JingShi Wisdom&Learning

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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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-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 learningaims 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

- *New Frontiers of Educational Research*
Editors : Shi Z., Huang, R., & Zhou Z.
- *Lecture Notes in Educational Technology*
Editors : Huang, R., Kinshuk, Jemni, M., Chen, N.-S., & Spector, J. M.
- *Smart Computing and Intelligence*
Editors : Huang, R., Kinshuk, & Sampson, D.

Springer's Journals

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

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.

Course in Havard University

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 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.

GSE Conference

IAU visited

ICT-based Instruction Center

Smart Education Demonstration Zone

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.

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Any feedback or suggestions, please contact us via the following methods:
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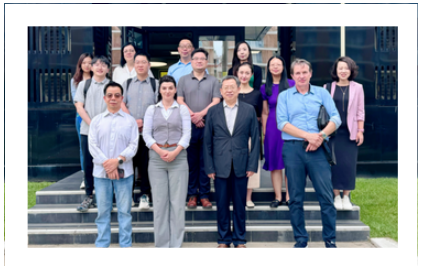
Contents

Summer 2024

Features 06-20

Important Events 21-27

Exchanges and Cooperation 28-32



Books & Articles 33-39

Features

The Global Smart Education Conference 2024

The Global Smart Education Conference 2024 (GSE2024) was hosted in Beijing from August 18th to 20th. GSE2024 not only organized the collection of excellent cases of smart education, but also carried out activities such as the selection of " Global Smart Education Innovation Prize " and the exhibition of global smart education innovation.

Call for "Global Smart Education Innovation Prize "

In order to promote digital transformation and international understanding in education and the innovative development of smart education, the organizing committee of the Global Smart Education Conference intends to launch a call for entries for the "Global Smart Education Innovation Prize". The purpose of this prize is to encourage innovative solutions that utilize technology to solve the most pressing problems in education. Innovations include, but are not limited to, the use of technology to improve pedagogy, reach marginalized groups and people with disabilities, provide solutions for expanding technical and vocational education and training, develop models for employment and entrepreneurship, and promote cutting-edge research.

Call for Exhibits

GSE2024 invites industry enterprises, educational institutions and research institutes, etc. to exhibit intelligent educational equipment, system platformplatforms, tools and software, digital resources, integrated solutions application cases, major projects and research results. The call is open until July 18th.

Call for Speakers

The organizing committee of GSE2024 calls for about 10 speakers from teachers and principals who have registered for the conference, and invites them to share their research results, excellent cases and practical experiences in smart education. The call is open until July 1st.

Call for Volunteers

The organizing committee of GSE2024 is now recruiting volunteers for students who have registered to participate in the conference, mainly to assist in the reception of guests, translation, conference services and technical support, etc., to contribute to the smooth convening of the conference!

Global Competition on Design for Future Education

Online Training Sessions on AIGC Application and Project Design

The 7th Global Competition on Design for Future Education has set up the theme of "AIGC and Education" for the first time, encouraging students from higher education and vocational education, teachers from primary and secondary schools and relevant personnel of enterprises to explore the innovative design of future education by applying AIGC from the perspective of issues such as quality, efficiency and fairness of education to fully utilize the potential of AIGC in the synergy of human-machine collaboration and creative problem solutions.In order to help participants complete the design of their works with high quality and improve their competition level and innovation abilities, the organizing committee of the competition held a three-day online training sessions on Artificial Intelligence Generated Content (AIGC) from May 15th to 17th, 2024, which was conducted by Wang Huanhuan, Assistant Researcher of Beijing Normal University and UNESCO Chair in Artificial Intelligence and Education, Dating, Postdoctoral Fellow of Beijing Normal University, and Zhang Ran, Technical Director of Trimble China. The course adopted both synchronous and asynchronous learning modes to ensure that each participant could learn efficiently and effectively within the flexible time frame, and attracted participants from different countries and regions.

教育项目设计场景	AIGC工具
信息检索	Gpt-3.5-Turbo、Gpt-4.0-Vision、文心一言、通义千问、AMiner
创意生成	Gpt-3.5-Turbo、Gpt-4.0-Vision、文心一言、通义千问
设计流程分析	Gpt-3.5-Turbo、Gpt-4.0-Vision、文心一言、通义千问
文本优化	Gpt-3.5-Turbo、Gpt-4.0-Vision、文心一言、通义千问
文本扩写	Gpt-3.5-Turbo、Gpt-4.0-Vision、文心一言、通义千问
图片描述	Gpt-4.0-Vision、通义千问
图片生成	剪映 Dreamina、笔墨 AI
PPT生成	AiPPT
实时翻译	Gpt-3.5-Turbo、Gpt-4.0-Vision、文心一言、通义千问、DeepL
音视频生成	Fliki

Competition Presentation

The presentation of "The 7th Global Competition on Design for Future Education (2024)" was successfully held online on April 11, 2024,. A number of industry experts attended the presentation to sort out the requirements of the competition, interpret the theme of the competition, and help participants further understand the competition and design better entries. The presentation also provided professional training and guidance on the AIGC tools, encouraging participants to better utilize the AIGC tools for thinking, designing prototypes and model iteration.

Program Orientation Sessions & Case Guidance Sessions

Program Orientation Sessions for Higher Education Track and Vocational Education Track

The Chinese and English program orientation sessions for the Program Guidance Meeting for the Higher Education and Vocational Education Tracks of the "The 7th Global Competition on Design for Future Education" were successfully held online From May 22nd to 24th, 2024,Representatives from more than ten domestic and international universities, including Peking University, Beijing，Normal University，Beijing University of Posts and Telecommunications, University of Chinese Academy of Sciences, Chinese University of Hong Kong, Zagreb University of Applied Sciences in Croatia and University of Szeged in Hungary, made wonderful project presentations focusing on a variety of fields such as education, technology, mental health and special needs groups, which showed the participants' in-depth explorations and unique thoughts on the future of education.

