was held in Cairo, Egypt, on "Enhancing Quality Assurance Exchange in Higher Education in Africa and Developing Mutual Recognition Tools for Quality Assurance Agencies in Africa". Participants from African higher education quality assurance agencies and responsibles of quality assurance networks tested the mutual recognition tool for quality assurance agencies developed with the support of the UNESCO SFIT Project in Africa.

2022 年

May the UNESCO SFIT Africa Project Outcome Meeting was successfully held in Barcelona, Spain during the 3rd World Higher Education Conference (WHEC 2022).

▲ UNESCO SFIT project Strengthening Quality Assurance in Higher Education in Africa received media coverage in Senegal

▲ UNESCO-ICHEI participated the project mid-term evaluation meeting and launching of component 3 of the Project was held in Johannesburg, South Africa.

▲ UNESCO-ICHEI was invited to participate a workshop held in Cairo, Egypt, on "Enhancing Quality Assurance Exchange in Higher Education in Africa and Developing Mutual Recognition Tools for Quality Assurance Agencies in Africa"

• Actions •

In line with UNESCO's Priority Africa Strategy, a total of 1.5 million US Dollars of the UNESCO SFIT was allocated for the Africa Project, with 10 beneficiary countries: Côte d'Ivoire, Egypt, Gambia, Malawi, Mali, Namibia, Niger, Senegal, Togo, and Zambia. Its objectives are mainly divided into following two parts:

To strengthen institutional, national and regional higher education systems in Africa

Complement UNESCO's efforts to facilitate the internationalization of higher education and the implementation of the Addis Convention.

Part 1 : Establish new quality assurance agencies

Support the establishment of new quality assurance agencies in Côte d'Ivoire, Mali, Niger, and Togo by facilitating access to good practices, developing capacities and supporting networking with existing QA agencies.

Part 2 : Strengthen existing capacity-building institutions

Institutional capacity-building of recently established QA agencies in Egypt, Gambia, Malawi, Namibia, Senegal, and Zambia by reinforcing capacities of QA professionals, knowledge sharing and development of QA tools.

Part 3 : Consolidate existing Quality Assurance Networks

Consolidate existing Quality Assurance Networks in Africa, including the African Quality Assurance Network (AfriQAN) and the East African Quality Assurance Network (EAQAN), through cross-fertilization of ideas, sharing of best practices and development of mutual recognition tools in quality assurance.

• Important Achievements •

Tools for QA and mutual recognition of qualifications in Africa

There are significant differences in the institutional setup, functional responsibilities, and operational capacities of QA bodies in different countries. These will limit the effectiveness of quality assurance of higher education and the development of partnerships, and therefore, they will also restrict the sharing of experiences and best practices. Through the implementation of the UNESCO SFIT, UNESCO hopes to develop tools for the recognition of certificates, degrees, study programmes, and qualifications in higher education in Africa as an outcome. By analysing the need, rationale, purpose, advantages, and challenges of mutual recognition tool of qualifications, this toolkit introduces the governance structure, recognition criteria, and recognition procedures and makes recommendations for the process of mutual recognition of qualifications.

Supported QA workshops and related training in several countries

The UNESCO SFIT Africa Project has organised a number of workshops and training on building QA agencies in various participating countries in Africa, covering areas such as raising awareness of quality assurance, introducing internal and external quality assurance frameworks, enhancing data collection capabilities, etc. Specific implementation programmes have been developed based on local quality assurance development, and over 500 quality assurance officers have been trained in total.

Supported the establishment of QA legislation or committees in certain countries

The UNESCO SFIT Africa Project has also supported the establishment of QA legislation from scratch in a number of countries, and has helped establish relevant agencies to support quality assurance at national and regional levels in the long term. Workshops and seminars were well organised to validate and adopt assessment frameworks for universities, degree programmes and research projects, laying the groundwork for national quality assurance committees to begin their functions, while quality assurance agencies developed assessment frameworks for higher education institutions and carried out pilot assessments in the field.

Supported the consolidation and strengthening of regional QA networks in Africa

Building on the milestones of the first and second parts of the project in terms of QA capacity building, the launch of the third part and the UNESCO Consultation on Quality Assurance in English and Portuguese-speaking African Countries was held in Johannesburg, South Africa, in November 2018. With the support of the project, regional QA networks in Africa have been consolidated and strengthened. The Network of Quality Assurance Agencies in French-speaking Africa was launched in Dakar, Senegal, in February 2020. From 2019 to 2021, the project developed the African Tool for Quality Assurance and Mutual Recognition of Qualifications, which strengthened communication and cooperation between quality assurance agencies and networks in African countries. These outcomes provide a much-needed platform for cooperation between national and regional quality assurance agencies in Africa, facilitate coordination and collaboration among quality assurance mechanisms across Africa, and promote cross-border recognition of qualifications and intra-African academic mobility.

• New breakthrough: Quality Assurance 2.0 •

The Quality Assurance (QA) of higher education in developing countries and regions is not only the main point of the UNESCO SFIT Africa Project, but also the focus of UNESCO-ICHEI and the IIOE development strategy. In conjunction with Africa's quality assurance practices in the project within the framework of the traditional higher education system, UNESCO-ICHEI has published "IIOE Quality Assurance" for blended teaching and learning. IIOE Quality Assurance 1.0, including the 1st version of the framework and its accompanying online self-assessment tool, was a key element of the IIOE launch at its inception and has been adopted by partner institutions in Africa and the Asia Pacific region. Through feedback from 13 partner HEIs in 9 countries, IIOE Quality Assurance 1.0 and its accompanying tool have been upgraded into the IIOE Quality Assurance Guide and Toolkit (IIOE QA 2.0). The newly upgraded QA 2.0 now has eight modules, 20 indicator points and 73 specific contents. Two new modules and related indicator points have been added compared to the old version, and the existing indicator points and specific contents have been revised. The revised version of Framework 2.0 also responds to the challenges raised by IIOE partner organisations in moving to blended learning during and after COVID-19.

IIOE QA Framework 2.0
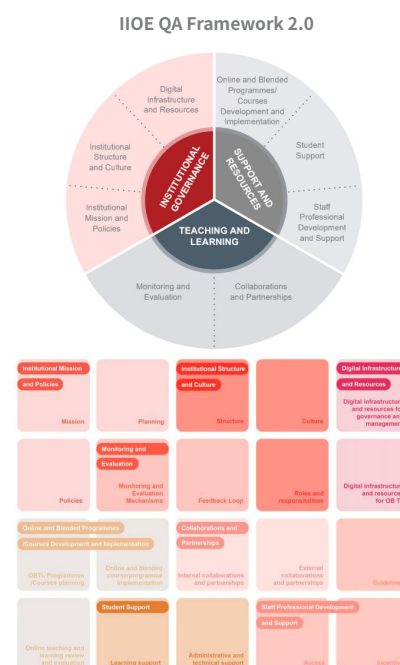
• Relevant Comments •

Mr. Dimitri Sanga
Director of UNESCO Dakar Regional Office, OIC
UNESCO Abuja Regional Office

The UNESCO-Shenzhen Project aims to reinforce the capacity of the higher education sector in terms of quality assurance, and also to build networks. The challenge of this project is to pool together the evaluation tools among African countries in the sub-region. Since there is mobility of students and workers among the countries, the evaluation methods should not be different. The best case is that we have common tools of evaluation.

Prof. Lamine Guèye
Executive Secretary of ANAQ-SUP

(The UNESCO SFIT Project) is a UNESCO-China project, principally with the city of Shenzhen, which aims to improve the quality of higher education. The importance of the partnership is that most African countries are signatories of the SDGs. Besides SDG4 "Quality Education", all African countries aspire to strong, quality and inclusive growth able to create jobs. In order to achieve economic growth and job creation, we need quality labour force. Therefore, we have to harmonise evaluation tools.

Prof. Kuassi Deckon
Focal point of UNESCO SFIT project in Togo
Professor of University of Lomé

The international financing in support of the Togolese quality assurance system, with ample technical backstopping but no interference, allows the freedom of the Togo national team to define the project activities according to national needs and contexts. The Project has also generated ripple effect and facilitated the exchange between Togo and other African countries in terms of quality assurance in higher education.

IIOE Roundtable Meeting: Towards a Shared Future of Higher Education Digital Transformation

● Background Information

On 20 May 2022, the International Institute of Online Education (IIOE) Roundtable Meeting was successfully held at Fira de Barcelona. UNESCO-ICHEI, University of Nairobi (Kenya), Ain Shams University (Egypt), Universiti Putra Malaysia (Malaysia), and UNESCO co-hosted the roundtable meeting as the main event of the WHEC2022. At this roundtable meeting, representatives of UNESCO-ICHEI delivered keynote speeches to present the achievements of IIOE and officially released a series of research publications on the digital transformation of higher education. Representatives from international organisations and enterprises engaged in the following two roundtable discussions, responding to IIOE's achievements, models and experiences with further suggestions on its future development.

▲ Ms YU Xiaoping, Counsellor of the Permanent Delegation of the People's Republic of China to UNESCO

▲ Prof. Stephen Kiama Gitahi, Vice Chancellor of the University of Nairobi

▲ Prof. LI Ming, Director of UNESCO-ICHEI

▲ IIOE Roundtable Meeting

Since its establishment in December 2019, IIOE has received strong support from the Office of Higher Education at UNESCO Headquarters, UNESCO offices, and partners from all walks of life. It also has attracted wide participation and attention from policymakers, higher education institutions (HEIs), enterprises, and international organisations, renowned itself as an important platform for the digital transformation of higher education in developing countries. The establishment of IIOE results from multilateral cooperation and embodies the spirit of "university-industry cooperation". As a global online education exchange and sharing platform for higher education, IIOE fully absorbs global practices and diligently mobilises resources with the **development principle of "extensive consultation, joint contribution, and shared benefit"**. Till now, IIOE has grown into an **alliance for higher education digital transformation**, covering 35 HEIs and 22 partner enterprises in 29 countries, with services reaching 135 countries and regions worldwide.

▲ "Practices and future of IIOE: Perspectives of multiple stakeholders" Panel Discussion (From left to right : Mr. David Atchoarena, Prof. Mona Abdel-Aal Elzahry, Ms Lesley White, Ms BI Xiaohan)

During the IIOE Roundtable Meeting, UNESCO-ICHEI proposed that IIOE will continue to support the digital transformation of HEIs worldwide and further deepen partnerships with partner universities and education authorities in partner countries, and support IIOE national centres in the local development of online education resources by conducting educational research in the field of digital transformation of higher education. In addition, IIOE will launch micro-certifications related to the digital transformation of teachers, and work with various partners to develop talent development through industry-academia integration.

▲ Panel Discussion on the Joint Research Project (From left to right : Dr. Francesc Pedró, Prof. Ismi Arif Ismail, Dr. Dalia Ahmed Yusuf, Mr. Abdoulaye Salifou, Ms BI Xiaohan)

▲ Group Photo of IIOE Roundtable Meeting

● Highlights

Strategies of digital transformation in higher education

Prof. Mona Abdel-Aal Elzahry, Director of Education Strategy Administration, Ain Shams University, Egypt

Digital transformation in higher education is not only about technology. It's mainly about pedagogy. This transformation should start with **pedagogical shift**s, which prepare us to put clear educational strategies and policies that enable online learning to be efficiently applied. This will be followed by a **cultural shift** to manage the change we all face, and then the workforce shift, in which we would focus on capacity building of instructors and faculty, and finally, to improve quality education. Last, it comes to the **technology shift**. Besides the challenges of preparing many technological infrastructures and 24/7 technical support for all instructors and students, there are main challenges in improving the capabilities of faculties to cope with these changes.

Dr. Francesc Pedró, Director of UNESCO IESALC

Technology supported education is related to the teaching methods and strategies being used. We see clearly that there is an opportunity for hybridization and that's where exactly this type of research that UNESCO-ICHEI has been now announcing and launching can really make a huge difference. As for whether technology-supported education is better than face-to-face teaching, it is not an issue related to the quality of your technology or the quality of your technical capacities. More importantly, it is more related with the type of methodology and the pedagogical strategies that you are using.

Challenges and reflections in moving toward digital transformation of higher education

Mr. David Atchoarena，Director of UNESCO Institute for Lifelong Learning

With the development of technology, the higher education system has changed significantly. As a result, many new opportunities have emerged in terms of learning pathways, such as self-directed learning and diverse online learning content. Through our global survey, we have found that lifelong learning has become a priority for the development of higher education institutions worldwide and that the work being done or planned by IIOE, particularly the provision of micro-credentials, will support the transformation of higher education institutions into lifelong learning institutions and promote knowledge acquisition. The future of higher education is about technology and digital transformation, but it also about lifelong learning.

