Distance Learning in China

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In line with the popularity of computer and communication technologies, the largest country in the world — China — has joined the era of the Internet. As one of the most important activities on the Internet, distance learning is widely developed by key universities in China. The advantage of distance learning compared to traditional education is its flexibility, timely distribution, scalability, and multi-modality of learning resources. Observing the development process and activities of distance learning from the perspective of one of the largest universities in China, we summarize a few interesting issues in this paper.

The traditional culture of the Chinese to allow children to receive good education is a common goal for many parents in China. However, for high-level education, the percentage of people that can receive a degree in China is lower than those in some Western countries. This is due partially to the large population of the country. Starting in 1998, the Ministry of Education of China investigated more than 260 million RMB to promote distance learning in four well-established universities, including Zhejiang University. The budget was to support the construction of advanced network infrastructure; the development of 200 high-quality distance learning courses; the implementation of a resource database to store course contents, references, exercises, and exams; and the development of a distance learning standard in China (including platform). When this paper was written, there were more than 68 large universities in China providing distance learning services to students. Ever since the investigation, distance learning in China has received high attention, not only from the 1.3 billion people but also from many Western countries.

In the year 2000, there were about 22,500,000 Internet users in China. About 75% of these users were under the age of 30, especially students in universities, colleges, and high schools. Motivation of distance learning students is based on receiving a high-level degree, especially for those who lost the chance to receive an education. However, for students from the country, it is relatively more difficult to join distance learning due to the high cost of computers and the Internet. Another factor that discourages distance learning is less readiness for using computer and communication technology, especially for people above the age of 30. In contrast with using high-tech, some prefer self-guided study and TV-based broadcasting for learning. However, this drawback of not using computers is improved after computer and network infrastructures are promoted by the government.

The cost of distance learning is high, compared to traditional TV-based broadcasting for learning and self study. In addi-
tion to government funding, most universities look for support from the industry investments or donations. The support will avoid adding the cost to students. In addition, most Internet information commonly is realized as a free resource in China. Therefore, the marketing strategy of these universities is different from some important distance learning portals in Western countries. The strategy requires providing a low tuition requirement, if possible. However, in general, the tuition of distance learning is higher compared to traditional high-level education in China. Even distance learning programs provide a new direction and opportunity for those who are seeking high-level education to some degree. The young from the country may have missed the opportunity due to economic reasons. This phenomenon is not much different from most developed countries.

Students in distance learning are of different ages and from different backgrounds. A reasonably large percentage of participants are those who graduated from colleges and were seeking opportunities to continue their studies at universities. The second largest category is university students, followed by students of colleges. In some particularly research-oriented universities (i.e., Tsinghua University and Zhejiang University), graduate-level courses are offered in distance learning. In Hunan University and Tsinghua University, some students of continuing education (non-degree oriented) received distance learning. Most distance learning programs in well-established universities are equipped with good facilities. Most commonly, satellite channels are rented for video conferencing or online delivery of instruction. Cable television is the replacement in the absence of satellite communication. Internet is used to deliver course material; it is also used in discussions via British Broadcasting Service (BBS) or e-mail. In some occasions, distance learning programs use phones to provide services to students (i.e., for discussion). In general, due to bandwidth limitation, online video broadcasting cannot be implemented on the Internet in some areas of China.

The government of China encourages distance learning programs in several key universities. We highlight some of the successful examples here.

- **The China Central Radio and TV University** ([www.crtvu.edu.cn/](http://www.crtvu.edu.cn/)) is the largest distance learning university supported in China. In 2003, the university had more than 1.467.000 students in more than 36 divisions (including remote areas such as Tibet). Among more than 1,300 instructors, more than 580 courses were taught. The university is the first university in China to integrate satellite communication, Internet, and traditional classroom in distance learning.

- **The distance learning program of Zhejiang University** ([www.zju.edu.cn/](http://www.zju.edu.cn/)) was started in 1998. More than 24 distance learning centers were established in 24 provinces and cities. Zhejiang University uses satellite communication and the Internet to deliver video-conference-like lectures. So far, more than 6,000 students have graduated from the program. Zhejiang University is the first organization to grant a diploma of distance learning in China.

- **The Tsinghua University** started its distance learning program at the same time as Zhejiang University. Tsinghua University uses satellite communication, the Internet, and cable TV for online video-conference-like learning. BBS and e-mail are used for off-line discussion and assignments. Summative assessment is required in class tests.
The Peking University distance learning program started in 1999. The university offers distance learning courses for degree and non-degree-seeking undergraduate and graduate students.

