The application of information and communication technologies on digital learning to reduce the digital divide

Ming-Whei Feng   Su-Cheong Mac

**Innovative Technology& Applications Development Center
in the Networked Multimedia Institute,
Institute for Information Industry**

mfeng@iii.org.tw   msc@iii.org.tw

Abstract

Digital learning is gaining a lot of attention in these few years. However, digital learning is still not yet widely adapted. One of the main reasons is due to the digital divide. Digital learning requires the learners to possess certain equipments and skills to participate. Due to the education level, income, generation, behavior, geographic location, etc., learners may not have the required equipments or skills or both to join digital learning. Moreover, insufficient professionalism and the lack of content also hinder the promotion of digital learning. Many nations have national policies to reduce the digital divide, mainly in establishing the necessary infrastructure such as network and computer to broaden the accessibility of digital technology, and deploying online government services to encourage the usage of the digital technology for public. One the other hand, the quality and quantity of the digital content for digital learning is still insufficient. The lack of an open platform, authoring tool chain, convenient digital right management mechanism, system supporting mobile behavior and customization, etc., are some sources of

the problem. We will describe several ongoing projects that are aimed to solve or reduce these issues. Combined with the efforts from the industries, such as system integrator, chip manufacturer, and mobile communication vendor, these projects will help encouraging the industries to invest in the creation of digital content.