Dr. Francesc Pedró，Director of UNESCO IESALC

The first problem to be solved is the problem of online teaching. In the current, context when we talk about the digital transformation of higher education, we have to contextualize this issue in the wider perspective of the COVID-19 pandemic. The learning loss that we have heard in which some research has been showing that the losses might be between 15 and 30%. If universities already have a platform that can monitor learning indicators, they can now at least clearly assess how significant these learning losses are and, in the future, use the findings to drive pedagogical and technological change for blended learning reform and development through collaborative efforts across UNESCO institutions.

The role of UNESCO-ICHEI and IIOE in the digital transformation of higher education

Prof. Mona Abdel-Aal Elzahry, Director of Education Strategy Administration, Ain Shams University, Egypt

IIOE activities were very supportive at that time of COVID-19 in raising these competencies for faculties to help them cope with these dramatic changes in educational infrastructure. Launching the IIOE Egypt National Centre was the main milestone in our relationship with UNESCO-ICHEI. **The role of IIOE Egypt National Centre to support blended learning and teaching** and align with the vision and mission of UNESCO-ICHEI and IIOE, will be to build a network of all Egyptian universities and **construct a national platform of dialogue for faculty development for all higher education workforce in Egypt. The Egypt National Centre can also participate in the joint educational research to** make evidence-based outcomes from all worldwide activities that have been done.

Mr. David Atchoarena, Director of UNESCO Institute for Lifelong Learning

IIOE will work on the provision of micro-credentials, which is an important way of facilitating and recognising blocks of learning, contributing to lifelong learning. **One other strong element of the IIOE presentation reflects broader development, challenges and opportunities, which is about Multi-stakeholders.** 5 universities partnered with different lecturers, private institutions involved in technology, and other important partners in this field. We know there is a need to see how technology can become a public good. IIOE is already providing learning platforms to universities around the world; that is an important step, in making technology a common and public good.

Mr. Abdoulaye Salifou, Regional Advisor for Higher Education and ICT, UNESCO Abuja Regional Office

At the height of the COVID-19 pandemic, UNESCO-ICHEI provided emergency online support to African universities through the launch of IIOE, which has helped to support continuous teaching, online learning, and virtual platforms in Africa, especially in West Africa. Currently, for the Abuja Regional Office in Nigeria, UNESCO-ICHEI **and IIOE are partners in mainstreaming and advancing new technologies in our region**. During the launch of the IIOE National Center at Ahmed Bello University, we have developed a work plan, various activity launches, capacity building, webinars, etc. that can benefit over 50,000 higher education institutions in Nigeria.

Prof. Ismi Arif Ismail, Deputy Vice Chancellor (Academic and International) of Universiti Putra Malaysia, Malaysia

We are so thankful to be give the opportunity to come up with **a research-driven policy on ICT Driven innovation for higher education**. Since the first year of our conference, we are talking about the social contract for reimagining education, that is collaboration. When talking about collaboration, We are talking about maintaining inclusivity and interconnectivity. Technology connects us together and makes sure no one is left behind. Connectivity is between countries, institutions, communities, and industries. I believe technology to be seen as a tool that ensure this process, and ultimately achieve SDG 4, better access to education for all.

Dr. Dalia Ahmed Yusuf, Director of e-Learning Central Unit, Ain Shams University, Egypt

UNESCO-ICHEI research project objectives provide us with policy briefs, and guidelines to procedures that will definitely be a resource and reference in setting our own (policy). Also it will provide us with practical frameworks and toolkits that will help us in the implementation of our new interventions, finding the gaps and needs of our infrastructure, and finally we will solve our problems. At last we will definitely gain a lot of knowledge of prior implementation and analysis of educational digital transformation projects in other countries, and will definitely do our competitive studies on our implementations impact and in our local environments.

Future perspectives on digital transformation of higher education

Ms Lesley White, Deputy VP of HR in the Western European Region for Huawei

Digital transformation requires future-proof talent. So Huawei is very keen to develop together and expand partner with IIOE to increase the number of collaborations and universities that we work with. Because it's truly important that we build the digital talent for the future in all the technology domains, such as 5G, AI, big data. **Because this is a great opportunity to be more inclusive, to truly bridge that divide and not only the digital divide, but also the gender divide. We want to ensure that through our actions, through our programs, that nobody is left behind.**

Dr. Francesc Pedró, Director of UNESCO IESALC

That we need a multisectoral approach because when it comes to the 21st century provision of higher education, connectivity is a must. I don't think that this connectivity can be solved only from the perspective of what universities can do or ministries of higher education. I think that we need a multisectoral approach and I'm happy to see. You know from different perspectives, different institutes of UNESCO are really the way to go. So I'm really hopeful that we are going to provide not only better evidence, but actually even increased capacities for people to deal with these challenges like the Dinosaur were already there before then.

Prof. Ismi Arif Ismail, Deputy Vice Chancellor (Academic and International) of Universiti Putra Malaysia, Malaysia

I think the argument in most of the education is to nurture good people so that we have a good future later on. So it should be people-centric. **When talking about people-centric digital skills, it's not the argument in, but another skill, that we will support and facilitate the acquisition and development of the other human skills that we have been championing in our philosophy of education.** We have to come up with a more holistic, developing, intellect, physical and emotion caution so forth. So in our policy, we propose this four levels of engagement, which we feel can tie researchers, policy makers, industry players and community leaders together, you have set this issue of negotiating, the needs and wants of each stakeholders, and you move from negotiate, to tolerate, and appreciate and eventually celebrate everyone's wants and need to ensure that inclusivity and the interconnectivity. We will accelerate the digital transformation of higher education ecosystem.

Dr. Dalia Ahmed Yusuf, Director of e-Learning Central Unit, Ain Shams University, Egypt

Ain Shams University has a vision of leading the Egyptian universities in the field of digital transformation. And the mission of the E-learning Center and Unit in Ain Shams University is to set Strategic Plans of the E-learning system, also provide varied and distinguished E-learning, digital tools in response to growing demand and needs for hybrid learning in order to assure effective implementation of modern technologies in E-Learning and distance education. Finally my hope is to keep the conversations between HEIs and all stakeholders and industry partners. **This conversation will definitely provide us with the needs and requirements of higher education in the field of digital transformation and we will study together the outcomes of the implementation of these interventions.**

In Numbers

As of June 2022

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

Partners

58 Partners

Phasal Goals

23
58

2019
2022

30 Countries
100 Partner HEIs

Partner HEIs
Partner Enterprises

User Growth

9600+ Platform Users

2019 Dec
2022 Jun

Events

10 Online Workshops

47
300+
2000+

countries · organisations · learners

6+ ICT-themed Training Series

135
32+
7300+

14+ Global Seminar

100+
6000+

Learners

Top 8 countries/regions of origin of IIOE users

26%

Pakistan
Nigeria
Philipphine
Iraq
Saudi Arabia
China
Sri Lanka
Côte d'Ivoire

3.2%

2 Type of co-constructing partners

2 IIOE Credit-sharing partners

3 Course co-making partners

Courses

3 Course type

Disciplinary
Teacher Education
Professional Education

6 UN-official Languages

630+

ICT Courses
EdTech Courses

IIOE national centres will collaborate with UNESCO-ICHEI to conduct research on higher education digital transformation, while also applying and localising the outcomes. In addition to capacity building activities for partners HEIs, national centers will also design relevant online degrees and credentials.

National Centres

4 — Goals

Joint-credential

Platform Upgrade

Capacity building

Joint-research

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

8 — National Centres

As of June 2022, IIOE has 8 national centres, with 4 in Asia and 4 in Africa

5 — Functions

- Serving national digital transformation of higher education
- Building a national network of HEIs
- Enhancing blended learning capacity
- Joint-developing of online teaching resources
- Research cooperation and application

• Important Knowledge and Practical Results

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START !
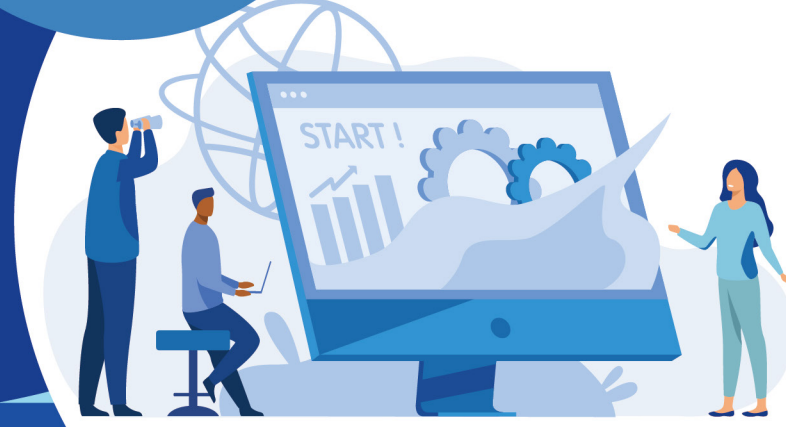
• Important Knowledge and Practical Results Release

Important Release #1: Research Project on the Digital Transformation of Higher Education

On 20 May 2022, the Research Project on Digital Transformation of Higher Education was released to the global audience at the IIOE Roundtable Meeting in Barcelona. The Research Project includes three handbooks (Handbook of Educational Reform through Blended Learning, Handbook of Teacher Professional Development in Higher Education, Handbook of Teacher Professional Development in Technical and Vocational Education and Training) and one research report (Research Report on Digital Transformation of Higher Education Teaching and Learning). These researchoutcomes, assembling joint efforts of over 50 scholars and researchers worldwide, has been published in all 4 UN official languages (Chinese, English, French, and Spanish). The Research Report on Digital Transformation of Higher Education Teaching and Learning is now available for open access on the internet. The Conference brings together more than 1500 participants onsite and over 8000 online attendees, including 42 ministers and around 200 rectors and vice-rectors. WHEC2022 provides a platform where global stakeholders can debate and share ideas and knowledge to shape a new path towards a sustainable and resilient future and chart a renewed vision for higher education in the next decade.

Background of the Research Project

The changing economies and societal and environmental challenges worldwide are rapidly transforming the global higher education landscape. The COVID-19 pandemic has caused the most serious educational crisis in human history, further highlighting the urgency and necessity for higher education systems and institutions to leverage digital technology to realise the vision of equitable and high-quality higher education for all. Consequently, the digital transformation of higher education, particularly teaching and learning, has become an increasingly important priority for local, national, and international stakeholders. More specifically, higher education institutions (HEIs) in the global south face many challenges, including how to provide inclusive and high-quality online and blended education, how to ensure the relevance of existing curriculum and assessment, and how to empower institutions to ensure equity, quality, and efficiency.

Potential risks to education arising from technological developments

● whether the scope of learning in the digital space can be controlled by the learner

● whether the new educational powers offered by technology are being applied appropriately

● whether the impact of data on learners' privacy can be limited

● whether the digital divide about technology using between different regions and social groups can be reduced, etc.

Despite the enormous transformative potential of digital technologies, we haven't found yet the path to turn these potentials into reality. Therefore, how can we understand the meaning and characteristics of digital transformation in higher education? How can it be effectively promoted in the context of different countries? What challenges are likely to be faced in the process of its advancement? How can these challenges be smoothly addressed? These are questions that need to be discussed in depth.

In response to these challenges, UNESCO-ICHEI and the Institute of Education (IOE), Tsinghua University launched the **Joint Research Project for Digital Transformation in Higher Education** (Joint Research Project). The project is led by Professor LI Ming, director of UNESCO-ICHEI, and Professor CHENG Jiangang, director of the Institute for Digital Transformation of Higher Education of UNESCO-ICHEI and member of the expert group on Educational Informatisation of the Ministry of Education, and chaired by Professor HAN Xibin, Associate Dean of the Institute of Education of Tsinghua University. With the efforts of more than 50 higher education experts from all over the world, the Joint Research Project brings together the academic results of more than a decade of blended teaching and learning as well as the teachers' digital capacity development. It contributes Chinese wisdom to global higher education and technical and vocational education, willing to help achieve the UNESCO 2030 Education for Sustainable Development goals (SDGs).

