

# 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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# Reviews of SLIBNU Major Events in 2017

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## Smart Learning Academic Salon on Virtual Reality and Education was Held by SLIBNU

On January 4th, Mingyuan Gu, Senior Professor of Beijing Normal University, Guangnan Ni and Qiping Zhao, Academicians of Chinese Academy of Engineering as well as Binglin Zhong, President of the Chinese Society of Education attended the conference.

## International Seminar on Immersive Learning and VR Educational Application was Held by SLIBNU

During January 13th to 15th, International Seminar on Immersive Learning and VR Educational Application was held in Harvard University, Boston, America. 12 seminars about academic articles were hosted in the conference. A letter of authorization was jointly signed by Harvard University, SLIBNU and NetDragon Incorporation, marking the recognition to VR/AR Education in China from the world top educational institutes.



2

## Zhanyuan Du, Vice Minister of Education and Dean Huang Investigated the ICT in Education in Hainan

On February 14th, Zhanyuan Du, accompanied by Dean Huang and other experts, went to Sanya, Hainan to investigate the ICT in education and put forward some suggestions.



3

## The 2nd US-China Smart Education Conference was Held by SLIBNU and 2017 Horizon Report: Technology Outlook for Chinese Higher Education was Released.

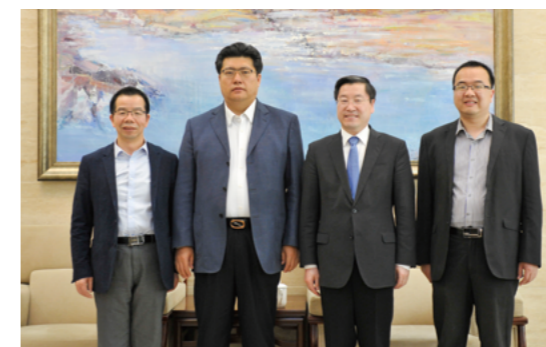
During March 18th to 20th, 55 experts, including 43 domestic experts and 12 overseas experts were specially invited. Zhanyuan Du, Deputy Minister of Ministry of Education, Binglin Zhong, President of The Chinese Society of Education and Qi Dong, President of BNU attended the conference. The 2017 NMC Technology Outlook for Chinese Higher Education: A Horizon Project Regional Report (in Chinese and English version) was released officially in the conference.



4

## Culture and Education High-end Forum was Held by SLIBNU Guided by The Belt and Road Initiative.

On April 22nd, leaders of The Belt and Road Think Tank Community and many experts from various universities attended the forum. Dean Huang and his team released 3 reports, which relatively were At a Glance: Education Development in The Belt and Road Countries, ICT in Education in The Belt and Road Initiative Countries and A Global Review on Development of Open Educational Resources as well as 1 database which was The Belt and Road Educational Research Database.





5

### Dean Huang Attended the 4th International Conference on "Education and Global Cities: Smart Learning for World University"

During May 19th to 20th, the 4th International Conference on "Education and Global Cities: Smart Learning for World University" was hosted by SLIBNU in St. Petersburg, Russia. Dean Huang presided over the theme forum "Universities and Smart Learning in the 21st Century", and discussed the advancement of ICT, future development of higher education and other issues.



### Smart Learning and OER International High-end Forum was Held by SLIBNU and White Paper: Smart Learning Environments in China 2016 was Released

On May 25th, many experts from China, Poland, Hungary, Slovakia, Croatia and Serbia gathered in the forum to share research outcomes, exchange experiences and discuss on the revolutionary influences brought by ICT. During the forum, White Paper: Smart Learning Environment China 2016 was released.



6

### Dean Huang Attended Various International Conferences.

On June 13th to 14th, Dean Huang went to Iowa State University of the US to attend a seminar on 2017 Intelligent Tutoring System and made a keynote speech on "Group Learning and Collaborative Knowledge Building of E-learning Space"; On June 27th to 29th, Dean Huang attended the International Conference on Blending Learning held in Hong Kong, and made a keynote speech on "Smart Learning Environments in Smart Cities".



7

### Forum on Education and Rural Development was Held by SLIBNU.

On July 17th, the forum was jointly held by SLIBNU and UNESCO International Rural Educational and Training Centre. Professor Kekang He of Beijing Normal University, Professor Hongyu Zhou, Vice Director of the Standing Committee of the People's Congress of Hubei Province, Professor Youqun Ren, Deputy Secretary of the Party Committee of East China Normal University and other experts attended the forum.



8

### The Belt & Road OER Community "Multilingual Development Strategy" Seminar was Held by SLIBNU.

On August 8th, experts and industry representatives from The Open University of China, Tsinghua University, Shandong University, Beijing Foreign Studies University and Eternity attended the seminar.