As one of the successful examples in Hong Kong, the College of Higher and Professional Studies Ltd. was established in 2003. The institute offers joint distance learning programs with universities in China, Macao, and other Western countries. In addition to the in-class type of lectures, the institute provides distance learning programs with degrees offered by universities in China and Western countries.

The Open University (www.nou.edu.tw/) offers university degrees in different subjects through the use of distance learning. The university is the first institute in the Taiwan area to use distance learning via TV broadcasting since 1986.

The distance learning program at Tamkang University (www.learning.tku.edu.tw/) was established in 2000. In addition to collaborating with universities in Taiwan area, the program also supports inter-campus distance learning through video conferencing.

Distance learning in China is still in its development and trying stage, which is similar to most Western countries. In our research of distance learning programs at Zhejiang University, we observed a few challenging issues and we point out a few suggestions.

- The development of learning resources (i.e., instruction materials, assignments, and test repositories) and delivery systems (i.e., content management, user management, and presentation platform) is time consuming. Yet, different institutes have their own systems. The standard of distance learning in China needs to be promoted. Standard platform and repositories of learning resources need to be implemented and announced for public usage.
- The network infrastructure in China is less efficient due to the large number of requirements in major cities. On the other hand, there exist fewer less-developed cities, especially in the remote areas (e.g., Tibet), that need a promotion of the Internet. The government will have to further investigate Internet users or the next generation of the Internet users to make distance learning accessible everywhere.
- The shortage of qualified instructors, especially for high-level education, happens in distance learning programs. In addition to having high degree instructors, distance learning programs in universities need to train these instructors to use distance learning facilities. The government and universities need policies to encourage these instructors, since it is harder to cope with the learning curve using distance learning systems, especially for those who are not in the engineering or science domains.
- The promotion of a distance learning university in our society should take a different strategy. The most successful examples, as we have discussed, are in well-established universities. People join their distance learning programs due to the reputation of these universities. However, large e-learning portals (e.g., University of Phoenix in the U.S.) are rarely seen in China. The promotion of good e-learning portals will supplement the fast exchange of industry experience, which may not be caught by traditional universities in time. These e-learning portals
should be incorporated with industry to deliver first-hand technologies.

• Bridging the gap between localization and internationalization is another important consideration. Recent international communities use English as a common language. Localization of good distance contents to deliver timely technologies will help the acceleration of distance learning programs, while Chinese culture-oriented lectures should be maintained.

• Nevertheless, economics play the major role. Distance learning requires a higher development cost, which can be transferred to students. With the rapid growing economic in China, distance learning will be more popular.

Making a successful distance learning program depends not just on the strategies or the infrastructure of our network. The management of a distance learning program usually needs different categories of people. On the top, the director needs to survey the domain of courses, find proper instructors, and set general requirements, such as syllabi, instruction delivery processes, and assessment requirements. Typically, these general requirements are the successful issue to ensure the quality of a program. If necessary, a committee led by the director needs to review periodically the requirements and to ensure that each instructor works as expected. A marketing team may be required to promote the distance learning program. Without sufficient students, no program will be successful. Nevertheless, instructors play the most important role in the whole process. Clear presentation and precise content will be the successful issue of a class as well as the entire program. Sometimes, artists are acquired to assist the instructors to design the interface of course materials. In addition to good contents, presentation styles often affect the impression of general readers. In addition, technicians to operate distance learning classrooms are required to ensure that the classroom is running smoothly in a synchronized distance learning program. The technicians will maintain the platform and allow the instructor to concentrate on instruction delivery. Finally, a coordination person (or team) may help the director to ensure that everything is running smoothly.

In this short paper, we discussed the status of distance learning in China. We introduced a few successful universities and institutes and pointed out factors that can further improve the quality of distance learning programs. It is the hope that, with the guidance of our government agencies, the distance learning program will help to develop high-level education in China. As a key university of distance learning in China, Zhejiang University will continue to play its important role and to contribute to the distance learning society in China.

ENDNOTES

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2 Zhejiang University, as the pioneer of distance learning in China, had more than 500,727 students and more than 223,855 distance learning students in 2003.

3 About 0.4% of people between the ages of 18 and 22 are able to participate in graduate studies. In addition, 4% and 7% are in undergraduate and college programs, respectively.
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