Case Guidance Sessions for K12 Track and Enterprises Track

The case guidance session for K12 Track and Enterprises Track of “The 7th Global Competition on Design for Future Education" was successfully held online on May 23, 2024.Six participating teachers from different regions of China introduced the educational design cases of their schools, such as teaching intelligent supply machine, AIGC integrated math curriculum, positive thinking stress relieving teaching practice, supplementary teaching of history in science class, AI educational program design in chemistry class, etc., which convey the participants' innovative exploration and thinking about the future of education .

Monthly Outstanding Entries and Popular Entry of Poster Contest on "The Future Education in My Mind" and Contest on " Contextual Learning Short Videos " Announced

After professional screening and fair evaluation by experts, a number of outstanding posters and short teaching videos stood out from April to June, which not only showed the profound teaching skills of global education practitioners and education enthusiasts, but also became models for the integration of educational technology and creativity.

Outstanding Videos of March

Contextual Learning Short Videos" in April

Zhang Xiaoling (Shengli Shengdong Primary School, Dongying City, Shandong Province)	The Infinity of Miraculous Anthropomorphisms
Wang Yuxia (Shengli Shengdong Primary School, Dongying City, Shandong Province)	The Secret of Hot Air Balloon Rise - The Spinning Paper Snake.
Shi Jianxing (Zoucheng Power Plant Primary School, Shandong Province)	Have You Grown - Smart Planters
Jie Qiao and Li Zhang (Qilong Kindergarten, Dongying District, Dongying City, Shandong Province)	Funny Graphics.
Monthly Outstanding Entries of Poster Contest on "The Future Education in My Mind" in April	
Gao Yang (Shaanxi Normal University)	AI-enabled EducationCultivating Excellence with Heart ”
Shou Xianjian (Beijing Union University)	Touching Words, Feeling the World
Li Zhiyang (Tianjin College of Media and Arts)	Books for the Future

Lu Zhile, Qiu Chunhua, ChenSirong, Ye Jinyao (Guangzhou Institute of Science and Technology); Luo Yaoming (Dongguan City College)	Carriage Haven: A Literary Retreat
Yang Haotian (Tianjin College of Media and Arts)	Education in Illusion and Reality
Tan Xiaowen and Li Caiyun (Beijing Union University)	Closely Linked to Hearing
Jiao Ye (Tianjin College of Media and Arts)	The Age of AI
Tao Chun (Guizhou City Vocational College)	The Classroom of the Future
Monthly Popular Entry of Poster Contest on "The Future Education in My Mind" in April 	
He Xinyi (Beijing Normal University)	Teaching to the Talent

Monthly Outstanding Entries of Contest on " Contextual Learning Short Videos" in May 	
Zhang Zhengyu (Harbin Normal University)	The Relationship between Technology and Design

Luo Rong (Longhua District Innovation Experimental School, Shenzhen, Guangdong Province)	The Code
Tian Zong'en and Xiao Li (Shenzhen Senior High School, Guangdong Province)	The One-Handed Shoulder Shot in Place.
Bouslimi Chokri (Jendouba Secondary School, Tunisia)	One Small Step for you, One Big Step for Sustainability.
Wenli Zhang (Liaoning Normal University)	Epigenetics
Chen Yanjie (Liaoning Normal University)	Food Chains and Food Webs
Chen Yinying (Liaoning Normal University)	Pigments Capturing Light Energy.
Zong Min, Ma Lin (Baoji University Of Arts And Sciences)	Who's the Murderer - Transformation and Application of the Iron Triangle
Xue Cihong, Liang Pengjun, He Jiahui, Xu Yang, Yang Qing (Beijing Normal University at Zhuhai)	Tearful Eyes Gazing Afar that Conveys the Heroic Spirit of the Frontier: An Analytical Appreciation of Yu Jia Ao: Autumn Thoughts
Sheng Xia, Chen Yanli, Wang Qiong (Danyang, Zhijiang City, Hubei Province) Primary school	In the Nature Park: Part A Let's Spell.

The Monthly Popular Entry of Contest on " Contextual Learning Short Videos" in May	
Sheng Xia (Danyang Primary School, Zhijiang City, Hubei Province)	Revised Edition: The Debate Between Two Children on the Sun
Monthly Outstanding Entries of Poster Contest on "The Future Education in My Mind" in May	
Xinyi Wang (Xi'an University of Technology)	Window to the Future
Song Xinyue, Hong Zijie, Tan Chenglong, Zhang Yu (Beijing Union University)	We just can't hear you
Ma Qingling (Yutou Primary School, Yuji District, Jinzhong City, Shanxi Province)	Education for the Future
Zhu Liying (Tianjin College of Media and Arts)	Digital Education
Zhi Xintong (Tianjin College of Media and Arts)	Future Education - Brain Chips
Zhang Huiyuan (Tianjin College of Media and Arts)	The Age of the Chip: Everything is Connected
Meng Xiangye (Beijing Union University)	Visualization of Information
Ye Zongqi (Fuzhou Software Technology Vocational College)	Education for the Future
Xu Gelin, Zhou Cheng (Loufeng School of SIP)	The Future Meta-Cosmic Geography Classroom

Zhang Tai (Yuji No. 2 Middle School)	The Future of Education in My Mind
Zhao Zijing (Yuji No. 10 Middle School)	The Future of Education in My Mind
Wang Han (Tianjin College of Media and Arts)	Internet Education
Monthly Popular Entry of Poster Contest on "The Future Education in My Mind" in May	
Wei Yuan, Wang Xinyi, Liu Zichen (Xi'an University of Technology)	Link to the Future