In September 2021, the first work seminar of the Joint Research Project was successfully held

Research Report on Digital Transformation of Higher Education Teaching and Learning

Research Report on Digital Transformation of Higher Education Teaching and Learning has been available in Chinese, English, French and Spanish. The research report focuses on the digital transformation of teaching and learning, and tries to introduce relevant concepts, ideas, methods, and challenges, and proposes possible solutions for international organizations, governments, higher education institutions (HEIs), enterprises and other stakeholders. The report includes 11 case studies **from nine countries, including Malaysia, Egypt, Indonesia, Kazakhstan, Morocco, Peru, the Philippines, Serbia and China**. Based on their own conditions, these cases show the efforts and effects of different countries in actively promoting the digital transformation of higher education covering a wide range of dimensions, such as institutional policies, academic programs, curriculum development, teachers and learners, etc. They also demonstrate the enormity and longevity of the digital transformation in higher education.

Research Report on Digital Transformation of Higher Education Teaching and Learning in four languages

In 9 chapters, the Report firstly outlined the background, current situation, and connotation of the digital transformation of higher education. Then, the Report demonstrated a map of digital transformation content, characteristics, strategies, and directions in six aspects: institutional policies, academic program approaches, curriculum development and delivery, teachers' professional competencies, learners and their learning, and teaching quality assurance systems. Then follows the discussion of challenges in promoting digital transformation in higher education and its possible solutions with examples and practices from different countries.

According to the Report, the digital transformation of higher education teaching and learning not only requires the application of digital technologies to education but also advocates the deep integration of digital technologies and education, developing new education systems adaptive to the digital age. **In terms of its contents, the digital transformation of higher education involves changes in the institution's space, operations, strategic directions, and values, as the digital age takes on a different character in this regard from the industrial age.** In the process, students will have greater autonomy in their learning, course selection, ability acquisition, and academic certification, and HEIs will develop a stronger social resource call via the Internet, which will ultimately revolutionize the traditional teaching models of higher education and create new models. **As for its essential components, the digital transformation of higher education includes higher education institutions, academic program approaches, curriculum development and delivery, teachers, learners, and teaching quality assurance.**

	Industrial Age	Digital Age
Institution's Space	Physical Places such as Classrooms and Campuses	Integration of Physical Environment and Digital Space
Institution's Operations	Modularized and Process Oriented	Integrated and Intelligence
Strategic Directions	Specialization and Popularization	Openness and Sustainability
Value propositions	Massiveness and Standardization	Individualism and Diversity

Characteristics of the digital transformation of higher education

Focusing on teaching, one of the two core functions of higher education with the other one being research, this Report proposes **a framework for the digital transformation of higher education teaching and learning**. The Report pointed out that, a HEI is a complicated system formed by many elements including institutional policies, strategies and support, academic program approaches, curriculum development and delivery, teachers' professional competencies, learners and their learning, and teaching quality assurance systems. While subject to social, political, economic and technological impacts, these elements also interact with each other. More specifically, the inner logic of these elements is as follows:

- Social, political, economic and technological changes can directly impact students' academic career plans, learning and cognition, prompting them to transform their learning in a digital way.

- To support students' digital transformation, curriculum development and delivery need to be changed and teachers need to update their professional competencies.

- As social and economic changes set new requirements for talents, academic programs need to be redesigned to meet the requirements.

- HEIs, as the operator of teaching activities, need to improve their technical system, personnel competency, organizational culture, management system, and supportive services to facilitate the digital transformation of teaching and learning.

Essential components for the digital transformation of higher education teaching and learning

Higher education institutions: HEIs are the initiators and guarantors of the digital transformation of teaching and learning. It is necessary for HEI leaders, administrators, teachers, technicians, off-campus supportive parties to play an active role in the digital transformation, and systematically promote the digital transformation of essential components such as objectives and plans, organizational structure, policies and norms, supportive services, technical environment, personnel's digital competencies, and cultural atmosphere.

Academic program approaches: The objectives of the digital transformation of academic programs are to provide suitable talents for society and support more personalized development of students. The digital transformation of academic programs in HEIs are characterized as follows: training objective turns from specialists to interdisciplinary talents; academic programs move from isolation to integration; HEIs pursue collaborative development rather than independent growth; and programmatic and specialized accreditation turns from rigidity to flexibility. The digital transformation of academic programs needs to be promoted in terms of professional talent training schemes, teaching resources, environment and platform for academic program development, and experimental and practical teaching bases.

Curriculum development and delivery: The core of the digital transformation of higher education teaching and learning lies in curriculum development and delivery. The integration of digital technologies into curriculum development and delivery will greatly expand the connotation of curriculum objectives, students, curriculum contents, instruction activities, learning evaluation and feedback, teachers and instruction environment, and their relationships will also be expanded in all dimensions. The whole process of gearing curriculum development towards the social demand for talents will be restructured. The instruction system becomes more open, complex, and dynamic, instruction contents, that is, knowledge generation and dissemination, more dynamic and mass-oriented, instruction scenes, greatly expanded in time and space, and instruction forms, more diversified and blended.

Teachers: As teachers play an essential role in teaching activities, they are the key to the digital transformation of higher education teaching and learning. In the digital era, new demands on teachers' professional competencies are reflected in four aspects: the awareness, literacy, competency of integrating digital technologies into teaching, and related research. The development of teachers' digital competencies requires the guidance of government departments, collaboration among social organizations, faculty training and development in HEIs, and self-empowering learning of teachers.

Learners: The ultimate objective of the digital transformation of higher education teaching and learning is to realize better learning and development of students in the digital age. As the development of various emerging technologies reconstruct students' learning and cognition, the digital transformation of industry highlights the importance of digital literacy in students' development objectives. It is necessary to create digital and adaptive learning context, provide diversified, intelligent and open educational resources, build open and socialized learning communities, and provide personalized and precise learning supportive services to meet the learning needs of students in the digital age.
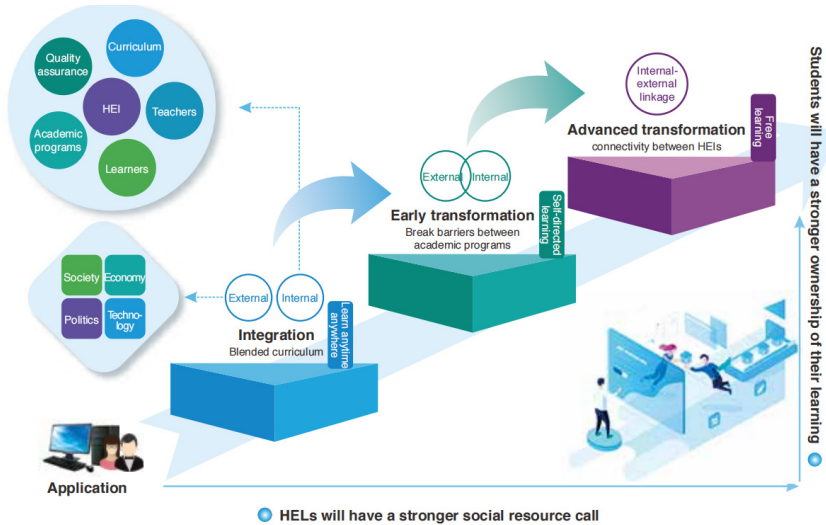
Teaching quality assurance: Teaching quality is vital to the survival and development of higher education. In the digital age, the HEI teaching quality assurance system shifts its objectives from singleness to diversity, its function from rating to early warning, its contents from decentralization to integration, its coverage of evaluation standards from phased and one-sided to whole-process and all-rounded, its method from regular sample-based to normal and full-scale, and its process from closed loop to open one.

Framework for the digital transformation of higher education teaching and learning

The framework indicated that, the digital transformation of higher education can be mainly divided into 3 progression stages, namely integration, early transformation, and advanced transformation. Like teaching and learning in higher education, the digital transformation is also an evolutionary and continuous process. The digital teaching and learning of each HEI follows the history of digital applications, and also faces the future of digital transformation. In Chapters 2-7, based on specific teaching and learning cases in different countries and regions, this Report presented 6 aspects of digital transformation of higher education, namely institutional policies, academic program approaches, curriculum development and delivery, teachers' professional competencies, learners and their learning, and teaching quality assurance systems.

In the stage of integration of digital technologies and teaching

where curriculum development and delivery will not be limited by time or space, the core elements such as teaching objectives, contents, activities, assessments, and environment will be reshaped and reorganized by the integration of physical and virtual spaces. At this stage, students will enjoy more flexible learning by blending online and offline methods and HEIs will expand Internet-based teaching to promote educational reform towards blended teaching.

In the stage of early transformation

HEIs will gain access to external resources for curriculum development, such as those from other HEIs, relevant enterprises and social organizations. At this stage, HEIs will develop individualized curriculum designs with a flexible combination of course modules from different schools and academic programs to meet diverse needs of students.

In the stage of advanced transformation

digital technologies will completely break boundaries between HEIs, enabling connectivity between HEIs, between HEIs and society, between HEIs and enterprises, and between HEIs and other stakeholders. By that time, the sharing of academic programs, curriculum, teachers, facilities, and services will become possible, and educational resources of the whole society will be fully utilized. The traditional ivory tower of HEIs will become history, and everyone will have access to appropriate educational resources in line with their individual needs, making education equity and sustainable development possible.

3 stages of digital transformation of teaching and learning

In the future, promoting the digital transformation of higher education teaching and learning will be a long-term and gradual process. It is bound to face many challenges, such as the digital divide brought about by technological changes, the constraints imposed by existing HEI instruction system, intuition-based thus flawed instruction management and decision-making, narrow professional fields and lack of flexible credit and degree accreditation system, differentiated teaching limited by traditional class mode and curriculum system, teachers' lack of the practical competency to deliver innovative instruction with digital methods, students deficient in self-management competency for digital learning, confusion and choice dilemma brought by fragmented learning, and the difficulty of using existing educational theories to guide complex teaching practice in the digital age. In face with the above challenges, it is necessary for the stakeholders of higher education teaching and learning to make concerted efforts and advance the digital shift systematically
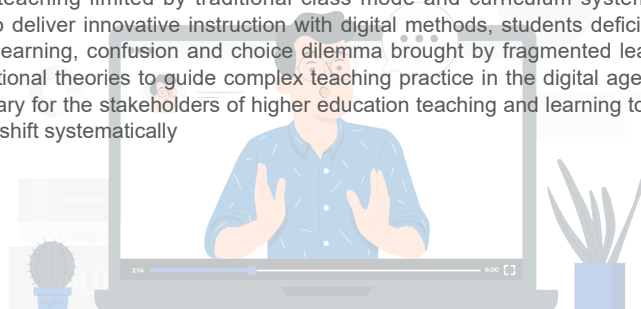
Equitable digital transformation of higher education

- **Strategies to deal with the digital divide brought by technologies:** International organizations, governments, HEIs and enterprises need to make joint efforts to continuously build the infrastructure needed to digitally transform teaching, so as to ensure that higher education can provide every learner with equal technical resources and access to information and educational opportunities. It is also important to accommodate the differences in the popularity and usage habits of educational technologies and culture differences among different regions. Digital literacy should be regarded as one of the core skills in the 21st century. Special attentions should be paid to cultivate students' rationality, empathy, creativity, and critical thinking, so as to help them resist the risks in the digital society. The digital transformation should strive to ensure that the digital technologies, tools and platforms applied in the field of education develop in the direction of supporting human rights, improving human capabilities and promoting human dignity and humanistic spirit, so as to maintain the peaceful, just, and sustainable development of the digital society.

- **Strategies about the intuition-based instruction management and decision-making:** When promoting the digital transformation of teaching and learning, higher education policy makers and HEIs should consider multiple evidence sources and polish their competencies of evidence collection and analysis. The application of big data to instruction can not only help obtain teaching information in time but also facilitate the monitoring and dynamic adjustment of the instruction process. Digitalization of instruction management is not merely a technical upgrade of management tools and means. Its key feature lies in that digital technologies are integrated into instruction management system to establish a continuous action system including information collection, analysis and conclusion-making, consultation and argumentation, planning and decision-making, implementation monitoring, feedback and adjustment.

Inclusive digital transformation of higher education

- **Strategies to deal with the limitations of current HEI instruction system:** Higher education policy makers, relevant administrators of educational institutions, researchers, and practitioners need to remove the limitations of thought that "technologies in an industrial society empower education and teaching" and that "the digital transformation of education is only applied to the field of education". They should deeply understand the nature of the digitally transformed higher education system, as well as the relationships between higher education and other systems such as society, economy, politics, and technology. They should also jointly formulate the vision and path of such transformation that reflects the concerns of all parties, integrate resources and services in other fields of society in cyberspace, and promote the systematic transformation of higher education.

