

# Jingshi Wisdom & Learning

Spring 2023 ISSUE No.25

BNU Standard Serial Number: BNU-044

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



Smart Learning Institute  
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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

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



Co-Dean Ronghuai HUANG

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

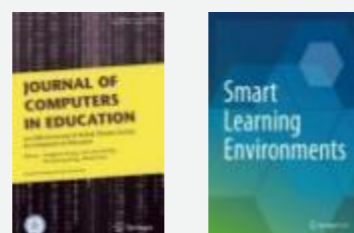
### Open Series in Springer

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



### Springer's Journals

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



### Design and Learning Laboratory

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



Virtual, Augmented, and Mixed Realities in Education



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

### Smart City and Learning Environment Laboratory

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



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



Index Report of Smart Learning Environments in Chinese Cities



Index Report of Smart Learning Environments in Chinese Cities

### Open Educational Resources (OER) Laboratory

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



The Third US-China Smart Education Conference (2018.03)



Series of Horizon Report in China



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



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

### ICT-based Instruction Center

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



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



101 Education PPT Solution

### Educational Robotics Center

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



2016 Educational Robotics White Paper: The Global Development



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



Prototype of Educational Robotics



Spring 2023, ISSUE No.25

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**Design**

**第六届全国未来教育设计大赛 (2023)**  
The 6th Global Competition on Design for Future Education

跨国设计48H | 共创教育未来

丰厚大奖, 名企实习, 惊喜黑科技奖品等你拿

报名启动时间|Registration Start Time: 2023/03/01

**参赛对象|Participants:**  
全球高校本科生及研究生  
Undergraduates and postgraduates

- ◆ 项目设计 Project Design
- ◆ 海报征集 Call for Poster

**全球中小学教师**  
Primary and secondary school teachers

- ◆ 案例征集 Case-study Collection
- ◆ 视频征集 Call for Video

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**报名参赛|Registration Venue:**

官方网站  
<http://gd4fe.bnu.edu.cn/en/index.html>

**主办单位|Organizers:**

与来自全球的选手同台竞技

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## Features

### The 6th Global Competition on Design for Future Education (2023)

The 6th Global Competition on Design for Future Education is jointly organized by Beijing Normal University, UNESCO Institute for Information Technologies in Education, as well as well-known domestic and overseas organizations, universities, and enterprises. The Competition is open to primary and secondary school teachers across the world, including Case-study Collection and Call for Videos with a theme of "5-Minute Mini Lesson on Knowledge Points in K12. It aims to demonstrate how primary and secondary school teachers in different countries think about the futures of education and try to find solutions for global future education.



#### Case-study Themes:

**AI and education:** How can AI create infinite possibilities in the campus of the future, hybrid learning spaces, virtual teachers and intelligent evaluation?

· Metaverse and education: How can an immersive online space construct educational scenarios in metaverse courses, metaverse conferences and metaverse with digital twins?

· Rural education: What design can help solve the needs of rural areas, such as teacher shortages, students' motivation improving, curriculum design based on rural resources and foundational learning of literacy and numeracy skills?

· Inclusive education: How can an educational model help include all students? Consider inclusive learning environments, students with physical disabilities and health impairments, girls and women, students with learning difficulties and gifted children.

· Artificial Intelligence, Big Data and Psychology: How to accurately access students' learning ability and status to effectively promote their mental health and well-being based on AI, Big Data, game-based and personalized psychological assessment and mental health, etc.? (such as AI-Based Psychological Assessment, Game-Based Psychological Assessment, Big Data in School Mental Health and Well-Being, Precision Digital Psychological Counseling Solution)

### Entry of the Competition

**Students & Teachers Track Entry:** On the official website of the competition

Post recruitment from university students: Download the entry form through the competition official website, and package the works and the entry form and submit them to the competition mailbox (d4fe@bnu.edu.cn).

Video recruitment from primary and secondary school teachers: browse the official site of the competition for more.

