

# Jingshi Wisdom & Learning

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Be in awe of education, for it shapes the soul of human,  
Be cautious to technologies, for its adoption has to be effective,  
Be entangled with 'wisdom', for uncertainty tends to be increasing,  
Be serious to academics, for academic research 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, Eternity (a subsidiary of NetDragon). SLI focuses on finding learning patterns powered by ICT, creating smart learning environment and platforms for lifelong learning, as well as supporting diversified, personalized and differential learning needs for digital learners.

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



Co-Dean Dejian LIU

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

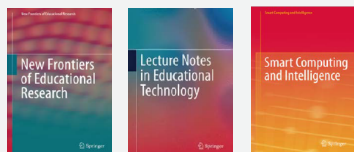


Co-Dean Ronghuai HUANG

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

### Open Series in Springer

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



### Springer's Journals

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



### 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 Harvard 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 learning environment as well as service industry and products of cyberlearning.

### Open Educational Resources (OER) Laboratory

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



GSE Conference



IAU visited

### ICT-based Instruction Center

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



Smart Education Demonstration Zone

### 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.





Winter 2024, ISSUE No.32

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Haijun Zeng

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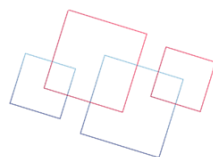
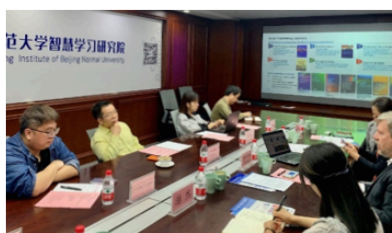
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# 目录

## Winter 2024

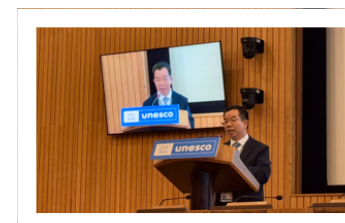
### Features 04-09

Review of Hot Topics of the Institute in 2024



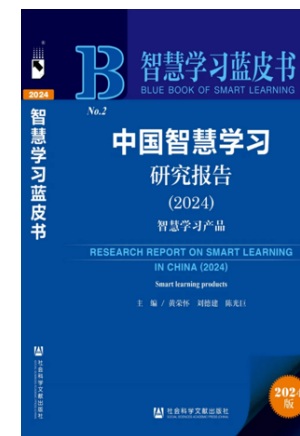
## Important Events 10-18

- The 8th International Conference on Smart Learning Environments (ICSLE 2024) and The 2nd Arab International Conference on Artificial Intelligence in Education
- The "Seminar on Technology Empowering the Construction of an Educational Power and Working Meeting on Industry-University-Research Collaborative Innovation in Smart Education" Was Held
- The Final of the Vocational Education Track of the 7th Global Competition on Design for Future Education Concluded Successfully
- The Final of the Vocational Education Track of the 7th Global Competition on Design for Future Education Concluded Successfully
- Professor Huang Ronghuai led a delegation to France, attending the Annual Meeting of the Global Alliance on the Science of Learning for Education
- Opening a New Chapter of Overseas Exchanges - The 3rd and 4th Sessions of the Advanced Workshops on AIGC-Empowered Human-Machine Collaborative Teaching Were Successfully Held



## Books & Articles 19-23

- Research Report on Smart Learning in China (2024): Smart Learning Products
- Digital Pedagogy Framework for Sustainable Education: Putting the Learner at the Centre
- Liu Dejian, Zeng Haijun: Digital Platforms Empower New-Quality Learning Productivity
- Smart Education in the Context of Digital Transformation: A Blueprint Planning and Key Paths - A Summary of the Global Smart Education Conference 2024
- Huang Ronghuai: Ten Prospects for the Development of Digital Education in China



## Features

### Review of Hot Topics in 2024

January

- From January to December 2024, the "Yuanzhuo Project" held a total of 38 online and offline activities, 31 thematic activities and courses, with a cumulative course learning duration of 400,000 minutes, over 1,200 participants in offline activities, and more than 70,000 viewers in live streams.
- From January 8 to 12, 2024, "The 9th Smart Learning Academic Week of Beijing Normal University: Designing for Future Education" was held.