- **Strategies to address narrow professional fields and lack of flexible credit and degree accreditation system:** Government departments and HEIs need to work together to formulate policies and standards to reform the credit and degree accreditation system, and adopt technologies like blockchain to promote the adoption of micro-credentialing and micro-certificate across HEIs and disciplines, so as to establish a flexible credit and degree accreditation system. Learners can go beyond the limitations of the traditional degree system, and choose and create "their own disciplines" instead of being confined to a certain HEI or discipline. International organizations should work with governments and vigorously advocate an international credit and degree accreditation system.

- **Strategies to address differentiated teaching limited by traditional class mode and curriculum system:** Teachers and instructional designers need to improve their data literacy and cultivate their competency in applying technologies to intelligent instruction environment. They should fully integrate big data, AI teaching assistants, and other technologies into the curriculum development and delivery process, expand instruction time and space, and realize accurate whole-process analysis of learners, accurate prediction of instruction results, and accurate regulation of instruction process, with a view to meeting personalized learning needs.

Quality digital transformation of higher education

- **Strategies to address teachers' lack of competency to deliver innovative instruction with digital methods:** The government should formulate standards over teachers' digital competencies and policies to promote such competencies. To that end, HEIs should build complete systems while social organizations can provide teachers with various resources. It is also beneficial to implement various digital competency development programs and carry out related certification. International organizations should advocate international and regional cooperation to develop online digital competency training programs (micro-credential, micro-degree, etc.), and work together to promote the continuous improvement of teachers' digital competency. Facing the impact of digital technologies, teachers should continue to innovate instruction ideas and improve digital competencies, and turn challenges into opportunities to reform traditional instruction and innovate future instruction.

- **Strategies to deal with students' deficiency in self-management competency for digital learning:** HEI administrators should actively use digital technologies to provide support for students' independent development, such as using AI to establish prediction models that can identify employment and skills development trends, and

thus helping them plan their future learning and development paths. The role of teachers should be transformed from imparting knowledge to offering academic guidance and career planning. Students should be fully self-motivated to avoid dependence on teachers and technologies.

- **Strategies to deal with confusion and choice dilemma brought by fragmented learning:** HEI administrators, instructional designers and researchers should work together to sort out the disciplinary knowledge in higher education build an adaptive visual learning engine with function like disciplinary knowledge verification, integration and mapping navigation, solve the problem of knowledge fragmentation on the Internet, and thus support the transformation from fragmented learning to meaningful reconstruction of knowledge system.

The full Report is available in Chinese, English, French and Spanish. For the full Report, please visit the official website of UNESCO-ICHEI (www.ichei.org).

Handbook of Educational Reform through Blended Learning, Handbook of Teacher Professional Development in Higher Education, and Handbook of Teacher Professional Development in Technical and Vocational Education and Training

Handbook of Educational Reform through Blended Learning, Handbook of Teacher Professional Development in Higher Education, Handbook of Teacher Professional Development in Technical and Vocational Education and Training focus on providing theories, standards, methods and strategies on hybrid teaching reform, teachers' digital competencies and their development, aiming to successfully cover the "last mile" of digital teaching for practitioners and researchers. At the same time, these handbooks will be disseminated through the UNESCO platform with a view to helping global countries, especially developing countries, to use digital technologies to move towards UNESCO's 2030 Education for SDGs. In this process, it's also promising to creat an inclusive, resilient, open and high-quality higher education teaching and learning system fit for the future.

Handbook of Educational Reform through Blended Learning includes different chapters on theoretical foundations, curriculum and teaching, professional and discipline development, institution reform, support services, practical cases and future prospects. Focusing on the core theme of blended teaching reform, this handbook provided a comprehensive and profound discussion both theoretically and practically. Specifically, the theoretical foundation chapter systematically introduced the system theory, learning theory, teaching theory, curriculum theory and educational communication theory of blended teaching and learning, and summarized the blended teaching model, design model and practice model. The chapter about teaching explained the core elements of hybrid teaching and learning as well as its relationships, detailing the methods and processes of designing, implementing and evaluating. All of these was supported by theoretical explanations and methodological examples. The chapter on professional and disciplinary development explained the new requirements for professional reform in the digital age, and proposed strategies for restructuring the system, optimising the process and building the

support system for professional training programmes. The chapter on institution reform explained the core elements, main responsibilities, implementation framework and phased development characteristics of blended teaching reform in HEIs, and proposed specific strategies to promote blended teaching reform in HEIs systems. The chapter of suppot services illustrated the theoretical basis and principles for the construction of a blended teaching support service system, and proposed the core elements and implementation methods for learner-oriented learning support services, teacher-oriented teaching support services, and the provision of virtual and real integration environment and digital resource support by HEIs. The chapter about practical cases presented 15 case studies from 10 countries, explaining their background, core problems, solutions, effects and impacts. The future perspectives chapter provided an outlook on the future development of blended teaching and learning reform from different perspectives, including blended learning spaces, open educational resources, ubiquitous learning, renewal of educational concepts and changes in the educational ecosystem.

Handbook of Teacher Professional Development in Higher Education, and Handbook of Teacher Professional Development in Technical and Vocational Education and Training focused on higher education and technical and vocational education respectively, exploring concepts, standards frameworks and strategies for enhancing teachers' competencies. These two handbooks included an introduction, theoretical foundations, frameworks and standards, actions to enhance competencies, and practical examples. The introduction analysed the background and challenges of developing teachers' competencies in higher education and technical and vocational education in the digital age. The theoretical foundation chapter defined teachers' competencies in the digital age, introduced the theoretical foundations of teachers' development, and reviewd the framework and standards of teachers' teaching competencies and research progress. The framework and standards chapter presented the objectives and principles of its construction, explained the structure and main contents of the framework, summarised the tools for assessing teachers' teaching competencies, suggested corresponding applications, and discussed the development trend of teachers' assessment of teaching competencies. The chapter on actions to enhance teaching competencies outlined the characteristics of teachers' competencies and the general framework of actions to enhance them, and also proposed strategies for international organisations, governments, social organisations, schools and teachers themselves.

Scan QR Code to Download the Report

Comments from Experts

Mr. QIN Changwei

Secretary General of the National Commission of China for UNESCO:

The pandemic in the past two years has made the digital transformation of higher education and MOOCs particularly important. The Joint Research Project reflects the positioning of UNESCO-ICHEI and provides strong support for the centre to expand its influence in the future.

Mr. CHEN Yidan

Core founder of Tencent, Founder and Honorary President of the Tencent Charity Foundation, Founder of Yidan Prize, and Founder of Wuhan College:

The focus of the research will finally be on the people; I have high expectations for the future development of the Joint Research Project.

Mr. ZHAN Tao

Director of UNESCO Institute for Information Technologies in Education:

UNESCO-ICHEI already has many practise-oriented projects, and the Joint Research Project can combine existing practises with theoretical innovation.

Mr. WANG Libing

Chief of Section for Educational Innovation and Skills Development, UNESCO Asia and Pacific Regional Bureau for Education:

The Joint Research Project shows a profound understanding of the digital transformation in higher education and the further enhancement of the knowledge production capacity of UNESCO-ICHEI. The research will make implementation more feasible and convenient.

Ms Michaela Martin

Programme Specialist of the UNESCO International Institute for Educational Planning (IIEP):

Many viewpoints, ideas, and work of IIEP can be integrated with the Joint Research Project, such as international comparative research and systematic research.

Prof. LIM Cher Ping

Chief Expert of IIOE, Chair Professor of Learning Technologies and Innovation, Education University of Hong Kong:
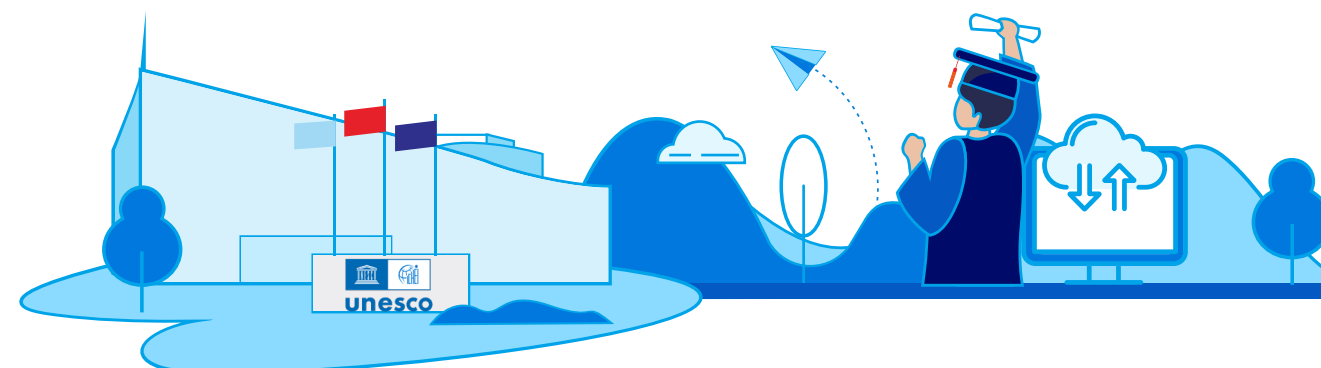
The localiSation of the Joint Research Project can enable the full integration of the participants.

Prof. YANG Xinbin

Party Secretary of Shenzhen Polytechnic:

The Joint Research Project is innovative, practical, and instructive and it has formed a comprehensive digital transformation system.

Important Release #2: IIOE Multilingual Services

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The importance of multilingualism in achieving the goals of the United Nations, as set out in Article 1 of the Charter of the United Nations, and its contribution to the three pillars of the organization – international peace and security, development and human rights – has been consistently emphasized since the organization's establishment. Being an inherent part of the genetic code of the United Nations, multilingualism is both an asset and a shared commitment for all organizations in the United Nations system.

—— Multilingualism in the United Nations system (2020)

▲ IIOE online education platform in six UN official languages
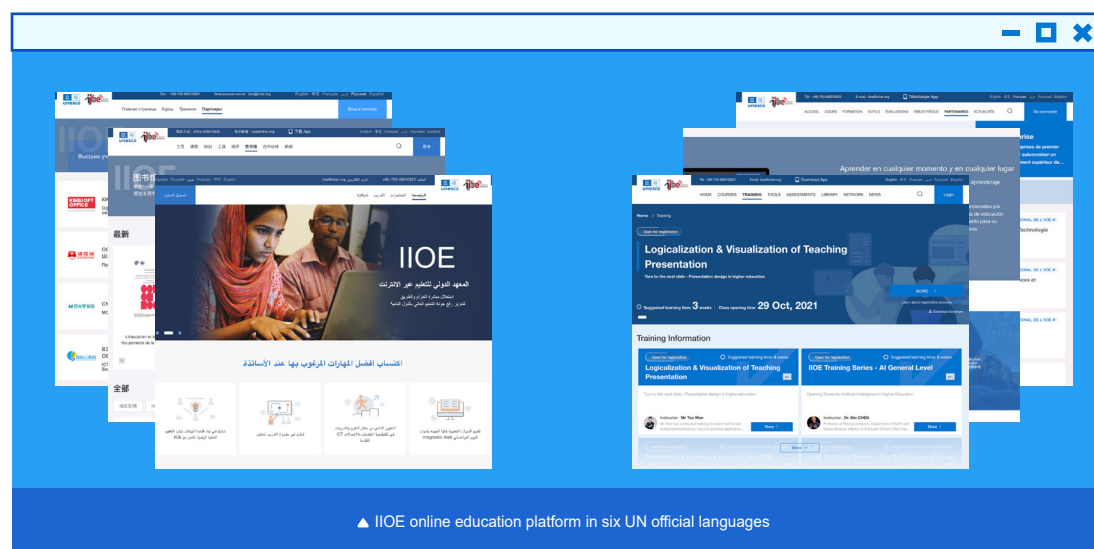
UNESCO-ICHEI has participated in diverse transnational cooperation in higher education, in which localisation development has been the critical strategy for project quality assurance and influence expansion. Localised international cooperation strategy needs to pay attention to the important influence of language and culture. As the International Institute of Online Education (IIOE) projects progress, UNESCO-ICHEI is concerned about the serious shortage of training resources for blended teaching and learning capacity and digital literacy of teachers in universities in developing countries, especially in the Arabic, French, Russian, and Spanish speaking regions. As soon as the IIOE was established, UNESCO-ICHEI formulated a development strategy to gradually cover the six official languages of the United Nations and completed the initial construction of a six-language network with diversified training resources this year. At the IIOE Roundtable held at the main venue of the 3rd World Higher Education Conference, UNESCO-ICHEI, together with global partners, officially launched the IIOE services in six UN official languages.
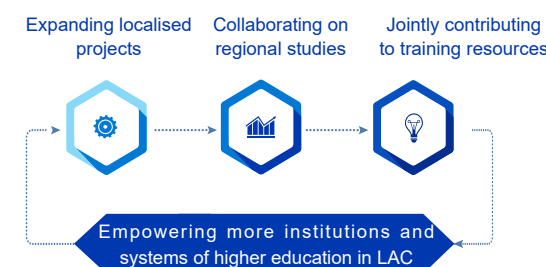

▲ IIOE Roundtable Meeting on Live

Important Release#3: Regional Cooperation in Latin America and Caribbean

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Higher education for all.