9

## "Foundation of Knowledge Sciences" Course for International Ph.D. Students was Launched.

In September, in the new semester, courses for international Ph.D. students started. Many well-known experts from the United States, Singapore, Australia and other countries were invited to co-teach the course. The postgraduates and Ph.D. students at home and abroad can participate in online classes through the webcast platform.



## Dean Huang Attended the 2nd World Open Educational Resources Congress.

On September 18th to 19th, Dean Huang was invited to attend the 2nd World Open Educational Resources Congress, which was organized by UNESCO and the Government of Slovenia. Dean Huang made a report on "Chinese OER Supportive Policy Environment Development".



## Dean Huang was Invited to Attend the eLearning Africa 2017 Conference and Co-organized a Seminar.

During September 27th to 29th, Dean Huang attended the 10th eLearning Africa Ministerial Round Table and made a keynote speech on the topic of "Deepening China-Africa Cooperation of ICT in Education for Sustainable Development Goal4". In addition, SLIBNU and UNESCO International Rural Educational and Training Centre jointly organized a seminar on "Enhancing Teachers' ICT Capability with OER".



10

## Design & Learning Course was Launched.

In October, Design & Learning course was launched. Taught by Dejian Liu and Professor Ronghuai Huang, Co-Deans of SLIBNU, the course was a cooperation with world-renowned design courses. Many experts in the field of design gathered and series of seminars and workshops were carried out.



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## Robotics and Education Summit was Held by SLIBNU.

On November 3rd, Robotics and Education Summit was held in Nanjing. Kai Kang, Vice President and Secretary General of China Association of Higher Education as well as Haijun Zeng, Vice Dean of SLI attended the summit.



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## The Belt & Road Open Education Learning Week was Held by SLIBNU.

During December 18th to 22nd, 23 renowned experts, leaders from educational institutes and enterprises in the field of open education from 14 countries discussed online with the audience on some hot issues like innovative practice of The Belt & Road OER, roles of teachers and students as well as international cooperation, attracting over 300 participants online and offline from more than 10 countries.



## Report of the Cyberlearning Service Industry in 2017 was Released by SLIBNU.

On December 26th, Dean Huang released Report of the Cyberlearning Service Industry in 2017 on the AI and Educational Development Seminar which is also the first meeting of the technical committee of National Engineering Laboratory for Cyberlearning Intelligent Technology.



# Robotics and Education Summit was Held in Nanjing

## Introduction

On November 3rd, 2017, Robotics and Education Summit, which was hosted jointly by China Association of Higher Education and Smart Learning Institute of Beijing Normal University (SLIBNU), was successfully held in the 50th Higher Education Expo China in the Nanjing International Expo Center. Higher Education Expo China is the largest comprehensive exhibition in higher education field and enjoys strongest influences, lasting longer than other expositions in the field. The summit focused on the development trends of intelligent robots, the cultivation of talents in the field of robots, and the development of educational robotic industry. Top domestic experts and scholars in the field of artificial intelligence, intelligent robot and robotic education gathered in the summit, sharing research outcomes, exchanging practical experiences and explored the revolutionary impacts that robotic technology has brought to education.



Conference on-Site

Kai Kang, Vice President and Secretary General of China Association of Higher Education, and Dr. Haijun Zeng Zeng made a speech for the summit. Kang Kai said that promoting the development of science education which was represented by robotics was an important way to establish an innovative country, and was also the key to enhance the scientific literacy of citizens. Haijun Zeng mentioned that educational robots involved two aspects, which were "service robots in education industry" and "robotic education among teenagers", and it would become the third field of robotic development after industrial robots and service robots. The summit was hosted by Teng Wang, Director of Educational Robotics Center of SLIBNU.



Dr.Haijun Zeng made a speech for the summit

## Experts Discussed together on the Development Trends of Education and Robots.



### Jingming Zhou, Executive Director and Secretary-General of China Service Robots Application & Promotion Alliance (CSRAP)

Executive Director Jingming Zhou shared his views on the main concerns and weakness, opportunities and challenges, trends and countermeasures of service robots. He believed that the development of service robots was still facing the reality of technical bottlenecks, and it was still under the stage in which "machine is made to help people". Only after the deep combination of service robots and artificial intelligence, "chemical reaction" would come out.



### Songhao Piao, Director of the Multi-Intelligent Robotic Research Center from College of Computer of Harbin Institute of Technology

Professor Songhao Piao gave a speech entitled "Research on the Current Development Status of Intelligent Robots". He briefly introduced the definition, classification, current development status of intelligent robots by some pictures and videos, and talked about his prediction on the future trends of intelligent robots. Professor Piao believed that robots in the future would become much more intelligent, they might be capable of sensing, thinking and moving. He also put forward several instructional views on the possible development trends of the conscious intelligent robots in the future.



