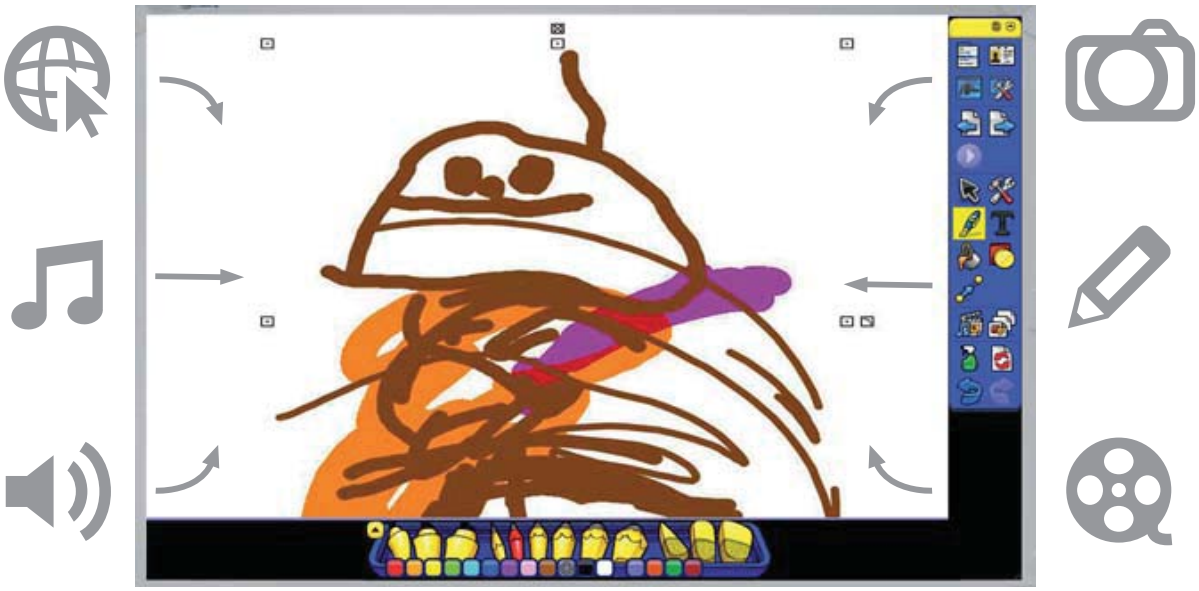
JESSIE HETHERINGTON CENTRE FOR EDUCATIONAL RESEARCH
Te Puna Rangahau ki Ako Pai

TE WHARE WĀNANGA O TE ŪPOKO O TE IKA A MĀUI VICTORIA UNIVERSITY OF WELLINGTON
Faculty of Education

Research into Practice Series from Victoria University

Interactive whiteboards, art and young children

by Lisa Terreni



Project Description

As suggested by Te Whāriki, the New Zealand early childhood curriculum (Ministry of Education, 1996), the majority of early childhood centres in Aotearoa New Zealand provide programmes that encourage children to freely use a range of media for traditional art-making activities, such as painting, drawing, clay modelling, construction, collage, and printmaking, as a basis for young children's visual art learning experiences. However, over the past decade there have been rapid advances in the development of information and communication technologies (ICT) and a marked increase in their use in early childhood settings. Consequently, the provision of "materials and technology" (Ministry of Education, 1996, p. 80) suggested for supporting visual art learning experiences in early childhood contexts has now started to include digital technologies, such as computers and interactive whiteboards (IWBs).

A small-scale qualitative case study investigated the use of an ActivBoard IWB (Promethean) that a New Zealand kindergarten introduced into their programme to support children's visual art learning experiences (Terreni, 2011).

Themes that emerged from the study

Interactivity, drawing and physical movement.

The interactivity and the large size of the board were very attractive to the children, giving them the option to use big muscle movements in their drawings.

Digital affordances of an IWB provide new tools for art-making.

