

Jing Shi Wisdom & Learning

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Be in awe of education, for it shapes the soul of human,
Be cautious to technologies, for its adoption has to be effective,
Be entangled with 'wisdom', for uncertainty tends to be increasing,
Be serious to academics, for academic research needs evidence.

-Dean Ronghuai Huang, delivered at the closing ceremony of the Second US-China Smart Education Conference on March 20, 2017



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Smart Learning Institute of Beijing Normal University

Smart Learning Institute of Beijing Normal University

The Smart Learning Institute (SLI) of Beijing Normal University is a comprehensive experimental platform involving scientific research, technology development and instructional teaching, which is jointly established by Beijing Normal University and a global educational technology company, Eternity (a subsidiary of NetDragon). SLI focuses on finding learning patterns powered by ICT, creating smart learning environment and platforms for lifelong learning, as well as supporting diversified, personalized and differential learning needs for digital learners.

- ▶ Focusing on the methods of design, optimization and evaluation for learning environment as well as developing the key technologies for learning environment engineering aims at providing a widely-spread solution for promoting smart learning.
- ▶ Constructing the theory of smart learning and exploring the approaches of integrating ICT with Education aims at offering an international exchange and cooperation platform to smart learning research.
- ▶ Studying on the characteristics and patterns of schooling, family education, community education, enterprise learning and public learning aims at providing support for constructing a learning-oriented society and smart city.
- ▶ Expanding the experimental areas and schools for smart learning as well as exploring the characteristics of ICT-based instruction and the models of future schools aims at promoting educational transformation and innovation.



Co-Dean Dejian LIU

Chairman of the Board, Executive Director of NETDRAGON, The Special Allowance Expert in State Council, Co-Dean of Smart Learning Institute of Beijing Normal University, Chair Professor at the College of Education of Harvard University.

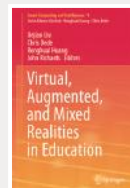


Co-Dean Ronghuai HUANG

Co-Dean of Smart Learning Institute of Beijing Normal University, Director of UNESCO International Research and Training Centre for Rural Education, Director of National Engineering Laboratory for Cyberlearning and Intelligent Technology.

Open Series in Springer

- Lecture Note in Educational Technology
Series Editors: Huang, R., Kinshuk, Jemni, M., Chen, N.-S., & Spector, J.M.
- Smart Computing and Intelligence
Series Editors: Huang, R., Kinshuk, & Dede, C.
- New Frontiers of Educational Research
Series Editors: Zhongying Shi, Ronghuai Huang, Zuoyu Zhou.



Springer's Journals

- Smart Learning Environment
(The Official Journal of IASLE)
Editors: Huang, R., Kinshuk, & Soloway, E.
- Journal of Computing in Education
(The Official Journal of GCSCE)
Editors: Huang, R., Hwang, G.-J., Kong, S.-C., & Chen, W.



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Design and Learning Laboratory

Study on the features and patterns of design, computational and innovative thinking for youth; Develop courses and books about design methodology, computational thinking and ICT; Build cooperative platform with world-renowned universities, enterprises and institutes for design and innovation.



The 48H Competitive Game of Education Design (2019.01)



Discuss with Prof. Larry Leifer at d.School of Stanford University (2017.04.11)

Smart City and Learning Environment Laboratory



Release Conference of White Paper: Smart Learning Environments in China 2015 (2015.09.20)



Index Report of Smart Learning Environments in Chinese Cities



2016 Report of the Cyberlearning Products Development Index in China

Study on the typical learning fields in smart cities and learning societies; Create database of smart learning environment; Publish serial reports on learning environment as well as service industry and products of cyberlearning.

Open Educational Resources (OER) Laboratory

Study on the solution of OER under its impact to the developing countries; Construct the OER community for The Belt & Road countries; Publish reports on the trends of ICT in education.



The Third US-China Smart Education Conference (2018.03)



Series of Horizon Report in China



At a Glance: Education Development in the Belt & Road Countries



Smart Learning and OER International High-end Forum (2017.05.25)

ICT-based Instruction Center

Explore the methodology of integrating ICT into education with large-scale experiments; Study on the solutions of smart classroom and smart campus; Provide the services for transferring education through the bridge of the theory and practice.



Initial Conference in Experimental Area of Smart Education in Fuquan, Guizhou Province



101 Education PPT Solution

Educational Robotics Center

Study on the scenarios of robotics in education and the trend of artificial intelligence; Develop the courses for robotic education and STEAM education for K-12 schools. Design educational robotic for various learning fields, such as school, family, etc.



2016 Educational Robotics White Paper: The Global Development



The Next Big Thing: Global Development Status and Trends in Educational Robotics



Prototype of Educational Robotics



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 - Seminar on Smart Education Planning in Xiong'an New Area
 - Conference on the Development of IT Curriculum Standards of Higher Vocational Schools
 - Seminar on Social Administration of Artificial Intelligence Application in Education
 - Annual Academic Review Meeting of SLIBNU in 2019
- ▶ SLIBNU, Tencent Education, Tencent Research Institute jointly released China Digital Learning Index Report 2019
- ▶ Co-deans were invited to the Fourth China-CEEC Conference on Innovation Cooperation and released the latest academic achievement of SLIBNU.



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- ▶ Ahmed Tlili, Postdoctoral Fellow



2019

The Events of SLIBNU

1

2019 Beijing Normal University Smart Learning · Design Education Academic Week was Successfully Held

From January 4 to 8, Beijing Normal University Smart Learning · Design Education Academic Week was successfully held. This academic week was aimed to promote the interdisciplinary integration of science and technology. The multidimensional exploration of design education took various forms, including the forum of innovative education in science and technology, the exhibition of excellent works in "Design and Learning", the 48-Hour Education Design Competition and the academic workshops. These activities attracted teachers and students from more than ten universities in China.



The 48-Hour Education Design Competition on-site



Group photo of guests in academic salon during the Academic Week

Dean Huang was Invited to Take Part in International Conference on Collective Action for Knowledge Economy with Technology (CAKE-TECH)

From February 25 to 26, Dean Huang was invited to the International Conference on Collective Action for Knowledge Economy with Technology (CAKE-TECH) in Allama Iqbal Open University.