### Yanyan Li, Professor of BNU

Professor Yanyan Li focused on STEM education, which has promoted the integration of interdisciplinary knowledge. And she made a report entitled "Robots and Innovation of STEM Educational Practice", advising to help students build a solid foundation of science, technology, engineering and mathematical knowledge as well as cultivate their innovative spirits and practical ability so as to promote the growth of innovative and entrepreneurial talents.



### Hualiang Zhang, Researcher of Shenyang Institute of Automation, Chinese Academy of Sciences

Researcher Hualiang Zhang gave a report on "Higher Robot-based Education and Experimental System in the Intelligent Era". The system was designed based on the practical education of the robotics and other related courses for undergraduates and postgraduates in the new era. It focuses on students' practices, trying to construct related experimental platforms, and reproducing the scenes of the workplace of robots in the intelligent era as well as the needs of future advanced research at a low cost.



# Achievements of Design & Learning Course

In December 2017, the first Design & Learning course launched by SLIBNU and NetDragon was coming to an end. Co-Dean Professor Ronghuai Huang and Dejian Liu are responsible for the course, attracting 30 postgraduates. During the course, students' thinking of design is cultivated through 12 weeks' cooperative study of design methodology. Each group of students is supposed to choose their own topic and design creative works by using design methodology. Many designers, scholars and experts from the field of design are invited to provide professional guidance to enlighten students' idea of design.



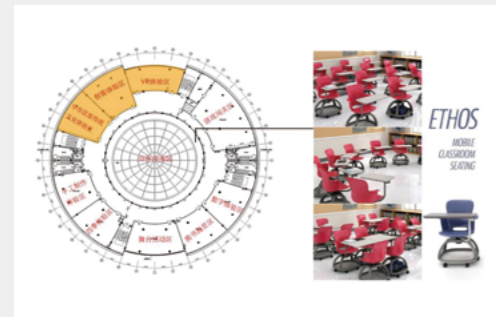
JOININ Group



51 Xueka Group



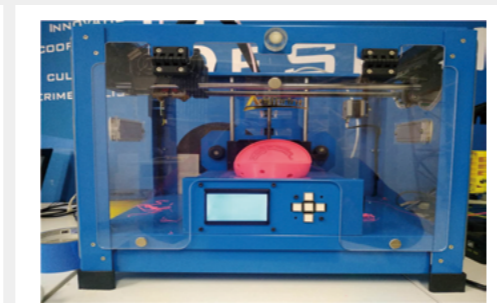
Happy Planet Group



Milu Group



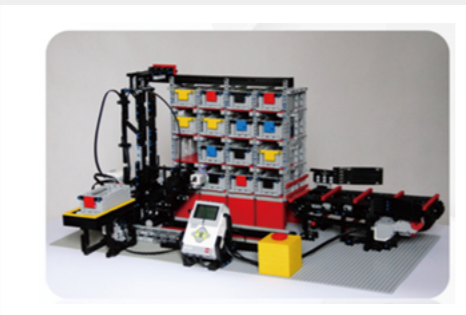
Sizzle Power Group



Cell Castle Group



Yizhi Group



Science Gezi-shop Group



Pre-manager Group

## ME310 Kickoff Activity at Stanford University

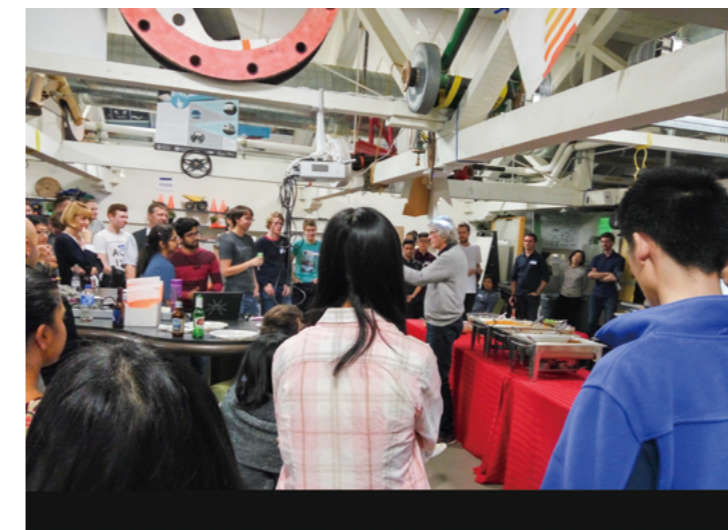
In November 2017, students of BNU went to Stanford University to carry out cooperative communication with the students there. They finally completed the task of Critical Experience Prototype (CEP) collaboratively and realized the friendship and power as a team. Through communicating and sharing their achievements with students of Stanford University every week, they had their visions on future products, and made splendid presentations and reports at the end of the semester.



