



# Information and Communication Technology in China: Connecting One Billion People for Education

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## ABSTRACT

*This article provides an overview of the current development of information and communication technology (ICT) utilized in Chinese education since China joined the World Trade Organization (WTO). Specifically, the article describes and discusses the positive impacts ICT has on Chinese basic education (grade one to grade nine), as well as the existing problems in the application of ICT. The article also discusses ICT's application in higher education and the issues that have to be dealt with. The potential for further developing distance education with ICT is considered. In addition, recommendations are made with regard to providing better distance education with ICT. The target audience of this article is policy makers, educators, ICT professionals and researchers. [Article copies are available for purchase from InfoSci-on-Demand.com]*

*Keywords:* China; Distance Education; ICT

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## INTRODUCTION

China joined the World Trade Organization (WTO) in 2001, which has had a profound impact on Chinese economic and social progress. Its impact on Chinese education is also noticeable. Joining WTO increased Chinese educators' awareness of globalization. They realize that they need to develop a stronger sense of service to establish the necessary education system to meet the requirements of economic and social

change to catch up with the developed countries. China signed the General Agreement on Trade in Services (GATS) and made promises to open up the market of Chinese education, particularly of higher education (WTO, 2002).

We believe the current Chinese education system has these problems: over-centralized administration, isolated environments, and outdated educational concepts. The education system has to be more flexible, so that it

will be more aligned with the relevant GATS regulations.

The gap in education between China and developed countries is obvious. In 2005 the Chinese combined gross enrolment ratio of primary, secondary and tertiary schools was 69, compared with the US ratio of 93, the Japanese ratio of 86, and the Canadian ratio of 99 (United Nations, 2007). Through international exchange and cooperation, it is possible to introduce advanced international practices into China.

In China, formal education from grade one to grade nine is compulsory, which is referred to as basic education. Education from grade ten to grade twelve is not compulsory, but most youth graduate from secondary school, or receive some secondary education (Ministry of Education, October 9, 2007). The increasingly internationalized educational standards are serious challenges to the Chinese basic education system and its curriculum, which we think is difficult, biased, outdated and narrow. Too much emphasis is put on the unification in curriculum administration.

The Chinese economy has changed from a planned economy to a market economy, yet the education system is still isolated from the market. Some scholars argue that the Chinese government should allow market forces to play a greater role (Dahlman, Zeng & Wang, 2007; Yan, 2007). Further allowing international and domestic institutions to participate in Chinese education will help to meet people's expanding and increasingly varied needs for education.

Around the world, higher education is becoming more internationalized (International Association of Universities & Malaysia Ministry of Education, 2007). At the Global Higher Education Forum held in Kuala Lumpur, Malaysia, November 6 and 7, 2007, the keynote speaker talked about globalization and what it meant for higher education. In the first plenary session of that Forum the role of information and communication technology (ICT) was discussed at length. Internationalization is also becoming an important trend in Chinese higher education (Ma, 2007).

Since China joined WTO, it has to follow the relevant rules. Under GATS, education is considered part of services and is regulated similarly. In 2003 the Chinese State Council promulgated *the Regulations of the People's Republic of China on Chinese-Foreign Cooperation in Running Schools*. This document states that the national government encourages the introduction into China of quality international education institutions to establish cooperation with Chinese institutions. Currently there are over one hundred Chinese higher education institutions cooperating with Western counterparts in providing instruction to Chinese students (Ministry of Education, n.d.). These Chinese institutions have introduced advanced international experiences into their operation. Changes have occurred in these institutions' autonomy, administrative concepts, discipline establishment, curriculum, pedagogy and funding. Opening up the Chinese education services will allow Chinese educators to benefit from other countries' resources and expertise. Actually, the Eleventh Education Development Five-Year-Plan Outline does indicate that the Chinese education system will be more open to the world (Ministry of Education, May 18, 2007).

## INFORMATION AND COMMUNICATION TECHNOLOGY IN BASIC EDUCATION

The development of education information and communication technology (ICT) is an important indication of a country's educational modernization. Social development in China requires the continuous advancement of ICT application in its basic education. According to the Eleventh Education Development Five-Year-Plan Outline, all elementary and secondary schools will have access to the Internet by 2010. It is hoped that the enhanced ICT application will assist the modernization of the Chinese basic education system (Ministry of Education, May

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