Monthly Outstanding Entries of Contest on " Contextual Learning Short Videos" in June	
Chen Shuang (Liaohe Kindergarten, Dongying District, Dongying City, Shandong Province)	The Magic Milk Painting
Li Jifeng (Shenglijinyuan Primary School, Dongying City, Shandong Province)	New Friends in Color
Yang Xiaojie, Chang Jiaqi (Liaohe Kindergarten, Dongying City, Shandong Province)	Meet Tie-Dye
Sheng Yuqiao (Liaoning Normal University)	The Process of Establishment of the Cell Doctrine

Ding Wenlong, Yang Jiao (Xinghu School, Liangjiang New Area, Chongqing)	On the Frontier
Bo Pingan and Song Chuancui (Dongkai No. 2 Primary School, Dongying Economic and Technological Development Zone, Shandong Province)	Enduring Melodies and Eternal Flame: A Case Study of Wang Wei's “Autumn Evening in the Mountains”
Jiang Wei (Dongwu Road Kindergarten, Dongying City, Shandong Province)	The Journey of the Seed
Yang Ruixin, Nan Xingyu, Ma Jingyuan, Che Shiwen (Beijing Normal University - Hong Kong Baptist University United International College)	Scenario-Based Teaching with Generative Artificial Intelligence for the Creation of "Enhanced Timetables"
Li Huiyu and Tian Lufeng (Third Primary School, Yantai Economic and Technological Development Zone, Shandong Province)	Oil-paper Umbrella
The Monthly Popular Entry of Contest on "The Contextual Learning Short Videos" in June	
Hao Kaihong (Yuci District No.5 Middle School, Jinzhong City, Shanxi Province)	The Design and Production of Geometric Translation and Rotation Teaching Aids
Monthly Outstanding Entries of Poster Contest on "The Future Education in My Mind" in June	
Marko Tomašek (Zagreb University of Applied Sciences)	The Future of Education

Jana Kovačević (Zagreb University of Applied Sciences)	Mirror of Tomorrow
Robert Novosel (Zagreb University of Applied Sciences)	Open Your Horizons: Beyond Boundaries.
Wu Minhua (Special Education College of Beijing Union University)	Learning Without Boundaries
Ema Novosel (Zagreb University of Applied Sciences)	Hand in Hand
Dora Starčević (Zagreb University of Applied Sciences)	In the Middle
Kristijan Rančić (Zagreb University of Applied Sciences)	Learn About the Future Before It's Too Late
Tina Ferenčić (Zagreb University of Applied Sciences)	The Future of Education
Ana Lackovic (Zagreb University of Applied Sciences)	Embracing Tomorrow: Symbiosis of Human and AI in Education.
Zhang Jing, Zhu Jiao, Luo Yijia (Special Education College of Beijing Union University)	The Miracle of Hearing
David Vrčković (Zagreb University of Applied Sciences)	Edufu Poster
Paula Jagodić (Zagreb University of Applied Sciences)	Stripes of Progress in Learning.
Marija Matković (Zagreb University of Applied Sciences)	Future Is in Your Control
Li Zichao (Gongcun Branch, Zhangqing Township Central Primary School, Yuji District, Jinzhong City, Shanxi Province)	AI Plus Education Equals the Future of Education

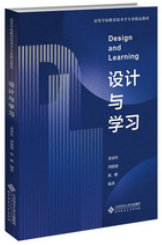
Qiu Xingyuan, Yang Xuan, Kim Miko, Yang Shan, Ding Yinan (Sungkyunkwan University)	The Future of Education in My Mind
Zhou Rongsheng (Tianjin University of Technology and Education)	Smart Mapping the Future: A New Blueprint for Education
Li Jiongzhen (Experimental Primary School, Yuji District, Jinzhong City, Shanxi Province)	Classroom of the Future
Zhu Xuhao (Fuzhou Software Technology Vocational College)	Back to Basics: The Ideal Future of Education
Kou Shiyan (Weinan Normal College)	Seeing the Future
Li Changzhi (Wujinshan Township Central Primary School, Yuji District)	Education of the Future
Wu Xianqing (Tianjin College of Media and Arts)	FUTURE
Yan Kaiqi, Wang Xiaoyu, Gong Shuai, Fu Yule (Shouyang No. 2 Middle School, Jinzhong, Shanxi)	The Future of Education in My Mind
Monthly Popular Entry of Poster Contest on "The Future Education in My Mind" in May	
Antonija Glasnović (Zagreb University of Applied Sciences)	Steps to Success: Embracing Imperfection in the Future of Education.

Design and Learning MOOC

“Design and Learning” Book Recommendations

"Design and Learning" is an emerging research field initiated by the Smart Learning Institute of Beijing Normal University, which researches the problems and challenges of future education, and explores the ways to apply design thinking and emerging technologies to resolve education problems. In order to let more people understand "Design and Learning" and join the dialog of future education, the Design and Learning Lab has compiled a series of related books for readers.

UNESCO's global report, Reimagining Our Future Together: Forging a New Social Contract for Education, released in 2021. This report maps out a vision of education for 2050 and beyond, proposing to revisit and transform education in five key dimensions: pedagogy, curriculum, teacher roles, school functions, and lifelong learning, and providing directions for the design of future education that are worthy of in-depth reading and reflection by everyone concerned with the development of future education.



Smart Learning Institute of Beijing Normal University invited domestic experts to prepare a Chinese textbook, Design and Learning, based on the results of the series. The book redefines "design" from the perspective of education, proposes NCIP design methodology for education, and provides theoretical basis and case support for future education design.

