



National Engineering Laboratory  
for Cyberlearning and Intelligent Technology

# National Engineering Laboratory for Cyberlearning and Intelligent Technology



北京師範大學  
BEIJING NORMAL UNIVERSITY



## Overview

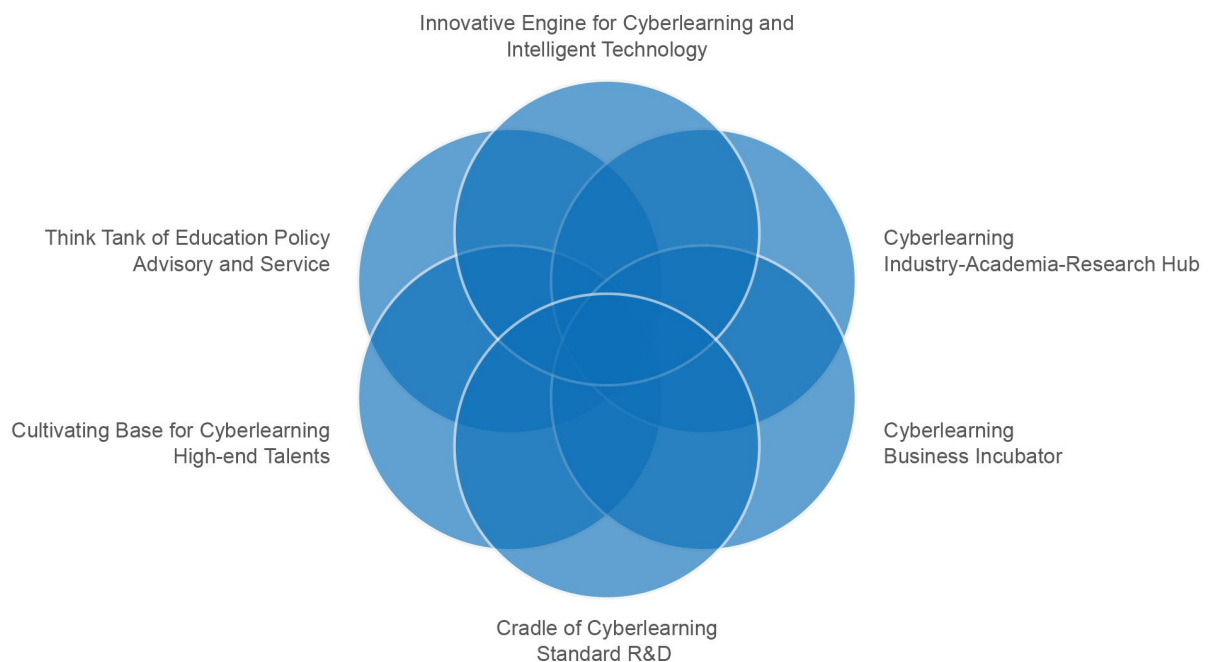
On January 23th, 2017, National Development and Reform Committee (NDRC) of China approved the establishment of National Engineering laboratory. In order to solve the problems of backward research and development methods in core technology, strengthen the weak link of national technological innovation system as well as enhance the independent industrial development capability, National Engineering laboratory for Cyberlearning and Intelligent Technology (CITlab) was organized by Beijing Normal University and jointly constructed by Tsinghua University, China Mobile Communications Corporation (CMCC), Elernity and IFLYTEK CO.LTD.

Aimed at the issues such as uneven distribution of high-quality educational resources, inadequate capacity of personalized learning services and so on, the National Engineering laboratory focuses on the sharing of high-quality educational resources and the urgent need of intelligent educational resources to construct a research platform for Cyberlearning and Intelligent Technology. It will support Interactive System for Distance Education, Knowledge Modeling and Analysis, Learner Modeling and Learning Analytics, Design and Assessment of Learning Environment, Systematic Education Governance as well as other technological R&D and engineering.