March

- From March to November 2024, "The 7th Global Competition on Design for Future Education" was held. The competition set up four tracks (Higher Education, K-12, Enterprise, Vocational Education) and overseas regional selection contests in the Maldives and Croatia. It attracted more than 5,000 participants from over 40 countries to register, and received more than 1,000 outstanding design works during the competition.
- On March 9, 2024, "The National Olympiad in Artificial Intelligence (NOAI) 2024" was held.
- On March 17, 2024, the Project Kick-off and Demonstration Meeting of "General Education Guidelines for Artificial Intelligence in Primary and Secondary Schools" was held.

April

- In April 2024, webinar series "Inclusiveness of Education System: In the Context of Digital Transformation towards Sustainable Development Goal 4" and "Navigating the Future: Bridging Smart Education around the World" were held.
- On April 11, 2024, the Springer Book Series Envisioning the Future of Education Through Design was published.
- From April 15 to 16, 2024, Professor Huang Ronghuai led a delegation to Croatia, visiting the University of Zagreb Applied Sciences, Algebra University College, and University North.



April

- From April 17 to 19, 2024, Professor Huang Ronghuai led a delegation to Slovenia, attending the 6th International Scientific Conference on Philosophy of Mind and Cognitive Modelling in Education (PCE 2024).
- From April 23 to 25, 2024, Professor Huang Ronghuai delivered a keynote speech titled "Metaverse, AI, and STEAM Education in China's Digital Transformation" at the International Congress on Educational Futures 2024 (ICEF2024) and the 30th Anniversary Celebration of the Education University of Hong Kong.
- On April 29, 2024, the President of Springer Nature's Global Book Business visited the SLI.



May

- On May 8, 2024, the Springer Book Series Application of the Metaverse in Education was published.
- On May 24, 2024, the 7th Digital China Summit was held, and the research team of Beijing Normal University undertook the "Digital Education" special session.
- On May 28, 2024, the 8th APSCE International Conference on Computational Thinking and STEM Education 2024 (CTE-STEM 2024) was held.



May

- From May 30 to June 5, 2024, Professor Huang Ronghuai, along with the delegation of the Faculty of Education delegation, visited Serbia and Bosnia and Herzegovina, and attended the "Forum on Robotics and Artificial Intelligence in Education" held in Serbia.
- From June 12 to 13, 2024, representatives from SLI attended the Printing & Design International Scientific Conference in Croatia.



June

- On June 19, 2024, experts from SLI conducted research at Daying Hope Primary School and Daying Middle School in Ziyun County, Guizhou Province.
- In June 2024, Chair Professor Asha S. Kanwar delivered a keynote speech titled "The Role of Open Universities in Building a Learning Society" at the 2024 International Conference on Building a Learning Society through Digitalization of Open Education.
- In June 2024, two journals achieved leading rankings in Clarivate's Journal Citation Reports (JCR) — Smart Learning Environments (SLE) ranked 7th, while Journal of Computers in Education (JCE) ranked 26th, covering the key indexes including SSCI, SCIE, and ESCI.



Ronghuai Huang  
Kinshuk  
Nian-Shing Chen  
Elliot Soloway



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

July

- From June 26 to 27, 2024, Professor Huang Ronghuai delivered a report titled "Promoting the Key Competencies of Teenagers for Building Shared Futures in the Intelligent Era" at the International Conference on Nation-Building 2024 (ICNB 2024) in Thailand.
- On July 4, 2024, Chair Professor Asha S. Kanwar delivered a keynote report titled "Education Transformation and Talent Development in the AI Era" at the Forum on AI and Education of the 2024 World Artificial Intelligence Conference in Shanghai.
- From July 11 to 12, 2024, the "Forum on Digital Transformation of Education in Ethnic Minority Areas and Thematic Research Meeting on Digital Leadership" was held.
- From July 29 to 30, 2024, the Forum on Enhancing Artificial Intelligence Literacy for Youth was held.

