

Educational Technology in the Developing China with the Example NTET

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全国中小学教师教育技术水平考试
National Teachers' Skill Test of Applied Educational
Technology in Secondary and Elementary School

Content

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1. Background: Chinese Policies & Investments for ICT oriented Educational Reform

ICT profoundly changes the way in which we have been working, learning and living. Correspondingly the Chinese government proposed the strategic policy to modernize education through ICT. Since 1990s Government has made many laws and policies to promote the ICT oriented education and educational reform in Primary and secondary schools.

- (1). 1999 Modern distance education project for K-12 schools in rural areas. 10Bil. Chinese Yuan are planned to be invested by the central and local governments to implement three models of device equipping and utilization.

Three models of device equipping and utilization

Model	1-DVD playing system for teaching	2-Receive teaching material system by satellite	3-Internet classroom
Devices	Colorful TV, DVD player and sets of DVD for teaching.	satellite receiving system, computer for teacher, TV sets, DVD players and DVD teaching materials	Multimedia computers with Internet access for teacher and students in the classroom, satellite receiving system, DVD player device
Benefit	5.1 million primary school students in mountain area.	81Mio. primary school students in 384,000 primary schools of the rural areas.	31Mio. junior high school students in 37,500 junior high school in rural areas.

(2). K12 modern educational technology pilot schools project throughout the whole country.

In 1997 MOE has approved 433 pilot schools, and 528 pilot schools in 2000 as the second stage. Together there are 961 national pilot schools.

All schools are equipped with the model 3.

(3). K12 ICT pilot districts project throughout the whole country.

In 1998 the first 15 pilot districts were approved by MOE and in 2000 other 76 pilot schools. Together 91 pilot districts. All schools in these districts are equipped with the model 3.

How to evaluate the effectiveness of these projects?

So much money has been invested, but how about the actual **effect** these projects have brought with it? for example, have the facilities been effectively used in the teaching and learning? The government and legislators don't know. So the idea of **examination** comes firstly in theory and then into fact. Examination of the student's information skills has been put into practice, although it is still not required in the national entrance examination to higher education every year in the summer.

Timetable of approved documents by MOE:

- Dec. 2004: Teacher's standard skills of educational technology in primary and secondary school.
- April 2005: National teacher's training plan of applied educational technology in primary and secondary school.
- Main Content: see next pages.
 - Goal: 50 hours/year training for every teacher. Examination and certification system (NTET). The certification will be related to the teachers' qualification and promotion.
 - Task: Outline NTET of training and test based on the standard, training base building.
- Oct. 2005: Outline of National teacher's skill test of applied educational technology
- Dec: 2005: first NTET (Pilot program) in the training bases of the 9 pilot provinces. 2000 examinees.
- Nov. 18– 24 2006: second NTET in 9 provinces. 90,000 examinees.
- Later: twice every year all over China. May and Dec.

2. Organization

- ❑ Leader: MOE, deputy minister
- ❑ Training: NCET (National Center of Educational Technology) and its local representatives all over China, and some universities like Peking University, Capital Normal University, Eastern China Normal University, etc.
- ❑ Examination: NEEA (National Educational Examination Administrative) and its local branches (representatives) all over China

3. Content: based on the standard skills

- Basic knowledge
- Teaching plan Design
- Instructional Resource preparation
- Instructional implementation
- Evaluation and assessment

Main content of the standard skills and examination

- Training and examination benchmark for teachers' skills of educational technology in primary and secondary school. In the name only teachers are mentioned, but this word refers to not only professional teachers who teach courses, but also the administrators and technicians in the school. In the content the three kinds of compositions for a school are given different corresponding standard skills of educational technology.

Consciousness and attitude

- ❑ consciousness of importance: educational informatization and reform, one composition of teacher's qualities, optimization of curriculum
- ❑ consciousness of application: integration, enrichment of educational resources, pay attention to the newest technologies and apply it
- ❑ evaluation and reflexion: on the utilization of educational resources, on the instructional process, and on the pedagogical effectiveness and efficiency.
- ❑ life-long learning: application of newest technologies.

Knowledge and skills

- basic knowledge: et concept, et theories, et methods, et research methods.
- basic skills: information search, process and using; the choice and development of common instructional medias; instructional system design methods; instructional resources management, instructional process management and project management; the evaluation of instructional media, resources, process and effect.

Application and innovation

- instructional design and implementation: correctly describe instructional goal, analyze instructional content, design effective instructional activities according to the students' features and curriculum content.
- instructional support and management: collect, distinguish, integrate and apply instructional resources related with the course subjects. Resources Management, learning activity management in the classroom.
- research and development: on ET application and theory. On the effectiveness of ET application in the corresponding curriculum, self development with ICT.
- cooperation and interchange with ICT: with students, colleagues, administratives and technicians, subject experts and ET experts.

Social responsibility

- ❑ Equal usage of educational recourses: The equality of all students' educational recourse usage.
- ❑ Effective usage: for all students from different backgrounds, characters and abilities.
- ❑ Healthy usage: criminal, violent, erotic information, etc.
- ❑ Legal usage: moral and ethical values in Information society, intellectual property protection.

4. Form

- ❑ CBT (Computer Based Test): objective questions
- ❑ Single or multiple choice, blank filling, operational test
- ❑ Every course (math, Chinese language, etc.) has its test paper. All together there are 3×9 test papers.

5. Possible Problems

- ❑ Financial problem: training and examination fee
- ❑ ET theory and practice problem
- ❑ Integration into the curriculum
- ❑ Technical problem: subjective questions