## Mission and Vision

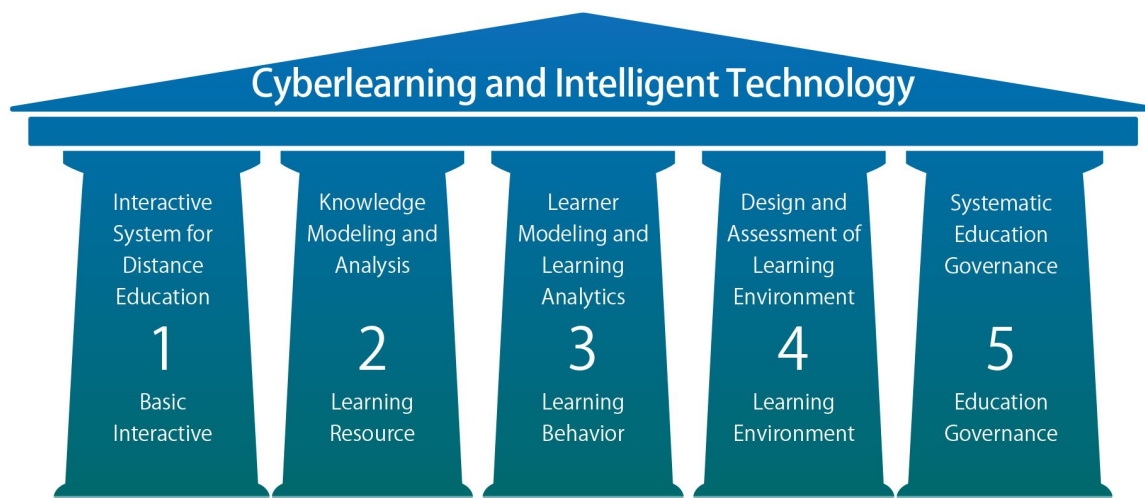
The mission for CITlab is to promote the construction of "Internet + Education". Specifically speaking, it is designed for improving the capacity of industrial innovation and service, implementing the service mode of new-type education and promoting equality and quality in education as well as individualized development of students.

The vision for CITlab is to construct it as an Innovative Engine for Cyberlearning and Intelligent Technology, a Think Tank of Education Policy Advisory and Service, a Cultivating Base for Cyberlearning High-end Talents, a Cyberlearning Industry-Academia-Research Hub and so on.