**48 Design**

**第六届全球未来教育设计大赛 (2023)**  
The 6th Global Competition on Design for Future Education

跨国设计48H | 共创教育未来

丰厚大奖, 名企实习, 惊喜黑科技奖品等你拿

**报名启动时间|Registration Start Time: 2023/03/01**

**参赛对象|Participants:**

- 全球高校本科生及研究生  
Undergraduates and postgraduates
- ◆ 项目设计 Project Design
- ◆ 海报征集 Call for Poster
- 全球中小学教师  
Primary and secondary school teachers
- ◆ 案例征集 Case-study Collection
- ◆ 视频征集 Call for Video

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赛事官网  
<http://gcd4fe.bnu.edu.cn/en/index.html>

**主办单位|Organizers:**

北京师范大学  
BEIJING NORMAL UNIVERSITY

unesco  
Institute for Information Technologies in Education

与来自全球的选手同台竞技

## Primary and Secondary School Teacher Track Recruitment

To help primary and secondary school teachers fully understand the competition requirements and submit better case studies and video works, the competition organizing committee held the "The 6th Global Competition on Design for Future Education (2023) Primary and Secondary School Teachers Track Presentation" (Tencent Meeting) on March 24, 2023, from 15:30 to 16:30. The conference invited domain experts to interpret the competition and provide guidance on case study design and video production. At the same time, previous competition winners shared their case study design experience and competition insights, which helped inspire primary and secondary school teachers' design inspiration and produce more outstanding case studies.

**4i Design**

**第六届全球未来教育设计大赛(2023)**  
**中小学教师赛道宣讲会**  
2023年3月24日 15:30-16:30 (GMT+8)

**活动流程**

15:30	<b>赛事解读</b> 施建国 中国教育装备研究院常务副院长
15:55	<b>案例分享</b> 梁雷 辽宁省凌源市第二高级中学教师 刘艳 北京市第八中学教师 姜春杰 浙江省宁波市深明镇初级中学教师
16:25	<b>会议总结</b> 施建国 中国教育装备研究院常务副院长

**出席嘉宾**

  
**施建国**  
 中国教育装备研究院  
 常务副院长

  
**梁雷**  
 辽宁省凌源市  
 第二高级中学教师

  
**刘艳**  
 北京市第八中学  
 教师

  
**姜春杰**  
 浙江省宁波市深明镇  
 初级中学教师

## University Track Recruitment



On April 1, 2023, the "The 6th Global Competition on Design for Future Education University Track Recruitment" hosted by Beijing Normal University and the UNESCO Institute for Information Technologies in Education was successfully held through a combination of online and offline methods. The conference invited several domain experts to attend, clarify the competition requirements, interpret the competition theme, and help participants further understand the competition and design better project works and posters. The conference also invited outstanding participants from previous competitions to share their experiences and set up interactive sessions such as Q&A and on-site team formation.



# Important Events

## 2022 National Intelligent Social Governance Experimental Base Education Industry Exchange Meeting Held

On the afternoon of December 30, 2022, the "National Intelligent Social Governance Experimental Base Education Industry Exchange Meeting and Related Open Topic Launch Meeting" hosted by the Education Informatization Strategic Research Base of the Ministry of Education (Beijing, hereinafter referred to as Beijing Base) was held in a combination of online and offline. The Beijing Base is a strategic research institution focusing on the development of smart education, the application of artificial intelligence in education, and international comparative research on education informatization, established by the Ministry of Education in 2021 (Education Science and Technology Letter [2021] No. 4) and built on the basis of Beijing Normal University. The purpose of this meeting is to implement the series of document requirements of the Central Cyberspace Affairs Office on accelerating the experimental work of artificial intelligence social governance, to help the construction progress of the characteristic base of education, and to consolidate the strategic research task of the application of artificial intelligence in education at the Beijing Base. Officials from the relevant departments of the Ministry of Education, leaders of the Beijing Base, and relevant comrades from each experimental area



Under the overall coordination of the Cyberspace Administration of China and the full guidance of the Ministry of Education, the social experiment work of artificial intelligence education has achieved phased results in theoretical research, application scenarios, and other fields in 2022. In the future, it will further stimulate the role of core elements such as data, algorithms, and computing power, analyze and summarize governance experience, research and formulate policy standards, explore the construction of governance mechanisms, and create a diversified ecological pattern of intelligent social governance in the field of education. It will help upgrade and optimize educational governance capabilities and strive to achieve cross-industry empowerment and win-win outcomes.

