UNIVERSITI TEKNOLOGI MARA

CASE STUDY OF NOVICE TEACHERS: THE USE OF DIGITAL TECHNOLOGY IN THEIR FIRST YEAR OF TEACHING

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Dissertation submitted in partial fulfillment of the
requirements for the degree of
Master of Science (Information Technologies)

Faculty of Computer and Mathematical Sciences

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AUTHOR'S DECLARATION

I declare that the work in this thesis was carried out in accordance with the regulations stipulated by Universiti Teknologi MARA (UiTM). It is original and is the result of my own work, unless otherwise indicated or acknowledged as referenced work. I declare that this thesis has not been submitted to any other academic or non-academic institution for any other degree or qualification.

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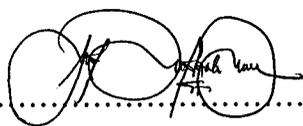
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ABSTRACT

Young graduating teachers have grown up using digital technologies known as digital saviours, able to teach the digital generation in relevant ways. This study examines the experiences of school novice teachers as they attempted to transfer their knowledge of digital technologies into their teaching context. The methodological approach taken in this study was multiple case studies. Six digitally confident novice teachers volunteered to be examined through interviews and observation to identify how they use digital technologies in their teaching practice, and the barriers and enablers experienced while attempting to integrate digital technologies into teaching practice. During the year, each of the teachers transferred their knowledge of digital technologies while facing challenges and accessing support from within and beyond the schooling context in which they were teaching. Using generic inductive qualitative analysis, the barriers and enablers were coded to five categories based on patterns identified from the interviews including: access, experience, support, school structures and knowledge. The findings from this research identified knowledge, experiences and support that could influence how novice teachers use and integrate digital technologies within their teaching practice. The novice teachers in this study were more likely to use digital technologies in their teaching practices when they were: (a) familiar with teaching students using a 'trial and error, ask a friend' approach to learning, (b) experienced in the use of digital technologies in specific subject specialist areas, (c) supported by mentors with pedagogical content expertise, (d) given a sense of agency, and (e) given access to digital technologies. The matrix of successful digital technologies integration can be a guideline for the successful of integration digital technologies in school.