—— Motto of UNESCO IESALC

At the IIOE Roundtable Meeting held at the Main Venue of WHEC2022, UNESCO-ICHEI and the UNESCO International Institute for Higher Education in Latin America and the Caribbean (UNESCO IESALC) officially established partnerships, marking a new chapter of regional cooperation in Latin America and Caribbean (LAC).As it is a new region to UNESCO-ICHEI, in order to better understand the development level and actual needs of higher education digital transformation in the region, UNESCO-ICHEI and UNESCO IESALC will jointly conduct a policy research project on the digital transformation of higher education in the region under the framework of the future of education. This joint policy research will select to study five representative member countries in LAC for policy analysis, such as Brazil, Argentina, Mexico, and Venezuela. The policy research will be conducted through expert consultation and country studies, forecasting the future trends of higher education in LAC, and providing policy recommendations to the governments of certain countries for higher education digital transformation.

Expanding localised projects → Collaborating on regional studies → Jointly contributing to training resources

Empowering more institutions and systems of higher education in LAC

The collaboration between UNESCO IESALC and UNESCO-ICHEI will further enrich the UNESCO-ICHEI's regional research cooperation, localisation project development, and training resources in Latin America and the Caribbean, empowering more higher education institutions and systems in the region. In the future, UNESCO-ICHEI will continue to cooperate with governments, higher education institutions, international organisations, and enterprises in Latin America and the Caribbean. In this way, the IIOE, research projects on the digital transformation of higher education, and the Smart Classrooms Project can benefit more institutions and agencies, dedicated to the "Future of Education" initiative of UNESCO to realise an inclusive and equitable quality higher education and the call for "Open Science".

▲ UNESCO-ICHEI and UNESCO IESALC announce the official opening of collaboration

• Exhibition on the Theme of "Towards a Shared Future of Higher Education Digital Transformation"

During 18-20 May, UNESCO-ICHEI and Huawei set up a joint booth at the main venue of WHEC2022. In the exhibition area, with the theme of "Towards a shared future of higher education digital transformation", multimedia forms such as pictures, texts, and videos in the six official languages of the United Nations have been adopted to show the work results of UNESCO-ICHEI based in Shenzhen, which has served the world and promoted the digital transformation of higher education in developing countries, as well as the contribution of Shenzhen to the development of global higher education. A reception and communication area was also set up at the booth for various participants to learn about the work of UNESCO-ICHEI and to communicate with it. In addition to the offline exhibition, UNESCO-ICHEI also set up a virtual online zone in new media forms, providing virtual exhibition viewing and remote participation services for online users in various formats.

During the conference, the booth received nearly 1000 visitors from all over the world. The conference space included in the booth received many batches of visits and negotiations from Chinese missions to UNESCO and Spain, officials from Spanish foreign affairs and education departments, senior officials from UNESCO, and other international organizations and institutions, and delegations from various universities and enterprises. In addition, the concurrent online exhibition and live streaming coverage attracted more than 10,000 visitors to watch the exhibition and the conference live.

Scan QR Code to Watch the Video

Engaging Future Forms of Higher Education

The International Centre for Higher Education Innovation under the auspices of UNESCO (UNESCO-ICHEI) joins WHEC2022 from Shenzhen, China. UNESCO-ICHEI is a category 2 centre jointly established by **UNESCO and Shenzhen** Municipal People's Government, carrying core missions to facilitate digital transformation of higher education in developing countries through the adoption and application of Information and Communication Technologies (ICTs).
Please follow our videos and exhibitions to learn more about our work.
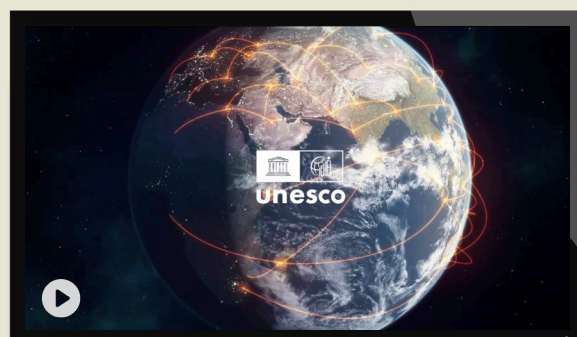
▲ UNESCO-ICHEI Introduction Video (2022 ver.)
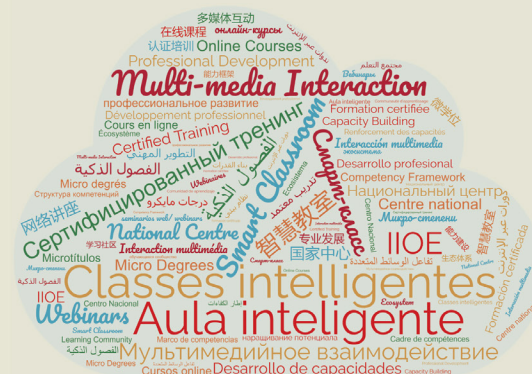
Digital Transformation for Quality and Equitable Higher Education

Since its inception in 2016, UNESCO-ICHEI has worked extensively to help higher education institutions in developing countries establish capacities for digital transformation and advocate quality and equitable higher education. UNESCO-ICHEI carries core missions such as knowledge production, capacity building, technical support, and information sharing. Through a series of research and practical projects such as the International Institute of **Online Education (IIOE), Smart Classroom Project (SCR), and the UNESCO-Shenzhen Funds-in-Trust Project (SFIT)**, UNESCO-ICHEI's works have reached to and benefited more than 135 countries across the globe.

▲ Snapshot of the Third World Higher Education Conference
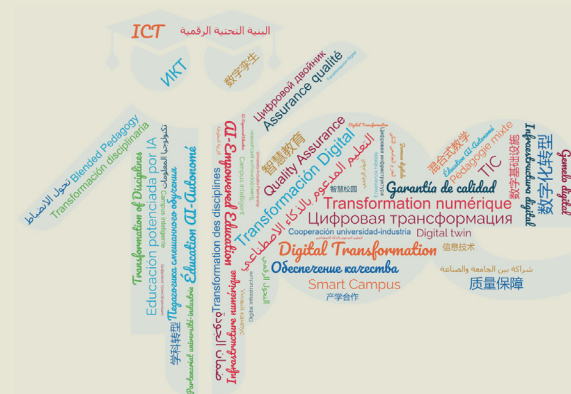
Together for a Shared Digital Future

UNESCO-ICHEI has always been an advocate for cross-sectoral collaboration in higher education. Many of the key contributions of UNESCO-ICHEI's projects have been made by a coalition of **Higher Education Institutions, Enterprises, and Intergovernmental Organisations.** At WHEC2022, we welcome friends and partners from all sectors to join us to form a supportive eco-system for the digital transformation of higher education.

CLOUD

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Common Actions Shaping the Digital Future: Global Institutions in Barcelona

• Introduction

The 3rd UNESCO World Higher Education Conference (WHEC2022) focuses on the reconstruction of education in the post-pandemic era. The pandemic has prompted the model of distance learning to become an important guarantee for the sustainable development of higher education, but the development disparities between countries have also widened the digital divide. How to develop higher education within the framework of the 2030 Agenda for Sustainable Development to create an equitable, high-quality, and inclusive learning environment and educational content?

At WHEC2022, UNESCO conducted a literature review and policy analysis on the ten themes directly related to the sustainable development of higher education respectively, and looked forward to the horizon of higher education to 2050 and beyond. The following texts are views related to technological progress and digital transformation extracted from the ten thematic documents, with the aim of showing the fields and development directions of technology and ICT in higher education from different functions and perspectives.

Theme 1: Impact of COVID-19 on Higher Education

● For those higher education systems with a solid technological base and that have applied technology to international education and training, choosing the path to technology-empowered internationalization will benefit students' learning. Between institutions that already have good technology to support international education and those without the corresponding infrastructures, we should strive to explore new ways to bridge the widening gap between them.

● We should strengthen the IT infrastructure and enhance connectivity. Higher education institutions should receive adequate support through which to develop the competence to effectively deliver online education; at the same time, we should also provide students with adequate support for online learning, especially in less developed countries.

● We should work together to promote interregional cooperation; support teaching, student learning, research work, and paths to internationalization in less developed countries by adopting technology-driven systems.

Theme 2: Higher Education and the SDGs

● Certain disciplines (economics, law, and technology) in higher education institutions have had a long-term close connection with extra-institutional/private sectors. Generally speaking, this is driven by the economic interests of both parties and has been reinforced by the investment of private sectors on higher education in recent years. For example, the "Horizon 2020" programme carried out by the European Union explicitly states that priority will be given to projects that promote technological innovation and economic returns. This strategy has clearly proved fruitful from the perspective that the interaction alone has promoted the development of new technology that strongly supports the SDGs.

Theme 4: Quality and Relevance of Programmes

● With the rapid development of information and communication technology (ICT) and artificial intelligence (AI), the paradigm of higher education is constantly shifting as global providers, models, target groups, needs and offers, and measurements of quality assurance continue to change. At the same time, the pandemic has disrupted the development of global higher education. A new system needs to be established so as to guarantee the quality and relevance of higher education. Recently, with the rapid expansion of ICT and the introduction of e-learning and mobile devices, education has entered a third era characterized by changes and subversions – changes in the nature, failures in prediction, as well as a great number of innovations, challenges, and opportunities within the field of education.

● Learning models in the field of higher education have changed due to the greater diversity of students' interests and goals. Compared to the pre-ICT era, time allocated to each course is significantly reduced, which makes learning less effective again. According to a research, registered students in higher education now show a significantly lower ability level than their predecessors 50 years ago.

● Thanks to the advances in technology and the diversification of information sources, students are no longer dependent on a single source of information when pursuing their careers, which has also contributed to a new paradigm of higher education in which lifelong and self-directed learning accounts for a substantial proportion. Thus, in the ICT era, information is no longer the currency of education, as it has been since the Middle Ages. The "new currency" of higher education includes core skills in problem solving, critical thinking, and basic skills (e.g., language and digital skills), intelligence, and insight, etc.

Theme 5: Academic Mobility in Higher Education

● While working to narrow the digital divide, higher education institutions also need to develop a sustainable and inclusive path to internationalization. Digital rights, including the availability of the Internet and computing technologies, are becoming more and more important. The rise of digital supply chains may lead to private sector involvement and control, making higher education learning and research platforms increasingly commercialized and profit-oriented (Salmi&Tavares, 2016; Bacevic, 2019; Mirowski, 2018). An inclusive world-class higher education system should address the dual challenges of physical and digital spaces.

Theme 6: Higher Education Governance

● Among the challenges such as the fact that not everyone has access to technology and the potential for misuse of student information, information technology (IT) may still be a promising resource for developing university programmes and strengthening governance models.

● It is also important to address the unequal spatial distribution of Internet facilities between urban and rural areas and between countries. Since IT can lead to greater inequality between rich and developing countries, the priority for the governance of higher education institutions in less developed countries should be to issue policies that will accelerate investment in technology. Then, it is also important to encourage professional training for faculty members and administration on different IT issues, including cybersecurity, personal data protection, data transparency, and the possibilities and benefits that technology brings to education.

Theme 9: International Cooperation to Enhance Synergies

● On the long road to advancing the goal of open, inclusive, and universal education, the incorporation of technology—especially digital technology—in international cooperation in higher education seems to be a shortcut to rapid developments. However, just like the agricultural and industrial revolutions, the digital revolution can exacerbate inequality and exclusivity (UNESCO, 2021). Therefore, technology in education and knowledge should be public in nature, so as to avoid the exclusiveness and internal friction of the digital knowledge sharing spaces (UNESCO, 2021).