Group photo of the guests of CAKE-TECH

The Fourth US-China Smart Education Conference

On March 18 to 20, the Fourth US-China Smart Education Conference: "Science Education under the Digital Transformation" was jointly hosted by BNU, UNT, National Engineering Laboratory for Cyberlearning Intelligent Technology (NEL4CIT) and Smart Learning Institute of Beijing Normal University (SLIBNU). The Ministry of Education of the United States and China, together with the educational administration officials at all levels, experts and scholars from well-known universities and institutes were invited to give brilliant keynote reports and workshops on science education, educational service robots, MOOC and other hot topics. The Annual Meeting of International Association of Smart Learning Environments (IASLE) and other activities were held at the same time.



Group photo of parts of the guests in The Fourth US-China Smart Education Conference

3

Dean Huang Visited CREATE for STEM Institute of Michigan State University

On March 21th, Dean Ronghuai Huang, Prof. Zheng Yonghe, Prof. Dong Yan and their team visited the CREATE for STEM Research Center in Michigan State University, USA. Dean Huang proposed that the operational mechanism of CREATE should be used as reference, which is guided by theoretical research and focusing on cooperating deeply with other universities, foundations and enterprises, and attaching great importance to the operational mechanism of international cooperation and promotion.



Visit CREATE for STEM Institute

Dean Huang was Invited to "E-records of the two Sessions" hosted by China Education Press Agency

On March 8, Dean Huang was invited to "E-records of the two Sessions" hosted by China Education Press Agency, and was interviewed on the topic "reforming talent cultivation mode and teaching method via intelligent technology".



"E-records of the two Sessions" hosted by China Education Press Agency

Dean Huang was Invited to Attend UNESCO Mobile Learning Week at Paris Headquarters

During Mobile Learning Week 2019, Prof. Ronghuai Huang attended the plenary of "Leveraging AI to enhance education and learning", sharing his opinions with the experts in the domain of "AI+education".



UNESCO Mobile Learning Week at Paris Headquarters on-site

4

Basic Education Quality Improvement and Innovation Project in Qingyang: Serial Activities for Smart Campus Projects

From April to June, in support of the development of the basic education, as well as the construction and application of ICT in education in the old revolution base area Qingyang, Gansu, the project team launched a series of events, such as the training by the name of "Construction, Application and Innovation of Smart Campus in the Era of Artificial Intelligence", the instruction and contest of educational research thesis, which was titled "the Integration and Innovation of IT and Education".



Serial Activities for Smart Campus Projects in Qingyang on-site

4

The Sixth and Seventh “Smart Education” Webinar

In mid-April and mid-June, more than 30 experts and scholars from the United States, Canada, Germany, Serbia and other countries participated in the seminar. A lively discussion was held from various aspects like theoretical policies and practical cases, focusing on the frontier topics of ICT in education, such as OER and MOOCs in universities.



“Smart Education” Webinar on-site

Dean Huang was Invited to the NTU-EON Reality Future of Education Global Summit

On April 25, Dean Huang was invited to the NTU-EON Reality Future of Education Global Summit.

5

“Design Education” Seminar

On May 14, Smart Learning Institute of Beijing Normal University (SLIBNU) and Beijing Design Society jointly held the “Design Education” seminar to discuss the form of society and industry as well as the education and teaching methods in 2035, and to explore how design education can shift from “art design” and “industrial design” to basic education and people’s daily work and life.



Group photo of the guests of the “Design Education” seminar

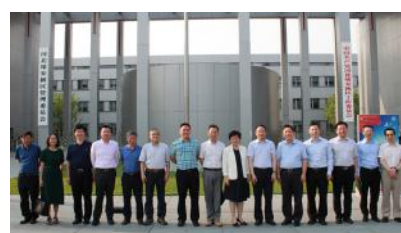
Dean Huang was Invited to the 3rd Global AI+ Adaptive Education Summit

On May 24, Dean Huang was invited to the 3rd Global AI+ Adaptive Education Summit organized by Squirrel AI.

6

Project Closing Conference of “the Strategy for Smart Education Plan in Xiong’an New Area”

On June 27, the Department of Science and Technology of the Ministry of Education held the project closing conference in Xiong’an new area, and organized experts to discuss the strategy for its smart education development. More than 60 guests attended the meeting, including experts from the expert review group, such as Chen Gang, a member of Standing Committee of Hebei Provincial CPC Committee and the Vice Governor of Hebei, Xiong’an New Area CPC Working Committee Secretary and Administrative Committee Director, and Lei Chaozi, the Director of the Department of Science and Technology of the Ministry of Education, and Wu Jianping, an academician of the Chinese Academy of Engineering, as well as representatives of educational field and enterprises from Beijing, Tianjin and Hebei.



Group photo of the guests of the project closing conference

7

The Technical Committee of Innovation Alliance for Virtual Simulation Experiment Teaching was Established

On June 11, the Conference on Construction and Application of Virtual Simulation Experiment Teaching was held in Beijing. The conference discussed how to promote the deep integration of VR technology and teaching, and also established the “Technical Committee of Innovation Alliance for Virtual Simulation Experiment Teaching”. Dean Huang was the first director of the committee.



Group photo of the guests of the conference on-site

The VR Design and Production Competition was Hosted by Eternity

From June 10 to 12, the VR Design and Production Competition of the National Vocational Students Skills Competition was hosted by Eternity Educational Technology Co. in Fuzhou, attracting 246 contestants of 82 teams from 33 provinces, municipalities, and autonomous regions nationwide. It was a lively, grand and unprecedented event.



Group photo of the VR Design and Production Competition on-site

BNU Summer Training Program for The Belt & Road

From July 15 to 21, participants from 13 “Belt & Road” countries have attended the training program. The program took the distinctive courses of BNU as core training courses with field research, experience sharing and other methods for learning and exchanges, so as to promote the development of innovation education in China and “Belt & Road” countries through international exchange and cooperation.



Group photo of the experts and other participants of the training program

Dean Huang was Invited to the IEEE ICALT2019

From July 15 to 18, Dean Huang was invited to IEEE ICALT2019 held in Maceió, Brazil.