## Youth Artificial Intelligence Innovation Plan

From January to March 2023, the "Youth Artificial Intelligence Innovation Plan" (also known as the "Yuanzhuo Plan") held 2 sessions of Yuanzhuo School activities and 3 sessions of "Digital Scientist Seed Teacher Growth Plan" reading club activities. A total of N participants attended these events.

### Growing plan for digital scientists and teachers

#### Session 1

- Theme: Reading and sharing on Introduction to A-STEM Education and Project-based Learning
- Presenters: Liu Baoli, Zhang Panfeng, Zhao Tinghong, Wu Junjie

#### Session 2

- Theme: Reading and sharing on Digital Scientist
- Presenters: Hao Jinqing, Zhu Lei, Jin Chuan, Song Yuan, Yang Sanmao

#### Session 3:

- Theme: Sharing on practices of the program digital exploring science
- Presenters: Wang Guoyu, Shi Huizi, Tian Qigang, Ma Liang



### Yuanzhuo Xuetang

#### Session 37

- Theme: What Revolution will ChatGPT Bring to Education
- Lecturers: Jiao Jianli, Xie Zuoru

#### Session 38

- Theme: About ChatGPT: The Boundary of AIGC
- Lecturer: Xiao Rui

## Beijing Normal University Educational Social Experiment : Changsha

On February 27th to 28th, 2023, the Education Informationization Strategy Research Base of the Ministry of Education (Beijing Base), together with the National Key R&D Program Project Team of the Ministry of Science and Technology and the Special Task Force for Educational Technology Development of the Ministry of Education, went to Changsha City, Hunan Province, to conduct educational social experiment research. Eight people, including Tong Lili, Deputy Director of Beijing Base and Faculty of Education at Beijing Normal University, and Lv Mingjie, Senior Research Specialist at Zhejiang Lab's Intelligent Social Governance Research Center, participated in the research.

The Beijing Base focuses on smart education and AI education applications as its core work direction. Some ongoing projects are part of the key program "Social Governance and Smart Society Technological Support" under the Ministry of Science and Technology. The series of educational social experiments conducted in 2023 is a specific action to implement the requirements of the 20th National Congress report, which calls for "improving the science and technology innovation system and accelerating the construction of a high-quality education system," as well as implementing the "Overall Plan for Building Digital China," which emphasizes "accelerating digital technology innovation application in education and other fields and building a fair and standardized digital governance ecosystem."

The research group's visit included four schools: Changsha Special Education School, Yajing Middle School, No.2 Primary School Affiliated to Central South University, and Zhenren Bridge Primary School in Xiangjiang New Area. These schools represent different educational stages (primary/secondary), sectors (regular/special education), and regions (urban/rural). The research covered various scenarios, including intelligent devices, digitized resources, and sign language software that promote cognitive development for children with visual or hearing impairments, cerebral palsy, or autistic tendencies. Other scenarios included self-service reading booths, interdisciplinary shared labor in educational planting gardens to promote digital literacy among teachers and students, electronic desks, and smart skipping ropes for personalized academic and physical improvement. Additionally, self-service sports equipment cabinets in small-scale rural schools were explored to cultivate good behavioral habits among students.

The education social experiment at Beijing Normal University is a long-term academic research project. Since the launch of the artificial intelligence education social experiment by the Cyberspace Administration of China, the Ministry of Education, and other relevant departments in 2019, the university has successively offered courses on "Social Experiment Methodology," undertaken the Ministry of Education's project on "Educational Experimental Research under the Conditions of Artificial Intelligence," obtained approval for the Ministry of Science and Technology's key special project on "Social Governance and Technological Support for a Smart Society," and published "Evaluation of Internet Education Applications in China: Methods, Practices, and Prospects." In the future, based on the rich accumulation of intelligent technology application scenarios, the Beijing base will collaborate with research efforts in intelligent technology, continuously refine governance experience and theories, support policy standard for mulation, pragmatically promote the positive role of artificial intelligence in education while avoiding negative impacts, advance the deepening of local education digital transformation, and enhance regional education governance capabilities.