The digital affordances of the IWB and the ACTIVprimary software offered children some new experiences in drawing that were significantly different to those offered by traditional drawing materials. The board also had the potential for children to incorporate other images, photographs, video, sound and text into their art work.

The importance of children using the IWB without time constraints.

Children were given unlimited time to explore the IWB for their visual art learning experiences. This enabled them to fully explore their creative ideas, and enabled them to become fully conversant with how the drawing tools worked, to remember how they worked, and to play and experiment with them.

IWB is a tool for transferring ideas into other visual arts experiences.

The IWB sometimes motivated children to engage in other visual art learning experiences using traditional art materials, enabling them to transfer their ideas developed on the IWB into other art media.

Collaborative and peer support in visual art learning experiences using the IWB.

The IWB supported socially constructed learning between the children. It offered children an opportunity to work together and, in the process, discuss each other's drawings and give each other support with using the IWB tools. The large size of the IWB – compared to the small size of traditional painting easels (designed for use by one child at a time) – plus the clear and central space in which the IWB was positioned, facilitated and encouraged this process.

The IWB is a tool for generating feelings of confidence and competence for children with special learning needs.

My observations of two children with different types of special learning needs showed that the IWB extended their visual art learning experiences. The IWB acted as a mediating tool for both children, enhancing their skills in drawing, and enabling them to access an important visual language. The IWB also increased the confidence of one of the children to engage in other art activities, and for both children it created opportunities for them to take leadership when they helped other children to use the technology.

Story-telling and drawing with the IWB.

The importance of the relationship between drawing and story-telling on the IWB was highlighted. Drawings created on the IWB were sometimes used by the children as a vehicle for story-telling. Children would often discuss what was happening in their work with teachers and each other. Research by Colbert (2006) has noted that ICT has a powerful ability to extend children's interest in story-telling.

Problems and issues identified

- IWBs can sometimes be placed too high for smaller children.
- Children can accidentally disable the computer.
- There is a need for professional development for early childhood teachers to help them use the IWB more effectively to implement the principles, strands and goals of *Te Whāriki,* and provide support for developing their pedagogy in relation to integrating the IWB more widely into an early childhood setting.

Comment

It is important to recognise that this study was very small (a case study of one kindergarten) and that the focus was limited to the area of visual art learning experiences in a kindergarten setting. Further, only one type of IWB (an ACTIVboard) was investigated. This means that the study can make no claims to being typical (Yin, 2003) in the use of an IWB for visual art learning experiences in the wider range of New Zealand early childhood contexts, and the findings about this particular type of IWB cannot be generalised.

Nonetheless, the findings are important to consider in the light of a growing use of IWBs in early childhood settings in New Zealand. Many themes that emerged from the study suggested that the IWB is likely to be a useful tool for extending young children's visual art learning, adding richness and variety to an early childhood art programme.

References:

Colbert, J. (2006). Story telling: Keeping it complex, keeping it connected. *Computers in New Zealand Schools, 18*(1), 17–22.

Ministry of Education. (1996). *Te Whaariki: He Whaariki Matauranga Mo Nga Mokopuna o Aotearoa: Early childhood curriculum*. Wellington: Learning Media.

Terreni, L. (2011). Interactive whiteboards, art and young children. *Computers in New Zealand Schools: Learning, Teaching, Technology, 23*(10), 1–23.

Yin, R. K. (2003). *Case study research: Design and methods.* Thousand Oaks: Sage.

biography

Lisa Terreni is a visual arts lecturer in the School of Education policy and Implementation at the Faculty of Education Victoria University of wellington. Lisa's Masters research looked at the role ICTs can play in young children's visual art learning experiences. Her current research interest is exploring how teachers can use art galleries to add richness to their visual art programme. Lisa is the editor of ecARTnz, an e-magazine of professional practice, which showcases current research and examples of best practice in the visual arts in early childhood.

For further information please email: lisa.terreni@vuw.ac.nz