

# CNAES

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**BELT & ROAD EDUCATION RESEARCH NETWORK**

# NEWSLETTER

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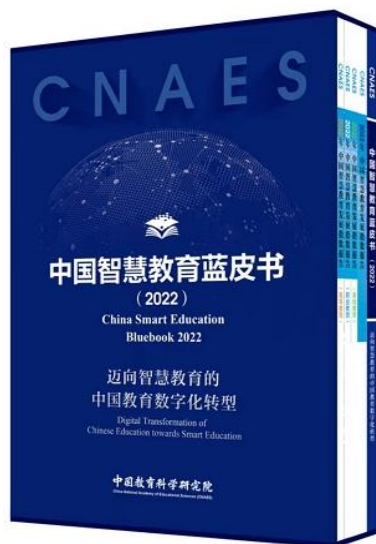
China National Academy of Educational Sciences

**中国教育科学研究院**  
China National Academy of Educational Sciences

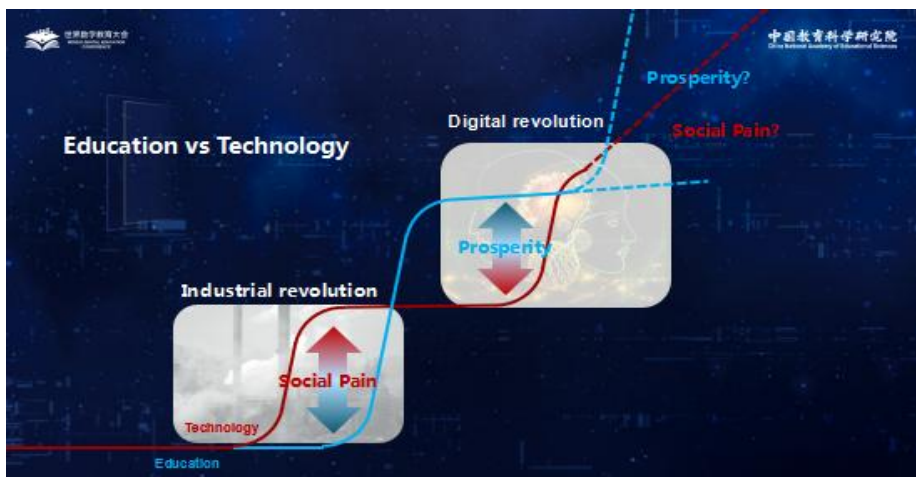
## Bluebook and Index of Smart Education Released by CNAES

Dr. LI Yongzhi, President of China National Academy of Educational Sciences (CNAES)

Stepping into the digital era, the educational mode of industrial era cannot adapt to social development. The digital transformation of education and explorations in smart education has drawn attentions from countries across the world. In 2022, China launched the national strategic initiative for education digitalization, and established a public service platform for smart education which contains 40,000 items of basic education resources, 32,000 online courses for vocational education, 27,000 high-quality MOOC courses for higher education. The total times of viewing these educational resources in the platform reached 5.87 billion, and the platform served users from more than 200 countries and regions, played an important role in supporting the online classes during the pandemic and bridging the digital gap. It pioneered the explorations towards smart education.



As a national education think tank, the China National Academy of Educational Sciences attaches great importance to smart education, and has formulated the China Smart Education Bluebook (2022) and the "1+3" development index report by gathering the practical explorations and research results at home and abroad, seeking expertise from various fields and building consensus.



The Bluebook centers on the interpretation of smart education, identifies 16 characteristics based on four dimensions of environment, teaching and learning, governance, and talents, summarizes the experience in the smart education development of China, and proposes seven themes and five initiatives with major focus in the future. We are convinced that smart education is the new educational mode of the digital era, essentially different from that of the industrial era.



First and foremost, its core concepts are new. Smart education which concerns not only specific action of people's livelihoods, but also major strategies of the nation, will empower education reform on an all-round basis, systematically construct the new ecology of relationship between education and the society. The mode of education evolves with the times but its essence remains unchanged. Empowered by technology and driven by data, smart education shall stick to the principles of education and talent cultivation, provide each learner with suitable education, realize the millennial dream of "education for all without discrimination", realize the unprecedentedly high compatibility of personal development at the micro level with social development at the macro level.



Second, smart education is novel in terms of its system structure. It will break boundaries of school education, prompt the combination of various types of education, resources and elements, encourage the coordinated efforts of schools, families and society in talent cultivation, establish a high-quality personalized lifelong learning system that allows anyone to learn anytime and anywhere.



Third, smart education is groundbreaking in terms of teaching paradigm. By means of integrating physical space, social space and digital space and transforming education and teaching scenarios, smart education promotes the fusion of man and technology, fosters learning communities across classes, grades, subjects, space and time, and realize the perfect unity of large-scale education and personalized education.



Fourth, the novelty of smart education also lies in its education content. It will focus on developing quality-oriented education, establish knowledge map based on the systematic and logical relationship between the bits of knowledge, innovate ways of content presentation, make learning an enjoyable experience, and cultivate learners' higher-order thinking skills, comprehensive innovative ability and lifelong learning ability.