Dean Huang talked with Professor Ig Ibert Bittencourt's team.

8

Educational Robots White Paper 2019: The Global Development was Released in Beijing

On August 23, Smart Learning Institute of Beijing Normal University (SLIBNU) and National Engineering Laboratory for Cyberlearning Intelligent Technology (NEL4CIT) jointly released the Educational Robots White Paper 2019: The Global Development at the World Robotics Conference, providing a report that presented a comprehensive understanding about academic research results, industry status and trends, and educational application of educational robots for the academia, education, and industry.



Dr. Zeng Haijun, Vice Dean of SLIBNU

9

Forum on System, Policy and Ethics of AI Education

On August 2, Smart Learning Institute of Beijing Normal University (SLIBNU) and National Engineering Laboratory for Cyberlearning Intelligent Technology (NEL4CIT) jointly hosted the Forum on System, Policy and Ethics of AI Education at the Summit on AI and Big Data Education. This forum focused on the issues such as the system, policy and ethics of AI education, discussing the problems and future suggestions of AI education in terms of these issues.



Group photo of the guests at the forum

Dean Huang was Invited to the SEAMEO CDM 2019

On August 8, Dean Huang was invited to the SEAMEO CDM 2019 held in Bangkok.



Group photo of the guests at the SEAMEO CDM 2019

"Science of Knowledge" International Course

In recent years, Smart Learning Institute of Beijing Normal University (SLIBNU) has successively launched some international courses including "Authentic Learning through Advances in Technologies", "Virtual Reality and Visualization Technology in Education", "Learning, Computing and Intelligence". On September 4, the international course "Cognitive Science, Psychology Science, Computer Science" was launched and the presenters were experts from many countries around the world.



Poster of the "Science of Knowledge" International Course

10

Co-deans were Invited to the Fourth China-CEEC Conference on Innovation Cooperation

On October 8, nearly 600 representatives from more than 300 universities, scientific research institutes, scientific and technological enterprises and government agencies in innovation, digital, artificial intelligence and other fields from China and CEECs attended the conference. Dean Dejian Liu and Dean Ronghuai Huang were invited to the conference. Dean Huang released the latest academic achievement of the SLIBNU research team at this conference, namely Reshaping Education to Develop Creative Competency in the Intelligent Era and Report on ICT in Education in CEEC, and proposed to establish the "Design Alliance for Future Education".



Photo of the Co-deans

11

2019 Global Competition on Design for Future Education was Held

From November 22 to 24, hosted by Beijing Normal University and Beijing Design Society, organized by the Faculty of Education of Beijing Normal University and SLIBNU, and co-organized by Eternity Educational Technology Co., Ltd, the 2019 Global Competition on Design for Future Education was successfully held. With the theme of "Future Education in the Intelligent Era", the competition was held simultaneously in Beijing Normal University, China, University of Novi Sad, Serbia and University of Kairouan, Tunisia.



Group photo of the opening ceremony of the 2019 Global Competition on Design for Future Education

12

2019 Global Competition on Design for Future Education Final

On December 28, the final of 2019 "Global Competition on Design for Future Education" was grandly held at Changping Campus of Beijing Normal University. Guangju Chen, former Vice Principal of Beijing Normal University, addressed at the competition. International judges of the final included Dejian Liu, chairman of NetDragon Websoft Inc., co-dean of Smart Learning Institute of Beijing Normal University; Weizu Song, executive commissioner and deputy secretary general of Beijing Municipal Committee of the Chinese People's Political Consultative Conference, leader of Beijing Municipal Committee of China Democratic League, and founder of Beijing Design Society; Bojan Lalic, Professor of University of Novi Sad in Serbia and Mohamed Jemni, Mohamed Jemni, Director of ALESCO's ICT Department. At last, Serbia team won the Gold Award.



Group photo of the guests and students at the Awards Ceremony of the 2019 Global Competition on Design for Future Education Final

"Young Artificial Intelligence Innovation Initiatives" of Beijing Normal University was Launched

On December 27, Beijing Normal University launched the "Young Artificial Intelligence Innovation Initiatives" (also named "Yuanzhuo Initiatives") to cultivate teenagers' ability to use original algorithms to solve problems in reality, and to establish a collaborative mechanism of production, learning and research so as to promote the transformation of scientific and technological achievements of artificial intelligence enterprises into education and teaching, and to facilitate China as the world's major artificial intelligence innovation Center.



Group photo of the guests at the launching ceremony of the "Young Artificial Intelligence Innovation Initiatives"

The Fourth Design, Computing and Innovative Thinking Cultivating Forum

From December 27 to 30, the Fifth Beijing Normal University Smart Learning Academic Week was successfully held at Changping Campus. During the Academic Week, ten important conferences and activities were also held, including the Fourth Design, Computing and Innovative Thinking Cultivating Forum, the display of the outcomes of "Design & Learning" course, "Design & Learning" Workshop, exhibition of excellent works in "Design & Learning" course, 2019 Global Future Education Design Competition Final and Awards Ceremony, Seminar on Smart Education Planning in Xiong'an New Area and Annual Review Meeting of SLIBNU in 2019.



Dean Huang addressed at the forum of the Fifth Smart Learning Academic Week

Dean Huang was Invited to the ICTA 2019 and Delivered a keynote speech

From December 13 to 15, the 7th International conference on ICT & Accessibility (ICTA19) was held in Tunisia. Dean Huang was invited to the ICTA 2019 and delivered a keynote speech entitled "ICT and OER in education: Future Perspectives". Hosted by Smart Learning Institute of Beijing Normal University (SLIBNU) and ALESCO, the International OER Workshop was successfully held at the conference.



Photo of the International OER Workshop on-site

2019 Global Competition on Design for Future Education was Successfully Held

Introduction

In 2019, from November 22 to 24, hosted by Beijing Normal University and Beijing Design Society, organized by the Faculty of Education of Beijing Normal University and SLIBNU, co-organized by Elernity Educational Technology Co., Ltd and supported by the Chinese Society of Education and the Committee of Beijing Design Week, the 2019 Global Competition on Design for Future Education was successfully opened. It was another grand competition after the 2018 48-Hour Education Design Competition. By building an interdisciplinary and international platform for learning and exchanges, this competition aimed to promote academic exchanges among colleges and universities, improve students' communication ability, create opportunities for practicing cross space, and play the critical role of education for establishing "a community of shared future for mankind". With the theme of "Future Education in the Intelligent Era", the competition was held simultaneously in Beijing Normal University, China, University of Novi Sad, Serbia and University of Kairouan, Tunisia, and the global final will be held in Beijing.