Communication with the Students from China, US, Korea and Japan



Project Team at d.school, Stanford University



ME310 Course on-Site

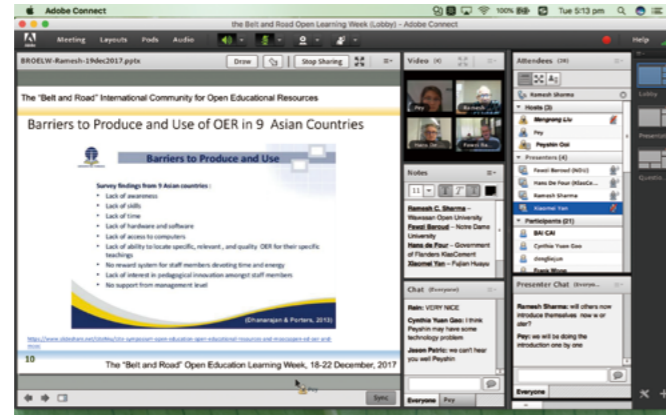


ME310 Course at d.school, Stanford University



## The Belt & Road Open Education Learning Week was Successfully Completed.

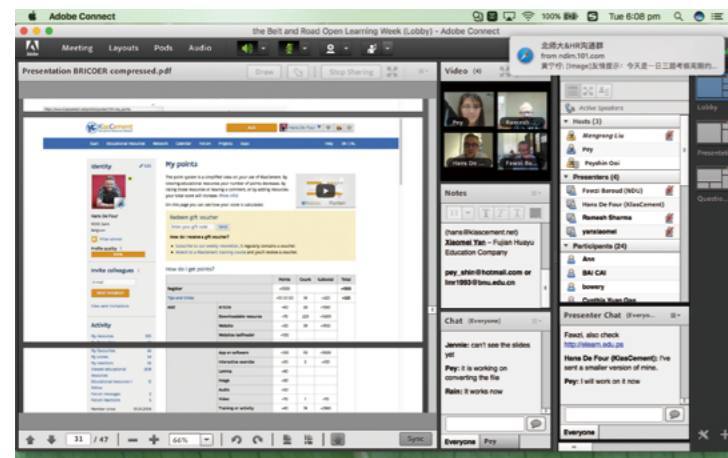
➤ During December 18th to 22nd, 23 renowned experts, leaders from educational institutes and enterprises in the field of open education from 14 countries discussed in the webinar with the audience on some hot issues like innovative practice of The Belt & Road OER, the role of teachers and students as well as international cooperation, attracting over 300 participants online and offline from more than 10 countries.



Webinar

### Experts Made Various Excellent Reports

➤ Many guests made excellent reports respectively, including Fengchun Miao, Chief of Unit for ICT in Education, Paris headquarters, UNESCO; Zeynep Varoglu and Joe Hironaka, Programme Specialists, ICT in Education, Knowledge Societies Division, Communication and Information Sector, UNESCO; Airina, President of EDEN (European Distance and E-learning Network); Bojan Lalic, Innovation and Technology Development Cabinet Minister of Serbia and Director of Belt and Road Institute; Christian M. Stracke, Chairman of ICDE (International Council for Open and Distance Education) as well as Fawzi Baroud, Vice President of Lebanon Notre Dame University.



Fawzi Baroud, Vice President of Lebanon Notre Dame University



Diana And one, Director of E-learning Center, Timisoara University of Technology, Romania

## Parallel Sessions

➤ The colorful schedule of the Learning Week and the effective and creative meetings demonstrated the latest OER research achievements in The Belt & Road countries, even in the whole world. Many experts shared the international cooperation and practical experiences in the OER domain, which would provide an exchange platform for educational researchers and teachers in The Belt & Road countries to further their mutual understanding. Participants spontaneously formed many parallel sessions, including overseas sessions in Serbia, Thailand and others, as well as domestic sessions in Beijing Normal University, Capital Normal University, Higher Education Press, National Centre for Open & Distance Education, etc.



Parallel Session in Serbia



Parallel Session in Thailand



Parallel Session in Beijing Normal University



Parallel Session in National Centre for Open & Distance Education



## Artificial Intelligence and Educational Development Seminar was Held in Nanjing

On December 26th, Artificial Intelligence and Educational Development Seminar & the First Conference of Technical Committee of National Engineering Laboratory for Cyberlearning and Intelligent Technology (CITlab) was held in Beijing Normal University. Hequan Wu, Academician of Chinese Academy of Engineering and experts from National Development and Reform Commission (NDRC), the Ministry of Education, Natural Science Foundation of China (NSFC), Beijing Normal University, Tsinghua University, China Mobile, Elernity, IFLYTEK, etc. attended the conference.