## "Seminar on the Essence and Transformation Path of Education Digitization" Held in Kunming

On March 8-9, 2023, the "Seminar on the Essence and Transformation Path of Education Digitization" and related research, jointly organized by the Ministry of Education's Strategic Research Base for Education Informatization (Beijing Base) and the School of Educational Technology at Beijing Normal University, were held in Kunming. This conference aims to implement the practical grassroots research and in-depth study of the core connotations and interrelationships of related concepts such as "education informatization," "education digitization," and "smart education" as required in the 2023 work plan meeting of the Ministry of Education's competent department. It also aims to enhance the policy pre-research support and promote a clear understanding of local practices.



The conference focused on the essence of education digitization and explored the mapping path of digital technology's actual transformative needs in teaching and management under the premise of student-centered education. During the conference, field research was conducted at Yunnan Normal University Affiliated Primary School (Chenggong Campus), where the conference was held, to accumulate grassroots materials for the governance of education digitization from both theoretical and practical perspectives, and to form preliminary consensus.



## Launch of the UNESCO Chair on AI in Education at Beijing Normal University

The UNESCO Chair on Artificial Intelligence (AI) in Education was officially launched at Beijing Normal University (BNU) on March 31, 2023. Prof. MA Jun, the President of BNU and Mr. QIN Changwei, the Secretary-General of the Chinese National Commission for UNESCO, unveiled the Chair. Prof. ZHOU Zuoyu, Vice President of BNU, presided over the launch event. Dr. Sobhi Tawail, Director of the Future of Learning and Innovation Team, UNESCO and Dr. Shahbaz Khan, Director of UNESCO Beijing Office, attended the event and made a speech. This milestone emphasizes BNU's commitment to advancing AI research in education and shaping the future of global learning. The forum is hosted by Beijing Normal University and organized by UNESCO Chair, Faculty of Education Beijing Normal University, National Engineering Laboratory for Cyberlearning and Intelligent Technology, Educational Informatization Strategy Research Base, Ministry of Education, P.R.C.



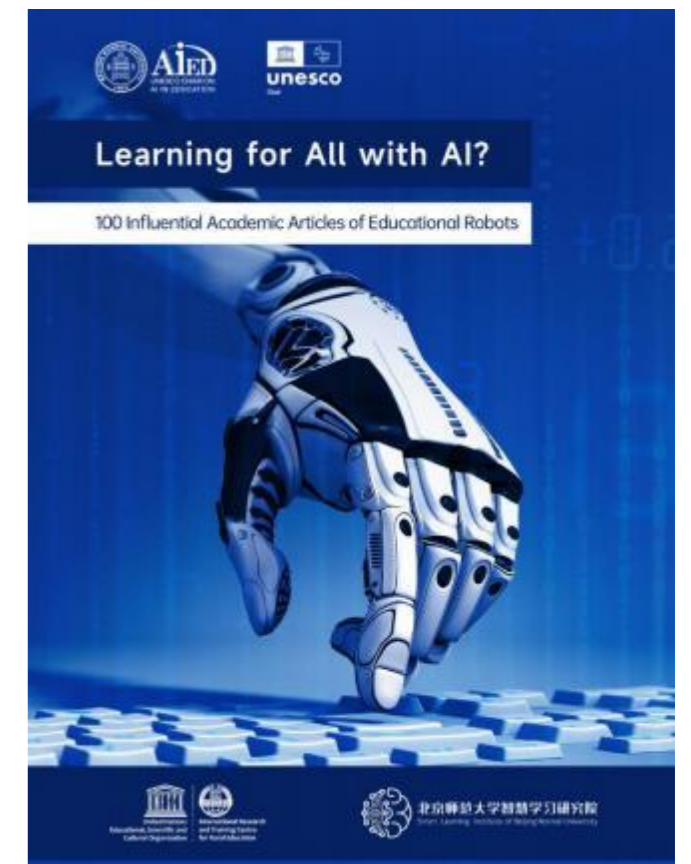
Beijing Normal University in cooperation with UNESCO established a UNESCO Chair on Artificial Intelligence in Education (hereinafter referred to as "the Chair") in Feb. 2023.