Group photo at the opening ceremony

The Opening Ceremony

Experts who attended the opening ceremony of the competition included Zuoyu Zhou, Vice Principal of Beijing Normal University; Wu Ying, Vice Director of the Department of Vocational and Adult Education of Beijing Municipal Education Commission; Guanzhong Liu, Professor of the Academy of Arts & Design, Tsinghua University; Ronghuai Huang, Dean of Smart Learning Institute of Beijing Normal University; Haijun Zeng, Associate Dean of Smart Learning Institute of Beijing Normal University; Hui Zeng, Supervisor of Beijing Design Society and Yan Sun, Executive Chairman of PILC.



Dean Ronghuai Huang



Supervisor Hui Zeng

Speeches by University Leaders from Three Countries

On behalf of Beijing Normal University, Vice Principal Zuoyu Zhou warmly welcomed all the guests, teachers and students who attended the opening ceremony, and extended greetings to the teachers and students who participated in the competition distantly in University of Novi Sad, Serbia and University of Kairouan, Tunisia. He pointed out that this competition is a vivid case of the interaction between universities, which is a presentation of design thinking, international cooperation, competition and global competence.



Zuoyu Zhou, Vice President of Beijing Normal University

Taha Querfel, Vice President of University of Kairouan, Tunisia, and Prof. Ugljesa Marjanovicto, Advisor of Ministry of Innovation and Technological Development of Serbia also addressed at the opening ceremony through distant connection. They all highly praised the competition and expressed their great pleasure to work together with Beijing Normal University to host the Global Competition on Design for Future Education, hoping more opportunities for cooperation in the future.



Taha Querfel, Vice President of University of Kairouan, addressed at the opening ceremony in Tunisia



Ugljesa Marjanovicto, Advisor of Ministry of Innovation and Technological Development of Serbia, addressed at the opening ceremony in Serbia

Design Expert Guanzhong Liu Delivered the Keynote Speech



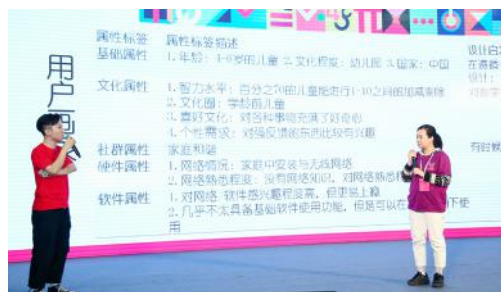
Guanzhong Liu, Professor of the Academy of Arts & Design of Tsinghua University

Topic: Industrial Design—the Practice of “China’s plan”

He stressed the importance of design thinking, encouraged Chinese designers to create an unprecedented way of living, to take Chinese own way of development—“a community of shared future for mankind”, and to shape a better life with our own methodology.

Qualification and Presentation Competition

After working all night, at 6:30 a.m. on November 24, contestants attended the roadshow competition before the final to obtain the qualifications. After fierce competition, 12 teams finally entered the presentation competition.



Photos of contestants during the roadshow competition

Summary from Delegates of Judges

Yiyu Ding, a member of the Central Propaganda Department of the China Democratic League, and Weizu Song, the founder of Beijing Design Society respectively summarized the competition at the closing ceremony. Dean Huang announced the list of finalists and expressed sincere gratitude to the guests, instructors, contestants and staffs at the closing ceremony.



Mr. Ding



Deputy Chair Weizu Song

2019 Global Competition on Design for Future Education Final

On December 28, the final of 2019 “Global Competition on Design for Future Education” was grandly held at Changping Campus of Beijing Normal University. Since its launch in September, the competition has received extensive attention from teachers and students of various colleges and universities. Nearly a thousand contestants from the three countries have signed up. In China, contestants covered 31 universities and colleges as well as over 10 higher vocational schools in 16 provinces across the country.

Speech Review

In the address, Prof. Guangju Chen said that the competition was an activity integrating education innovation, international exchanges, and cross-regional, cross-national, and cross-cultural education construction. In this competition, contestants from different countries fully demonstrated the rich imagination and creativity of the younger generation.



Address by Prof. Guangju Chen

Serbian tutor Ratko Obradovic, Tunisian tutor Ahmed Tlili, and Chinese tutor Zhiying Nian introduced the overall situation of each competition division in detail, shared the interesting people and stories they encountered, and also introduced outstanding representative works of each region.



Serbian Tutor Ratko Obradovic



Tunisian Tutor Ahmed Tlili



Chinese Tutor Zhiying Nian

Final Competition

The final teams are composed of Gold Award teams in each division. They were “We are all right” team from China, “Pedomation” team from Serbia and the “ENDGAME” team from Tunisia. The order of final roadshow was determined by the draw. Professor Guangju Chen, Mr. Weizu Song, Dean Ronghuai Huang, Professor Yonghe Zheng, Deputy Director Hui Zeng, Deputy Director Jingwen Chen, Professor Ratko Obradovic and Ms. Sisi Yu served as the judges of the final.

Before the final, on behalf of the international chief judge team, Dean Dejian Liu introduced five evaluation standards of the competition with the help of a virtual AI character, namely the problem awareness, innovative spirit, future sense, social responsibility and application prospects reflected in the design work and output.



Part of the judges



Dean Dejian Liu introduced the evaluation standards

The roadshow was started by teams from Tunisia, Serbia and China respectively. Judges commented on the works of each team and gave professional opinions and suggestions in terms of the practical operation and innovation of the products.



“Pedomation” team from Serbia



“ENDGAME” team from Tunisia



“We are all right” team from China

After the roadshow, Dean Dejian Liu made detailed comments on the design work of the three teams through distant connection. Mr. Weizu Song, on behalf of the expert jury, delivered a summary speech on the basic situation of the competition and the performance of players from the three teams.



