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 requires 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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Jingshi Wisdom&Learning

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北京师范大学智慧学习研究院
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, Elernity (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_x0002_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.

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 nvironments in China 2015 (2015.09.20)

Index Report of Smart Learning Environments in Chinese Cities

Index Report of Smart Learning Environments in Chinese Cities

Study on the typical learning fields in smart cities and learning societies; Create database of smart learning environment; Publish serial reports on leraning 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 evelopment in the Belt & Road Countries

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

ICT-based Instruction Center

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

101 Education PPT Solution

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.

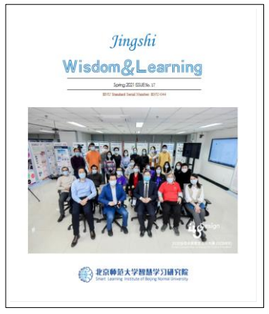
Educational Robotics Center

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 tatus and Trends in Educational Robotics

Prototype of Educational Robotics



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Features

The Sixth Annual Smart Learning Academic Week

From January 13 to 20, 2021, Beijing Normal University held the “Sixth Annual Smart Learning Academic Week” and invited teachers and students and industry sources to discuss the application of artificial intelligence, learning analytics, virtual reality and other technologies in education, as well as the trend and direction of educational reform in the post-pandemic era. The academic week was held online, covered various theme seminars, design competitions and other activities, targeting teachers and students of colleges and universities, researchers of scientific research institutions, primary and secondary school teachers, representatives of educational science and technology enterprises, etc.

Seminar： MOOCs amid COVID-19 Pandemic: Opportunities, Challenges and Future Paths

On January 13, 2021, "MOOCs amid COVID-19 Pandemic: Opportunities, Challenges and Future Paths" seminar, co-organized by Smart Learning Institute of Beijing Normal University (SLIBNU), UNESCO International Research and Training Centre for Rural Education (INRULED) and NetDragon Websoft (ND) was successfully held. Experts, scholars, and policy-makers from China, Turkey, India, Sweden, the United Kingdom, Portugal and other countries were invited to discuss and shared experiences on policies, measures, achievements, teaching cases, strategies and solutions in using MOOCs during the pandemic, so as to explore new directions of MOOCs in the peirod of pandemic and in the area of future education.

Dr. Tingwen Chang

Assistant to the dean of SLIBNU

As an important teaching form and tool during the pandemic period, MOOC has been widely used, but the implementation of comprehensive online education during the pandemic period still faces great challenges. The participation and selfless sharing of experts from various countries and regions will certainly promote the application and reform of MOOC in the field of education in the next stage.

Prof.Phillip Benachour

Lancaster University

The situation of online learning is "together but apart", and MOOC has played an important role in the pandemic period: it not only helped students realize the goal of suspending classes without stopping learning, but also ensured the continuity of education.

Zhijun Wang

Associate professor of Jiangnan University

In the future, higher education institutions should change their idea and encourage online teaching innovation, improve the existing credit system, design more high-quality MOOCs from xMOOC to cMOOC, encourage more teachers to accept the training and in-depth practice of online teaching, and combine classroom teaching and online learning together.

Prof.Ramesh C.Sharma

Ambedkar University Delhi

For the future development of MOOC, the professor stated that the combination of quantum technology and artificial intelligence will bring in more possibilities of education and provide support for students' autonomous learning.

Prof.Fahriye Altinay

Near East University in Cyprus

The core methods to deal with the current problems and promote the development of online education are to foster inclusiveness and social justice awareness, and purposively pursue quality improvement and innovation.

Ebba Ossiannilsson

Vice-President of the Swedish Association for Distance Education

Educators need to focus on how MOOC provides support for learners in terms of equal and inclusive learning environment, teaching quality, lifelong learning, and gender equality, and to promote the ability and habit of autonomous learning.