世界数字教育大会  
World Digital Education Conference  
2023


中國教育科學研究院  
Chinese National Academy of Educational Sciences

## NEW Education Governance





世界教育教育大会  
WORLD EDUCATION CONFERENCE




中国教育科学研究院  
China Education Academy of Educational Research

### Indicator System of Smart Education Development (General Indicators)

一级指标	二级指标	三级指标
基础设施	网络设备	接入互联网的學校比例 (%)
		无线网设备覆盖率比例 (%)
		网络终端设备与教学设备比例 (%)
		网络教学终端设备占比 (%)
教师教育水平	教师教育背景	人均合格教师教育背景率 (教师/人) *
		每名专任教师与课程资源量 (课程/人) *
		合格教师教育背景覆盖率 (%)
		普通教师与专任教师的比例 (%)
网络学习空间	网络学习资源	普通网络学习空间的普及率 (%)
		具备网络技术支持能力的教师比例 (%)
		合格教师与网络资源覆盖率 (%)
		教育云资源普及使用率 (%)
教学资源应用	合格教师教育背景与网络普及率 (教师/人) *	
		合格教师教育背景覆盖率 (%) *
		网络设备普及率 (%)
		网络设备普及率 (%)
教学方式和效果	教师教学方式	教师网络教学方式率 (%) *
		利用网络进行学习的网络用户比例 (%)
	教学评价与效果	教学过程评价合格率 (%) *
		智能教学评价合格率 (%) *
教师发展	教师素质	教育基础素质合格率 (%) *
		教育基础素质的覆盖率 (%) *
		教育一体化发展管理服务的覆盖率 (%) *
		教师教育背景普及率 (%) *
教育治理	治理水平	教育云资源普及率 (%) *
		教育云资源普及率与网络普及率 (%) *
		教育云资源普及率与网络普及率 (%) *
		教育云资源普及率与网络普及率 (%) *
网络与数据安全	网络安全	具备网络安全管理能力的教师比例 (%)
		网络安全普及率 (%) *
		教育云资源普及率与网络普及率 (%) *
		教育云资源普及率与网络普及率 (%) *
人才培养质量	学生教育背景	教育云资源普及率 (%) *
		教育云资源普及率与网络普及率 (%) *
		教育云资源普及率与网络普及率 (%) *
		教育云资源普及率与网络普及率 (%) *


### Indicator System of Basic Education



The diagram illustrates the Indicator System of Basic Education, showing a hierarchical structure of indicators categorized into various levels and domains, including infrastructure, teacher education, network learning spaces, and teaching resources.

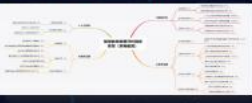
## Core Outcome of Indicator Reports

### Indicator System of Vocational Education



The diagram illustrates the Indicator System of Vocational Education, showing a hierarchical structure of indicators categorized into various levels and domains, including infrastructure, teacher education, network learning spaces, and teaching resources.

### Indicator System of Higher Education



The diagram illustrates the Indicator System of Higher Education, showing a hierarchical structure of indicators categorized into various levels and domains, including infrastructure, teacher education, network learning spaces, and teaching resources.

It is well proved through theory and practice that the development of smart education in China has a solid foundation with distinctive features. China is committed to uphold value of delivering people-oriented and people-satisfying education and carry on as well as develop traditional education philosophy such as “education for all without discrimination”, “teaching according to people’s caliber and interest”, as well as “unity of knowledge and action”. Furthermore, China also strives for combining the top-down macro planning and bottom-up ecological construction.

As a Chinese saying goes, *a single flower does not make spring, only hundreds of flowers in full blossom can herald the arrival of spring*. We would like to work with international organizations and institutes of educational sciences, learn from one another, deepen our cooperation, jointly explore the development paths of smart education, and open up the bright future of global development with educational innovations. We would like to work with international organizations and institutes of educational sciences, learn from one another, deepen our cooperation, jointly explore the development paths of smart education, and open up the bright future of global development with educational innovations.

## Dr. Li Yongzhi Appointed as the New President of CNAES



Dr. Li Yongzhi was appointed as the new President of the China National Academy of Educational Sciences on December 27, 2022 by the Ministry of Education.

Dr. Li Yongzhi graduated from Fudan University. He used to work in the Ministry of Education, Donghua University, Shanghai Municipal Education Commission and other organizations. He is Vice Chairman of the Steering Committee for Education and Instruction in Basic Education of the Chinese Ministry of Education, a member of the Second Educational Informatics Research Group of the Ministry of Education, and also a member of the Education Informatization Development Strategy Consulting Expert Group of the Science and Technology Department of the Ministry of Education.

## NIES and NCEDR Merged as CNAES

In 2022, two top Chinese education research institutes, the National Institute of Educational Sciences (NIES) and the National Center for Education Development Research (NCEDR) merged into a flagship organization – China National Academy of Educational Sciences (CNAES). The new organization is comprised of 20 research institutes, two affiliated enterprises and an audio and video publishing house (ESPH).

With more than 270 researchers, CNAES is regarded as China's leading educational think tank. So far, it has collaborated with about 14 international organizations and 550 educational research institutes in around 80 countries. During the last few years, it conducted a series of important research projects such as the evaluation of the ten-year National Education Plan, the projects on educational responses to the COVID-19 pandemic and Artificial Intelligence, etc. It hosts a Postdoctoral Training Center and a Platform for Visiting Scholars. It also set up dozens of pilot schools and educational reform districts across China. National Office for Education Sciences Planning is set up in CNAES currently.