August

- On August 10, 2024, the Springer Book Series A Collection of AI Innovations by Chinese Teenagers was published.
- From August 18 to 20, 2024, the Global Smart Education Conference 2024 was held, launching the report "Global Understanding of Smart Education in the Context of Digital Transformation".



- On August 19, 2024, the Working Meeting of the Alliance Schools (Districts) for the Construction and Application Demonstration of Intelligent Connected Learning Environments was held.



September

- On September 29, 2024, the Springer Book Series Using Educational Robots to Enhance Learning was published.

October

- From October 19 to 23, 2024, Professor Huang Ronghuai attended the International Conference on Innovation of Emerging Information and Communication Technology (ICIEICT 2024) in Morocco.
- On October 28, 2024, the 8th International Conference on Smart Learning Environment (ICSLE 2024) and 2nd Arab International Conference on Artificial Intelligence in Education were held.

November

- From November 5 to 7, 2024, Professor Chen Guangju, the vice Dean of SLI, attended the UNESCO IIEP Regional Conference on Educational Planning in Asia-Pacific: Common Vision and Future Prospects.
- From November 5 to 9, 2024, Dr Zeng Haijun, the vice Dean of SLI, joined the BNU delegation to Russia for the Sino-Russian Universities Alliance in Education International Forum on Teacher Education and a bilateral working meeting.
- On November 9, 2024, the Seminar on Technology Empowering the Construction of an Educational Power and Working Meeting on Industry-University-Research Collaborative Innovation in Smart Education was held.
- From November 12 to 15, 2024, Professor Huang Ronghuai attended the 17th ASEF Classroom Network Conference.
- From August to November 2024, the Advanced Workshops on AIGC-Empowered Human-Machine Collaborative Teaching were held in Beijing, Tunisia, and Serbia.



- From November 22 to 25, 2024, Professor Huang Ronghuai attended the International Association of Universities Annual Conference in Tokyo.
- From November 22 to 24, 2024, Professor Asha S. Kanwar delivered a keynote on "Sustainable Higher Education in the AI Era" at the 3rd International Conference on University Transformation and Development.
- From December 1 to 6, 2024, Professor Huang Ronghuai led a delegation to France, attending the Annual Meeting of the Global Alliance on the Science of Learning for Education. Professor Huang Ronghuai, on behalf of the "Technology for Education" Working Group, introduced the thematic report.



December

- On December 10, 2024, the GSENet Global Smart Education Webinar Series "What Role Can Smart Education Play in Transforming Open, Flexible, and Distance Learning" was held.
- In December 2024, the book Research Report on Smart Learning in China (2024): Smart Learning Products was published.



## Important Events

### The 8th International Conference on Smart Learning Environments (ICSLE 2024) and The 2nd Arab International Conference on Artificial Intelligence in Education

The 8th International Conference on Smart Learning Environments (ICSLE 2024) and The 2nd Arab International Conference on Artificial Intelligence in Education opened on October 28. This three-day international exchange event brought together experts from the global education and technology fields to jointly discuss cutting-edge applications and innovative development of smart education and artificial intelligence in education. The opening ceremony of ICSLE 2024 was addressed by Professor Liu Dejian, Co-Dean of SLI, who shared profound insights into the future development of smart education and artificial intelligence. The opening ceremony invited a number of important guests, including Prof. Slim Edriss, President of the University of Tunis, Prof. Imed Jabri, Director of the LaTICE Research Laboratory, and Prof. Mohamed Jemni, Director of the Department of Information and Communication Technology of ALECSO (representing H.E. Prof. Mohamed Ould Amar, Director-General of the Arab League Educational, Cultural and Scientific Organization (ALECSO)). ICSLE 2024 accepted a total of 28 international academic papers, which will be included in the Lecture Notes in Educational Technology (LNET) series published by Springer and indexed in Scopus, providing an important reference for global academic research in the fields of smart education and artificial intelligence. In addition, the conference also set up a ministerial-level meeting, focusing on regional education cooperation and development opportunities, and met with representatives of other Arab organizations to discuss cooperation opportunities and promote in-depth exchanges and collaboration in smart education among regions.