Dean Dejian Liu commented on the works



Mr. Weizu Song made a summary of the competition

Winning Teams and Works Theam

After fierce competition and professional selection, the final winner of the 2019 Global Competition on Design for Future Education was the “Pedomation” team from Serbia. The second place was the Tunisian “ENDGAME” team, and the third place was the Chinese “We are all right” team.



Gold Award: “Pedomation” team from Serbia



Silver Award: “ENDGAME” team from Tunisia
Bronze Award: “We are all right” team from China

Prize	Team	Project
Global Final		
Gold Award	Pedomation	VOVREE-A Visual World to Improve Students' Practice
Silver Award	ENDGAME	Be Safe-Smart Watch and App to Prevent Bullying
Bronze Award	WOSHUODEDOUDUI	Small Vision - An Interactive Smart Book to Subvert Traditional Reading Mode
China Final		
Gold Award	WOSHUODEDOUDUI	Small Vision - An Interactive Smart Book to Subvert Traditional Reading Mode
Silver Award	MIAOMIAOBAN	When You're Old - A Facing-Community Shared Elderly Safety Education Design
	WANGZAI	Let Me Love You More
Bronze Award	KUAILEFEIZHAI	A Future-oriented Knowledge Acquisition Design - Learning from Life for 3-6 Year-old Children's Logical Thinking Training
	JUSTCHUIT	Fun Travel - Innovation for Dreams beyond the Space
	5S	Warm Heart - A Parent-children Companion Game
	CHISUDE	Dragon Heart - To Solve Problems of Language Violence, Create New Approaches for Family Communication
	JIANGDEDOUDUI	Fun Thinking - A Coding Board Game Based on Computer Thinking
Best Poster	WANGZAI	Let Me Love You More

Dean Ronghuai Huang, as the chairman of the competition organizing committee, summarized the competition in the end. He spoke highly of the competition and stated that there are three rational ways to look at education issues, namely education research, news tracking, and education design.

“Young Artificial Intelligence Innovation Initiatives” and the Fourth Design, Computing and Innovative Thinking Cultivating Forum

Introduction

On December 27, hosted by Beijing Normal University, organized by the Smart Learning Institute of Beijing Normal University (SLIBNU) and National Engineering Laboratory for Cyberlearning Intelligent Technology (NEL4CIT), co-organized by Eternity Educational Technology Co., Ltd and supported by Beijing Design Society, the Fourth Design, Computing and Innovative Thinking Cultivating Forum was successfully held at Changping Campus of Beijing Normal University.

This forum invited many scholars, outstanding teachers, research staffs, and excellent representatives from enterprises to share concepts and cases of design, computing and innovative thinking education from different perspectives. It also discussed some hotspots such as artificial intelligence education after the release of the New Generation Artificial Intelligence Development Plan by the State Council.

The “Young Artificial Intelligence Innovation Initiatives” (also named “Yuanzhao Initiatives”) of Beijing Normal University was officially launched at this forum. The initiatives aimed to cultivate teenagers’ ability to use original algorithms to solve problems in reality, and to establish a collaborative mechanism of production, learning and research so as to promote the transformation of scientific and technological achievements of artificial intelligence enterprises into education and teaching, and to facilitate China as the world’s major artificial intelligence innovation Center.



➤ In order to respond to the opportunities and challenges of education in the era of artificial intelligence, serve the demands of major national strategies, better carry out artificial intelligence education in primary and secondary schools, and cultivate innovative talents for the future, Beijing Normal University actively advocates that artificial intelligence can empower basic education and the growth of teenagers. After preparation for nearly one year, Beijing Normal University and National Engineering Laboratory for Cyberlearning Intelligent Technology (NEL4CIT) officially launched the “Young Artificial Intelligence Innovation Initiatives”.

Professor Huang pointed out that artificial intelligence provides a new paradigm for human beings to understand the world. It is an important driving force for a new round of scientific and technological revolution and industrial transformation, and will give birth to new business modes and economic growth. Information technology, such as artificial intelligence, is the cornerstone of intelligent society, and also the commanding point of science and technology competition in the future.

As core members of the “Yuanzhao Initiatives”, Junxiu Wang, Hongyu Chen and Zhong Ren introduced its working mechanism, support service platform and artificial intelligence teacher training plan. They also raised ten research topics about artificial intelligence in 2020 for primary and secondary school students, as well as some cases from enterprises such as NetDragon, IFLYTEK, Baidu, Tencent, Lenovo and UBTECH.

Keynote Speech



Xiaoru Wang, Associate Professor of School of Computer Science, Beijing University of Posts and Telecommunications

Speech Title: The Cultivating and Training of Computational Thinking

Professor Wang introduced the evolution of computational thinking, the new pattern of AI enabled education, and the change of traditional cognitive method in detail, and pointed out that computational thinking needs to rely on the dual training both from individuals and schools.



Guangzuo Cui, Professor of Faculty of Education, Beijing Normal University

Speech Title: The Cultivating and Training of Computational Thinking

Prof. Cui introduced the model of four stages of innovation, and proposed that quality and personality are the core of innovative competency. He also mentioned that the prerequisite of improving innovative competency is overcoming challenges, and the prerequisite of overcoming challenges is doing one's best. It is the key of classes to make students do their best.



Jian Wu, Professor of School of Art & Design, Beijing Institute of Graphic Communication

Speech title: Design is Everywhere

Prof. Wu introduced a number of cases of innovative design with the most basic and accessible materials in life, advocating that innovative scenarios should be everywhere in our life.



