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**Digital foundations:
A study of perceptions and practices surrounding the use of ICT in
ECE Centres**

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ABSTRACT

The use of information and communication technologies (ICT) in early childhood education (ECE) is controversial. Currently, ICT in ECE is experiencing a second wave of popularity. While many of the recurring debates exist around the use of technology in the education sector it would appear that ICT is here to stay. A distinguishing feature of the literature across both waves is a growing appreciation of the importance of pedagogy and the key role of the teacher.

This thesis builds on this broad concept of pedagogy by investigating the growth of ICT in ECE. The aim of the study was to discover new insight and understanding of how parents', teachers' and children's perceptions of the use of ICT in ECE influence the surrounding practice. A mixed-method approach was undertaken with a sample group in three distinct phases in one geographical location in the greater Wellington region. The study adopted an interpretive framework to inform the research methodology and help explain the findings.

The findings across the three phases show the multifaceted nature of ICT and the many layers that are required to ensure that it can be offered in an authentic and meaningful way in ECE. When this approach is not evident it constrains the integrated use of ICT and affects the quality of the programme offered. Factors that influence the level of quality include: (a) the role of teacher's beliefs and self-efficacy; (b) fluid conceptions of pedagogy; (c) the competing and co-existing drivers associated with the use of ICT in ECE; (d) the changing face of literacy; (e) barriers affecting the full integration; and (f) the implications of policy on practice.

The thesis draws on the framework of an enabled and enacted ICT curriculum developed in the literature review, as a tool to indicate and understand the current state of the level of ICT integration in ECE centres. Overall the findings show that participating teachers have begun their ICT journey and are working towards the goal of offering an authentic and meaningful educational experience. Yet, the research shows that the many layers of support necessary to ensure teachers continue to move forward on this journey are not well understood. A failure to address these gaps may sadly lead to a "third wave" of ICT in which history repeats itself.

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