### The "Seminar on Technology Empowering the Construction of an Educational Power and Working Meeting on Industry-University-Research Collaborative Innovation in Smart Education" Was Held

To implement the spirit of the 20th National Congress of the Communist Party of China and the National Education Conference, and serve the national education digitalization strategy, the "Seminar on Technology Empowering the Construction of an Educational Power and Working Meeting on Industry-University-Research Collaborative Innovation in Smart Education", hosted by the China Smart Education Industry-University-Research Collaborative Innovation Platform of the China Association for the Promotion of Industry-University-Research Cooperation, was held at Beijing Normal University on November 9, 2024. Participants jointly discussed key issues, implementation paths, scenarios, and the working mechanism of the industry-university-research collaborative innovation ecosystem for technology empowering the construction of an educational power.



## The Final of the Vocational Education Track of the 7th Global Competition on Design for Future Education Concluded Successfully

From November 22 to 24, 2024 (Beijing Time), the final of the Vocational Education Track of the 7th Global Competition on Design for Future Education was successfully held at Fuzhou Software Technology Vocational College. This competition was co-hosted by Beijing Normal University and the UNESCO Institute for Information Technologies in Education (IITE), with Beijing Design Society and the Office of the Organizing Committee of Beijing International Design Week as special cooperative organizations, and jointly undertaken by Fuzhou Software Technology Vocational College, the Smart Learning Institute of Beijing Normal University, and the National Engineering Research Center of Cyberlearning and Intelligent Technology, and co-organized by the Fujian Provincial Vocational Education Steering Committee for VR/AR Industry and NetDragon Huayu Education. During the final, 22 participating teams (with a total of 91 participants) from various higher vocational colleges across the country engaged in intense and challenging project optimization and design. Meanwhile, a team of university and enterprise mentors from the fields of education and design provided targeted professional guidance to each participating team through face-to-face communication with the participants. The final of the Vocational Education Track produced 2 Gold Awards, 4 Silver Awards, 6 Bronze Awards, 6 Excellence Awards, and 4 Finalist Awards. Professor Chen Guangju, Deputy Director Song Weizu, Vice Dean Shi Jianguo, Professor Bai Qingyuan, Professor Zhang Xiuyu, Vice President Chen Hong, Vice Dean Chen Changjie, President Yu Faren, Teacher Ma Dongming, and Teacher Xu Pengfei presented awards to the winning teams.

第七届全国未来教育设计大赛职教赛道获奖名单		
项目名称	团队名称	队员姓名
金奖		
I See It——针对特殊教育学生的AI智能助学习平台	有爱无碍	朱宇鸿、刘希娅、宋慧萍、祝皓、徐彤
挂车式空气能热泵烘干装置	福拱壹号	朱兴、徐静怡、戴仁贵、温怡娴、陈炎炜
银奖		
数说睿银——畲族非遗银雕技艺+科技	数说睿银	吴怡诗、叶德斌、刘嘉琦
“童创”逻辑思维训练系统	逻辑小工匠	韩明杰、徐仁杰、赵磊、吴天月、周家地
介休明代黄釉琉璃青鲁IP文创设计	四神文艺队	冯彬彬、杜俊荣、许力方、武彦宏
蔚彩剪韵——蔚县非遗剪纸数字化传承平台	蔚剪守护者	袁帅、郭晓钰、李杰、王奥天、李韦娴