Junfeng Yang, Professor of Hangzhou Normal University, Moderator of the Keynote Speech

“Design & Innovative Thinking” Workshop



TingWen Chang, Assistant to the Dean, Smart Learning Institute of Beijing Normal University
Speech Title: Talent Cultivation of Future Education Design



Xiufeng Liu, Director of Research Center for Applications and Innovations in Math Educational Technology (RCMET), Ministry of Education
Speech Title: The Practice and Exploration Based on AR Technology (Converging Media Technology) of Curriculum



Xiangtong Zhu, Teaching and Research Staff of Beijing Changping Teacher Training School
Speech Title: Innovative Education Promotes the Development of Students' Innovative Thinking



Xiaomei Yan, Post-doctoral Fellow of Beijing Normal University (SLIBNU) and National Engineering Laboratory for Cyberlearning Intelligent Technology (NEL4CIT), Moderator of the “Design & Innovative Thinking” Workshop

“Curriculum of Computational Thinking and Artificial Intelligence” Workshop



Zuying Luo, Professor of School of Artificial Intelligence, Beijing Normal University



Jihua He, Head of Technology Teaching and Research Group, Beijing No.35 High School



Zhongguo Yuan, Head of IT Teaching and Research Group, the High School Affiliated to Renmin University of China



Changyan Chi, Chief Development Officer of NetDragon Websoft Holdings Limited



Ge Wang, Teaching and Research Staff of Beijing Chaoyang Center of Education Research



Chengjie Mao, Head of IT Teaching and Research Group, Beijing Jingshan School, Moderator of the “Curriculum of Computational Thinking and Artificial Intelligence” Workshop

The Fifth “Smart Learning” Academic Week

Introduction

From December 27 to 30, ten important conferences and activities were held during the Academic Week, namely the Fourth Design, Computing and Innovative Thinking Education Forum, the display of the outcomes of “Design & Learning” course, “Design & Learning” Workshop, exhibition of excellent works in “Design & Learning” course, 2019 Global Future Education Design Competition Final and Awards Ceremony, Conference on the Development of IT Curriculum Standards of Higher Vocational Schools, Seminar on Social Administration of Artificial Intelligence Application in Education, the Conference on the Training of ICT in Education for Presidents in Primary and Middle Schools in “Three Regions and Three Prefectures”, Seminar on Smart Education Planning in Xiong'an New Area, and Annual Review Meeting of SLIBNU in 2019. Professionals, teachers and students from government departments, schools, research institutions, associations, enterprises and media were invited to discuss the cultivation of design and computational thinking as well as the application of emerging technologies in education, such as artificial intelligence.

The Conference on the Training of ICT in Education for Presidents in Primary and Middle Schools in “Three Regions and Three Prefectures”

On December 29, the Conference on the Training of ICT in Education for Presidents in Primary and Middle Schools in “Three Regions and Three Prefectures” was held at Changping Campus of Beijing Normal University. The conference promoted the dissemination and influence of “Three Regions and Three Prefectures” project in government, mainstream media, enterprises and international community, and demonstrated the mission and leading role of Beijing Normal University in serving the national strategy, education and informatization.



Conference on-site

Seminar on Smart Education Planning in Xiong'an New Area

On December 29, Seminar on Smart Education Planning in Xiong'an New Area was held in SLIBNU, inviting leaders from the Department of Science and Technology of the Ministry of Education and the Bureau of Public Services of Xiong'an New Area, experts, and representatives from enterprises. Leaders from the Department of Science and Technology of MOE, Prof. Ronghuai Huang, and leaders from the Bureau of Public Services of Xiong'an New Area addressed at the Seminar. Mr. Jiao, a member of the project team, reported the achievements of the special planning for Smart Education in Xiong'an New Area in detail. Experts and representatives from enterprises held a detailed discussion on the three-year action plan from 2020 to 2022 and the long-term plan of 2035 on Smart Education in Xiong'an New Area.



Seminar on-site

Conference on the Development of IT Curriculum Standards of Higher Vocational Schools

On December 28, pursuant to the spirit of the 19th CPC National Congress and the National Education Conference, entrusted by the Department of Vocational and Adult Education of MOE, Conference on the Development of IT Curriculum Standards of Higher Vocational Schools was hosted by Central Institute for Vocational and Technical Education and co-hosted by SLIBNU to implement the Plan of National Vocational Education Reform and further improve the systems of national instructional standards for vocational education. The conference summarized the work that has been done, such as the previous investigation, and made clear the future task, division of labor and preliminary project plan, etc.



Conference on-site

Seminar on Social Administration of Artificial Intelligence Application in Education

On December 29, pursuant to the spirit of the 19th CPC National Congress, the Fourth Plenary Session of the 19th CPC Central Committee and the National Education Conference, and entrusted by the Department of Science and Technology of MOE, Seminar on Social Administration of Artificial Intelligence Application in Education was held by National Engineering Laboratory for Cyberlearning Intelligent Technology (NEL4CIT) at Changping Campus of Beijing Normal University to promote the social administration of artificial intelligence in education. Experts from the Cyberspace Administration of China, the Department of Science and Technology of MOE, the Department of Vocational and Adult Education of MOE, National Institute of Education Sciences, Tsinghua University, Beijing Normal University, Zhejiang University, Central China Normal University, Southwest University, Zhejiang Normal University, Hangzhou Normal University, Beijing Sport University, "Smart Education Demonstration Area" and the key educational project Research on Artificial Intelligence and Development of Future Education of the National Social Science Fund of China discussed the influence and effect, ethical issues and norms, social administration and research methods of artificial intelligence application in education.



Seminar on-site

Annual Academic Review Meeting of SLIBNU in 2019

On December 30, the Annual Academic Review Meeting in 2019 was held by SLIBNU and National Engineering Laboratory for Cyberlearning Intelligent Technology (NEL4CIT) at Changping Campus of Beijing Normal University. Heads of each department respectively reported on the major work of 2019 and the work plan of 2020. The meeting awarded the 2018 Annual Academic Achievement Awards, Annual Contribution Awards and Outstanding Project Teams Awards. Dean Huang pointed out that in 2019, all the departments have gained remarkable achievements with five abilities, namely planning, integrating, executing, expressing and responding. However, we should pay attention to the ability of reviewing with comprehensive reports of our achievements, full explanations of our problems and accurate descriptions of relations. He also put forward the expectations for the future development of SLIBNU: in terms of international exchanges, more international joint laboratories should be established, and Global Smart Education Conference will be held; in terms of serving our country, we should support the planning of ICT in Education and construct the Smart Education Demonstration Area; in terms of project expansion, breakthroughs in major projects should be realized; in terms of serving schools, the collaboration and communication with schools should be further strengthened through Design and Learning courses; in terms of serving enterprises, some projects should be implemented, such as Smart Learning Classroom, international courses and artificial intelligence. Vice Dean Changjie Chen attended the conference remotely.



