Ando, R., Takahira, M. and Sakamoto, A. 2004 Effects of Internet use on attitude toward learning: A panel study of 5th- and 6th-grade elementary school students in Japan. The Journal of Information and Systems in Education, 3, 67-73.

## Effects of Internet use on attitude toward learning: A panel study of 5<sup>th</sup>- and 6<sup>th</sup>-grade elementary school students in Japan

Reiko Ando<sup>1</sup>, Mieko Takahira<sup>2</sup> and Akira Sakamoto<sup>1</sup>

<sup>1</sup>Ochanomizu University, <sup>2</sup>National Institute of Multimedia Education

We examined the effects of Internet use by elementary school students on their attitude toward learning. A two-wave panel study was conducted with 817 5<sup>th</sup>- and 6<sup>th</sup>-grade elementary school students living in Tokyo. The effects of Internet use were examined with respect to each Internet tool and each purpose. As a result of cross-lagged effect model analyses, for the Internet tool used, Web-site browsing and message-posting to a BBS significantly enhanced motivation for learning. Also, Web-site browsing and Web-page creation significantly enhanced self-efficacy. As for the purpose of Internet use, interpersonal exchange significantly enhanced motivation for learning. However, the effects were not strong, although they reached a significant level. Therefore, rather than concluding that the Internet use of elementary school students has positive effects on attitudes toward learning, it may be concluded that Internet use does not have any negative effects.

Key words: Internet use, elementary school students, causal relationships, attitude toward learning