铜奖		
智护养老	彩虹大厦4人组	刘婷兰、李尉露、杜佳泽、许嘉欣
深度融合大世界：特殊儿童在幼儿园的融合教育实践探索	福佑星程融合教育社	黄安馨、蔡洁仪、陈丽斌、王继麟、高胜美
基于OpenHarmony的智能家居系统	你说得都对队	康嘉彬、黄鑫源、张凯、林善春、郑宸斌
化学探索者	放飞梦想队	何烨强、陈晓春、郭鑫荣、陈泽淋
非遗文化虚拟场馆设计—非遗文化场馆设计	贰贰叁	张高哲、殷铮明、冉卓
"Self-Lift"——情感与认知的内在成长计划	雷雷雷队	唐敬瑞、柏雨伶、管民安、严锋
优秀奖		
"帕鲁一号"自主导航运输车	数字未来探索队	陈锦杨、施俊杰、李川、陈芝颖
长征精神-非物质文化遗产虚拟体验馆	七上花枝队	来婧、邓翔、吴昱晶、方玉娇
妙手绣心	我说的都对	喻好、彭筠竹、张婧
节气守护者	节气守护者队	罗宗铭、沈盈如、张世贵
8-18岁青少年行为偏差的干预与塑形	视心	樊如君、杨栖、兰芳
VR云锦技艺体验	云锦梦之端	夏玲、程鑫婷、魏雯清、吴西
总决赛入围奖		
绿野启途——农村教育振兴与发展计划	绿野振兴团	陶纯、杨艳希、黄江海、卯越
元宇宙城市空间教育设计与室内设计	思路打开	贺正霖、魏文可、罗佳、黄大朋、徐鹏翔
古方新境：中医药虚拟体验馆	从容应队	范雯欣、余睿怡、雷婕妤、龚敬、李晓萍
安全过街体感教育软件	星语心愿	何煜、林嘉越、张美琪、徐雅玲



Professor Chen Guangju and Deputy Director Song Weizu presented awards to the Gold Award teams.

Vice President Chen Hong and Vice Dean Chen Changjie presented awards to the Silver Award teams.





Vice Dean Shi Jianguo and President Yu Faren presented awards to the Bronze Award teams.

Professor Bai Qingyuan and Professor Zhang Xiuyu presented awards to the Excellence Award teams.



Teacher Ma Dongming and Teacher Xu Pengfei presented awards to the Finalist Award teams.



## Professor Huang Ronghuai led a delegation to France, attending the Annual Meeting of the Global Alliance on the Science of Learning for Education

From December 2 to 3, 2024, the Annual Meeting of the Global Alliance on the Science of Learning for Education was held at the UNESCO Headquarters in Paris. Professor Huang Ronghuai, Co-Dean of the Smart Learning Institute of Beijing Normal University and UNESCO Chair on AI in Education, and Associate Professor Liu Min, Director of the Sino-French Center for Educational Innovation and Deputy Director of the International Exchange and Cooperation Office, were invited to attend the meeting.

In October 2023, the UNESCO Expert Meeting on the Science of Learning officially established the UNESCO Global Alliance on the Science of Learning for Education (hereinafter referred to as the "Alliance"). As one of the important communities of practice under UNESCO, the Alliance aims to bridge the gap between academic research, policy-making, and educational practice, and promote the transformation of knowledge in the science of learning into educational policies and practices. As one of the founding members of the Alliance, the Smart Learning Institute of Beijing



Normal University and the UNESCO Chair on Artificial Intelligence in Education hosted the "Technology for Education" Working Group of the Alliance in 2024. Professor Huang Ronghuai's team took the lead in writing the thematic report of the Working Group.

# Opening a New Chapter of Overseas Exchanges - The 3rd and 4th Sessions of the Advanced Workshops on AIGC-Empowered Human-Machine Collaborative Teaching Were Successfully Held



In October 2024, the "Advanced Workshops on AIGC-Empowered Human-Machine Collaborative Teaching", co-hosted by the Smart Learning Institute of Beijing Normal University and ALECSO, was held during the 8th International Conference on Smart Learning Environments (ICSLE 2024) and The 2nd Arab International Conference on Artificial Intelligence in Education.



This event was the first time the workshop was held overseas, attracting more than 30 primary and secondary school teachers, university teachers, and representatives of relevant enterprises from Tunisia to participate actively. The workshop shared practical cases of AI Agent applications in China and provided a communication platform for participants to jointly discuss how Agents can empower human-machine collaborative teaching in the AIGC era.