The purpose of the Chair is to promote an integrated system of research, training, information and documentation on artificial intelligence in education. It will facilitate collaboration between high-level, internationally-recognized researchers and teaching staff of the University and other institutions in China, as well as elsewhere in Asia, Africa, Latin America, and in other regions of the world.

Prof. HUANG Ronghuai, an esteemed researcher in smart learning environments, AI in education, educational technology, and knowledge engineering, was appointed as the Chairholder. He outlined the Chair's vision, mission, and strategic objectives, emphasizing its role in fostering a comprehensive research, training, and information system for AI in education. The Chair will foster collaboration among renowned researchers and educators from Beijing Normal University and other institutions in China, Asia, Africa, Latin America, and beyond. Its primary focus will be exploring how artificial intelligence can contribute to achieving the Sustainable Development Goals (SDGs) by catalyzing innovative solutions and strategies in education.



The UNESCO Chair on AI in Education held the Conference on Artificial Intelligence and Digital Education on March 31, 2023. Keynote speeches were given by Prof. GU Mingyuan from BNU, Dr. MIAO Fengchun from UNESCO, Prof. Colin de la Higuera from the University of Nantes, Prof. Rose Luckin from University College London, Prof. Chee-kit LOOI from Nanyang Technological University, and Prof. John Shawe-Taylor from University College London. The conference included a panel on AIED ethics with participation from Prof. JIAO Jianli, Prof. WANG Qiong, Prof. FANG Haiguang, Prof. Mutlu Cukurova, and Prof. Ahmed Tlili. The event also marked the release of the "Artificial Intelligence for All: 100 Influential Academic Papers on Educational Robotics" report.



# The International Webinar entitled " Envisioning the Futures of Education Through Design " Successfully Held

The technological revolution, in recent years, is flourishing and generating profound impacts on people's learning and lives. Specifically, the development of artificial intelligence (AI) has brought both opportunities and challenges in terms of safeguarding the futures of education. On one hand, AI has contributed greatly to the intelligent development of education. On the other hand, educational inequalities are still prevalent and widespread. More efforts and effective reforms are needed to combat educational challenges to shape a better future for our planet. On March 17, 2023, Smart Learning Institute of Beijing Normal University (SLI, BNU) held an international webinar entitled "Envisioning the Futures of Education Through Design". Ronghuai Huang, Co-Dean of SLIBNU; Diana Laurillard, Professor of UCL Knowledge Lab; Hannele Niemi, Professor of University of Helsinki, Koutheair Khribi, Assistant Professor of University of Tunis; Tingwen Chang, Assistant to the Dean of SLIBNU and Michael Agyemang Adarkwah, a postdoctoral fellow at Beijing Normal University, were among the guests who discussed the topic of "Design Empowers Future Education."



Prof. Diana Laurillard pointed out that current digital technology provided many conveniences for teaching. We can see the multimodal forms of lessons with the help of technological advancements, endowing students with more active engagement and reaction in classroom discussion, and also enabling teachers to provide more instant feedback. Moreover, she also introduced two successful practices of learning design, i.e., peer learning and the vicarious masterclass, which enables students to broaden their learning resources and gain more learning motivation.

Prof. Hannele Niemi perceives that the continuous development of technology is indeed a weighed focus in future educational design. For instance, AI can help students better understand and master subject knowledge, and offer teachers opportunities to dedicate more time to mastering technology. In the meantime, such transformation also indicates a need to confront emerging ethical risks. It is believed that the affordances technology applications offer humanity should be evaluated and investigated in the process of education development. When it comes to the latest novel invention, ChatGPT, Prof. Hannele Niemi welcomes more discussion about its use and boundaries from both official and societal communities.



Assistant Professor Koutheair Khribi from the University of Tunis pointed out that when producing accessible digital content, accessibility, fairness, and inclusiveness should be considered. Educational design should be people-oriented, creating accessible learning modes that satisfy the needs of every learner, including those with disabilities. More work should be done to pave way for the successful learning of minorities or the disadvantaged. Also, it is worth exploring the way to create a universally accessible digital teaching content.