Smart Learning and Education Development Forum

On January 15, 2021, the "Smart Learning and Education Development Forum" was hosted by the National Engineering Laboratory for Cyberlearning and Intelligent Technology and the Smart Learning Institute of Beijing Normal University, and co-organized by Elernity. The forum focused on the application of virtual reality, learning analytics and artificial intelligence in education, and invited academic experts, front-line teachers and representatives of enterprises to gather together and bring three wonderful workshops to more than 1,000 online conference attendees.

Speeches

Prof. Guangju Chen, Deputy Director of the Council of Beijing Normal University (BNU)

The mission of BNU is to build a "comprehensive, research-oriented, world-class university in teacher preparation under the Chinese context," with a review of the substantial achievements of the Academic Week on Smart Learning since its inception.

Ruidong Liu, Vice Director of Science and Technology Commission of Changping District, Beijing

As the science and technology management department of Changping District Government, Science and Technology Commission of Changping District has always attached great importance to the cooperation and exchange with universities and research institutes in Changping. It is hoped that at this time, as the support organization of this forum, the commission will not only further promote the bidirectional empowerment of technology and education， but also boost the innovation and development of technology and education

Virtual Reality and Education Workshop Keynote Report

Prof. Shuangshou Li, Tsinghua University

Thinking and Exploration of Cultivating Innovative Talents for a Strong Manufacturing Country

Cultivating innovative talents for a strong manufacturing country from two levels: understanding changes and responding to changes, striving for changes. When the production patterns of the manufacturing industry is undergoing profound changes, Digital Twin technology can play an important role, and the virtual world should be used to discover potential problems, stimulate innovative thinking and constantly pursue improvement

Panel Discussion

Qizhi Xu, University of Science and Technology of China

"Principles of Visual Perception in Educational VR Application"

Based on the perspective of cognitive psychology, Xu introduced the internal and external cognitive mechanisms and demonstrated the application of scientific visualization in teaching abstract concepts at K-12 level by using a case study.

Guangtao Xu, Associate Professor of Hangzhou Normal University

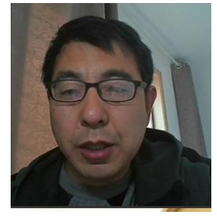
"Design and Implementation of Inquiry-based Learning Environment with Multimodal Natural Interaction"

A technology-enabled model of inquiry-based learning; and pointed out that in an inquiry-based learning environment, conducting multi-level, accurate and objective evaluation of learners is a difficult part in research and practice.

Ruibin Zhao, associate professor of Jiangsu Normal University

"VR Application for Education: Key Technologies and Typical Cases"

The core issue of virtual reality(VR) education application is the lack of high-quality resources and effective normalized education application.



Lixin Zhu, Senior engineer of the National Engineering Laboratory for Cyberlearning and Intelligent Technology

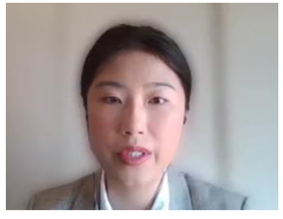
"Textbooks for Simulation Experiment"

Zhu introduced the "micro textbooks" based on the concept, technology, structure and application of the virtual simulation experimental teaching, expecting to promote this teaching.

Xinyi Qian, the operation manager of ARHT Media

"ARHT's Holographic Application"

Qian introduced the basic principles of holographic projection and shared the technical solution of ARHT Media, which is expected to be applied in education as soon as possible.



Learning Analytics Technology and Education Workshop

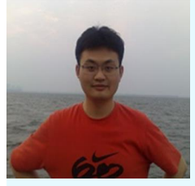
Keynote Report

Shuang Lee, Associate Professor from Beijing Normal University

"Agile Educational Modeling with Human-Computer Augmented Intelligence Support"

Educational modeling should start from the basic laws of education to form feature extraction that satisfies the educational context, it should emphasize more on feature discovery based on causal models rather than terminating at the construction of relevant models, and it should focus on the formation of a collaborative human-computer modeling approach rather than pursuing algorithmic precision.