A Brief History of the Future of Education was pubished as a tour de force that anticipates the the transformative future of education which not only looks back at education's journey to yesteryear, but more importantly gives us a vivid picture of how education and learning will look in 2038 and beyond. Created by two thought leaders in education, Ian Jukes and Ryan L. Schaff, this book is an indispensable guidebook for educators and parents as it reveals how education can adapt and lead the digital generation in an era of disruptive innovation.

Visible Learning: A Synthesis of More Than 800 Meta-Analyses of Academic Achievement by Professor Hattie of the University of Melbourne searches for the "holy grail" of teaching and learning through a meta-analysis of more than 800 studies of academic achievement, and demonstrates the enormous potential of the concept of "visible learning" as a valuable resource for educators to improve the effectiveness of their teaching and learning.

"Design and Learning" MOOC is available online for free at the Academy

The 9th Academic Week of Smart Learning Institute of Beijing Normal University released the international course "Design and Learning". The new MOOC "Design and Learning" developed on the basis of AI technology is one of the important achievements of this academic week as an open resource of the international course, which has been officially launched on the Xuetang online platform.The MOOC adopts "project-based learning" approach, encouraging students to form teams across schools and disciplines to complete their works. The course integrates mature theories, latest achievements and typical cases in the field of future education design (including excellent works of the Global Future Education Design Competition), and guides learners to complete the design of key educational scenarios, including the design of learning activities, learning spaces, learning methods and STEAM courses, by applying the design thinking and NCIP design methodology (Needs-Context-Idea-Presentation).

Important Events

Yuanzhuo Initiatives

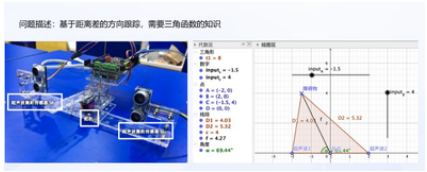
"Spring is the Time to Read" Special Event

The special event " Spring is the Time to Read" of Yuanzhuo Project, focusing on STEM education, programming practice and the application of AI in education, invited Yu Xiaoya, director of the Artificial Intelligence and Creative Education Research Center of the Beijing Institute of Education, Wang Aisheng, a senior teacher from Qingzhou No.1 Middle School in Shandong Province, and Li Junyi, a special researcher of the China Education Forum of Thirty People, to attend the event, which respectively focusing on "STEM and Computational Thinking", "Programming World: Python Chapter" and "Super AI and Future Education". The guests shared their views with the participating teachers and conducted in-depth discussions and exchanges, which made the future direction of the development of computational thinking and AI education clearer and clearer.

"Artificial Intelligence Education for Primary and Secondary Schools" Sharing Session

Yuanzhuo has hold sharing sessions on "Artificial Intelligence Education for Primary and Secondary Schools" in collaboration with the Intelligent Education Center of Shanghai Artificial Intelligence Laboratory since May 2024.

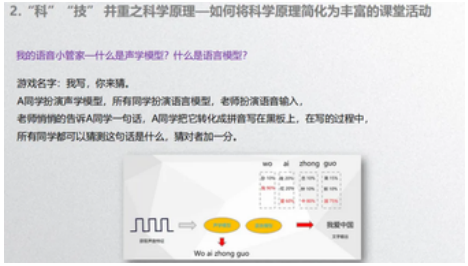
- On May 18, Xie Zuoru, Head of Science and Creative Education at the Intelligent Education Center of the Shanghai Artificial Intelligence Laboratory, conducted the first sharing session. Mr. Xie explained the current challenges of AI education from a theoretical point of view, and also provided solutions in actual teaching. The event was interactive through the Tencent conference, and live streamed through channels of the Global Intelligent Education Conference and PuYu InnoLab, attracting the participation of many teachers.



- On May 25th, Wang Haitao, the project leader of Youth AI Innovation and Practice Activity of Intelligent Education Center of Shanghai Artificial Intelligence Laboratory, brought the interpretation and guidance of the activity around "2024 National Youth AI Innovation and Practice Activity: Creating the Future with AI". The activity interpretation and guidelines. The sharing explained the themes of AI Art Generation, AI Interaction Design, AI Engineering Practice, AI Algorithm Challenge, and AI Innovative Teaching Case Collection.

- Liu Xiaoyu, senior researcher on AI teaching at the Intelligent Education Center of the Shanghai Artificial Intelligence Laboratory, brought the third edition of the sharing, in which Mr. Liu gave an in-depth explanation of the content structure of the AI Teaching Guidance Series for Elementary and Middle Schools, explored the status quo and challenges of AI teaching , and put forward a model for AI teaching innovation.
- Digital Human Production Technology and Application Scenarios
  On June 15, Yuanzhuo Academy invited Li Ruobing, Head of Algorithm of Flying Shadow Digital Person, to share the latest technology and application scenarios of digital human. The event introduced the current status of the development of digital human, as well as the advantages and shortcomings of digital human at the current stage, helping teachers to improve their personal digital literacy, gain inspiration on how to use digital people technology to solve existing teaching limitations, such as personalized teaching, using teacher detachment and virtual assistants for after-school tutoring, etc., and understand how to use digital people for distance teaching or self-media operation to break the geographic and time constraints, so that high-quality educational resources to be more widely disseminated.