# Books & Articles

## HUANG Ronghuai: Constructing the Base of a Learning Society with the Digitalization of Education

At present, the digital transformation of education is the key means to promote the construction of a learning society and a learning country facing lifelong learning for all, and digital education is the core component of a learning society and a learning country. The construction of a learning society is a complex and arduous systematic project, which not only needs to use digitalization to incite the reform and transformation of school education, but also radiates and drives the reconstruction of family education and social education system. It is a digital transformation involving the education of the whole people and society.



Source: Study Times February 6, 2023, A4  
Author: HUANG Ronghuai

# HUANG Ronghuai: Continuously Deepening International Cooperation in Digital Education

Report to the 20th CPC National Congress of the Communist Party of China proposed to promote the digitalization of education and build a learning society and a learning country with lifelong learning for all. The World Digital Education Conference held in Beijing recently focused on "Digital Transformation and the Future of Education", emphasizing that international cooperation is an important driving force for global educational transformation, especially digital transformation. China attaches great importance to the development of digital education as an important part of digital China, and calls on all countries to work together to promote innovation and make the achievements of digital education more beneficial to people of all countries. In this issue, experts are invited to discuss related issues.

**13 智库** 2023年5月7日 星期二

**构建开放共享的全球数字教育生态**

2022年年初，教育部印发《数字教育创新发展行动计划（2021—2023年）》，提出构建开放共享的全球数字教育生态。这是我国首次提出构建全球数字教育生态，也是我国在数字教育领域提出的重要倡议。构建开放共享的全球数字教育生态，是推进教育数字化、建设学习型社会和学习型国家的重要途径。中国高度重视数字教育的发展，并将其作为数字中国建设的重要组成部分。中国呼吁世界各国共同努力，推动全球数字教育生态的构建，使数字教育成果惠及全人类。

**数字技术带来机遇与挑战**

数字技术的快速发展，为教育带来了前所未有的机遇。通过数字技术，教育资源可以更加公平地分配，学习方式可以更加个性化和灵活。然而，数字技术也带来了新的挑战，如数据隐私、网络安全、数字鸿沟等。在推进教育数字化的过程中，必须充分认识到这些挑战，并采取有效措施加以解决。要确保数字技术真正服务于教育，让每一位学习者都能享受到数字教育带来的便利和优势。

**开放共享消除数字壁垒**

构建开放共享的全球数字教育生态，关键在于实现资源的开放共享。通过打破地域、语言、文化等壁垒，让优质的教育资源能够跨越国界，惠及全球学习者。这需要各国政府、教育机构、企业和社会各界共同努力，建立开放、包容、互利的合作机制。通过共享数字教育资源，可以促进全球教育质量的提升，缩小教育差距，实现教育公平。

**持续深化数字教育国际合作**

数字教育的发展离不开国际间的交流与合作。通过深化国际合作，可以借鉴各国的先进经验和做法，共同推动全球数字教育事业的进步。中国愿与世界各国一道，加强在数字教育领域的沟通与协作，开展多层次、多形式的合作。通过举办国际会议、开展学术研讨、实施联合项目等方式，增进各国在数字教育领域的相互了解和信任，共同探索数字教育发展的新路径、新模式。

**我为全球教育高质量发展作出贡献**

作为全球教育高质量发展的重要参与者，中国愿发挥自身优势，为全球教育高质量发展作出积极贡献。中国拥有悠久的教育传统和丰富的人才资源，在数字教育领域也取得了显著成就。中国愿与世界各国分享数字教育发展的经验和成果，提供力所能及的技术支持和智力支持。通过积极参与全球教育治理，推动全球教育治理体系改革和建设，为构建人类命运共同体贡献智慧和力量。

# The "Why" and "What" of Smart Education - Analysis on the Performative and Constructive Features of Education in the Age of Intelligence