Group Photo of the Annual Academic Review Meeting



SLIBNU, Tencent Education, Tencent Research Institute jointly released China Digital Learning Index Report 2019

In order to promote the research of digital learning in China, SLIBNU, Tencent Education and Tencent Research Institute have jointly written the China Digital Learning Index Report 2019. On December 4, Dean Xiao Si of Tencent Research Institute and Dean Ronghuai Huang of SLIBNU jointly released the China Digital Learning Index Report 2019 at the First MEET Education Summit. The report assessed 351 cities in China and established the evaluation system of digital learning index to help the industry to understand and promote the regional development of digital learning.

Dean Ronghuai Huang pointed out that according to the report, in the global community, the number of students who should receive education in primary school is about 650 million, while there are 250 million children who cannot receive basic education. However, nine-year compulsory education has been made universal in China 10 years ago, and all the Chinese citizens can be educated. During the process of learning, we should learn how to share, discuss and code to solve problems. The essence of learning relates to the relations between the knowledge we have learned and the reality we face, the original knowledge and the future learning.

Dean Xiao Si of Tencent Research Institute mentioned that three key words, namely ubiquitous, diversified, and inclusive, represent the direction of the current and future development of educational science and technology with the ultimate vision of “WELEARNING”.



The Release of China Digital Learning Index Report 2019 on-site



WELEARNING—China Digital Learning Index Report 2019

Co-deans were Invited to the Fourth China-CEEC Conference on Innovation Cooperation and Released the Latest Academic Achievement of SLIBNU

On October 8, hosted by the Ministry of Science and Technology of China and the Ministry of Innovation and Technological Development of Serbia, the Fourth China-CEEC Conference on Innovation Cooperation was held in Belgrade, Serbia. It was the first Conference on Innovation Cooperation since Greece joined the China-CEEC cooperation mechanism. Nearly 600 representatives from more than 300 universities, scientific research institutions, scientific and technological enterprises and government agencies in some fields including innovation, digitalization, artificial intelligence from China and CEECs attended the conference. Dean Dejian Liu and Dean Ronghuai Huang of SLIBNU were invited.

Dean Ronghuai Huang shared SLIBNU's practical experience, outstanding achievements and construction concepts of scientific and technological innovation collaborated with CEECs in recent years.

Dean Huang also released the latest academic achievement of the SLIBNU research team at this conference, called Reshaping Education to Develop Creative Competency in the Intelligent Era, hoping to carry out further cooperation with CEECs to jointly develop future education faced with the intelligent era. He also proposed to establish the “Design for Future Education Alliance”.

SLIBNU has initiated the 2019 “Global Competition on Design for Future Education” with Serbia, Tunisia and some other countries to jointly explore future education and promote the collaboration of scientific and technological innovation with more CEECs.



Co-deans Ronghuai Huang and Dejian Liu



Dean Dejian Liu talked with the guests at the conference.

Cooperation & Communication



Dean Huang was invited to the International Consultation Conference of International Institute of Online Education (December 7, 2019)



Dean Huang was invited to the 10th WEEC2019 (November 4, 2019)



Dean Huang at the ICTA2019 (December 15, 2019)



Dean Huang was invited to the Promotion Conference on Smart Education Demonstration Area Construction in Wuhou District, Chengdu (December 25, 2019)



Dean Huang was invited to the EITT2019 of the Society of International Chinese in Educational Technology (SICET) (October 29, 2019)



Dean Huang was invited to the Annual Meeting of Association for Educational Communications and Technology (AECT) (October 26, 2019)



Dean Huang was invited to the First Expert Conference of ASEM Education Digitalization (December 13, 2019)



Foreign contestant teams of Global Competition on Design for Future Education (GCD4FE) visited SLIBNU (December 26, 2019)



Dean Huang was invited to the 5G+ Smart Education Forum of the World 5G Convention (November 22, 2019)



Dean Huang was invited to the ICTA2019 at Tunisia (December 13, 2019)



Representatives from Nanyang Technological University visited SLIBNU (November 13, 2019)



Representatives from Sony Global Education visited SLIBNU (October 13, 2019)

2019 Project Status

Smart Education Experimental Area in Wuhou District, Chengdu

On December 25, in order to further promote the construction of Smart Education in Wuhou, SLIBNU and the Education Bureau of Wuhou District, Chengdu jointly held the Promotion Conference on “National Smart Education Demonstration Area” Construction in Wuhou District. Leaders from the Education Department of Sichuan Province, Chengdu Municipal Educational Working Commission, Chengdu Municipal Education Bureau, Wuhou District Commission, Wuhou Government and the Ministry of Education in Wuhou District were invited to the conference, with experts of “National Smart Education Demonstration Area” in Wuhou and Presidents of primary and secondary schools.



The Promotion Conference on “National Smart Education Demonstration Area” Construction

The VR Design and Production Competition for Medium and Higher Vocational Schools

In December, SLIBNU co-hosted 15 sessions of competitions with enterprises, among which there were 5 sessions of VR Design and Production Competition for Medium Vocational Schools and 8 sessions for Higher Vocational Schools. All the sessions were held successfully, gaining the praise from provincial and municipal educational authorities and contestant schools.

Seminar on Smart Education Planning in Xiong'an New Area

Project team from Smart City and Learning Environment Laboratory specified the information of the Smart Education Planning in Xiong'an New Area, and conducted researches on some practical cases of smart education in schools and enterprises. Team members have held regular discussions to confirm the implementation of seven projects of the three-year plan, namely infrastructure improvement, cloud platform construction of smart education, construction of educational big data center, pilot construction of digital campus, innovation of educational and instructional methods, inclusive smart learning with Internet+ Education platforms and information literacy improvement of teachers and students. They also discussed the feasibility and specific contents of each project.



The project proposal report made by project team members

Intellectual Property Declaration

Three pieces of software, namely “Data Platform of Educational Development in Xiong'an New Area”, “Technological Laboratory Equipment Selection Platform of Future Education” and “Test System of Academic Norms” have registered the Software Copyright Registration Certificate.