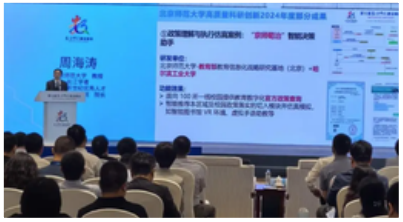
- Design and Practice of Artificial Intelligence Curriculum for Middle Schools
  On June 22, Yuanzhuo Academy invited Zhao Yingying, an information technology teacher from Beijing No. 5 Middle School, to share the design and practice of the junior high school artificial intelligence curriculum. The sharing focused on AI curriculum design of middle school, implementation effect evaluation and case analysis. Meanwhile, the event explored how to integrate the current development trend of AI technology and junior high school students' learning situation to create interesting AI course content based on the requirements of the new curriculum, and revealed how to deeply integrate technology and education to turn complex theories into vivid teaching. In addition, the activity discussed how digital technology can help improve classroom participation and promote the integration of teaching and learning , and analyzes two typical cases, namely, the model training class and the experiential class. Finally, the guidelines for the use of the casebook were briefly introduced to provide teachers with clear guidance for their teaching implementation.



Beijing Normal University Research Team Successfully Organized the "Digital Education" Session of the 7th Digital China Summit

The 7th Digital China Summit was held from May 24 to 25 at Fuzhou Strait International Conference and Exhibition Center. This summit marks the first Digital China Summit held since the optimization and restructuring of the national data governance framework, themed "Unleashing the Value of Data as a Factor of Production and Developing New-Quality Productive Forces." More than 300 people attended the summit, including the responsible comrades of the Social Science Department of the Research Institute of BNU, representatives from relevant state departments, local

education administrations, college and universities directly under the Ministry of Education, colleges and universities jointly established by ministries and provinces, as well as scientific research institutes and relevant enterprises.On the afternoon of May 24th, "Digital Society Sub-Forum: Digital Education Special Session" was held at the 7th Digital China Summit. With the theme of "Data Enabled Education Transformation and Innovation", the forum was hosted by the Ministry of Education and co-organized by Fujian Provincial Department of Education, Fuzhou University, Educational Informatization Strategy Research Base (Beijing), Ministry of Education, P.R.C, and China Telecom Group Corporation. Mr. Wu Yan, Vice Minister of Education, Mr. Xia Bing, Deputy Director of National Data Bureau, Mr. Li Xinghu, Member of the Party Group of Fujian Provincial People's Government, and Mr. Liang Baojun, General Manager of China Telecom Corporation Limited, attended the forum and delivered remarks.The Educational Informatization Strategy Research Base (Beijing) of the Ministry of Education, co-organizer of this sub-forum, relies on the construction of Beijing Normal University. Prof. Zhou Haitao from the Faculty of Education of BNU was invited to deliver a keynote report, introducing the exploration experience of Beijing Normal University from the perspective of data-enabled education research paradigm innovation, research scenario innovation and research capacity building innovation.The on-site experience area was open from May 23rd to 27th. NetDragon Websoft Inc. has been deeply involved in the exhibition for seven consecutive years, and the NetDragon Pavilion attracted many media reporters and professional visitors to experience the exhibition. Mr. Liang Nianjian, Vice Chairman of the Board, said that NetDragon focuses on the new generation of digital technology in this exhibition, with the theme of "Education Leads the Future, Creating New Quality Productivity Together", and empowers the digital education from the multi-dimensions of hardware, software and overall solutions.



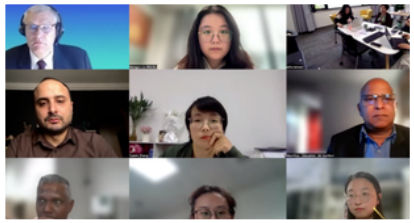
The First Seminar in the Series "Leading the Future - Bridging the Globe to Smart Education" Was Held Successfully

On April 19, the first seminar in the series "Leading the Future: Bridging the Globe to Smart Education" was held successfully, co-organized by the Smart Learning Institute of Beijing Normal University and the UNESCO Chair in Artificial Intelligence and Education. The seminar series aims to explore the definition of smart education, its basic features, and the practical impact of smart education in the global education system by integrating the views of global expers.The inaugural seminar brought together experts and scholars from several countries to share their understanding of smart education and how it can transform teaching and learning in different contexts. Asha Singh Kanwar, Chair Professor of the Institute of Smart Learning at Beijing Normal University, served as the moderator of the session.

International Seminar on " Inclusiveness of Education System: In the Context of Digital Transformation towards Sustainable Development Goal 4” Was Held Successfully

Recently, the Smart Learning Institute of Beijing Normal University and the UNESCO Chair in Artificial Intelligence and Education co-organized an international seminar on Inclusiveness of Education System: In the Context of Digital Transformation towards Sustainable Development Goal 4” . The seminar invited experts from many countries around the world, hoping that through sharing and exchanging ideas in the context of digital transformation, the seminar will help stakeholders to deeply understand the latest developments in inclusive education practices and try to find effective and innovative solutions to improve education practices. Asha S. Kanwar, Chair Professor of Smart Learning Institute of Beijing Normal University; Jonathan Kovilpillai, Project

Manager, Digital Learning Center, Asia Pacific University of Science, Technology and Innovation (APUSTI); Ricaud Auckbur, Acting Chief Technology Officer, Ministry of Education, Mauritius, Zhang Yuexin, Associate Professor, Department of Special Education of Beijing Normal University; Achraf Othman, Director of Innovation and Research, Mada Assistive Technology Center Qatar, attended the seminar. The seminar was moderated by Didier Jourdan, the UNESCO Chair in Global Health and Education and Director of the World Health Organization Collaborating Center for Education and Health Research.