### Application 2.3 : Brainstorming

Tool : GPT-4 /GPT-4o

Prompt : I am an assistant professor in the robotics department dedicated to researching anti-bullying robots, and I am currently designing the first lesson of an introductory course on campus anti-bullying robots for second-year graduate students. To ensure the rigor of our design in teaching and make it easy to understand, I have to receive professional guidance from a seasoned professor with extensive experience in bullying prevention robots. Could you assist me in designing the following aspects of the teaching plan and provide information, presented in a standardized format?

Activity: Please provide a description of a teaching activity that lasts approximately 5 minutes. The activity is to ignite students' interest in the development of anti-bullying robots while also aligning with their characteristics to facilitate subsequent group collaboration.

Output 1	Output 2	Output 1	Output 2
<p><b>Activity Description:</b></p> <p><b>1. Introduction (5 minutes)</b></p> <p>Start the activity by briefly discussing the increasing importance of robotics in social contexts, particularly in addressing mental health issues like bullying. Mention how innovative solutions, such as anti-bullying robots, can transform campus environments.</p> <p><b>2. Prompting (10 minutes)</b></p> <p>Ask students to quickly pair up with someone they have not yet met. They will start a 2-minute conversation for their assigned topic.</p> <p><b>3. Report (10 minutes)</b></p> <p>Request each pair to share their findings with the class and get them to brainstorm and get ideas on how to design an anti-bullying robot that can address their assigned topic.</p>	<p><b>Activity Description:</b></p> <p>This activity will be a media-based ice breaker that will last for 5 minutes. Screens can be a powerful tool in igniting student interest, and in this instance, we will use clips from popular films featuring robots to engage our students.</p> <ol style="list-style-type: none"> <li>1. Start the activity by showing short clips (30 seconds to 1 minute long) from various films such as "E.T.", "The Iron Man", "Wall-E", or "The Terminator" in the classroom setting. Please ensure the clips contain scenes where robots display anti-bullying characteristics or perform anti-bullying activities.</li> <li>2. After displaying each clip, ask the students to raise their hands if they have seen the movie.</li> <li>3. Then facilitate a brief 1-minute discussion after each clip.</li> </ol>	<p><b>Activity Description:</b></p> <ol style="list-style-type: none"> <li>1. <b>Introduction (5 minutes)</b> Start the activity by briefly discussing the increasing importance of robotics in social contexts, particularly in addressing mental health issues like bullying. Mention how innovative solutions, such as anti-bullying robots, can transform campus environments.</li> <li>2. <b>Prompting (10 minutes)</b> Ask students to quickly pair up with someone they have not yet met. They will start a 2-minute conversation for their assigned topic.</li> <li>3. <b>Report (10 minutes)</b> Request each pair to share their findings with the class and get them to brainstorm and get ideas on how to design an anti-bullying robot that can address their assigned topic.</li> </ol>	<p><b>Activity Description:</b></p> <ol style="list-style-type: none"> <li>1. <b>Introduction (5 minutes)</b> Start the activity by briefly discussing the increasing importance of robotics in social contexts, particularly in addressing mental health issues like bullying. Mention how innovative solutions, such as anti-bullying robots, can transform campus environments.</li> <li>2. <b>Prompting (10 minutes)</b> Ask students to quickly pair up with someone they have not yet met. They will start a 2-minute conversation for their assigned topic.</li> <li>3. <b>Report (10 minutes)</b> Request each pair to share their findings with the class and get them to brainstorm and get ideas on how to design an anti-bullying robot that can address their assigned topic.</li> </ol>

In November 2024, the E-library platform, co-founded by the UNESCO Institute for Information Technologies in Education (IITE) and NetDragon Websoft Inc., successfully held the Teaching in the 21st Century Teacher Competition 2.0. After fierce competition, a total of 8 teachers stood out and won the opportunity to participate in an international study tour to Serbia. This study tour in Serbia was supported by the UNESCO Chair on AI in Education (AIED Chair for short). During the study tour, the AIED Chair organized the "Advanced Workshops on AIGC-Empowered Human-Machine Collaborative Teaching" for the participating teachers and their Serbian counterparts, which attracted nearly 100 primary and secondary school teachers, university teachers, and normal university students to participate and received wide acclaim. This workshop was the second overseas workshop organized in Central and Eastern Europe following the workshop in Tunisia at the end of October.





