A Comparison of Chinese and Western Distance Education Initiatives: Educational Goals and Instructional Practices

Geoff Potter, Ph.D.
University of Victoria, Canada
Distance Education in China

- Introduction
- An overview of China’s current distance education program:
  - Purposes, objectives and achievements
  - Challenges facing distance educators
  - Comparison with distance education in several western nations
Distance Education in China

What might distance educators in China and western nations learn from each other?
The Current Status of Education in China

• What is the Size of China?  9.2 million square kilometers
• What is the Population of China: 1,278,000,000
• How many students are receiving formal education in China:
  • Elementary Level: 280,000,000
  • Middle Schools: 73,000,000
• There are currently about 350 million children in the Chinese school system.
The Current Status of Education in China

- How many institutions of higher education are there in China? There are 1075.
- Of these, 154 are major universities.
- The total university student enrolment: 4.5 million
- This is only 10.5 per cent of the total population of Chinese young people between 18 to 24 years.
- Many western countries offer higher education to twice this percentage.
- The total number of students in US universities is 10.9 million. This is 12% of all 18-24 year-olds.
The Current Status of Distance Education in China

• The number of students taking Distance education courses in Chinese Universities in 2002 was estimated to be 800,000.

• This is 20% of all higher education students.
The Developmental Context of China’s Education System

• The story of this huge nation’s experience with education is an interesting one, spanning 3500 years.
Education for Social Control

- **The Imperial Period (1500-BC- 1840 AD)**
- **Shang Dynasty (1523-1027 BC):** the curriculum comprised six subjects:
  - Rites ...
  - History ...
  - Music....
  - Mathematics
  - Archery....
  - Chariot-Riding
- **This curriculum was used for more than a thousand years. It was replaced when Confucius’ classics were politically adopted.**
Education for Social Control

• Confucius ruled education for an even longer period: two thousand years, right up to very recent times.

• During this entire 3500 year long period, it is estimated that only 1% of each generation of Chinese people received this “higher” education.
Changing the System

• 1842: Acknowledgement that China needed western science and technology
• 1905 - 98 years ago - The then governing Qing Dynasty dismantled the system of civil service exams and inaugurated the current system of primary, secondary and tertiary levels of education, similar in some ways to western models.
Changing the System

• 1921: Communist Party modified the new system in an attempt to preserve Chinese identity and culture.

• But, hardly had these modifications begun when the Japanese invaded and everything came to stop until 1949.
Changing the System

• 1949: Mao imported the Soviet Russian model of education:
• This brought the development of higher education:
• New polytechnic and comprehensive universities
• Teacher training colleges.
• But once again the process was interrupted, this time by the cultural revolution.
Changing the System

• Stability
• Only in 1976 was Deng Xiaoping able to modernize the university system to focus on the four modern essentials: industry, agriculture, science and technology, and national defense.
• This, together with increased economic prosperity brought stability to the education system and the opportunity to concentrate of some serious expansion.
Changing the System

• But…
  In 1976, it was estimated that even after so many radical changes to the system, the number of Chinese citizens enrolled in higher education was still 1%. Approximately what it had been 3500 years earlier.
  So…

• The search was on for other more flexible ways of educating the masses, who after 3500 years of Chinese history, were still for the most part excluded from education and training.
Expanding the System

• 1985: The “Decision of the Reform of the Education System”
• This established the university and technical college systems.
• It also granted some autonomy to some universities.
• 1995: The Education Law of the People's Republic of China
• This was a commitment to universal education.
The Role of Confucianism

- Confucius’ code has dominated Chinese culture and education for over 2000 years.
- The code is written in five books:
  - 1. Yi jing: The Book of Changes
  - 2. Shu jing
  - 3. Shi jing
- This is the Book of Songs: China’s earliest collection of poetry. Many of these poems are interpreted as reflecting the peasant’s feelings towards government. Here is one:
The Role of Confucianism

Big rat, big rat
Do not eat my millet!
Three years I have served you,
But you will not care for me.
I am going to leave you
And go to that happy land;
Happy land, happy land,
Where I will find my place.
The Role of Confucianism

- 5. Li ji
- This is the Book of Rites. It reflects Confucius’ obsession with ritual. It has most strongly influenced the design of Chinese educational practice.
- These are described here because in many ways Confucius rules in Chinese Education, replete with tight regulations and behaviors not conducive to contemporary distance education.
Challenges to Chinese Education and Distance Education

- The challenge to be free of the cloying, restrictive, out-dated elements of Confucianism, while respecting and retaining all that is still valuable, is a major challenge within Chinese education.