The 8th APSEC International Conference on Computational Thinking and STEM Education (CTE-STEM 2024) Opens in Beijing

On May 28, 2024, The 8th APSEC International Conference on Computational Thinking and STEM Education (CTE-STEM 2024) was held in Beijing. Focusing on "Computational Thinking Education and Computing-related STEM Education", the conference invited researchers and practitioners engaged in or interested in the field of computational thinking and science education to attend the event. Participants exchanged innovative ideas, insights, valuable experiences and challenges around various sub-themes, explored new perspectives and trends in computational thinking and STEM education, and worked together to promote the sustainable development of computational thinking and STEM education.The conference ran through May 30, during which a series of diverse and engaging events had been organized, including keynote speeches, roundtable discussions, educator forums, academic paper presentations, teaching case studies, book exhibitions, and school tours. These events provided valuable platforms for education researchers and practitioners to share and exchange their experiences and insights. The conference was fruitful and received a total of 174 paper submissions from 322 authors from 11 countries and regions, and 78 high-quality papers were finally

included following rigorous review process. More than 200 guests and representatives from home and abroad attended the conference, among which nearly 80 representatives of domestic and international paper presenters showed their academic achievements and excellent teaching cases to the conference. The conference was hosted by the Asia-Pacific Society for the Application of Computer Education (APSCE), co-organized by Beijing Normal University, and supported by CoolThink@JC.

Exchanges and Cooperation

Professor Ronghuai Huang Led Delegation to Visit Three Higher Education Institutions in Croatia

On April 15, 2024, Prof. Ronghuai Huang, Dean of the Smart Learning Institute of Beijing Normal University, UNESCO Chair on AI in Education, embarked on an official visit to Croatia, accompanied by Associate Professor Ahmed Tlili and Assistant to Dean Dr. CHANG Tingwen. The visit aimed to strengthen the cooperation in smart education between China and Central and Eastern European countries and to discuss the blueprint for future collaborative projects. The first stop was the Zagreb University of Applied Sciences, where the team was warmly welcomed by Professor Jana **Ž**iljak Gr**š**i**ć**, Dean of the Department of Informatics and Computing, and Professor Petar Jandri**ć**, Vice Dean. They had productive discussions on co-organizing the Global Design Competition for Future Education, AI in Education (AIED) research projects, and digital printing technology with infrared spectroscopy. After in-depth talks, both sides agreed to establish a division of the 7th Global Competition on Design for Future Education at the university and invite experts in the field to join related research projects to promote educational innovation and development jointly.

Professor Ronghuai Huang Was Invited to Visit Slovenia and Attend PCE 2024

From April 17th to 19th, 2024, Prof. Huang Ronghuai, Co-Dean of Smart Learning Institute of Beijing Normal University, along with Associate Professor Ahmed Tlili and Assistant to Dean Dr.Tingwen Chang , was invited t8.3o visit the University of Maribor in Slovenia to attend the 6th International Scientific Conference on Philosophy of Mind and Cognitive Modelling in Education (PCE 2024) and to visit the Slovenian educational technology company Inovatio.. The visit not only strengthened the academic exchange and cooperation between Smart Learning Institute of Beijing Normal University and

Slovenian universities and enterprises, but also laid a solid foundation for the in-depth development of both sides in the field of smart education.

Co-Dean Ronghuai Huang Participated in the International Congress on Educational Futures 2024 and the 30th Anniversary Celebration of the Education University of Hong Kong

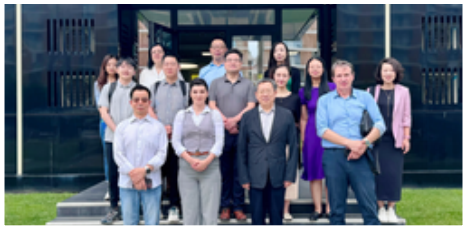
From April 23rd to 25th, 2024, Prof. Huang Ronghuai, Dean of Smart Learning Institute of Beijing Normal University, was invited to participate in the 30th Anniversary of the Education University of Hong Kong, alongside the concurrent “International Congress on Educational Futures 2024”. During the event, Dean Huang Ronghuai delivered a keynote speech entitled “Metaverse, AI, and STEAM Education in China's Digital Transformation” as a guest speaker and was invited to participate in the symposium “Elite or Idiot? Do Our Students Have Choices in the Digitalized World in the Coming 10 Years?” and had in-depth discussions and exchanges with international experts and scholars on related topics.

Springer Nature Managing Director Books visited Smart Learning Institute of Beijing Normal University

On April 29, Dr. Niels Peter Thomas, Managing Director Books, Springer Nature,

accompanied by LI Yan, the Editorial Director of Humanities and Social Sciences and Book Director of China, XIE Ran, the Editor of Education Books in East Asia, CUI Lili, the Senior Authorization Manager, and RAN Lu, the Account Manager visited the Smart Learning Institute of Beijing Normal University. During the visit, they engaged in discussions with Prof. HUANG Ronghuai, the Co-Dean of Smart Learning Institute of Beijing Normal University, CHANG Tingwen, the Assistant to the Dean, YAO Youjie, the Director of the Educational Robots Center, WANG Huanhuan, an Assistant Researcher, and Da Ting, a Postdoctoral Fellow. The two sides reached a consensus that they are looking forward to strengthening cooperation in the form of future teaching materials and resource production through Springer's AI products and services.