Conference on-Site

## SLIBNU Attended ICCE2017 Conference

During December 4th to 8th, the 25th International Conference on Computers in Education (ICCE 2017) hosted by Asia-Pacific Society for Computers in Education (APSCE) was held in New Zealand. Yuan Gao, Director of Open Educational Resources (OER) Laboratory of SLIBNU and Ph.D. Kaushal Kumar Bhagat attended the conference.



Dr. Kaushal Kumar Bhagat was making a presentation.



Nomination for the Best Overall Paper Award

## Artificial Intelligence (AI) Expert Consultation Seminar was Held in SLIBNU

On October 18th, SLIBNU held Artificial Intelligence (AI) Expert Consultation Seminar. Experts and scholars of AI field were invited to attend to produce AI training quality courses for party members. At the seminar, experts gave positive comments on the domestic and international policies related to AI, the investigation and analysis of the relevant videos of mass media (popularization, propaganda for party and government), and the investigation on the needs of party members. In addition, they also made constructive comments on the subject content of the course, production form, planning programs, and filming production.



Seminar on-Site

## Expert Seminar on Smart Education of Xiong'an New Area was Held in SLIBNU

On October 20th, commissioned by the Department of Science and Technology, Ministry of Education, China Education and Social Development Research Institute and Smart Learning Institute of Beijing Normal University co-held Expert Seminar on Smart Education of Xiong'an New Area in Beijing. Experts focused on the smart education development of Xiongan New Area and discussed the following five issues: the first is about the education positioning of Xiong'an New Area, including basic industrial forms and education support problems in building a "world-class, green, modern and smart city"; the second is about the construction of "big education" system including schools, families, communities, enterprises and public places, as well as the issue of school layout; the third is about how to employ "dual first-rate" universities in Beijing, Tianjin and the whole country to support the cultivation of high-level innovative talents in Xiong'an New Area in order to develop new high-end industries and cultivate new momentum; the fourth is the promotion of various types of schools at all levels and the "upgrading" and innovation of the ICT in schools; the fifth is how to construct the public service system of ICT in education in Xiong'an New Area to provide high-quality public services for the school development and the learning of citizens.



Seminar on-Site



## Expert Seminar on ICT Promoting the Development of Rural Compulsory Education was Held in SLIBNU

On November 13rd, commissioned by the Equipment and Informatization Division of Department of Basic Education, Ministry of Education, SLIBNU, UNESCO International Rural Educational and Training Centre recently organized an Expert Seminar on ICT Promoting the Development of Rural Compulsory Education. The Seminar analyzed the policy of rural compulsory education development in our country, the experiences and challenges of ICT promoting rural compulsory education and shared the research reports and typical cases of rural compulsory education and ICT. Experts suggested that the construction of ICT in education should not only summarize and continue the achievements and experiences, but also strengthen the top-level design of ICT in basic education to solve problems, deepen the innovative application of ICT in education, service and management, improve and release the innovative efficiency of ICT in education to promote fair education and improve the quality of education.



Seminar on-Site

## Expert Seminar on Monitoring and Evaluation of Preschool Quality was Held in SLIBNU

On November 7th, SLIBNU held an expert seminar on monitoring and evaluation of preschool quality. The experts present shared the latest theoretical research achievements and innovative practical experiences based on their research fields. They analyzed the important problems of monitoring and evaluation of preschool quality in the big data era from the aspects of the basic problems of preschool education quality monitoring, the assessment of children's development in Learning Houses, the application mode of big data education as well as the visual modeling and calculation of learning emotion. They also put forward the development strategies and suggestions. Experts believed that under the rapid development of preschool education, the establishment of pre-school education quality monitoring and evaluation system is an important guarantee for the balance between the scale expansion and quality improvement. To enhance the effectiveness of preschool education quality monitoring, it is important to enhance the construction of results application mechanism, making connections among results, accountability and development.