Panel Discussion



Xuanyu Zhou, Associate Professor from Hunan Normal University

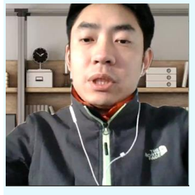
"Construction and Application of Knowledge Graph for Middle School Mathematics Based on the Fusion of Multi-source Heterogeneous Data"

Zhou explained the construction process of knowledge graph in detail through analyzing the construction and application of knowledge graph in mathematics teaching.

Cixiao Wang, Beijing Normal University

"The Trade-off Between Individual and Collective Consciousness: Role Interaction Under the Influence of Technology Supply"

Technology supply affects individuals' discourse power, and role interaction is a result of trade-off between individual and collective consciousness.



Qianta Zhu, Product Director of Education Business Group of Iflytek Co., Ltd

"Driving Force of Big Data in Education"

Director Zhu analyzed and demonstrated the driving force behind educational big data in various aspects of education.

Huaibo Wang, Doctor from Beijing Normal University

"Knowledge Graph Construction in Online Communities"

Starting from the connotation of new concepts in the Internet era and the new representation of knowledge in online communities, Dr. Wang introduced in detail the construction process of network knowledge map.

Artificial Intelligence and Education Workshop

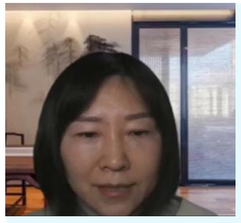
Keynote Report

Xiaoru Wang, Professor from Beijing University of Posts and Telecommunications (BUPT)

"Language & Algorithm & Thinking——Integrative Teaching"

By analyzing the data of university students' informatics competitions, Ms. Wang proposed a new idea of integrative teaching of language, algorithm and thinking-the design of course curriculum in the way of "competition-led learning", which eliminates the way of learning programming on paper rather than on computer caused by paper exams and strengthens students' awareness of engineering practice.

Panel Discussion



Xueting Xiong, IT teacher and researcher from Xicheng District Education and Training Institute in Beijing

"Ideas and Practice of Computational Thinking"

Creating a good learning environment with hands-on experiments and real-world problem solving is a valid way to develop students' computational thinking skills.

Dr. Zeyao Han , CTO of Shanghai Huan Ti Education Technology Co. Ltd.

"Artificial Intelligence Curriculum System and Construction of Data Intelligence Platform"

Dr. Han shared his research in grade level curriculum, intelligent applications, practical work and contest.

Shuang Wang, Director of Education Research Institute of Shenzhen Yuejiang Technology Co. Ltd

"Students' Academic Performance and the Development of Computational Thinking Skills"

Mr. Wang presented in detail the case of performing the Computational Thinking Test among Mongolian students.

Chengjie Mao, Senior Teacher of IT at Beijing Jingshan School

"How to Develop Students' Computational Thinking"

Ms. Mao analyzed the ways to develop students' computational thinking and the measurement of computational thinking, and introduced the case of teaching through the Breakout Clone game.

International Webinar： Cooperation on Future Education between China and the Arab Region During the Post-COVID-19 Era

On January 20, 2021, an international webinar entitled “Cooperation on Future Education between China and the Arab Region during the post-COVID-19 Era”, initiated by Smart Learning Institute of Beijing Normal University (SLIBNU) was held online. Experts from both China and Arab countries in the education field were invited to discuss the current status of education informatization in their countries, share practical experience during the pandemic, and look forward to the new direction of educational informatization cooperation and development in the post-pandemic era.

Ahmed Tlili

Co-Director of the OER Lab in SLIBNU

Many students and scholars are facing difficulties in the shift to online learning mode, calling on experts and teams to work together to build a cooperative roadmap and create more innovative solutions.

Dr. Ronghuai Huang

Dean of SLIBNU

The application of artificial intelligence, 5G network, big data and other technologies not only brings more possibilities for the development of education, but also plays an important role in fighting the pandemic.