• Achievements of UNESCO Institutions at WHEC2022

International Association of Universities (IAU): Finding Pathways to Digital Transformation

The International Association of Universities (IAU) engages with higher education stakeholders worldwide and shares its expertise on strategic issues for higher education and society. It actively contributed to the UNESCO WHEC2022 by offering university perspectives on leading-edge themes. The IAU organised the following sessions at the conference:

● Technical Expert Group (TEG) Round Table Theme 9: International Cooperation to Enhance Synergies & Round Table Theme 10: Reimagining the Futures of Higher Education

● Reimagining the Futures of Higher Education

● IAU Round Table: Leading Universities into the Future—Finding Pathways to Transformation

● Joint UNESCO, IAU, SDSN/Mission4.7 Session: Higher Education's Role in Securing the Future—A More Equitable, Peaceful and Sustainable Society. Are Universities Ready to Assume Their Full Responsibility?

link

https://iau-aiu.net/IAU-at-UNESCO-WHEC2022

Knowledge Product

Transforming Higher Education in a Digital World for the Global Common Good: Policy Statement of the International Association of Universities (IAU)
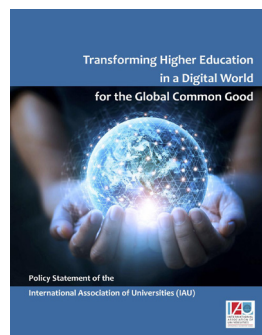
Digital transformation is one of the four strategic priorities of the IAU. In light of the trend towards digital transformation, and following intensive consultations with relevant stakeholders, the IAU has issued a Policy Statement entitled Transforming Higher Education in a Digital World for the Global Common Good, which outlines essential values and principles that must underpin the digital transformation for the common good. The Policy Statement represents the commitment of IAU members and its partners to build a humanistic, ethical, inclusive and purpose-based digital transformation of higher education for the global common good.

link

https://www.iau-aiu.net/IMG/pdf/whec2022_open_knowledge_product_iau_policy_statement__digital_transformation_of_he.pdf

About IAU

The International Association of Universities (IAU) is an international non-governmental organisation founded in 1950 under the auspices of UNESCO to promote exchange and cooperation in higher education. One of the priorities in its strategic plan is to "promote the design of inclusive digital transformation strategies in higher education institutions (HEIs)", which is highly consistent with the vision and mission of ICHEI. IAU has some 600 member higher education institutions and organisations from 130 countries including China. It also conducts research and offers a series of publications including *Higher Education Policy and IAU Horizons*.

International Association of Universities (IAU)

UNESCO International Institute for Higher Education in Latin America and the Caribbean (IESALC): Resuming or Reforming

The UNESCO International Institute for Higher Education in Latin America and the Caribbean (IESALC), as one of the main co-organisers of WHEC2022, led several sessions of discussions and launched reports on higher education, including Resuming or Reforming? Tracking the Global Impact of the COVID-19 Pandemic on Higher Education after Two Years of Disruption, Supporting Women Participation in Higher Education in Eastern Africa: Building Sustainable and Equitable Higher Education Systems in Kenya, Uganda and South Sudan (a joint project with the UNESCO Regional Office for Eastern Africa), Gender Equality: How Global Universities are Performing (a joint collaboration with Times Higher Education), and a report on international aid.

link

https://www.iesalc.unesco.org/en/2022/06/14/iesalcs-leading-role-at-the-unesco-world-higher-education-conference/

About IESALC

Established in 1997, the UNESCO International Institute for Higher Education in Latin America and the Caribbean (IESALC) is the sole specialised institute of the United Nations system with the mission to contribute to the improvement of higher education in member States and is one of the sponsoring organisations of WHEC2022. IESALC carries out its activities through four programmes: research, capacity building, technical cooperation, and concerted advocacy. It has established a partnership with ICHEI in 2022 to promote the digital transformation of higher education in the Latin American and the Caribbean (LAC) region.

Knowledge Product

Resuming or Reforming? Tracking the Global Impact of the COVID-19 Pandemic on Higher Education after Two Years of Disruption
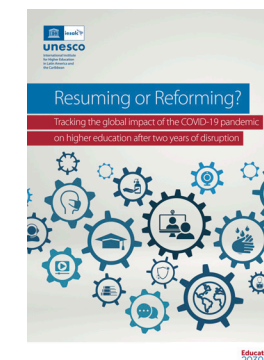
The report offers relevant insights on the impact COVID-19 has had on higher education systems, highlighting global responses and how this experience can help us identify areas of improvement and strength.

The report notes that the impact of COVID-19 on higher education has been diverse and profound and varies from institution to institution and from country to country. Higher education institutions (HEIs), students, faculty, and staff have demonstrated significant efforts to be resilient and rapidly adapt to the systemic changes brought on by the pandemic. With the increase in protocols and restrictions, higher education systems played a vital role in contributing to finding solutions, including COVID-19 vaccine development. The four thematic sections of the report detail the impact of COVID-19 on:
(a) higher education administration and management
(b) teaching and learning,
(c) research
(d) internationalisation. The report ends with lessons learned and takeaways that can be useful for future action and planning.

link

https://www.iesalc.unesco.org/app_en/ver.php?id=37

UNESCO Institute for Information Technologies in Education (IITE): Open Universities and Higher Education Transformation

On 19 May 2022, the UNESCO Institute for Information Technologies in Education (UNESCO IITE) and the Commonwealth of Learning (COL) co-organised the round table "Role of Open Universities in Transforming Higher Education" at WHEC2022.

The round table was intended to bring together the representatives of higher education institutions (HEIs) from different countries and regions worldwide to discuss how open universities can lead the transformation of higher education and encourage traditional HEIs to learn from open universities in order to ensure sustainability and scalability. Opening the round table, Prof. Asha Kanwar, President and CEO of COL, emphasised the profound experience of open universities in distance and blended learning aimed to contribute to the transformation of higher education and said that "ensuring lifelong learning opportunities, social justice, equity and inclusion by means of blended learning has become central to their mission". In his opening remark, Prof. ZHAN Tao, Director of UNESCO IITE, also reaffirmed the unique role of open universities in transforming higher education. The round table speakers were unanimous about the need for changing the attitude of learners and governments towards open education. They emphasised the importance of construction of the bridge between traditional and distance learning universities, seamless connection between higher education (HE) and technical and vocational education and training (TVET) and more intense collaboration, as well as recognition of credits. In addition, they noted the need for open policies.

Knowledge Product

UNESCO IITE launched the Russian edition of the new UNESCO Curriculum on Media and Information Literacy

Second edition of the UNESCO Curriculum on Media and Information Literacy for Educators and Learners entitled "Media and Information Literate Citizens: Think Critically, Click Wisely!" has been translated into Russian by UNESCO IITE.

The updated edition of the UNESCO Curriculum on Media and Information Literacy (MIL) presents a comprehensive competency framework of MIL and offers structured pedagogical suggestions to educators and learners. This resource links media and information literacy to emerging issues, such as artificial intelligence, digital citizenship education, education for sustainable development, cultural literacy and the exponential rise in misinformation and disinformation. In addition, the UNESCO MIL Curriculum outlines transformations of media and information environment taking place during the last decade and requiring an entirely new understanding of media and information and the ways that it spreads and where it comes from.

The publication is designed to serve as the definitive global framework for teaching the key twenty-first century skills in the coming years.

link

https://iite.unesco.org/news/unesco-iite-launched-the-russian-edition-of-the-unesco-curriculum-on-mil/

About UNESCO IITE

The UNESCO Institute for Information Technologies in Education (UNESCO IITE) was established by the General Conference of UNESCO at its 29th session (November 1997) and is located in Moscow, Russian Federation. IITE is the only UNESCO category 1 institute that holds a global mandate for information and communication technology (ICT) in education. The mission of IITE in the new era is promoting the innovative use of ICT and serving as facilitator and enabler for achieving Sustainable Development Goal 4 (SDG 4) through ICT-enabled solutions and best practices.

UNESCO Institute for Lifelong Learning (UIL): Higher Education and Lifelong Learning in the Digital Age

In 2020–2021, the International University Alliance (IUA) and the UIL cooperated to develop and disseminate a global survey on the role of higher education in lifelong learning. It paid heed to how lifelong learning could be integrated with the concept and existing achievements of higher education in the era of highly developed science and technology. The achievement report was presented at the UNESCO 2022 World Higher Education Conference.

Global Survey Report: The Contribution of Higher Education Institutions to Lifelong Learning
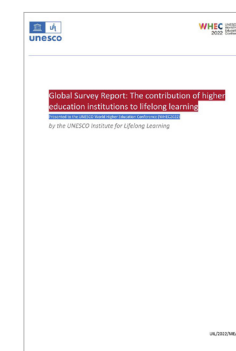
This report presents the results of a global survey administered by the UIL on the contribution of universities and other higher education institutions (HEIs) to lifelong learning (LLL). It was conducted with the aim of developing a knowledge base on how and to what extent HEIs contribute to the implementation of LLL. There is also a policy brief that provides insights on principal areas of action for policymakers and other stakeholders. It highlights the importance of enabling policy environments at the national and institutional level, looks at institutional structures and mechanisms, and evaluates different ways of widening access and increasing participation to foster the transformation of HEIs into lifelong learning institutions.
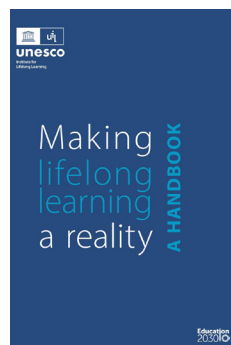
link

https://uil.unesco.org/contribution-higher-education-institutions-lifelong-learning-global-survey-report-presented-unesco

Knowledge Product

Make Lifelong Learning a Reality: A Handbook

This handbook puts forward that LLL presents an effective and potentially transformational means of addressing the complexities of modern life. It provides information, evidence and basic conceptual models to facilitate the adoption of LLL in national and local settings. It provides evidence from diverse initiatives and describes some of the contemporary issues to which lifelong learning responds—including how it shapes the 2030 Agenda for Sustainable Development.

link

https://uil.unesco.org/making-lifelong-learning-reality-handbook

About UIL

The UNESCO Institute for Lifelong Learning (UIL) is one of UNESCO's key education-related institutes and holds a global mandate for lifelong learning. UIL supports Member States in the field of lifelong learning with a focus on adult and continuing education, literacy and non-formal basic education. It pays special attention to UNESCO's Global Priority Africa and Global Priority Gender Equality.

unesco
Institute for Lifelong Learning

Global Education Monitoring Report (GEM Report): The Contribution of Enterprises and Private Sectors

At 2:30 pm local time on 19 May in Barcelona, the Global Education Monitoring Report (GEM Report) team and the International Network of Educational Institutions held a special conference on equity and inclusion in higher education. The conference theme is "Equity and Inclusion in Higher Education: Multiple Actors for A Shared Vision", which aims to learn from university leaders, students, as well as state and non-state actors. Through experience sharing, the participants will think about how to jointly safeguard and expand equity and inclusion in higher education.
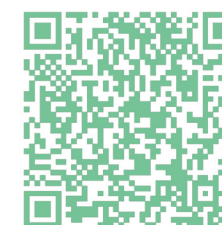
link

https://en.unesco.org/gem-report/events/2022/equity-and-inclusion-higher-education-multiple-actors-shared-vision-whec-2022

Knowledge Product

2021/2 Global Education Monitoring Report: Non-State Actors in Education

Non-state actors' role extends beyond provision of schooling to interventions at various education levels and influence spheres. Alongside its review of progress towards SDG 4, including emerging evidence on the COVID-19 pandemic's impact, the 2021/2 GEM Report urges governments to see all institutions, students and teachers as part of a single system. Standards, information, incentives and accountability should help governments protect, respect and fulfil the right to education of all, without turning their eyes away from privilege or exploitation. Publicly funded education does not have to be publicly provided but disparity in education processes, student outcomes and teacher working conditions must be addressed. Efficiency and innovation, rather than being commercial secrets, should be diffused and practised by all. To that end, transparency and integrity in the public education policy process need to be maintained to block vested interests.