Seminar on-Site

## Leaders and Experts Visit SLIBNU



Beijing Normal University Department of Education Visited SLIBNU (10/4/2017)



Aopeng Education and Radboud University Leadership Visited SLIBNU (10/24/2017)



Daniël Wigboldus, President of the University of Nemea, The Netherlands Visited SLIBNU (11/17/2017)



Taiwan Central University Teacher Representative Visited SLIBNU (11/17/2017)



Shanxi Province Electrification Education Museum Visited SLIBNU (11/17/2017)



UNESCO Institute for Education and Information Technology Visited SLIBNU (11/27/2017)



Hebei Province Education Department Leadership Visited SLIBNU (12/04/2017)



Xiong'an District Primary and Secondary School Principals Visited SLIBNU (12/20/2017)



# Project Status in 2017

## The Book: Current State of OER in The Belt & Road Countries

This book provides a comprehensive and in-depth analysis of the status of the world OER, especially the status of OER development in The Belt & Road countries. The analytical models, writing framework and list of experts to be invited are currently drawn up. Based on the current model of world OER development, OER experts in the Belt and Road countries will be invited to describe, analyze and compare the development status of various countries and to provide theoretical and practical references for educational researchers and practitioners.

Submitted by Yuan Gao



Seminar with Baidu

## Global Educational Information Project

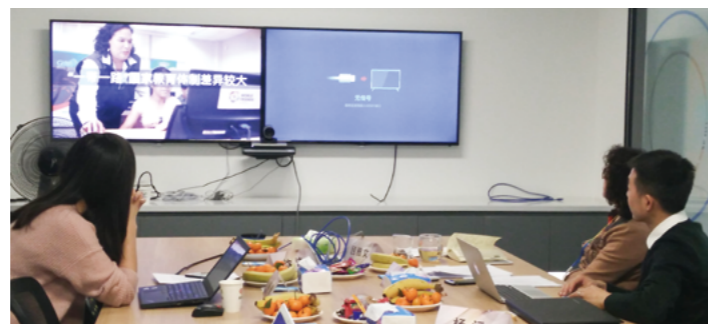
The Global Educational Information Project mainly provides the latest, valuable and authoritative educational information, professional reports and academic platform for domestic and overseas teacher groups, educational policy makers and managers, as well as educational researchers to guide the educational information and commentary in a professional way. It has become an educational leader to serve the development of global education industry. Currently, the project has basically completed the platform construction, functional design, team construction, etc.

Submitted by Nan Jiang

## OER Practice and Application Workshop Project

The OER Laboratory of SLIBNU creates a series of workshops on the theme of OER, invites researchers and practitioners in the fields of OER to discuss deeply with participants on how to provide flexible authorization methods by open copyright agreements in order to support the sustainable development of the OER Platform. They also discuss to explore the difficulties in OER development and the strategies for its development under The Belt & Road Initiative. At present, the workshop carries out two phases of cooperation with Baidu Library and Open Edutainment, and an open copyright agreement labeling scheme is initially formed.

Submitted by Yuan Gao



Seminar with Open Edutainment

## Artificial Intelligence (AI) High-Quality Videos and Reading Books

Its core content will focus on the main concepts of AI, development history of AI, key technologies in the related fields of AI, interpretation of the major policies at home and abroad, applications and impacts of AI industry, etc. At present, the preliminary content research and expert consultation have been completed and the thematic programs, content scripts and case collection will be completed as soon as possible.

Submitted by Nan Jiang

## Smart Campus Construction Project of the Collaborative Innovative and Quality Improvement Plan of K-12 Education in Qingyang Old Revolutionary Base Area

The project team of ICT-based Instruction Centre has set targeted "one body and two wings" (Smart Cloud Classroom, Mobile Learning and STEAM Course) programme around the Smart School Construction project through a lot of researches and analyses. Through the online and offline multithreading trainings as well as teaching and research guides of project team, the project teachers now have the conventional teaching ability with the help of information technology. Also their personal information literacies and application integration capabilities are rapidly improved.

Submitted by Yongzhong Wang



Seminar on-Site

## ICT in K-12 Education Project

Based on the instructions of Deputy Director Zhiwen Zhu of the Ministry of Education in his research in Beijing Normal University, over 10 expert seminars, video conferences, field trips, research and surveys on "ICT in K-12 Education" were organized by SLIBNU and implemented by ICT-based Instruction Centre to collect large amount of detailed information as well as cases through various channels.

The report of "Guidance Opinions for Further Promoting the ICT in K-12 Education" was recently completed, providing more effective implementation strategies and recommendations for the development of ICT in K-12 Education in the new era.

Submitted by Yongzhong Wang



Seminar on-Site

## Planning Project of the Smart Education in Xiong'an New Area

8 interns were called to visit 386 schools in 32 towns in the three counties of Xiong'an New Area to mark geographic location with latitude and longitude and photograph for keeping on file. It also makes literature research to comprehensively understand the geography, economy, population, education, data information of ICT in education in Xiong'an New Area. The educational data of Beijing, Tianjin and Shenzhen Special Economic Zone was collected for comparative study. Based on the baseline survey and the report outcomes of 2016 including Index Report of Smart Learning Environments in Chinese Cities. and Build Beijing - Tianjin - Hebei Smart Learning Ecosystem, the project has been successfully approved by 2017 Operating Expenses for Science of Department of Science and Technology, Ministry of Education.