Delegation of the Faculty of Education visited Serbia and Bosnia and Herzegovina to deepen China-Central and Eastern Europe educational cooperation



From May 30 to June 5, 2024, Prof. Zhu Xudong, Minister of the Faculty of Education of Beijing Normal University, led a delegation to Serbia and Bosnia and Herzegovina, and Prof. Huang Ronghuai, Co-Dean of Smart Learning Institute and UNESCO Chair in Artificial Intelligence in Education, accompanied the delegation, visiting the local partner universities, the Chinese Embassy in Serbia, the Chinese Embassy in Bosnia and

Herzegovina, and local primary and middle schools, and successfully co-organized the international scientific sub-forum “Forum on Robotics and Artificial Intelligence in Education” with the Faculty of Education, University of Belgrade.This visit is an important initiative to deepen the cooperation and exchange between the Department of Education of Beijing Normal University and the universities in Central and Eastern European countries, and vigorously promotes the construction of the “China-Central and Eastern European Universities Association Community of Pedagogical Disciplines” led by the Faculty of Education of Beijing Normal University, laying a solid foundation for the further promotion of practical cooperation in related fields.

SLIBNU Invited to International Conference in Croatia: Collaborating to Co-Design a New Chapter of Future Education

From June 12 to 13, 2024, Prof. Guangju Chen, Deputy Dean of SLIBNU, Ms. Huanhuan Wang, Core Member of UNESCO Chair on Artificial Intelligence in Education, and Ms. Hongyan Kuai, Focal Contact of Design and Learning Lab, were invited to Croatia to attend the annual Printing & Design Conference. During the keynote session, a digital avatar of Prof. Guangju Chen, created by NetDragon Websoft Inc., made a striking appearance. Prof. Chen primarily shared the research achievements and practical explorations of SLIBNU in the field of Design and Learning. He introduced the “Design and Learning” course, as well as some annual activities, such as Global Competition on Design for Future Education (GCD4FE). Through the exchange and cooperation, educational design concepts have collided, sparking unprecedented ideas and enabling the profound integration of their unique methodological essences.

Digital Tools Empowering Rural Education, Enhancing Educational Equity: Prof. Asha S. Kanwar Visited Primary and Secondary Schools in Ziyun, Guizhou

On June 19, 2024, Professor Asha S. Kanwar, Chair of the Governing Board of the UNESCO Institute for Information Technologies in Education, former President and CEO of the Commonwealth of Learning, and Chair Professor at the Smart Learning Institute

of Beijing Normal University, together with Dr. Zeng Haijun, Vice Dean of the Smart Learning Institute of Beijing Normal University, representatives from China Education Daily, and Aliyun Education, visited Daying Hope Primary School and Daying Middle School in Ziyun County, Anshun City, Guizhou Province. The visit aimed to investigate how rural schools are utilizing digital tools to innovate educational practices.

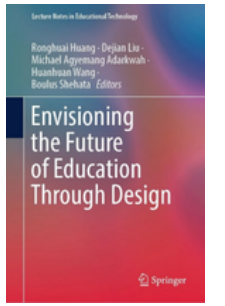
Chair Professor Asha S. Kanwar Was Invited to Deliver Speech at International Conference on Digital Open Education and the Construction of a Learning Society

Recently, the International Conference on Digital Open Education and the Construction of a Learning Society was convened in Beijing. The event was jointly hosted by the China National Open University, Metropolitan University of Hong Kong, Broadcast University of Japan, and the National Open University of Korea. Prof. Asha S. Kanwar, Chair Professor of Smart Learning Institute of Beijing Normal University was invited to participate and delivered a keynote address titled "The Role of Open Universities in Building a Learning Society" In the presentation, Prof. Kanwar delved into the concept of a learning society, emphasizing the need for close collaboration across various sectors to enhance the learning environment and motivate continual learning among individuals and organizations.

Book & Articles

Envisioning the Future of Education Through Design

Ronghuai Huang, Dejian Liu, Michael Agyemang Adarkwah, Huanhuan Wang, Boulus Shehata



Introduction: This book identifies the educational problems and issues that could be solved by design and discusses how to overcome these challenges by adopting a design thinking approach. The chapters cover topics such as opportunities and challenges for the futures of education, the emerging models of design thinking for education, learning activity design, educational design for learning with special needs, designing learning spaces of the future, designing the classroom of the future, the design of authentic learning, and design of elderly education. It aims to assist (e.g., administrators, practitioners, researchers, teachers, and students) in the educational field to realize the importance of design in education and enables them to use design and design thinking to overcome the educational challenges to achieve sustainable development.

Research on Paths to Improve The Efficiency of Human-machine Collaborative Classroom Under the Digital-Evidence Symbiosis Model

China Educational Technology

Tong Lili, Zhang Chen, Gai Yuhan, Zheng Ruihang

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4.2 Smart Education: Ensuring Lifelong Learning Opportunities for All: Based on GSE2023 Perspectives

E-education Research

Liu Dejian, Zeng Haijun，Huang Lulu，Liu Jun

Abstract: As a new form of education in the digital age, smart education is an inevitable choice for us to promote high-quality education with fairness and inclusivity and to provide lifelong learning opportunities for all. The Global Smart Education Conference serves as a crucial platform for international community to carry out exchanges and cooperation in smart education. In order to summarize and share the new achievements in the research and practice of smart education, this paper selects the perspectives of the Global Smart Education Conference 2023 and draws the development blueprint and promotion path of smart education. Smart education is the target form of digital transformation of education and its core proposition is to cultivate top innovative talents. The integration of science and education serves as the driving force for the innovative development of smart education, while data governance is the way of thinking for the orderly progress of change in the education system. Digital transformation is the practical foundation for shaping regional smart education ecology, and international cooperation paves the way towards a brighter future of human education.