—UNESCO, 2021, Abstract of the 2021/2 Global Education Monitoring Report – Non-State Actors in Education: Who chooses? Who loses? , Paris, UNESCO

link

https://unesdoc.unesco.org/ark:/48223/pf0000379875_eng

About GEM Report

Established in 2002, GEM Report is an editorially independent report based on sound evidence published by UNESCO, with the mandate to monitor progress on education targets in the SDG 4 monitoring framework. With 17 editions between 2002 and 2021, it received mandate from 160 governments to monitor progress on education targets in the SDG 4 monitoring framework and help relevant partners to implement their national and international strategies. It is an indispensable part of the global education architecture. It successfully fulfils its mandate, providing rigorous, relevant, high-quality and authoritative evidence for its broad audiences.

unesco
Global Education Monitoring Report

UNESCO International Institute for Educational Planning (IIEP): Technology-driven Flexible Learning Model

At the third World Higher Education Conference, UNESCO IIEP organised a round table on the theme "Flexible learning pathways in higher education—what is the way forward?" to discuss its recent research results on flexible learning pathways (FLPs). Policies related to FLPs can help higher education (HE) systems adapt to diverse learners' needs, offering them a greater choice and removing barriers to their access and progression in HE. Based on the experience of countries participating in this collaborative study, the study shows that FLPs are the key to achieving the Education 2030 Sustainable Development Agenda, which requires the establishment of a bridging education system with multiple entry and exit paths by recognising formal, non-formal and informal learning. Therefore, the theme is highly relevant to the present and future of higher education.

link

http://www.iiep.unesco.org/en/higher-education-changing-and-challenging-world-14177

Knowledge Product

Refugees' Access to Higher Education in Their Host Countries: Overcoming the "Super-Disadvantage": Policy Paper

UNESCO IIEP participated in a round table on data and knowledge product and issued a policy paper on refugees' access to higher education in host countries together with the United Nations High Commissioner for Refugees after the conference, facilitating the policy directions for supporting vulnerable groups and eliminating learning disabilities to gain more attention. The paper presents inclusive policies and good practices from the countries analysed and

their higher education institutions (HEIs), organised by type of obstacle to accessing higher education. It concludes by presenting 15 recommendations on how host countries can support refugees' access to their national systems, arguing strongly for an "equality opportunity approach" in terms of national policies, and also for caring measures at the level of HEIs, who share a combined responsibility and whose actions can mutually reinforce each other.

link

http://www.iiep.unesco.org/en/publications-en?slideshow=newest

About UNESCO IIEP

The International Institute for Educational Planning (UNESCO IIEP) was established in 1963 as an integral part of UNESCO. As the only specialised organisation with the mandate to support educational policy, planning and management, IIEP plays a unique role within the United Nations system. It develops the capacities of education actors to plan and manage their systems through its programmes of training, technical cooperation, policy research and knowledge sharing.

Achievements of Other Higher Education-Related Organisations at WHEC2022

Global University Network for Innovation: New Visions for Higher Education towards 2030

During the third World Higher Education Conference (WHEC2022) held in Barcelona, the Global University Network for Innovation (GUNi) presented the 8th GUNi Higher Education in the World Report: "New visions for higher education institutions towards 2030". The Report analyses the state of higher education in the world and seeks to respond to the need to transform HEIs based on the experience accumulated by GUNi in the promotion of global and regional analyses and in the production of knowledge for institutional action and the formulation of public policies.

More than 90 authors have contributed to the Report, which analyses the state of universities around the world. The Report covers a wide range of topics: from the digital-human future to governance and public service, while addressing sustainability, work, and citizenship, among other aspects. As a distinctive feature, the Report focuses mainly on institutions and introduces regional perspectives with the aim of ensuring the applicability of the findings. The Report carries out a detailed analysis of the current situation in order to keep HEIs advancing successfully towards 2030 and beyond.

About GUNi

GUNi was created in 1999 after the first UNESCO World Higher Education Conference held by UNESCO to follow up and facilitate the implementation of its main decisions. It is supported by UNESCO and the Catalan Association of Public Universities (ACUP), which hosts its secretariat and presidency since 2014.

It is one of the world's leading think tanks on higher education policy and management. As an international network, GUNi currently gathers 268 members from 85 countries, including higher education institutions, UNESCO Chairs and research centres. It is also a reference institution in the implementation of the 2030 Agenda and the SDGs in higher education. GUNi's mission is to foster the role of higher education in society by supporting the renewal of its visions and policies around the world in terms of public service, relevance, social responsibility and innovation.

link

https://www.guninetwork.org/about-guni-0

Higher Education in the World Report 8: New visions for higher education institutions towards 2030

Huawei: Digital Talents Enable Sustainable Development of Higher Education

Huawei hosted the Digital Talent Summit on 17 May in Barcelona as part of the WHEC2022. The summit was attended in person or virtually by more than 80 experts from the education sector representing government, academia, industry, and UNESCO. The guests discussed how technology can play a role in reinventing higher education for a sustainable future.

UNESCO Assistant Director-General for Education Stefania Giannini and Huawei's Board Director & Senior Vice President Vincent Peng kicked off the event describing the increasingly important role technology is playing in innovation and education. Peng called for universities, corporations, and governments to work together for a sustainable and inclusive future. He also spoke on the initiatives Huawei is pursuing to bridge the digital divide and developing a talent ecosystem, including the Huawei ICT Academy project where university-enterprise collaborations help universities train new ICT talents through dedicated courses, training boot camps, and competitions.

About Huawei

Founded in 1987, Huawei is a leading global provider of information and communications technology (ICT) infrastructure and smart devices. Huawei's mission is to bring digital to every person, home and organisation for a fully connected, intelligent world.

HUAWEI

Huawei Digital Talent Summit

May 17-20, 2022   Barcelona, Spain

## European University Association: Promoting Open Science and Regional Dialogue

At 2:30 pm on 19 May, Barcelona time, a roundtable on "Innovations and proposals for interregional cooperation in Open Science from a university perspective" hosted by EU-LAC Foundation and OBREAL Global was held at the venue. EUA President Michael Murphy represented EUA at this roundtable, which is part of the "Open Science: Innovations, Challenges and Projections for the Future based on an Inter-Regional Dialogue" initiative jointly organised by EU-LAC Foundation and OBREAL Global. The initiative aims to provide spaces for exchange, thus promoting understanding of open science (OS) practical tools.

About EUA

The European University Association (EUA) represents more than 850 universities and national rectors' conferences in 49 European countries. Through continuous interaction with a range of other European and international organisations, EUA ensures that the independent voice of European universities is heard. EUA provides unrivalled opportunities for members to share best practices by participating in projects, events and other mutual-learning activities involving a wide range of universities. The Association also provides members with unique opportunities to shape European policies and initiatives affecting higher education and research.

eua EUROPEAN UNIVERSITY ASSOCIATION

Association of African Universities: Exploring a New Path of Higher Education in Africa

During the third UNESCO World Higher Education Conference (WHEC2022), Prof. Olusola Oyewole, Secretary General of Association of African Universities (AAU), attended several activities and participated in discussions, sharing his perspectives and insights on higher education.

● On 20 May, participants discussed how to address the challenges faced by HEIs through regional approaches at the roundtable hosted by the GUNi with the theme of "From Vision to Action: the regional approach to transformation of HEIs". The speakers presented specific challenges of their regions and showed the necessary actions that need to be taken or that are already being implemented to address them.

● The roundtable, co-chaired by DAAD-EU and Nuffic, featured Prof. Olusola Oyewole on "From employability to job creation: How to create effective university-business ecosystems in Africa?" and discussed why entrepreneurial orientation and supporting job creation are key new roles of African universities.

● At the roundtable on the theme "Innovations and proposals for inter-regional cooperation in Open Science from the perspective of universities", Prof. Olusola Oyewole said that scientists had been accused of confidentiality for many years, and the Open Science Initiative solved this problem because it promoted international development and made science a common good.

● On 18 May 2022, UNESCO held a high-level meeting on the Global Convention on the Recognition of Qualifications concerning Higher Education at the World Higher Education Conference 2022. Prof. Olusola Oyewole, Secretary General of the AAU, emphasized the importance of the Global Convention in international student mobility and high-quality education.

Infographic: Excerpts from WHEC2022 Data Report
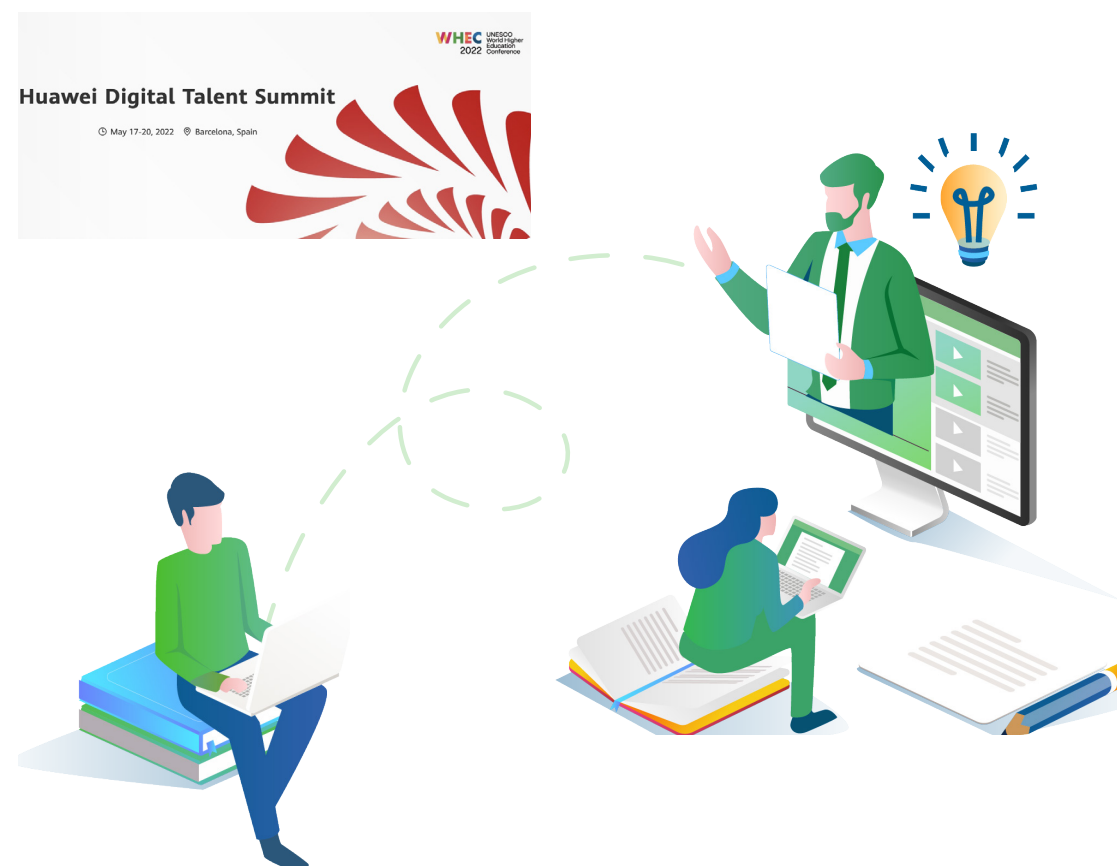
The Association of African Universities (AAU) was founded in 1967, with an initial membership of 46. Its founding conference was attended by the Heads or senior representatives of 34 African Universities. The Association has provided a platform for research, reflection, consultation, debates, cooperation and collaboration on issues pertaining to higher education and served African higher education in a variety of ways.

The Institute for Educational Research, Innovation and Technology: Exploring the Value of Digital Transformation of Higher Education

Within the framework of the third World Higher Education Conference (WHEC2022), the Institute for Educational Research, Innovation and Technology (UNIR iTED) organised a series of four online seminars, with the participation of international experts who contributed their experience in each of the topics discussed, including:

- Education in times of Crises: How to address the challenges that crises bring to education?

- Artificial Intelligence and academic performance: Artificial Intelligence can contribute to improving the academic management. Thanks to big data, and the sensible interpretation of those data sets, academic managers can take informed and more accurate executive decisions.

- Open education, licensing, and sustainability models: Open education is free of charge for many, but there is always a cost. The balance between cost and exploitation can support openness in a sensible way, across various educational settings.

- Transformación digital en Educación Superior (Spanish): Universities need to update and incorporate digital evolution in many areas: student and faculty relations, content, processes and so on. This panel discussed to what extent digital transformation is necessary and how it can be successfully implemented.