HUANG Ronghuai, LIU Mengyu, LIU Jiahao, CHANG Tingwen

**Abstract :** As a high-end form of education informatization development, smart education is in line with the development goal of education digital transformation and has become a target of education development in various countries and a topic of common concern for the whole society. The deep integration of technology and education endows smart education with brand-new features reflected in the performative features of a country or region's smart education ecology, namely the "development goal" of smart education and the constructive features of a smart education system, namely the "practical path" of smart education. Among them, the performative features should conform to the principles of consensus, directionality and stability, embodied in (1) Student-Centered Pedagogy, (2) Comprehensive Development Learning Assessment, (3) Smart and Ubiquitous Learning Environment, (4) Continuous Improvement Education Culture, (5) Commitment to Inclusion and Equity in Education, which are also the five primary features of smart education. The constructive features should conform to the principles of operability, stage and diversity, embodied in (1) Social Learning Community for Active Students, (2) Prioritized Support Program for Teachers, (3) Adopting Technologies in line with Ethics and Privacy, (4) Sustainable Plan for Education Reform, (5) Effective Multi-Sector Collaboration, which are also the five subsidiary features of smart education.

# What If the Devil Is My Guardian Angel: ChatGPT as a Case Study of Using Chatbots in Education

Ahmed Tlili, Boulus Shehata, Michael Agyemang Adarkwah, Aras Bozkurt, Daniel T. Hickey, Ronghuai Huang & Brighter Agyemang

**Introduction:** Prof. HUANG Ronghuai, along with researchers from the Smart Learning Institute of Beijing Normal University (SLIBNU), including Dr. Ahmed Tlili, Dr. Boulus Shehata, and Dr. Michael Agyemang Adarkwah, conducted a qualitative instrumental case study on the use of ChatGPT in education. Collaborating with scholars from the United States, Turkey, and Australia, their research aimed to examine the impact of this advanced AI application on the education sector. The study's findings, published in the journal "Smart Learning Environments" (DOI : 10.1186/s40561-023-00237-x) on February 22, 2023, shed light on the advantages and challenges of utilizing AI, particularly chatbots, in education. The research also presented valuable insights and research directions to ensure the responsible and safe adoption of chatbots, including ChatGPT, in educational settings.

## AI in Education

Li Yanyan

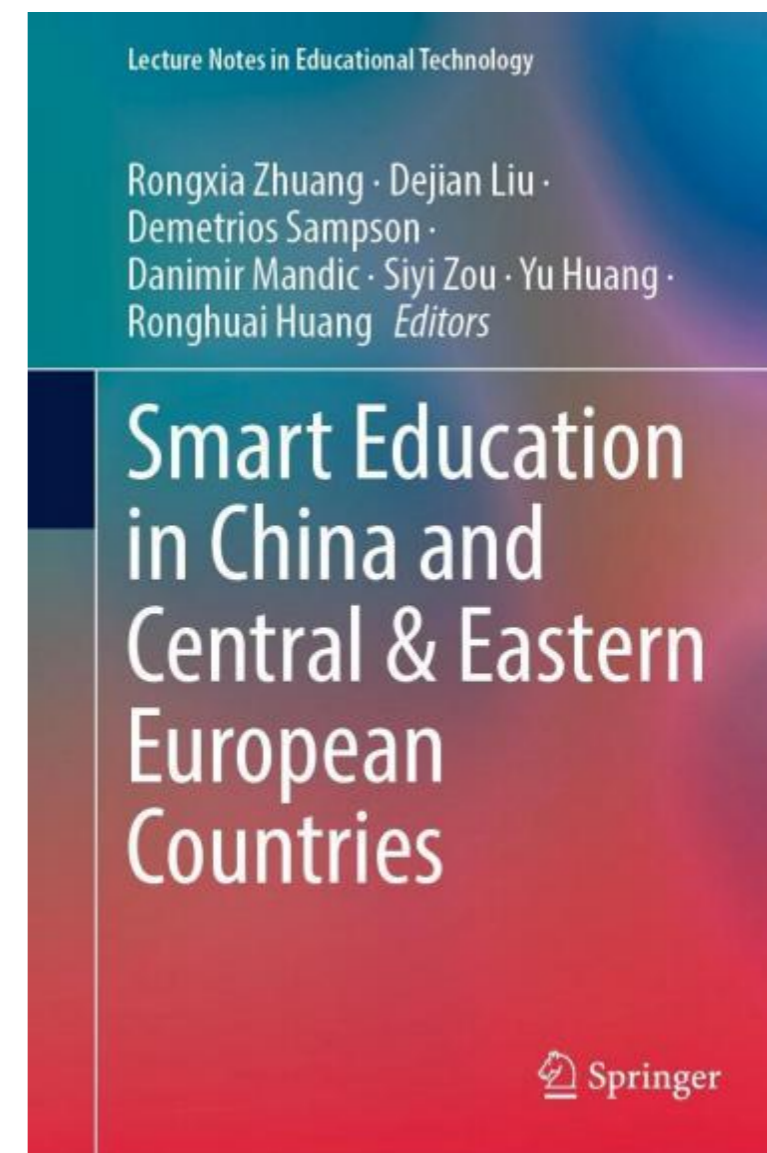
**About the author:** Li Yanyan, doctoral supervisor, is mainly engaged in design and application of learning platform and learning resources based on Web2.0, computer supported collaborative learning, individualized as well as adaptable learning and learning analysis. Professor Li successively presided over National Natural Science Fund projects, Beijing key laboratory co-construction project, educational reform project and crosswise tasks and participated in national major fundamental research program 973 project, the major project of attracting capital for colleges and universities science and technology innovation and so on. So far Professor Li has published more than 70 papers in domestic as well as international journals and in international conferences, among which 6 papers can be indexed on SSCI/SCI and more than 20 papers can be indexed on CSSCI and EI/ISSHP.