It was also a specific practice of the AIED Chair in fulfilling its mission of "cultivating the ability of educational administrators and teachers to use artificial intelligence in education in an ethical and effective manner". Through the continuous holding of relevant activities, the AIED Chair will continue to promote research, training, resource sharing, and exchanges of artificial intelligence in the field of education, and facilitate cooperation among high-level experts, scholars, and educators from universities and educational institutions in China, Asia, Africa, the Americas, and other regions of the world.

## Books & Articles

### Research Report on Smart Learning in China (2024): Smart Learning Products

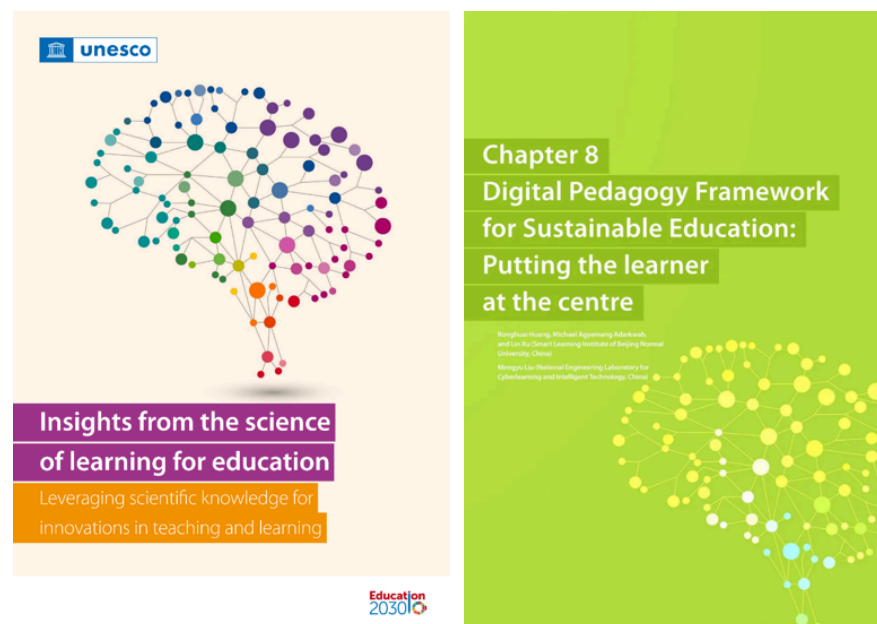
Editors-in-Chief: Huang Ronghuai, Liu Dejian, Chen Guangju

Since 2022, the Ministry of Education has taken the implementation of the National Education Digitalization Strategic Action as an important task. Focusing on the construction of the National Smart Education Public Service Platform, it has made every effort to promote the digital transformation of education, expand the total supply of platform resources, and gather and deploy digital education tools and platforms such as intelligent homework, interactive classrooms, online teaching and research, auxiliary marking, and educational evaluation. This book expounds on the relevant concepts and definitions of smart learning, and emphasizes the role and status of smart learning in the construction and development of a smart society and Digital China. The book is divided into four parts: General Report, Thematic Chapter, Local Chapter, and Case Chapter. It summarizes the overall development of smart learning products in China in recent years, sorts out the market status and development suggestions of different product types through the research on the connotation, framework, and development environment of smart learning; and introduces the planning, application, and effect display of smart education in typical regions and schools, demonstrates the achievements of regions in realizing the digital transformation of education through the application of smart learning products, and presents the design ideas, architecture deployment, and application cases of typical enterprises in smart learning products. It reflects the practical significance of the application of technologies and products to the digital transformation of education from both the demand side and the supply side.