Theory Evolution of Smart Learning Environment from Perspective of Digital Transformation

Heilongjiang Researches on Higher Education

Wang Yunwu, Huang Ronghuai, Jiao Yanli

Abstract: In the post-pandemic era, the world has accelerated the digital transformation and called for a theoretical breakthrough in the smart learning environment. Globally, since the early 1960s, the learning environment has gradually attracted people's attention; since the 1990s, the research on smart learning environment represented by smart campus and smart classroom has gradually increased. In the process of human civilization, learning environment has experienced five types: scene, learning environment, digital learning environment, smart learning environment and ubiquitous smart learning environment. Human beings have attached great importance to the learning environment and atmosphere in history, especially the digital transformation has expanded the connotation of smart learning environment, and the connotation of

smart learning environment needs to be redefined. The analysis framework of smart learning environment includes six parts: policies and standards, theory, nine fields, three types, key technologies and metaverse. The ten theoretical foundations of smart learning environment are: design thinking, emotional design, human-computer interaction, activity, immersion, embodied cognition, distributed cognition, situational cognition, cognitive load and architectural color visual modeling. The smart learning environment has gradually formed a relatively complete theoretical system and is moving from theoretical basis to theoretical innovation. Under the background of digital transformation, facing the era mission of building a powerful educational country and realizing educational modernization, it is urgent to speed up the construction of ubiquitous smart learning environment.

Developing Holistic Enhancement Pathways for Teachers' Digital Literacy

Ethnic Education of China Li Yanyan

In the context of the digital era, enhancing teachers' digital literacy is a crucial foundational project to ensure the quality of education in the new era. Our country has successively implemented several initiatives such as the "National Primary and Secondary School Teachers' Information Technology Application Skills Improvement Project 2.0" and the "AI-Driven Teacher Workforce Development Action" to improve the digital literacy and capability levels of the teaching staff. However, issues such as insufficient digital awareness among teachers, uneven levels of digital teaching proficiency, and a lack of practical experience in digital teaching still persist. Therefore, to further enhance teachers' digital literacy, efforts can be made in three aspects: strengthening the digital identity of the teaching staff to stimulate their willingness to be trained; optimizing the allocation of time and space for teaching and training to improve training conditions; and establishing a collaborative mechanism for the cultivation of teachers' digital literacy to ensure practical training.

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"Reshaping Higher Education with Vital Competences in the Intelligent Era"

Huang Ronghua

The breakthrough development of generative artificial intelligence(GenAI) technologies such as ChatGPT, Gemini and Sora has enabled the systems to "learn and understand" human language and generate high-quality and coherent text, complex and realistic images, dynamic and detailed videos, and other content as needed. In the face of the continuous iteration of intelligent technology, we should recognize the internal logic of AI's transformation of education, rethink the changes in the concept of education in the age of intelligence, and grasp the concerns of higher education in cultivating the "key competencies" of the new generation of citizens, so as to promote the high-quality development of higher education.


11 Reshaping Higher Education with Vital Competences in the Intelligent Era

by **Huang Ronghuai**, *UNESCO Chair on AI in Education and Professor & Co-Dean, Smart Learning Institute, Beijing Normal University, China*

The breakthrough development of generative artificial intelligence (GenAI) technologies such as ChatGPT, Gemini, and Sora has enabled the systems to "learn and understand" human language and generate high-quality and coherent text, complex and realistic images, dynamic and detailed videos, and other content as needed. Furthermore, users can intuitively and tangibly perceive and experience the profound impact of generative AI on their learning, work, and daily lives. GenAI is becoming an important driving force for accelerating the transformation of higher education and it is bringing unprecedented challenges in the process.

Professor Huang Ronghuai, the Chairholder of the UNESCO Chair on Artificial Intelligence and Education and Co-Director of the Institute of Smart Learning at Beijing Normal University, published an English article titled "Reshaping Higher Education with Vital Competences in the Intelligent Era" in the IAU Horizons, the journal of the International Association for Open and Distance Learning.

Journal of Smart Learning Environments and Journal of Computers in Education Leading in Journal Citation Reports 2024

Recently, the 2024 Journal Citation Reports (JCR) was released, with a total of 756 journals participating in the ranking within the "Education & Educational Research" field. Two journals co-hosted by the Smart Learning Institute of Beijing Normal University are leading in the rankings. Among them, the Smart Learning Environments (SLE) journal ranked seventh, covering indexing indicators including SSCI, SCIE, and ESCI, with its impact factor increased from 4.8 last year to 6.7 。 The Journal of Computers in Education (JCE) ranked twenty-sixth, with both journals ranking at the forefront in the field of education and educational research.

The journal "Smart Learning Environments," established in 2014, serves as the official ublication of the International Association of Smart Learning Environments (IASLE). pIt primarily features academic articles that promote the evolution of current learning environments into smart learning environments and innovate teaching and learning methods. The journal provides a platform for stakeholders to engage in constructive dialogues about the limitations of existing learning environments, the necessity for reform, the innovative application of emerging teaching methods and technologies, and the sharing and promotion of best practices to foster the evolution, design, and implementation of smart learning environments. The goal of the journal is to help stakeholders in smart learning environments better understand their roles throughout the educational process and explore pathways for mutual support.

The "Journal of Computers in Education" was founded in 2014 and is an interdisciplinary and comprehensive international journal, as well as the official journal of the Global Chinese Computer Education Application Society. This journal aims to showcase research outcomes that demonstrate how "applied technology promotes education and transforms learning methods." It provides an excellent academic exchange platform for researchers, practitioners, and policymakers in the fields of computer science and educational technology. The journal encourages authors to submit papers on the following topics: the latest research and experiences in the application of information and communication technology in learning and education, instructional design, learning technology theory, educational communication media and teaching tools, and relevant academic reviews.

Ronghuai Huang
Kinshuk
Nian-Shing Chen
Elliot Soloway

Ronghuai Huang
Gwo-Jen Hwang
Siu-Cheung Kong
Wenli Chen