

# Educational Technology in Higher Education at China

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# Content

- Overview of ET in china
- National Projects in recent years
- ET Organizations in higher education
- Dept. Of ET in PKU

# Part 1: Overview

The slide features a black background with the title 'Part 1: Overview' in white text. Below the title, there are three horizontal stripes: a purple stripe, a red stripe, and a gold stripe, followed by a large orange rectangular area.

# Origin

- 30's film /slide  
1922, "Audio/Video" -->电化教育
- 1978, the first two Institutes of Audio/Video Research were set up in Beijing Normal University and South China Normal University

# History

- Start from 1922: slide, film
- restart in 1978: TV, slide
- popular in early 80s:  
audio-video center
- flourishing in later 90s:  
multimedia classroom/Campus Computing
- rebirth in 21 century:  
Web-based **Distance** Education

# Trend in China

- Media comparing, topic experiment
- single subject, single class, short period
- ET faculties do the research



- in a whole, comprehensive
- multi-courses, whole school, long period
- leaders, teachers and researchers

# Trend in China

- Surrounding Diathesis Education
- Network will be the core media
- Education materials producing, available on line
- Recruit more students for the modern distance education
- IT training for Teachers and students

# Research Work

- 教育技术在学科教学中应用研究  
Applying Educational Technology  
(multimedia, network) in subject education  
especially on critical thinking
- 教学学习资源建设研究  
Education Materials production
- 新型教学模式研究  
New Instructional Paradigm



# Research work

- 教育技术理论研究

Educational Technology Theory  
Research: strategy research,  
comparing, cross-culture

- 现代远程教育理论与实践研究

Modern Distance Education: theory  
and practice

- 教育技术人才培养开发

# Part 2: Organizations



# Organizations in ET

- *Audio-Video Centers*

National (中央电教馆)

Province, City, borough

Functions:

- educational materials  
video types, software, books
- teacher training

Audience: k-12 schools and teachers

# Organizations in ET

- Association of Audio-Video Professional(中国电化教育协会)

Social and Science, Engineering, Medicine, Agriculture, Army

Functions:

- Cooperation on educational materials
- Information and experience exchange

Members: Universities' and Colleges' faculties (80%)

# Organizations in ET

- China Education Technology Association of Higher Education Institutes

## Functions:

- information exchange(netcourse, website, magazine)
- teacher training center

Membership: 420 Universities and Colleges

# Organizations in ET

Modern Educational Technology  
Center

= Audio-Video Center

(+ Network-based College)

(+ Network Center)

(+ Computing Center)

# Organizations in ET

Departments of ET =

- Department of Audio-Video
- Department of Computer Science
- Department of Physics
- Audio-Video Center

# Degrees on E.T.

- Degree on Educational Technology
  - 56 universities have bachelor programs
  - 10 universities have master programs
  - 4 universities have Ph.D programs
    - Beijing Normal University(2)
    - South China Normal University(4)
    - East China Normal University(2)
    - Nanjing Normal University(1)



# Part 3: Projects



# Projects

- Practice and Experiments
- Modern Distance Education
- Education Materials

# Practices and Experiments

- 《电化教育促进中小学由应试教育转向素质教育的实验研究》（MOE）  
18 provinces, 236 schools
- 《小学语文四结合教学改革实验项目》  
18 provinces, 602 schools
- 《中国基础教育现代化工程实施策略研究》

# Practices and Experiments

- 《高等师范面向21世纪教学内容和课程体系改革计划》之《现代教育技术应用研究与实践》
- 《高等教育面向21世纪教学内容和课程体系改革计划》之《普通高校电教面临的问题与对策》
- 《北京朝阳区职业教育课程开发》（联合国）

# Modern Distance Education

- 《以电子信息技术为主要教学手段的远距离教育研究》（7.5）
- 《广播电视大学质量保证体系与信息资源利用研究》（8.5）
- 《广播电视大学实现现代开放教育的研究》
- 《人才培养模式改革和开放教育试点》

# Modern Distance Education

- Modern Distance Education
  - CERNET: The basic framework for national education and science research
  - Satellite + {ISDN, internet/intranet}
  - new century netcourses :  
200 courses

# Work focus

- 现代远程教育传输体系技术实现方式
- 网络教学平台建设
- 现代远程教育资源建设（教学资源库，网络课程和设计开发）
- 现代远程教育教学管理体制和评估指标体系

# Education Materials

- 《CAI软件研制与开发应用》
- 《教育技术信息资源库建设与应用》
- 《中小学课件的研制与开发》（北师大）
- 《中学计算机辅助教学软件品质与教学模式的相关优化研究》（西南师大）



# Education Materials

- 《基础教育多媒体计算机教学网络现代化建设研究》（江西师大）
- 《现代化教学环境建设》（西安交大）
- 《信息高速公路与多媒体辅助教育的研究》（天津师大）

# Part 4: ET in PKU



# Introduction to GSE

- The Graduate School of Education was set up last November
- 3 Departments:
  - Dept. Of Education and Human Development
  - Dept. Of Education Economics and Administration
  - Dept. Of Educational Technology

# Dept. Of E.T.

- 12 teachers, 9 technicians  
4 professors  
2 associate professors  
the other are assistant professors
- all have master degrees in  
Science from PKU
- Strong background in Computer  
Science

# Graduate programs

- 2 programs
  - Education materials and instruction design including: multimedia, IT merge with classroom
  - Network-based Educational Technology focus on: web-based instruction, campus computing

# What we did

- platform for multimedia course development
  - especially for math course
  - math symbols are not image, can be calculated
  - draw math curve based on formula
  - automatic judge the exercises

# What we are doing

- Modern Distance Education System Standards(MOE)
- The Strategies Research for National Modern Distance Education(MOE)

# What we are doing

- Educational Resource Tank for PKU
- Campus Netcourse Delivery Platform
- Toolkit for Multimedia Course Development



# What we are doing

- 《Information Technology》 course for primary, middle school and high school (VCD)
- 2 netcourses supported by MOE
- 4 netcourses supported by PKU
- 6 netcourses supported by dept.

# What we will do

- Advanced Studies in Graduate Program
  - Leadership
  - Special professional
- Certification program
  - Leadership
  - Special professional

# Aims

- First-class Research Institute  
focus on : ET over web  
materials , instruction method,  
technical Support, behavior  
analysis, tools evaluation
- ET Professional Center  
discussion, comments,  
evaluation, consulting

# Advantage

- In the right time
- Peking University is a famous university in china
- Good relationship with MOE
- Dean of Education is vice present of the University
- good faculties and facilities

# disadvantages

- No professional
- less knowledge on Education Theory, just begin to learn
- in early stage
- less real experience

Thanks!