## Digital Pedagogy Framework for Sustainable Education: Putting the Learner at the Centre

On December 2, 2024, UNESCO released the report *Insights from the Science of Learning for Education: Leveraging Scientific Knowledge for Innovations in Teaching and Learning*. The report includes a policy brief titled "Digital Pedagogy Framework for Sustainable Education: Putting the Learner at the Centre" by the team of the Smart Learning Institute of Beijing Normal University and the UNESCO Chair on AI in Education.



Scan the QR code to read the report.

## Liu Dejian, Zeng Haijun: Digital Platforms Empower New-Quality Learning Productivity

In 2022, UNESCO, UNICEF, and other organizations launched the "Public Digital Learning Portal Initiative", which is committed to cooperating with governments and partners to establish digital education as a public good through high-quality, inclusive national digital learning platforms and content. The National Smart Education Platform (SEC) provides 24/7 "supermarket-style" services for students at school and the public, realizing the leapfrog development of large-scale application of digital educational resources and public services.

- **Technology Empowers Platform Productivity**

The construction of public digital learning platforms is a continuous and gradual iterative process, and platforms can be used as a lever to drive the digital transformation of regions and schools.

- **Reshaping the Relationship of On-Demand Learning**

Future learning is inseparable from a resilient education system composed of schools, learners, content providers, decision-making institutions, industry enterprises, etc., and will form an ecology of global participation, content co-creation and sharing, and on-demand learning.

- **New Guidelines for Platform Governance**

Public digital learning platforms should adhere to the concept of sustainable development, commit to developing and providing high-quality educational resources covering school stages and fields, and ensure that global learners can access and use them freely and equally through various methods.

## Smart Education in the Context of Digital Transformation: A Blueprint Planning and Key Paths - A Summary of the Global Smart Education Conference 2024

*Modern Educational Technology*

Huang Lulu, Feng Tingting, Li Miaohao, Liu Dejian, Zeng Haijun

Abstract: Smart education, as an advanced form of education informatization development, conforms to the development goals of educational digital transformation, has also become a topic of common concern of all countries of the world of education and the whole society, and the Global Smart Education Conference has built an important platform for the exchange and cooperation of the launch of smart education. Based on the main viewpoints of experts and scholars at the Global Smart Education Conference 2024, this paper discussed the important role of smart education in accelerating the reform of education digitization. Meanwhile, the ideal blueprint of smart education was described from the aspects of promoting comprehensive development of human beings through the whole process, all-field, and all-factor digital transformation, the formation of a sustainable smart education ecology, the integration of science and education, the integration of industry and education to support smart education innovation. In addition, the key paths to support smart education innovation practice were proposed, in order to promote the effective practice of smart education on a global scale, strengthen international understanding and dissemination, and promote educational reform and innovation.



Scan the QR code  
to read the full  
text.

## Huang Ronghuai: Ten Prospects for the Development of Digital Education in China

In 2024, the Third Plenary Session of the 20th Central Committee of the Communist Party of China put forward clear requirements for promoting the digitalization of education and empowering the construction of a learning society. China regards promoting the digitalization of education as an important part of educational modernization, further advances the National Education Digitalization Strategic Action, and creates Chinese ideas, Chinese concepts, and Chinese solutions for digital education.

At present, new technologies such as artificial intelligence are profoundly changing the industrial pattern and human life, and have become an important driving force for promoting industrial transformation and social transformation. The author believes that under the interaction of scientific and technological progress, social transformation, and educational changes, digital education in China will show the following development trends:

- Smart education opens a new direction for digital transformation.
- The National Smart Education Platform serves as a new lever to drive transformation.
- Educational big data centers inject new elements into governance.
- Large models empower new forms of human-machine collaborative teaching.
- Digital pedagogy creates new scenarios for smart "Five Education" (moral, intellectual, physical, aesthetic, and labor education).
- Digital leadership leads new collaborative capabilities.
- Intelligent connected learning environments create new borderless classrooms.
- Digital universities nurture new lifelong learning schools.
- Industry-university-research collaboration builds an innovative ecosystem for smart education.
- The World Digital Education Alliance writes a new chapter in internationalization.