About UNIR iTED

The Institute for Educational Research, Innovation and Technology (UNIR iTED) is an international research department of UNIR, which designs, implements and evaluates the university's research strategies with international partners and institutions. UNIR iTED encourages researchers and professors to contribute effectively to research activities at UNIR, by participating in research groups, national and European Research Projects, as well as a wide range of calls and initiatives related to research and to the technological aspect of the institution. It enhances the life cycle of research and innovation projects towards a practical application of the knowledge generated, always seeking to multiply the social impact of scientific activities, and with a special emphasis on international projects. It also focuses on technological aspects that improves the experience of learning, teaching, tutoring and administration of the context and educational process of the University.

unir research

WHEC2022 Global Data Report

Visualisation: UNESCO-ICHEI

Equal Higher Education

▶ **Enrollment rate** 2020

2.35
Billion enrolled higher education (HE) students

43%
Female enrollment
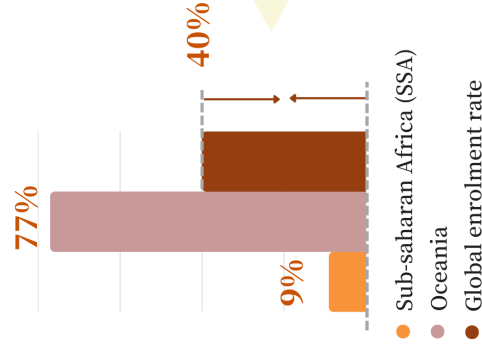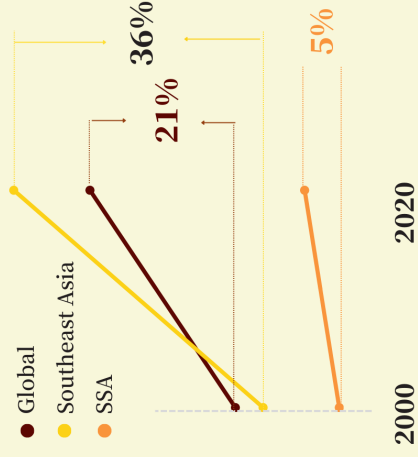
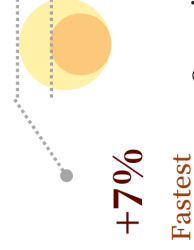**37%**
Male enrollment

2.58%
Internationally mobile students

77%

9%

40%

- Sub-saharan Africa (SSA)
- Oceania
- Global enrolment rate

Increasing rate of HE students percentage

- Global
- Southeast Asia
- SSA

36%

21%

5%

2000 — 2020

▶ **Private HE enrollment rate** 2017

54%
Highest rate

33%
Global

+7%
Fastest

Oceania

Free public education

40%
Highest rate

Latin America and Carribean (LAC)
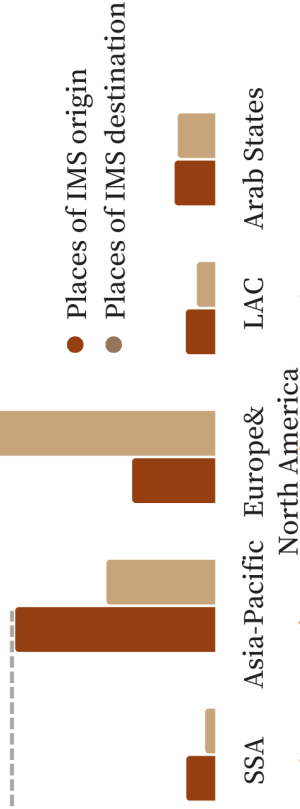
Quality Higher Education

345
working QA institutions globally

100% Oceania

100% Europe& North America

52% SSA

27% LAC
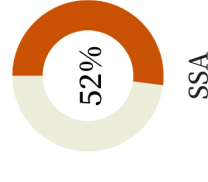
142
QA institutions recognised by external credential agencies

258
QA institutions are member of global or regional QA network

116
countries has National Qualifications Framework for HE

▶ **Internationally mobile students (IMS)**

Destination of IMS
61.5%

- Places of IMS origin
- Places of IMS destination

44.3%
IMS places of origin

SSA

Asia-Pacific

Europe& North America

LAC

Arab States

21

84

133

75

21
西亚北非

▲ **Number of quality assurance(QA) institutions**

▲ **Institutions belong to international QA network**

Inclusive Higher Education

▶ **Diversity**

50%
Students with disability are 50% likely to complete HE than their sound counterparts.

60%
Students of low and high socio-economical status might have 60% difference in higher education accessibility.

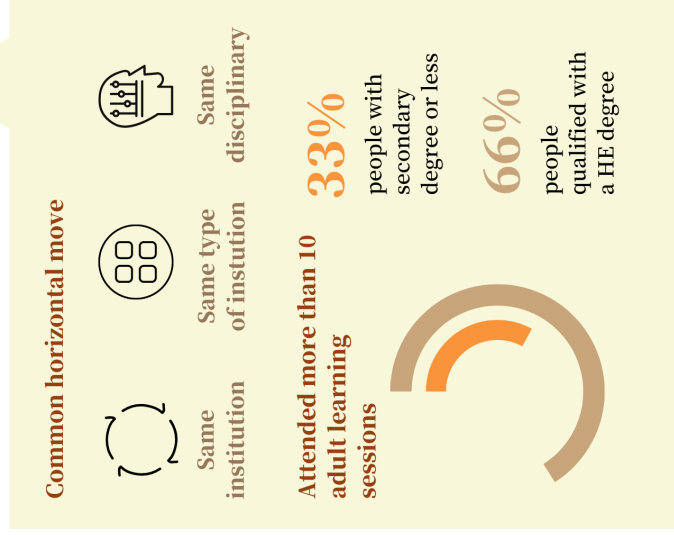**11**
There are at least 11 ways to access HE.

▶ **Flexible Learning Pathways (FLPs) - Case study** 2019

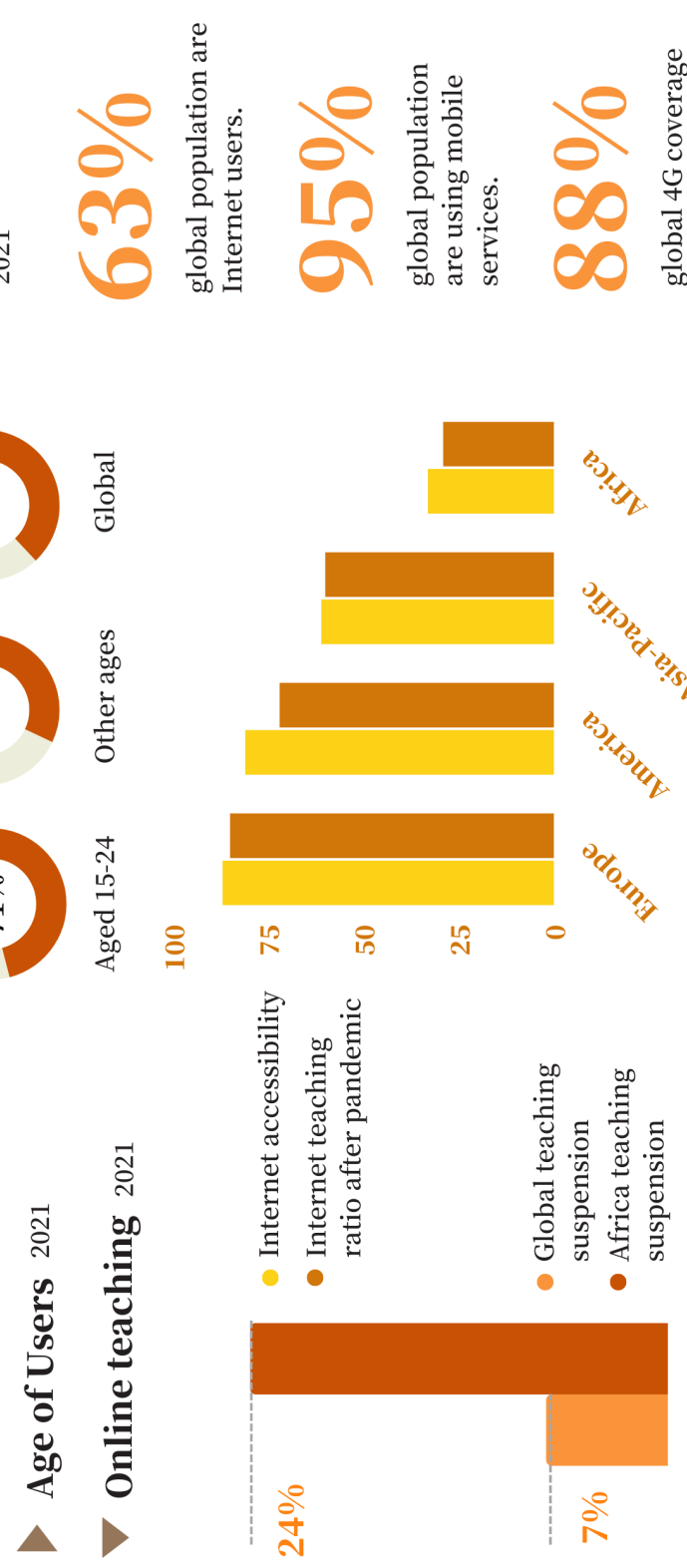⬍ **Vertical move**
enter into a higher learning or education level

⬍ **Horizontal move**
mobilise within the same learning or education level

Common horizontal move

⟲ **Same institution**

▦ **Same type of instution**

🏛 **Same disciplinary**

Attended more than 10 adult learning sessions

33%
people with secondary degree or less

66%
people qualified with a HE degree

55 Countries
has national policies on FLPs

73%

60%

45 Countries
has regulations on FLPs

11 (Countries)

7

● Made FLP-explicit policies
● Partially execute FLPs polcies
● Fully execute FLPs policies

Tech and HigherEd

▲ **Age of Users** 2021

▶ **Online teaching** 2021

● Internet accessibility
● Internet teaching ratio after pandemic

● Global teaching suspension
● Africa teaching suspension

24%

7%

71% Aged 15-24

57% Other ages

63% Global

100
75
50
25
0

Europe
America
Asia-Pacific
Africa

▶ **Internet Access** 2021

63%
global population are Internet users.

95%
global population are using mobile services.

88%
global 4G coverage

● CLOUD ▬▬ 71/72

● Photo Gallery: Highlights of UNESCO-ICHEI

UNESCO SFIT Africa Project Outcome Meeting

Mr. ZHU Jingyang, Consul General of the People's Republic of China in Barcelona, visited the UNESCO-ICHEI booth at WHEC2022
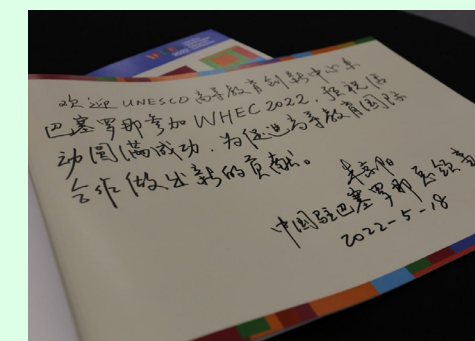
UNESCO-ICHEI, introduced the work to Consul General ZHU Jingyang (Left)
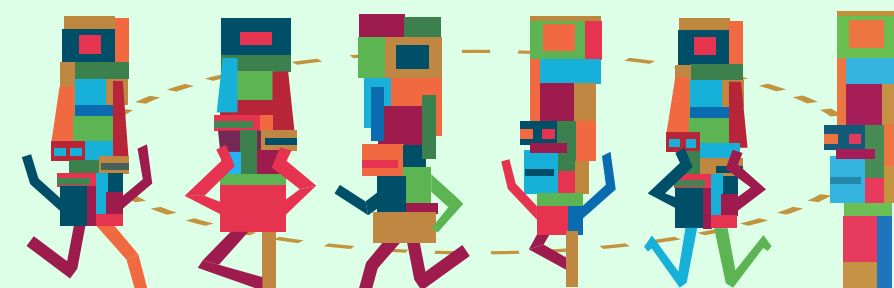
IIOE Roundtable Meeting

Prof. HAN Wei, Executive Deputy Director of UNESCO-ICHEI (left) talked with Ms YU Xiaoping, Counsellor of the Permanent Delegation of the People's Republic of China to UNESCO

Mr. ZHU Jingyang, Consul General of the People's Republic of China in Barcelona, inscribed the UNESCO-ICHEI's participation booklet

UNESCO-ICHEI shared its representation video to Dr Manos Antoninis (second from right), Director of UNESCO's GEM Report

Prof. LI Ming (middle) met with Prof. Silvia Florea (left)

UNESCO-ICHEI met with Professor Lamine Gueye (second from the right), Executive Secretary of ANAQ-SUP of Senegal

UNESCO-ICHEI and IAU in the meeting

The delegation of UNESCO-ICHEI met with Héctor Benitez Pérez (second from the right)

The meeting "Applications of artificial intelligence (AI)" hosted by UNESCO IESALC

Prof. LI Ming delivered a speech at "Huawei Digital Talent Summit"

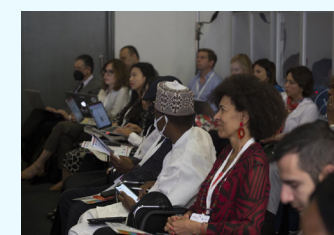Ms DUAN Xiaotong spoke at the meeting hosted by UNESCO IESALC

UNESCO-ICHEI's joint booth with Huawei at the WHEC2022

UNESCO SFIT Africa Project Outcome Meeting

Participants at IIOE Roundtable Meeting

IIOE Roundtable Meeting on Live

W H E C