Submitted by Yongzhong Wang

## Thematic Venue Development: Index Report of Smart Learning Environments in Chinese Cities.

2017 Research Report on Smart Learning Environments of Chinese Venue has completed its first draft of more than 300 thousand words. The "Chinese venue database platform" has been constructed. 19 interns were recruited in summer, collecting a total of 9528 venues into database, including 4590 libraries, 361 science and technology venues and 4577 museums.

Submitted by Yanli Jiao



# 2017 Report of the Cyberlearning Service Industry

## Introduction

The development of education at all levels in China has reached the level of middle and high-income countries. People's educational needs are moving from standard teaching to personalized learning and lifelong learning. The supply-side reform of education service becomes an inevitable choice for ensuring inclusive education for all and meeting the needs of diversified education.

- ▶ It analyzes the connotation of education service and the development of education service as an industry.
- ▶ It demonstrates the development opportunities facing today's education services from the dimensions of relevant policies, market demand, supply and technological development.
- ▶ It puts forward a 4S evaluation model of cyberlearning service industry, making a comprehensive analysis of 262 listed companies in the education service industry from four aspects including Scale, Specialty, Service and Section to provide a reference for the industry development and give directions for the quality improvement of education service.
- ▶ It compares the policies on education service development, the investment and financing in the market, the number of students and private education institutions and other aspects between China and the United States. It points out that the higher education scale in China is relatively low with high demand and great potential for development.
- ▶ It is suggested that the government should take "two hands" measure. It not only needs to provide public service of basic education, but also needs to co-ordinate and optimize the development environment of education service industry to promote the healthy development of "education service" and make people's education in our country.



## SLIBNU Promotes Research through Various Lectures

Time	Place	Sponsor	Activity	lecturer	Topic
October 9th	Beijing	Beijing Institute of Education	China-Finland Principals (Basic Education) Forum	Ronghuai Huang	Future- Oriented Educational Reform
October 13rd	Wuhan	Central China Normal Unlversity	Computational Behavior Sciences	Ronghuai Huang	Connected Learning Scenario to Learning Behavior: A Data-Intensive Research
October 24th	Chongqing	Organized by China Mobile Communications Corporation Government and Enterprise Service Company	Education Informatization Training of Ministry of Education	Ronghuai Huang	Global Blueprint for Future Education
October 26th-28th	Fuzhou	China Computer Federation (CCF)	2017 China National Computer Congress (CNCC)	Ronghuai Huang	The Current Situation and International Trends of Information Technology Courses in Senior High Schools
November 9th	Beijing	Beijing Normal University	Conference on Innovation Teaching of Primary and Secondary School	Ronghuai Huang	Smart Learning: from "Mastering Learning" to "Learning to Learn"
November 13rd-15th	Bangkok	Asian Institute of Technology	International Forum on Education for Rural Transformation	Ronghuai Huang	Education in the Digital Age for Rural Transformation
November 27th	Beijing	China Association for Educational Technology (CAET)	2017 China International Educational Informatization Forum	Ronghuai Huang	Artificial Intelligence(AI) in School Education: Opportunities and Challenges
November 28th-29th	Beijing	Co-sponsored by China Development Research Foundation (CDRF), Beijing Normal University, Tencent, GSV and Tomorrow Advancing Life(TAL)	2017 Global Education Summit(GES)	Ronghuai Huang	ICT in School education
December 15th	Shangrao, Jiangxi Province	State Information Center(SIC)	The Second China "Internet + Education" Summit, 2017	Ronghuai Huang	Key Factors and Rules of Cyberspace Transforming Education
December 19th	Zhejiang	Zhejiang Normal University Smart Education Institute	Zhejiang Smarter Education Alliance	Ronghuai Huang	From "Mastering Learning" to "Learning to Learn"
December 27th	Guangzhou	China Educational Equipment Industry Association (CEEIA)	The Fourth National Renowned Teachers and Principals Summit	Ronghuai Huang	Smart Education in Internet + Age



## Exclusive Interview



Character: **Yanli Jiao**

Director of the smart city and learning environment laboratory. The office director of Education technology Beijing key laboratory.