- The challenge to relate higher education more accurately to the needs of a WTO nation competing in a global market.
Challenges to Chinese Education and Distance Education

• The challenge of the digital divide - the gap between the computer haves and have-nots. Currently 12 people in every 1000 now possess a computer.

• The 37% of Chinese citizens who live in rural areas and are in most need of educational reform, have the least capacity to use it.
Challenges to Chinese Education and Distance Education

• Another challenge is the cost of education.
• Education is expensive and higher education utilizing digital technologies is even more expensive.
• At ¥5000 per year, university tuition is almost equal to the average annual income of urban workers (¥6000) and is 2.5 times the average annual income in rural China.
• If distance education is even more expensive, who will be able to study at a distance?
The Forms of Distance Education in China

• **Print**
  The first major delivery mode for distance education in North America and Europe was print.
• **But in North America and Europe** paper is cheap and readily available.
• **In China it is not.** So while China did initiate a print-based correspondence system in the 1950’s its primary distance education delivery process has been for several decades, radio and television.
The Forms of Distance Education in China

• Television

• China’s use of television as an educational device began almost as soon as television became widely available in 1960.

• By 1966 8000 students had graduated from the Beijing Television University.

• But 1966 saw the beginning of the cultural revolution and the effective end of this promising experiment.
The Forms of Distance Education in China

• The proposed revitalization of the Chinese economy in 1976 required millions of trained and skilled workers. Once again distance education became the vehicle of choice.

• In western nations, television-based courses and programs were often delivered to fairly small audiences. But in China, television-based courses were to be delivered to the masses. No-frills, black and white, talking head television grew rapidly as a skills training device.
The Forms of Distance Education in China

- A Period of Rapid Expansion
- In 1979, The Central Radio and Television University (CRTVU) was established in Beijing.
- In 1980 provincial TVU’s in Eastern China.
- By 1986 one third of all higher education students in the country were learning from TVU’s.
- Secondary school students were admitted by passing the same national entrance examination for conventional universities and colleges.
- The TVU came was a new conventional university.
Enriching the System

The course range was considerable - up to 81 different subjects by the 1990’s.

• Delivery was multi media with one technology supplementing another.
• The instructional method was very straightforward: duplication of the classroom experience - the modification of television with Confucian instructional methods.
Enriching the System

• To this end two innovations kept everything together:
  • (i). distance education students studied together in groups; and
  • (ii). tutors were available to answer questions and guide study.
CERNET: Distance education Goes Digital

- Towards the end of the 20th century China’s Central Government made a major leap forward in distance education: the establishment of CERNET: The Chinese Educational and Research Network one of whose purposes was ADL (Advanced Distance Learning): distance education delivery of academic courses via advanced high tech systems.
CERNET: Distance education Goes Digital

- CERNET is the world’s largest education and research network.
- It is China’s first nationally funded TCP/IP network.
- Of China’s 1075 universities, just over 100 are now connected to CERNET.
- Plans for the coming three years should see all universities and higher education institutes, plus 40,000 middle school, with 56,000,000 students and 160,000 primary schools with 125,000,000 students.
CERNET: Distance education Goes Digital

• What does CERNET do?
  ❖ CERNET is the high-speed backbone of the Chinese government’s Remote Learning Program.
  ❖ CERNET enables users to deliver distance education courses.
  ❖ CERNET is pioneering a completely new form of education via the Internet and personal computers.
The Characteristics of Distance Education in Western Nations

The two primary developers of distance education in the west are Britain and the USA.

- Distance education began in 1840
- 1890: The University of Chicago offered a program of courses via correspondence.
- 1933: The world's first educational television programs were broadcast from the University of Iowa.
The Characteristics of Distance Education in Western Nations

• 1969: Britain's Open University was founded.
• 1971 the first experiments with satellite-based delivery of distance education were conducted in Canada and the USA.
• In the 1980s, the telephone was integrated into the process, particularly in Iowa, British Columbia and Western Australia.
• 1995 the ten largest distance education institutions in the world alone served over 3,417,000 students.
Who studies at a distance in western countries?