Dr.Mohamed Jemni

ICT Director at ALECSO Tunisia

Scholars and experts from all countries should take the best advantage of ICT to share expertise, experience, best practices and technological solutions to ensure the continuity of learning during the period of offline educational disruption.

Dr. Paul Hector

Advisor at UNESCO’s Regional Bureau for Science in the Arab States

With the rapid development and extensive application of information technology, education has been able to respond quickly to the COVID-19 crisis; however, it has also widened the digital divide and increased inequality in education.

Mr.Karim Abdelghani

Program coordinator at ITU Arab Regional Office

COVID-19 has revealed the problem related to inclusive education and educational inequality.

Dr. Saida Affouneh

Associate professor at An-Najah National University in Palestine

Equal opportunity, quality of education, flexibility to cope with changes and sharing of resources in the digital age are the core goals of cooperation between China and Arab countries.

Ms. Chunchun Zhang

Vice President of ClassIn in China

OMO (Online Merge Offline) education mode may be a direction of informational education in the future. At present, teachers have begun designing OMO courses to cope with and balance the unstable teaching pedagogy and students' learning efficiency under the COVID-19 crisis.

Mr. Nishant Chand

Strategic development manager at NetDragon Websoft Holdings Limited in China

One-stop learning mode has provided a distance education solution for teaching problems arising from the outbreak of COVID-19.

Dr. Khalid Berrada

Professor at Mohammed V University in Morocco

In the post-pandemic era, experts from various countries are advised to share and encourage new programs, strengthen the mobility of teachers and students, and improve the smart education ecosystem.

Dr. Tingwen Chang

Assistant to the dean of SLIBNU

The construction of the high-quality and localized smart campus in the third wave of e-learning requires the close cooperation of experts from China and Arab countries, calling on experts from more countries to continue organizing similar webinars and constructing modern educational informatization.

The Global Competition on Design for Future Education

From January 18 to 20, 2021, with the theme of “See the future through pandemic; See the world through students; See the education through designing,” the competition was hosted by Beijing Normal University, co-organized by the Office of International Exchange and Cooperation of Beijing Normal University(BNU), Student Union of BNU, Graduate Student Union of BNU, SLIBNU, Elernity, and EEO Empower Education Online. And it is supported by UNESCO IITE and the Organizing Committee Office of Beijing International Design Week, with Beijing Design Society as the special cooperative organization.

Aiming at improving the public understanding of inclusive education and promoting UN’s SDGs, the competition, based on the perspectives of students globally, provides the unpredictable future with abundant and effective proposals on education. Contestants are equipped with 18 mentors coming from countries including China, Italy, Tunisia, Iran, Palestine, the Philippines and Japan, giving instructions in fields including education, designing and computer science.

Opening Ceremony

Li Chen,

Vice President of Beijing Normal University

The competition corresponded to the fashion of “Internet plus Education,”and its mode of offline guidance with online competition also gave the contestants a chance to get an in-depth experience of the online education.

Saida Affouneh,

Dean of Faculty of Education in An-Najah National University, Palestine

The competition established itself not only as a platform to design the inclusive education, but also as a channel through which the globe gets to know Chinese cultures.

Ping Xu,

The president of Beijing Design Society

The criteria are designed to focus on the common benefits of people of all nations, and value the ability to solve problems in teaching and learning with design thinking.

The Roadshow

Guangju Chen,

Vice Director of the Council of BNU

Whatever fields the contestants might get into in the future, the experience of this event would do them immense good.

