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THE COMPUTER AS AN AGENT OF INCLUSION:

A Study of Current Practice

A thesis submitted as partial fulfilment of the requirements for the degree
of Master of Education (Special Education)

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DECLARATION

I declare that this thesis represents my own work, except where due acknowledgement is made. It has not been previously included in a thesis, dissertation or report submitted to this University or any other institution for a degree, diploma or any other qualification.

A handwritten signature in cursive script, reading "Alison C. Kearney", written over a horizontal dotted line.

Alison C. Kearney

ABSTRACT

This thesis investigates the nature and extent of computer use for learners with special needs and the context in which they are used. It investigates and documents the practices and beliefs of teachers who believe the computer to be an effective tool for including learners with special needs in regular class settings. The research addresses a number of problems associated with the use of computers in this field. First the lack of critical debate over the use of computers to facilitate the inclusion of learners with special needs in New Zealand schools. Second, while the computer has the potential to overcome many barriers faced by these learners, arguably, this is not always happening and in some cases, the computer can erect other barriers to inclusion. Finally, while it is known *what* the computer can do for learners with special needs, clarification is still needed on *how* to do it. The research explores these issues through the perceptions of the teacher who has a vital role to play in the successful use of computers for learners with special needs.

The research is designed over two phases. It involves a purposive sample of teachers who have a learner in their class with a Ministry of Education funded computer for reasons of special need. Phase one uses a survey method in which a questionnaire is the vehicle of data collection. Phase one is divided into two parts: (a) the nature and extent of computer use by learners with special needs and the beliefs and practices of the teachers. (b) a comparison of the beliefs and practices of those teachers who believe the computer to be an effective or very effective tool for the inclusion of learners with special needs into regular classes with those teachers who do not believe computers to be effective in this role.

Phase two employs a form of ethnographic research where semi structured interviews are used to collect data from six teachers who believe the computer to be an effective tool for inclusion.

A analysis of the nature and extent of computer use reveals that most teachers feel confident and competent in implementing computer technology for the learner in their class, and believe that the computer has many advantages. It is less clear however, whether these advantages are being utilised. Most learners were funded through the Ongoing Resourcing Scheme, and the majority had more than 21 teacher-aide hours per week. They used their computers for less than once hour per day and predominantly in the areas of English and Mathematics. Most learners had an IEP, and the computer was written into that plan.

The teachers who believed the computer to be an effective tool for including learners with special needs in regular classes identified a number of common beliefs and practices. A belief and commitment to the concept of inclusion, and the importance of integrating the computer into the regular curriculum, (including assessment and the Individual Education Process,) as well as the computer philosophy of the school were significant findings of the research.

In sum, the research provides:

- an overview of the nature and extent of computer use by learners with special needs,
- identifies the beliefs and practices of teachers who belief the computer to be an effective tool for the inclusion of learners with special needs and
- highlights ways in which the teacher, the computer and the environment in which it operates might best accommodate the needs of learners with special needs in inclusive ways.

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