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**BRING YOUR OWN DEVICES CLASSROOM: ISSUES OF
DIGITAL DIVIDES IN TEACHING AND LEARNING
CONTEXTS**

**A thesis presented in partial fulfilment of the
requirements for the degree of
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Bring Your Own Devices Classroom: Issues of Digital Divides in Teaching and Learning Contexts

Abstract

Since the late 1990s, *digital divide* has gathered much attention from the research community and government organizations. The education sector has been an important area of inquiry for many researchers, as they strive to inform government initiatives on strategies to address digital divide issues prevalent here. This study reports on how existing and new digital divides have evolved with increased penetration of digital learning technologies into teaching and learning practices and the wide usage of enabling technologies by students across formal and informal learning spaces (i.e. both in- and out-of-school), within the context of a BYOD (bring your own device) classroom initiative. A five-year longitudinal investigation of a BYOD classroom initiative by a New Zealand school helped to gain insights into different nature of digital divides in the learning process. First, the BYOD classroom initiative did not end up accentuating existing gaps in access to digital devices and information, despite initial results indicating towards a potentially digitally divided classroom. Second, the study strongly indicated the presence of gaps in terms of information literacy and critical thinking ability, which was eventually bridged in the later stage, as students slowly adjusted to the classroom curricular structures in the BYOD classroom. Third, learner self-efficacy has been identified as the most influential determinant of learning outcomes among students. In earlier phases of investigation of BYOD classrooms initiative, learner self-efficacy was found to be influenced by digital capability, in combination with information literacy, critical thinking ability, and positive motivation. However subsequently, self-efficacy influences affordances in

various aspects of social cognitive abilities related to individual's learning activities affecting how learners engage and apply technology to shape their learning outcomes. The study findings will inform policy makers and education government agencies, in their ongoing quest for bringing about inclusive digital transformation and overall improvement in learning outcomes.

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