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Assistive technology: effects of training on education assistants' perceptions of themselves as users and facilitators of assistive technology and consequent transfer of skills to the classroom environment

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**ASSISTIVE TECHNOLOGY: EFFECTS OF TRAINING ON EDUCATION
ASSISTANTS' PERCEPTIONS OF THEMSELVES AS USERS AND
FACILITATORS OF ASSISTIVE TECHNOLOGY AND CONSEQUENT
TRANSFER OF SKILLS TO THE CLASSROOM ENVIRONMENT.**

Submitted by

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B.Ed. Hons. (Edith Cowan University), M. Ed. (Edith Cowan University)

A THESIS SUBMITTED TO FULFIL THE REQUIREMENTS OF THE
DEGREE OF DOCTOR OF PHILOSOPHY.

School of Education

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ABSTRACT

With the increasing use of Education Assistant Special Needs (EASN) to support students with special needs in regular settings, it is important to consider the tools and knowledge that they bring to the role. The use of assistive technology (AT) as a support for students with special needs in Australia and globally is becoming more prevalent as the technology becomes increasingly affordable and more widely available. Consequently, it is important that the staff who are most likely to be working closely with these students are competent and confident in the use of AT. The purpose of this research was to investigate EASNs' perceptions of themselves as users and facilitators of AT in the classroom and to examine how skills learnt in a training situation might transfer into a classroom setting. Perceptions of EASN in regards to AT have not previously been examined, even though these perceptions may potentially impact upon if, when and how, AT is utilised in the classroom.

Eighteen EASN were recruited to participate in the study. These participants were drawn from five primary school settings in the Perth, Western Australia, metropolitan area. The EASN were all employed to work with students with special needs, and indicated that they previously had little training in the area of AT. As part of the study, an eight-week training program was designed for the EASN to incorporate a wide range of assistive technologies, from low-tech to high-tech, across a number of functional areas (i.e. learning disability, vision and hearing impairments, physical disability). The training was targeted towards the EASN and their role as described by the level 3 Job Description Form (Department of Education and Training, 2002c) and the Competency Framework for Education Assistants – Special Needs (Department of Education and Training, 2008).

A mixed method study incorporating a combination of quantitative and qualitative methodologies underpinned the research. Participants were asked to complete a skills test, questionnaire and focus group interview at three phases of the study – pre-training, post-training, and after a ten week maintenance period. The data collected were then analysed using non-parametric statistics and qualitative coding. Together the data allowed the researcher to explore the perceptions of the EASN to using and facilitating the use of AT and to determine the level of skill development as a result of the training. The use of a ten week maintenance period also assisted the researcher to determine how the training had transferred into the classroom setting.

The research revealed significant impacts for the EASN in the areas of confidence for using and facilitating AT with students with special needs and highlighted areas where barriers to the use of AT were evident. Recommendations to address these barriers are presented. Future avenues of research are also highlighted. These areas of research would provide further insight into the use of AT and how EASN are utilised in school settings to support students with special educational needs who are using AT.

STATEMENT OF SOURCES

This thesis contains no material published elsewhere or extracted in whole or part from a thesis by which I have qualified for or been awarded another degree or diploma. No other person's work has been used without due acknowledgment in the main text of the thesis. This thesis has not been submitted for the award of any degree or diploma in any other tertiary institution. All research procedures reported in the thesis received the approval of the relevant Ethics/Safety Committees.

Signed: _____ Date: _____

Dianne Chambers

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