Dejian Liu,

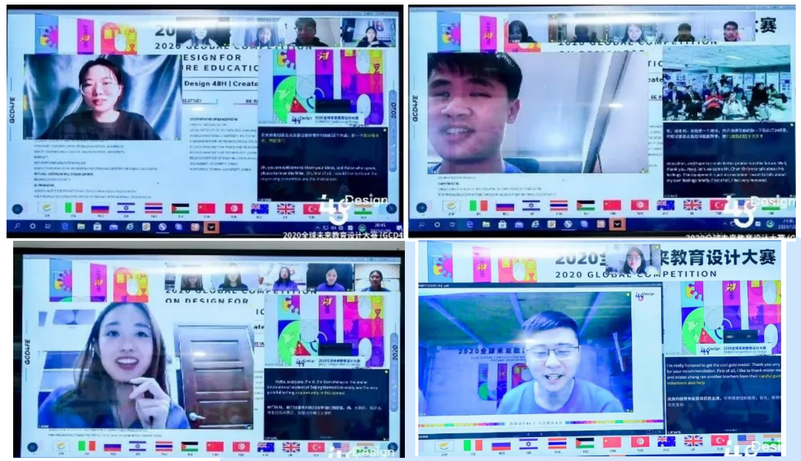
Co-Dean of SLIBNU

All the designs were produced impressively with the sense of creativity, the appliance of technologies, the awareness of the cost, and the use of interdisciplinary methods.

The 48H Final Competition

The signal given, the 22 teams from 36 schools globally set about designing their works under realtime online instructions of 18 mentors. Focusing on the four topics-- education in crisis, personalized education, special education, and rural education, the teams proposed creative solutions to explore the future path of education. There were three rounds of reports and one roadshow in total.

Moments of the Final



Contestants Giving Online Reports

Part of the Competition Posters

Closing Ceremony

Zuoyu Zhou,
Vice president of Beijing Normal University

Design thinking is the inner driving engine of education development; there should be more communications and interactions between designing and education in the future, and effective actions should be taken to achieve that.

Tao Zhan,
Director of UNESCO Institute for Information Technologies in Education

In the post-pandemic era, digitization will become a necessity for the education, while reflection on and redesigning of the educational system are especially essential.

Saeed Dahdahjani,
Director of an independent design studio, Iran

Simone Miraldi,
Senior industrial designer in NetDragon Networks Inc

Competition Results

After the fierce competition, with meticulous considerations from professional judges, 5 teams were awarded with the metals by the organizing committee. Dean Liu Dejian announced the winners, and the representatives of the winning teams delivered their acceptance speeches.

Mr.Ronghuai Huang, co-dean of Smart Learning Institute of Beijing Normal University, had a high opinion of this competition. He stated that the initial aspiration of Global Competition On Design for Future Education is to encourage students to view the future with design and to construct the future with education and technology. It was especially difficult, as he mentioned, to organize the event in the pandemic, and its success owned to the co-efforts of everyone. In this case, further achievements could be expected in the competition next year.

Awards	Teams	Subjects
Silver Award	A2 GOGO	Special Education
	A1 ALL See Love	Special Education
Bronze Award	B5 Yuanbao (Gold Coin)	Rural Education
	B4 Food Fun	Personalized Education
	A3 To Laugh	Personalized Education
Nomination by Mentors	B3 Learning Smartly	Personalized Education
	C5 AR for Sign Language	Special Education
	B1 Teaching & Sharing	Rural Education
	D2 Asteroid Belt	Special Education
	D1 Sim Career	Rural Education
	D4 Up2Learn	Special Education
Excellence Award	C1 Skilled & Bold	Rural Education
	C4 Try & Do	Personalized Education
	C6 New Reading APP	Special Education
	A4 Remote Lab	Rural Education
	A5 ONNEH	Special Education
	D3 Future Physical Education Platform in 5G Era	Personalized Education
	C2 Future Planet Research	Rural Education
	B2 Fun	Education in Crisis
	D5 Teach & Reach	Education in Crisis

Important Events

NetDragon: UNESCO IITE's New Strategic Partner

On March 12, the official website of UNESCO Institute for Information Technologies in Education (UNESCO IITE) announced that it would collaborate with Netdragon, a global leading creator of Internet communities, to launch the joint project "Teacher Capacity Building with AI and Digital Technologies: E-library for Teachers".

