

Digital Inequality and Exclusion: The Barriers of First Order and Second Order Digital Divide in Taiwan

YOU Yu-Ching

Department of Sociology, National Taiwan University

Since the late 1990s, the unequal distribution of Internet access between population segments in a society has gained its recognition among concerned parties, such as scholars, policy makers, and advocate groups. The development of the Internet has been suggested as an enabling technology for transforming society, eliminating power differentials, realizing a free and democratic society, and other benefits. Lack of access to Internet or information communication technology (ICT) jeopardizes one's opportunity of social participation and thwarts one's life chances. Wider uses of ICTs offer considerable opportunities for those able to take advantage of them, and increased exclusion for those who cannot. In the national level, poor nations without high technological investment suffered a competitive disadvantage compared to their wired rivals in the global economy (Norris, 2001).

Much of the research on the digital divide focuses on the first order effects regarding who has access to ICTs versus those who do not. As Internet access gradually increased worldwide for the past decade, foci on digital inequality studies shifted to the second order digital divide. While the first order effects focus on the inequality in access to ICT, the second order addresses the effects of inequality resulting from the different ways people use ICT technology. Hargittai (2002) argued that as more people start using the Internet, it becomes less useful to merely look at binary classification of whether one is online or not. Instead, she suggested a need to start looking at the differences in people's online skill and how those who are online use the medium is more important when discussing issues of digital divide.

This study aims at examining the first and second order digital divide in Taiwan. As a high connected region and a fast-growing telecommunication market, it was tested for the normalization/stratification hypothesis of internet penetration in Taiwan. The gaps between different population groups according to their access to Internet have been significantly reduced. The continuous expansion of information and communication technologies (ICT) has revealed new disparities—the second order digital divide, specifically the inequality of ICT usage. In this paper, disparity of ICT access and usage overtime are compared. This study employs secondary longitudinal data to analyses digital divide in Taiwan. National internet access and usage data from 2004 to 2010 Digital Divide Surveys in Taiwan are collected to examine barriers of the first order and second order digital divides in Taiwan.

The results indicated that the Internet access gap was narrowing in Taiwan. Yet persistent

divides of the elderly, the least educated, and the poorest suggested digital exclusion and social disadvantages were inextricably linked. The divides of broadband and mobile connection suggested that low Internet access groups were again running behind with new innovation. Educational capability still played an important role in determining what people did online. Lack of usage in needed resources will make groups that are already disadvantaged in society fall farther behind. A digital inclusion that makes it possible for people to use technology effectively and reach needed resources is vital to bridge digital and social divides.