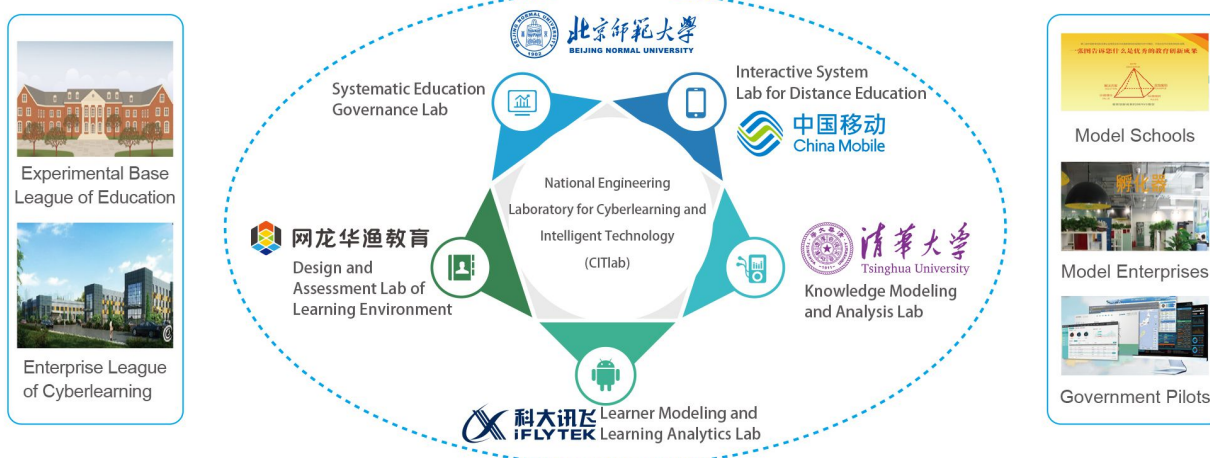
## Technologies and Services

The CITlab has its own technology R&D and service orientation, which can be divided into five levels: Interactive System for Distance Education, Knowledge Modeling and Analysis, Learner Modeling and Learning Analytics, Design and Assessment of Learning Environment as well as Systematic Education Governance.



Interactive System for Distance Education is a new-generation basic interactive environment. The establishment of "Mobile Learning" Lab governed by the Ministry of Education is a successful example of this kind. Knowledge Modeling and Analysis is the basis of high-quality resources construction and service. It has a wide coverage of resources and the first-class team of knowledge calculation. Learner Modeling and Learning Analytics is the basis of adaptive service. Assessment Model as well as Analysis Model for Students' Data and Learning Process have been established. Design and Assessment of Learning Environment is to construct new-generation smart learning environment. Systematic Education Governance is to improve the scientific level of education decisions.

## Joint Organizations



BNU undertakes the responsibility of organizing, managing and directing CITlab and is in charge of jointly constructing Interactive System Lab for Distance Education, Knowledge Modeling and Analysis Lab, Learner Modeling and Learning Analytics Lab, Design and Assessment Lab of Learning Environment as well as Systematic Education Governance Lab. Tsinghua University cooperates with BNU to construct Knowledge Modeling and Analysis Lab. CMCC, Elernity and IFLYTEK CO.LTD. respectively collaborate with BNU to construct Interactive System Lab for Distance Education, Design and Assessment Lab of Learning Environment as well as Learner Modeling and Learning Analytics Lab. And they also invest in innovative platform construction of CITlab, purchasing and installing equipment, product R&D, etc.





Jianping Cheng, Chairman of CITlab Board



Li Chen, Director of CITlab Technical Committee



Ronghuai Huang, Director of CITlab



Beijing Normal University has been leading the practice of China's education informatization over the past forty years. It is the first batch of comprehensive universities with key construction, and the "leader" of China's educational reform and development. BNU has strong capability in innovation and R&D, making a group of leading technological achievements in the Internet domain. It has 10 national and provincial innovative platforms in this field. The "Smart Learning Partner" Platform (an APP used for offering aids to students) made by BNU has innovated the K-12 Education in Beijing.

BNU: <http://english.bnu.edu.cn>



Tsinghua University has already emerged as a world-class computer science research institution. It has carried out a lot of research work in big data knowledge calculation. THU has also enhanced our country's capacity in super-large scale online data storage, holding a massive storage, massive unstructured digital resources and data researches.

THU: <http://www.tsinghua.edu.cn>



China Mobile Communications Cooperation is the world's largest operator with over 800 million users, owning the largest coverage of 4G network, the national first cloud computing resources, and terminal advantages. It has cooperated with BNU to develop the "AND EDUCATION" Cloud Platform. In the model of "Internet + Education", the open education cloud service platform has 90 million users.

<http://www.chinamobileltd.com>



Elernity is one of application development and operation leaders in China's online games and mobile Internet. It started to distribute the VR/AR field and build VR distribution platform in multibillion levels in 2015. Elernity will continue to explore innovative mode of cooperation and integrate VR industrial hardware, content, platform and other leading technologies to create a complete industrial ecosphere.

<http://www.101.com/en>



IFLYTEK CO.LTD. is a national backbone software enterprise specializing in intelligent voice and language technology, artificial intelligence technology research and e-government system integration. The company's intelligent voice core technology represents the highest level in the world. It has decided to cooperate with BNU to create Education Big Data Institute to make greater contributions to the development of educational data technology.

<http://www.iflytek.com/en/index.html>



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