UNESCO Institute
for Information Technologies in Education

HOME / ANNOUNCEMENTS

UNESCO IITE and NetDragon launch the joint project

Listen

Background

Teachers are essential to the achievement of Education 2030 and SDG4, namely, ensuring inclusive and equitable quality education and promoting lifelong learning opportunities for all. Meanwhile, teaching is becoming an ever-challenging profession in the digital age, as proven once again by the COVID-19 pandemic. Therefore, there is an urge to better support teaching in capacity building as qualification of teachers is at the heart of ensuring quality education for everyone.

RELATED CONTENT

News: IITE and partners in action

Online expert meeting for Central Asia within the UNESCO-WEIDONG joint initiative

On 23 December 2020, UNESCO IITE and the UNESCO Almaty Office collaboratively organized and held an online expert meeting within the UNESCO-WEIDONG joint project "Building future schools through ICT competency development".

25 December 2020

News: IITE and partners in action

Teacher professional development on media and information literacy: a new webinar by UNESCO IITE

Based on successful practices of universities and organizations of additional professional education in CIS countries, the webinar participants discussed the issues of fostering the information and management culture of teachers in the context of digital transformation, current trends and popular formats of advanced training courses, as well as resources and conditions for scaling up such activities.

3 November 2020

The Project of "Research and Developemnt of the Real-time Visualized Virtual Simulation System for Orthopaedic Minimally Invasive Surgery (MIS)" Being Approved by the Experts

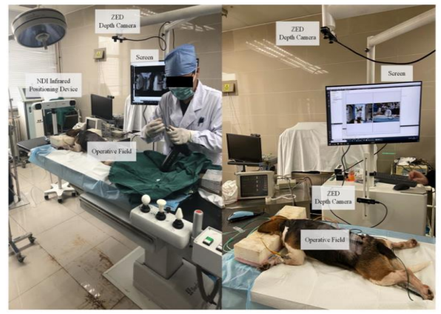
Based on computer vision and augmented reality technology, this research project realizes the registration and fusion of multivariate data and constructs a real-time visualized virtual stimulation system in orthopaedic minimally invasive surgery (MIS), so as to effectively ensure the "precision," realize the "perspectivity," improve the safety and accuracy of surgery, and reduce the number of intraoperative X-rays as well as surgical injury.

The research group has overcome various difficulties. The target was reached successfully and the expectations of the project were achieved. On March 26, the project was approved by the experts.

系统结构

The System Structure

系统应用场景



Application Scenarios

Project Status

Global Competition on Design for Future Education

The concept note of 2021 GCD4FE has been confirmed, including the theme, rules, forms as well as the deadlines of every phase. There are two innovative points:

1) strengthening the cooperation with the UNESCO;

2) enlarging the case-study collection from primary and secondary school teachers around the world. A list of potential partners including international institutes and organizations from 20 countries has been made. Through the organization of internal coordination meeting, some departments of Beijing Normal University, such as the International Exchange and Cooperation Office, Students' Union and Education College have agreed on the competition's content.

Author: Hongyan Kuai

Smart Campus Program in Wuhou District, Chengdu

Having always been supporting the construction of the Smart Education Demonstration Area, the project team organized a seminar on “Smart Campus Construction in Wuhou District” (online), discussed the key direction and conception of the construction of regional smart education in the future with the leaders from Wuhou District Education Bureau and the principals of primary and secondary schools, and reached a preliminary consensus over the cooperation on developing regional smart education.

Author: Yongzhong Wang

Educational Reform and Development Plan of Beijing Pinggu District in the 14th Five-Year Period

The project team has organized several expert symposiums to collect the experts’ suggestions and continually optimize the plan. Through the communication and discussion with all the departments of Pinggu District Education Committee, the key tasks of each department as well as the construction and work division during the 14th Five-Year period have been confirmed.

Author: Yongzhong Wang

The 14th Five-Year Planning Project on Beijing Education Informatization

The project team has organized several expert symposiums to study the spirits of the related documents under the instructions of leaders and experts from the Beijing Municipal Education Commission, to accurately ensure the progress of education informatization in Beijing during the 14th Five-year period and further improve the plan in accordance with the latest national policies and instructions.