**Q** **2017 Report of the Cyberlearning Service Industry in China is just released. Could you tell us about this report?**

**A** The project team has collected the data of public educational service over the past 10 years as well as the financial data of 262 listed companies in education field. It analyzed these data to summarize and sort out the characteristics and status of educational service in order to provide suggestions for solving the current problem in our country and promoting educational supply-side reform. The report is divided into six parts: the first part explains the concept and connotation of the educational service and analyzes the development of educational service as an industry; the second part summarizes the development of public service through analyzing the data in the past ten years; the third part demonstrates the development opportunities facing today's educational service from the dimensions of relevant policies, market demand, supply and technological development; the fourth part analyzes the development process and teaching mode of distance education, especially collates the situation of cyberlearning in universities; the fifth part describes the development of the listed companies in education field and analyzes their educational service abilities by 4S evaluation model. The sixth part compares China and the United States in relevant policies, market investment and financing, the number of students, private educational institutes, etc.

**Q** **The Smart City and Learning Environment Laboratory has developed a lot of reports. Could you please introduce these reports to us?**

**A** 2016 Index Report of Smart Learning Environments in Chinese Cities, 2016 Report of the Cyberlearning Products Development Index in China, White Paper: Smart Learning Environments in China 2016 and 2017 Report of the Cyberlearning Service Industry in China were released following White Paper: Smart Learning Environments in China 2015 released on September 20th, 2015. At the macro level, we studied the current situation of the smart learning environment construction in smart cities and payed close attention to the vitality of urban innovation and the livable experience of citizens, aiming to promote lifelong learning. At the median level, we studied the status of the educational service industry catalyzed by the internet and modern technology, in order to provide suggestions for solving the problems currently facing our country's education and educational supply-side reform. At the micro level, through the establishment of an indicator system for the development of cyberlearning, we evaluated cyberlearning products from

multiple dimensions in order to reflect the current status of cyberlearning and promote the symbiotic development of information technology and education.

**Q** **As you have mentioned before, the research report has received the academic guidance of many experts. How did you do this?**

**A** As for the laboratory project management, PI + PM model was proposed at the very beginning which means the Principal Investigator and Project Manager share the responsibility of its management system. During the implementation of the project, it is also continuously adjusted and improved according to the characteristics of the project and the practical conditions. Since these laboratory research reports are very important and there are many difficulties in implementation, the laboratory upholds the spirit of open sharing and win-win cooperation, invites domestic experts in the related fields to guide the research of every projects as well as conducts discussions on the problems in the process so as to ensure the rigorousness and authority of each report. The whole process reflects the "wisdom" of the laboratory's researches. Special thanks are also expressed to every expert for the guidance and support of several projects in the lab, in hope of more experts joining the project in the future.

**Q** **The Smart City and Learning Environment Laboratory has published lots of reports and outcomes. Could you please talk about the working plan in 2018?**

**A** In December, 2017, the project of "The Plan-formulation of Smart Education in Xiong'an New Area" was approved by Department of Science and Technology, the Ministry of Education. In 2018, The Smart City and Learning Environment Laboratory will carry out the project. Smart education is not only the high-

end form of ICT in education, but also essential part of smart city, which implies that the smart education plan is an integral part of the plan-formulation in Xiong'an New Area. According to The Outline of Collaborative Development of Beijing, Tianjin and Hebei Province, the project team will do further research on the current situation and development trends of the cities in Beijing, Tianjin and Hebei. We will also investigate the population, economy and education in Xiong'an New Area as well as the restriction factors of educational situation and development there. Additionally, the team will study on the social, economic and cultural development as well as educational models in China's Special Economic Zones like Shenzhen, Tokyo Bay Zone (Industry), San Francisco Bay Zone (Technology) and New York Bay Zone (Finance), which will provide references for the development of smart education in Xiong'an New Area. We will collect related data about Xiong'an New Area's society, economy and education in order to construct the educational model for predicting the educational development trends in Xiong'an New Area. In accordance to the relevant policy, we will draw up The Outline of Smart Education in Xiong'an New Area.

Besides, the Laboratory will continue our research on The Research Report of Smart Learning Environments in Chinese Pavilion, The Research Report of Digital Learning in Beijing Primary and Middle Schools as well as The Investigation Report of the Popularization of Art Education in Beijing. Also, we will improve and construct the database of the Laboratory.



# 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**

CEO & Chairman of NetDragon Websoft Holdings Limited (777.HK), Special Allowance Expert in the State Council of China, Co-dean of Smart Learning Institute of Beijing Normal University, Adjunct Lecturer of Harvard Graduate School of Education.



**Co-Dean, Ronghuai Huang**

Co-dean of Smart Learning Institute of Beijing Normal University, Director of UNESCO International Rural Educational and Training Centre, Director of National Engineering Lab for Cyberlearning 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.



## 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 GCSE) Editors: Huang, R., Hwang, G.-J., Kong, S.-C., & Chen, W.



## 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.



Virtual, Augmented, and Mixed Realities in Education



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

## Smart City and Learning Environment Laboratory

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.



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

## 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 1st US-China Smart Education Conference (2016.01.14)



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