## Smart Education in China and Central & Eastern European Countries

Rongxia Zhuang, Dejian Liu, Demetrios Sampson, Danimir Mandic, Siyi Zou, Yu Huang, Ronghuai Huang

**About the book:** This book focuses on the development of smart education in China and some countries of Central and Eastern Europe. A brief discussion on the idea of smart education was given in the introduction chapter, followed by a series of national smart education profiles of eleven countries. In detail, the profile starts with an overview of ICT in Education or smart education in the country and policies of ICT in Education or smart education. Some key features of smart education in each country were discussed with examples of best practices. The profile ends with a description of trends of smart education in the country. Based on the information above, the final chapter presents an analysis among the eleven countries with six major features they presented and concluded the book with suggestions on advancing smart education by three points.



## Project News

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*Research Report on Smart Learning in China (2022 - 2023)* has completed its three rounds of review and one round of proofreading and will be officially published in May. *Internet Education Application Evaluation: Methods, Practices, and Prospects* has been published and will be launched at the Education Forum of the Digital China Summit.

— Contributed by Jiao Yanli



The project at the Institute's Fuzhou Changle Campus is progressing as planned. The team from ICT Instruction Research Center has initiated training programs according to the Q1 plan. The first session, the "Fujian Province Primary Education Digital Transformation and Principals' Leadership Enhancement Seminar," is now open for enrollment.

— Contributed by Wang Yongzhong



*Smart Education in China and Central & Eastern European Countries* has been officially published. A revised version of *Compilation of Ten-Year Excellence Cases of China-CEE Cooperation* was completed and will be published this year as an outcome marking the decade of the China-CEE cooperation mechanism. Two volumes of Central and Eastern European Country Insights were compiled and edited. The *Proceedings of 2021-2022 China-CEE Smart Education Academic Conference (Abstract Version)* were finalized in both Chinese and English.

— Contributed by Zhang Dingwen, Chen Hao



Associate Professor Ahmed Tlili participated in the "High-Level Forum on AI and Education in the Arab Region," delivering a keynote speech introducing research projects of the BNU-Arab Joint Laboratory. He also co-organized and participated in the roundtable discussion at the "Seminar on Artificial Intelligence and Digital Education."

— Contributed by Zhang Dingwen



The project for Cambodian IT Curriculum and Textbook Development and Teacher Training completed its second round of field research and workshops. The preliminary teacher training plan was finalized. The draft textbooks were developed and translated, receiving written acknowledgment from the Cambodian counterparts.

— Contributed by Yao Youjie, Qi Xinjian

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