- In major western nations between 12 and 15% of higher education students currently study at a distance.
- USA: 2,000,000.
- Britain: 750,000, one third of whom study at the Open University.
- France 650,000 students, 190,000 of whom are enrolled in the National Open University.
- Canada: 200,000
Variety Within Western Distance Education

• The University Alliance, linking five institutions
• Walden University specializing in Business, Administration and Information Systems.
• Barnes & Noble University, an on-line university that offers free courses to those who purchase textbooks from this marketing giant.
• Jones International University, the first accredited online university in the USA.
• UNext.com: an “education company”
• The Western Governors Virtual University, offering degree programs based entirely upon the assessment of competencies rather than courses.
Current Distance Education Practice in China

Satellite-Based Television

• 1990 a project was begun in China to train large numbers of 25,000 teachers via television.
• 1994: 40,000 trainees had completed their training and upgrading through ETV.
• 1995: China was broadcasting each day more than 30 hours of educational programming on two dedicated channels.
Current Distance Education Practice in China

E-learning
Currently the primary vehicle of educational growth.
2001: Beijing University of Language and Culture opened an on-line Chinese language distance education program.
2002: A computer-based and networked distance learning center was opened in the Ningxia Hui Autonomous Region.
2002: a distance education linkage was established between China's Renmin University and Japan's Osaka Education Institute.
Current Distance Education Practice in China

• 2002: The Chinese government authorizes 45 universities to offer web-based degree and diploma programs through the Modern Distance Education Project.

• Most conventional universities and colleges are now dual-mode.

• E-learning instructional methods now take two forms: live transmissions direct from classrooms combined with interactive, on-line support; and self-study materials supplemented with on-line discussions and tutorials.
Current Distance Education Practice in China

Several trends are now identifiable:

• Collaboration in distance delivery between an academic institution and a private company
• The establishment of extensive online support systems for distance students.
• The development of multi-media instructional packages.
Current Distance Education Practice in China

- **E-learning Interfaces**
  - 2001: WebCT was sold to a Tsinghua University Company in Beijing.
  - WebCT is an e-learning interface that addresses and to some extent resolves an on-going problem in e-learning.

- 2001: Hunan University developed and marketed an on-line education platform

- Currently China has 31 universities providing on-line e-learning to 50,000 distance-education students.
Challenges Facing China’s Distance Education Endeavors

• Chinese distance education has its problems.
• 1. There is the problem of access. Individual web-based study is still not possible for most people,
• 2. Internet access is expensive. Most Chinese citizens—particularly those who would most benefit from distance education, cannot afford it.
• 3. The lack of locally produced software
• 4. Online centers are not yet efficiently managed
• 5. Many DE teachers lack specific training.
Challenges Facing China’s Distance Education Endeavors

• 6. A relatively small number of students actually graduate from distance education programs
• 7. China does suffer at the moment from a lack of infrastructure: inadequate bandwidth; inadequate access to computers; and inadequate software.
• 8. The legacy of Confucius. Teachers are the protectors of Confucian wisdom and have been well trained in it. For distance education, to succeed it must eventually be embraced by all educators.
Comparisons

1. A Difference in the Literacy Base:
   81.5% of China’s citizens are literate. This compares with 97% in Canada and the USA.

2. A Difference in the Number of Graduates.
   The number of university students in China today is 4.5 million. This is only 0.27% of the country’s population.
   The total number of students registered in American universities is 10.9 million. This represents 3.82% of the entire population.
Comparisons

• 3. A Difference in Available Programs.
In North America, Europe and Australia, education is expensive, course and program selection is broad and the job prospects for are uncertain. In China study options are limited primarily to science, culture and technology. Tuition is free. Medical care is free. A reasonable job is fairly easy to find, and frequently offered upon graduation.
Comparisons

• 4. Differences in Attitude and Personal Opportunities

In many western countries higher education is almost a basic right.

In China admission to a university has been a stressful and complex process which most candidates failed. Only last year, in 2002 were 60% of entrance examination candidates successful.

Between 1949 and 1978 only 2,900,000 students graduated from full time universities and colleges.
Comparisons

• 5. Differences of Focus
Distance education in North America and Europe is primarily a tertiary level skills or academic based affair.
In China it is a major component of a national system.

• 6. The Role of Television
In western nations, ETV is an option for a minority.
In China television is a major player in higher education
Comparisons

7. The Role of the Internet
   In many western nations up to 70% of the population can access the Internet.
   In China less than one percent

8. Differences in National Goals
   In the west, there were as many national educational goals as there are educational systems.
   Canada
   The USA
   England
   France
Can China and the West Learn from Each Other’s Experiences?

Not Very Much

- The reasons for distance education are different
- Educational philosophy and practice are different
- Target groups are different
- Availability of technologies is different
- The time frame is different
- Priorities are different
- The scale is entirely different
- Management and control are different
Can China and the West Learn from Each Other’s Experiences?

- Chinese distance educators may learn about:
  - Instructional design
  - Instructional models
  - Academic-business linkages
  - Virtual systems

- Western distance education educators may learn about:
  - The design and management of large distance education systems
  - The establishment of learning centers;
  - Collaborative study groups;
  - The establishment of dedicated networking systems.