Author: Yongzhong Wang

Scene of Expert Symposium

Intellectual Property Management

The Learning Environment Design and Assessment Lab applied for two computer software copyright and got the certificate. The project team of “National Smart Education Conference” applied for one computer software copyright. The Design and Learning Lab applied for five design patents, three of which have received notification to grant and the approval process is complete. The project team of the “Orthopaedics Program of the Department of Science and Technology” applied for one invention patent, which has also received the notification and the process is complete.

Author: Jingjing Jin

Interview on the Governance of Artificial Intelligence Education

By the end of March, 20 experts have been interviewed, consisting of 4 teachers, 4 employees of enterprises, 3 researchers of universities, 5 academicians, 2 regional managers as well as 2 parents, 8 of which were interviewed face to face and 12 online. All the experts were interviewed with a personalized outline. After processing the interviews, we have summarized them in the form of a set of cards, got a table as a tool for data processing, and reached a basic conclusion. In addition, a governance framework of AI’s application in education has been put forward.

Author: Youjie Yao

The Research on and compilation of *Information Technology Curriculum Standard for Higher Vocational Education*

Since September 2019, the expert panel has been compiling this standard. After thematic studies, extensive research, revision and improvement, it is planned for release on April 9, 2021.

Books & Articles

Experts'Lectures

Dean Ronghuai Huang：Educational Reform in the Era of Intelligence —On the Proposition of Two-Way Empowerment of Science & Technology and Education

Dean Huang delivered a speech at the 2020 China's Future Education Summit Forum, with the theme of "Innovation and Reform: Education in the Era of Intelligence," organized by Beijing Normal University. Starting with the relevant policies on future education in various countries, Dean Huang introduced the background of "the Era of Intelligence," the three functions of education reform empowered by AI, and the development course of educational informatization in China. He advanced the following six topics worth discussing:

1.The growth of educational technology market and the insufficient educational support from government

2.The overestimation of AI's short-term influence and the underestimation of its long-term effect

3.New needs for the standard and types of talents and the laggarded training system

4.Balanced development of large-scale education and personalized training in school system

5.The actual gap between rural and urban education and the range of balanced development

6.The acceleration of scientific and technological revolution and the insufficient internal driving force in educational reform

At last, Dean Huang concluded that "science and technology can empower education, which in turn can promote the progress of science and technology, together contributing to the future development"; in the future, we should let technology and education further reinforce each other.

Seminar on Regional Smart Campus Construction

Academic Paper

An Analysis on the Path and Strategy of Education Design: A New Perspective of Innovating Training Talents

Peng Chen, Ronghuai Huang

Abstract: On this basis, this paper sorts out the development of design education from the educational form inherited by family teachers and apprentices to the educational form of design literacy with innovation as the goal in the era of knowledge network, and puts forward the ways to cultivate innovative talents at different educational stages. In the stage of higher education, special design-related courses can be set up, while design can be integrated with other courses to carry out educational teaching practice with design thinking. In the stage of basic education, design education is carried out by means of design courses focusing on art and design, design and technology, curriculum integrated with discipline courses, and maker education. In the design education, teachers change the teaching method to promote the students' innovative ability, that taking design thinking as the strategies and methods. They should integrate design literacy and discipline literacy as learning objectives, design learning content from simple to complex, and guide students using design thinking method to complete the practice in multiple and ubiquitous courses.

Research on the "Golden Course" of Innovative Talents Cultivation from the Perspective of Design Thinking

Peng Chen,Ronghuai Huang, Zhiying Nian

Abstract: Taking the design thinking into the research of innovative curriculum, this paper constructs a new learning model with real problems, multi-level collaboration, multidimensional methods and tools, and innovative core ideas, which reconstruct the curriculum content and structure around the cultivation of students' knowledge, ability and behaviour. Based on the learning model, the course "design and learning" has been carried out for three rounds of iteration. Research results indicate that the innovative learning model breaks through the space boundary of the classroom, constructs the diversified new teaching space, forms the new relationship between teacher and student, the rich and flexible learning interaction, and the knowledge production mode. It conforms to the requirements of "golden course" construction, promotes the effective learning, cultivates students' problem-solving ability in real situations, and improves students' innovative thinking and ability.

