



Learning and Teaching Performance Fund 2007 project report form

Project Title

Use of technology in the education of students with high support needs
(Stephenson/Carter)

\$ Amount Awarded

\$9,000.00

Brief Outline of the Project

Multi-sensory environments (MSEs) are installations containing high-technology equipment such as light projectors and fibre optic devices intended to provide sensory stimulation to persons with severe intellectual and other disabilities. Many schools have installed MSEs over the last ten years and teachers are using them within educational programs. There is, however, little research to show students actually learn anything in the environments or benefit in other ways. This project will explore the history of and rationale for the installation and use of MSEs. If teachers are to be educated and supported in acting professionally and adopting appropriate innovative technology, it would be helpful to understand the reasons behind the wide uptake of this particular technology and to compare the uptake of this unproven practice with what is known about the use of evidence-based pedagogies in special education.

Data will be collected through in depth interviews with up to ten teachers. From teacher responses, a questionnaire will be developed and mailed to all schools educating students with severe intellectual disability in NSW.

Project Outcomes

Some understanding of the motivations for the installation and use of MSEs should emerge. The research on the uptake of evidence-based practices in special education suggests that these practices are only established when particular conditions are met (such as formal didactic input, coaching and support within the classroom from mentors and peers, and obvious positive impacts on students). These conditions are not apparent for MSEs, yet they have become established in some schools. It may be that the high value many teachers place on personal relationships with their students

underpins the use of MSEs as students simply enjoy being in them. The lure of technology may be a factor, given that other forms of technology (such as electronic communication devices) have had a positive impact on the lives of people with disabilities.

The current emphasis on evidence-based practice and professional standards in education requires that teacher educators and those who provide further professional development have an understanding not only of the factors that support teachers in adopting and sustaining effective practice, but also of the factors that lead teachers to adopt unproven practices that do not benefit their students. It is imperative if we are to have mature and professional teachers in special education that they are prepared to make intelligent use of available technology and not be seduced by high-tech options when these are not the appropriate solution.

It is anticipated that the outcome of this project will directly inform teaching at MUSEC regarding the factors that are involved in teachers' decisions to implement practices. Further, it is hoped that this project will lead to the identification of strategies that can be used by academics to facilitate the uptake of evidence-based practices in schools.

Where will the project outcomes be documented (report to faculty or University Learning and Teaching Committee? journal publication? conference paper? Other?)

The findings will be documented in a journal publication and through presentation at conferences.


A report of the project will be provided to the Faculty Teaching and Learning Committee.

What is the next step? Or, how may the outcomes of this project be replicated and good practice spread across the University?

The findings will be used within post-graduate teaching at MUSEC to help prepare special educators to understand the reason why practices without a sound research and/or evidence base are adopted in schools.

The study may have implications for teacher preparation more generally where staff may wish to ensure that teachers graduating from Macquarie have a critical approach to the use of technology in schools.

Project Representatives

Name	Jennifer Stephenson Mark Carter
Signature	
Date	03/07/08