Books and Articles

In 2011, the Faculty of Education of Beijing Normal University and Springer signed the Letter of Intent on Publish Collaboration and the Book Series Co-Publishing Agreement. With the theme of “New Frontiers of Educational Research”, the book series were co-edited by professors from the Faculty of Education of BNU and scholars in relevant fields around the world. Springer is responsible for publishing and releasing the series worldwide.

So far, Beijing Normal University and Springer have jointly published three book series and two international journals.

- ◎ 34 works of “Lecture Note in Educational Technology (LNET)”
Series editors: Ronghuai Huang, Kinshuk, Mohamed Jemni, Nian-Shing Chen, J. Michael Spector.
- ◎ 16 works of “New Frontiers of Educational Research”
Series editors: Zhongying Shi, Zuoyu Zhou, Ronghuai Huang.
- ◎ 3 work of “Smart Computing and Intelligence”
Series Editors: Kinshuk, Huang, Ronghuai, Dede, Chris.



5 works were included in the Book Citation Index Database



Top 5 downloaded works



1. Journal of Computers in Education (hard copy ISSN: 2197-9987; soft copy ISSN: 2197-9995)

The journal was published in 2015 and co-edited by Dean Ronghuai Huang of SLIBNU, Prof. Gwo-Jen Hwang of National Taiwan University of Science and Technology, Prof. Siu-Cheung Kong of Hong Kong Institute of

Education and Associate Prof. Wenli Chen of National Institute of Education, Nanyang Technological University. The editorial board was composed of 34 top experts and scholars in education and technology from over 30 universities at home and abroad. The journal collects interdisciplinary views of researchers, practitioners and policy makers on the theory and practice of technological education to make an influence on practice of education and transformation of learning.



2. Smart Learning Environments (soft copy ISSN: 2196-7091)

The journal was published in 2014 on SpringerOpen (<http://www.springer.com/computer/journal/40561>) and co-edited by Dean Ronghuai Huang of SLIBNU, Prof. Kinshuk of School of Computing and Information Systems of Athabasca University, Prof. Elliot Soloway of Engineering and Education

of University of Michigan, Ann Arbor. The editorial board was composed of 26 well-known experts and scholars in educational technology from over 24 universities at home and abroad.

Exclusive Interview



Character: Ahmed Tlili

Post-doctor of Education Technology, Beijing Normal University

Q What do you think about your experience as a postdoctoral fellow at the Smart Learning Institute of Beijing Normal University (SLIBNU)?

A My experience so far has been very positive! At the beginning and as I came from a whole different continent, I honestly needed some time to adjust. Everything then went very smoothly. Working at SLIBNU specifically is quite motivating and challenging at the same time; Motivating because you get to collaborate with several national and international famous researchers here, as well as experts from the industry. This will definitely enhance your research expertise and make you learn about new research fields. Challenging, on the other hand, because you need to always be engaged and keep up with the on-going research projects to help your colleagues and students when needed. One of the things that I also admire about this work environment is team Spirit; SLIBNU is like a family, and people here are unconditionally supporting and helping each other. I really like that: “Teamwork makes the dream work”.

Q How do you feel about undertaking Open learning related research?

A Open learning, including Open Educational Resources (OER) and Open Educational practices (OEP) is a topic very close to my heart! I started working on this research area with the Arab League Educational, Cultural and Scientific Organization (ALECSO), and I then continued working on it here at the SLIBNU. This area is really interesting because through the obtained findings you can help achieve social justice by providing free and good quality education for everyone! As we all know, educational materials are now very expensive and many kids are now dropping out of school/university just because they cannot afford the cost of those learning materials. The United Nations Educational, Scientific and Cultural Organization (UNESCO) stated that education is a human right and no one should be excluded from it. Therefore, focusing on facilitating the adoption of OER and OEP by universities and schools can help achieve inclusive and accessible learning, as well as enhance the learning outcomes. We have published so far several research papers in this area, and we are currently collaborating with big organizations, such as UNESCO and ALECSO to achieve sustainable open learning.

Q How do you feel about organizing the 2019 Global Competition on Design for Future Education Design in Tunisia?

A Let me first say that the 2019 Global Competition on Design for Future Education Design was a very huge event where more than 300 students from three countries, namely China, Tunisia and Serbia participated in it. In this competition, students worked in teams for 48H to develop solutions related to three themes, namely family education, safety education and science education. Organizing this competition in Tunisia was very fruitful, as the Tunisian students got the chance to practice several needed 21st century skills, such as coding. They also got the chance to exchange their ideas with the Chinese and Serbian students. This helped them enhance their knowledge and learn from international peers. The international experts were also very helpful in guiding the students through face to face and online meetings. I really hope that this huge event becomes an annual thing so we can help the students worldwide build their knowledge and skills for better future career. In the end, I would like to give very special thanks to all the universities, organizing teams and professors from the three countries who made this event very successful!

Q Can you share with us your experience to achieve such fruitful research results?

A For me, to achieve good research results, I applied my own research triangle which is composed of three dimensions, namely critical reading, openness and hard work.

- Critical reading: Critical reading of research papers published by several authors with different perspectives will help you learn about a specific research topic. Therefore, reading as many papers as possible will give you a wider scope about a specific research area, and help you gain more research expertise along the way. Additionally,

each solid research paper must be based on a solid theoretical background, and reading could help you achieve that.

- Openness: A good researcher should be open to work with others. In mathematics “1+1=2”, but in philosophy “1idea+1idea=infinity of ideas”. Imagine if only two researchers are collaborating together, how many possible ideas can be generated through their discussions? Now, what if a team of four members are working together!! I used to tell my students that only sitting on your laptop will not help you become a good researcher, you need to get out of your comfort zone and exchange your ideas with others and learn from their inputs. Also, openness should be in the way of thinking, where a good researcher should always be innovative and think “outside the box” to provide new research solutions for a given problem.
- Hard work: As we all know, hard work is the key to success in any field, including the academic and research ones. Therefore, researchers should work hard to achieve fruitful research results. For instance, a researcher should work hard by carefully reading as many papers as possible (first dimension) or also by trying to get in discussions with experts (second dimension) via forums, webinars, etc. Hard work outcomes can also be seen when writing a research paper, since this process will be very confusing and difficult at the beginning, but after consistent attempts, this process will be less difficult and easy.