

# ICTs in Chinese Distance Higher Education: Increased Opportunities and Continuous Challenges

*Xiaobin Li, Brock University, Canada*

---

## ABSTRACT

*The Chinese higher education system is the largest in the world, but distance education, using information communication technologies (ICTs), started later than in developed countries. In this paper, the author examines the benefits of education to human development and provides an overview of the recent development of distance higher education in China. The potential for further developing distance higher education with ICTs is considered. In addition, challenges are discussed and recommendations are made to improve Chinese distance higher education.*

*Keywords: Distance Education, Distance Higher Education, Educational Technologies, Human Development, ICTs*

---

## BENEFITS OF EDUCATION TO HUMAN DEVELOPMENT

Education is valued for its benefits to human development and its role in advancing social justice. However, before realizing any larger social values, most citizens have to be literate and numerate to obtain gainful employment to be financially self-sufficient in an increasingly globalized economy. Providing an adequate education, generally considered at minimum to include a secondary school diploma but ideally to have some form of higher education, to all youth so that they become contributing citizens is a critical and challenging issue that

educators and policy-makers have to work on permanently.

Education has economic values. The more education one has, the more likely one is employed, and the higher income one tends to earn (Garner, 2004; Levin, Belfield, Muenig, & Rouse, 2007; Statistics Canada, 2004, 2006). In the United States, Angrist and Krueger (1991) find that the estimated monetary return to an additional year of schooling is about 7.5 percent. In Canada, from 1951 to 2001, the skills acquired by one extra year of education resulted in an increase in per capita income of around 7.3 percent. The accumulation of human capital has played a strong role in explaining relative levels of per capita income across the Canadian provinces during the past half century

DOI: 10.4018/jicthd.2010100101

(Statistics Canada, 2006). In China it is also observed that there is a positive relationship between education and career development (Chai, 2009).

Investment in human capital is three times as important to economic growth over the long run as investment in physical capital. Differences in average skill levels among Organization of Economic Cooperation and Development (OECD) countries explain fully 55 percent of the differences in economic growth over the 1960 to 1994 period. This implies that investments in raising the average level of skills could yield large economic returns (Statistics Canada, 2005).

Japan and China may be considered two examples of the difference education can make. The Japanese labor force is better educated than the Chinese labor force. In 2007 the Japanese education index was 0.949 and their GDP per capita (PPP US\$) was 33,632, compared with the Chinese index of 0.851 and their GDP per capita of 5,383 (United Nations Development Program, 2009). With the realization that China lags behind developed countries in education, the Chinese system has gone through the largest expansion ever seen in the world higher education community (Zha, 2009). Recently the Chinese government has allocated a significant portion of its economic stimulus money to be used in developing education (Li & Yu, 2009).

Education also has other values. Educational attainment has large and independent positive effects on most measures of civic engagement and attitudes (Dee, 2004). More education is associated with more civic engagement. Lower education levels are almost always associated with significantly lower levels of civic engagement (Statistics Canada, 2006). There is a positive relationship between these activities and the satisfaction people derive in their lives (Statistics Canada, 2004). In other words, people with more education tend to engage in more civic and social activities. Because they engage in more of these activities, they tend to be happier. People with more education are healthier and are less likely to have law-breaking behavior (Statistics Canada, 2005). Besides,

education brings external benefits to society in addition to the person who uses the service of education (Brimley & Garfield, 2005).

## CHINESE HIGHER EDUCATION

In 2008 with more than 29 million students, the Chinese higher education participation rate was 23.3 percent (Ministry of Education, 2009), which can be considered mass education (Trow, 1973). The largest higher education system in the world, Chinese higher education is more accessible than before, but there are problems.

There are significant gaps in the development of higher education across regions and social groups, as well as between urban centers and rural areas. Higher education is still not available in some remote western areas. With tuitions rising rapidly, higher education is difficult for poor families to access. In addition, the increasing availability of higher education makes people pay more attention to quality, and there are concerns. When compared with universities in developed countries, domestic ones are not rated highly (National Bureau of Statistics of China, 2002).

The average Chinese education attainment of 8.5 years (Zhou, 2007a) is significantly lower than the 12 years of the OECD countries. Within China, the gap in education attainment between eastern regions and western regions is wide. The recent needs for education spending were estimated at 6-9 percent of GDP, but the actual expenditures were about 5 percent (Dahlman, Zeng, & Wang, 2007), significantly lower than the OECD average of 6.2 percent (OECD, 2007). Even with the most recent increase in education spending (Wen, 2009), expenditures in education still lag behind those in developed countries. The demand for higher education is growing, but under-funding has been a problem (Ma, 2009). In 2008 approximately 10 million Chinese took the entry examinations for higher education; only about 6 million were admitted (Ministry of Education, 2009). It seems that part of the demand for higher education is not met by the current supply.

10 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

[www.igi-global.com/article/icts-chinese-distance-higher-education/47377](http://www.igi-global.com/article/icts-chinese-distance-higher-education/47377)

## Related Content

---

### Enhancing Interaction with Dynamic Environments: An Adaptive Approach to Process Management

Minhong Wang and Huaiqing Wang (2006). *International Journal of Technology and Human Interaction* (pp. 37-53).

[www.irma-international.org/article/enhancing-interaction-dynamic-environments/2890/](http://www.irma-international.org/article/enhancing-interaction-dynamic-environments/2890/)

### A Perception of Prejudice in Face-to-Face Retail Services: Comparative Analyses of Age, Gender, and Appearance

Mirian Palmeira, Denise Palmeira and Cassia Maria dos Santos (2012). *International Journal of Applied Behavioral Economics* (pp. 22-40).

[www.irma-international.org/article/perception-prejudice-face-face-retail/71052/](http://www.irma-international.org/article/perception-prejudice-face-face-retail/71052/)

### Internet Use among Older Adults: Constraints and Opportunities

Yiwei Chen, Bob Lee and Robert M. Kirk (2013). *Engaging Older Adults with Modern Technology: Internet Use and Information Access Needs* (pp. 124-141).

[www.irma-international.org/chapter/internet-use-among-older-adults/68310/](http://www.irma-international.org/chapter/internet-use-among-older-adults/68310/)

### Introduction: Information Systems as Constrained Variety-Issues and Scope

Steve Clarke and Brian Lehane (2000). *Human Centered Methods in Information Systems: Current Research and Practice* (pp. 1-12).

[www.irma-international.org/chapter/introduction-information-systems-constrained-variety/22190/](http://www.irma-international.org/chapter/introduction-information-systems-constrained-variety/22190/)

### Automated Video Segmentation for Lecture Videos: A Linguistics-Based Approach

Ming Lin, Michael Chau, Jinwei Cao and Jay F. Nunamaker Jr. (2005). *International Journal of Technology and Human Interaction* (pp. 27-45).

[www.irma-international.org/article/automated-video-segmentation-lecture-videos/2862/](http://www.irma-international.org/article/automated-video-segmentation-lecture-videos/2862/)