An Exploration of Artificial Intelligence Education Based on Integrated Teaching Mode

Yunfeng Zhang, Dejian Liu

Abstract: Based on integrated teaching mode, this paper explores the construction of the multi-role integrated three-dimensional learning system. On the basis of thematic curriculum, educational resources, tools for experience, and open platform for developers, it reshapes the teaching process by integrating perception, experience and practice; explores the path for the practice of AI education and enriches the content and forms of AI education by combining online and offline education, in-school and out-of-school activities as well as club activities and competitive events.

Exclusive Interview

Junxiu Wang
High commissioner of education research at the Educational Robotics Center, SLIBNU

Q: Hello, Ms. Wang. As an excellent representative of the project managers of Smart Learning Institute (SLI), could you share the importance of a project manager to an organization?

A: Project manager is an essential position to take quality, safety, progress and cost management of the project and to comprehensively improve the project management. It is also called "Executive Producer" who is responsible for dealing with all transactional work. A project manager claims responsibility for the successful planning and implementation of the project. His/Her primary role is leading the project team to complete all milestones on time and with high quality within the budget and to satisfy customers. Required abilities include: charisma, influence, ability to communicate and adapt.

Q: As a project manager of SLI, what kinds of abilities do you think are important in work?

A: In SLI, at most time there is no leadership level between the project manager and the members of the project team in most cases. Many times the members of the project team are external experts.

Therefore, the project manager of the institute require not only the basic abilities, but also some "special" abilities. For example:

- Be able to write all kinds of materials: papers, brochures, manuscripts, speeches, host scripts...
- Even if you cannot understand the English document, you should manage to read it with translation software
- Master Word, PPT, Excel and be able to use SPSS and mind map;
- Have accumulated academic knowledge in the field and can learn those unknown quickly;
- Be able to communicate well with postgraduates, doctoral students, professors, entrepreneurs, academicians etc.

- Facing a messy project, be able to quickly clear thoughts and promote it in an orderly manner;

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In a word, as long as the timeline, goals, and production are set, the project has to be promoted in accordance with the timetable.

Q: You are responsible for many key projects of the Institute. Would you please share some valuable experience in project management?

A: Each project faces plenty of difficulties.

Let's start with the simplest one: set the time for meeting. As long as the meeting involves more than five experts, it is hard to schedule, because they are busy with their own affairs: classes, lectures, other meetings, picking up children, taking care of the elderly, seeing a doctor, being in quarantine...Even if you finally find a time when everyone is free, it's likely that one suddenly has something coming up, and you have to reschedule. Moreover, there are also foreign experts. Due to the time differences, they either get up early or stay up late. Sometimes it is necessary to set the time for meeting at seven or eight o'clock in the morning.

The most difficult part of the project is to discuss academic issues and to determine basic conclusions. Each expert has his/her opinions, so from divergence to convergence, to adjustment, reconfirmation, and finally agreement, there are countless "confrontations." From the perspective of a project manager, this is tricky. Should be the minority subordinate to the majority? Or should we listen to the best-known experts? Or continue to discuss it? There is no optimal solution but only specific analysis depending on circumstances. The project manager grows up through solving various problems, which may be the core competency.

The other difficulty is "communication." Some people may say how hard communication can be? Well, it is really hard. For example: what can you do if the team members miss the deadlines? Nothing. This is a matter of moral restraints and professionalism. For those who don't cooperate, you can only use your own personality charm and communication skills:carrot-and-stick approach, to observe their speeches and behaviors, to enlighten them with affection and motivate them with reason. An important task of the project manager is to encourage everyone, so he/she should have positive thinking and always see the positive side, and thus influence others in the project team.