

ANGLIA POLYTECHNIC UNIVERSITY  
ABSTRACT

ULTRALAB

MASTER OF ARTS IN EDUCATION

THE USE OF INTERACTIVE WHITEBOARDS AND  
TOUCHSCREENS BY PUPILS WHO HAVE  
PROFOUND AND MULTIPLE LEARNING  
DIFFICULTIES

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This research assesses whether pupils who have profound and multiple learning difficulties (PMLD) are more engaged with the activity when using interactive whiteboards than a touchscreen equipped desktop computer. Ten pupils were chosen at random within the school, from the population who would be described as having PMLD but being capable of using touch as a method of access to the technology. Videos were recorded of each pupil using both forms of technology to work with a simple multimedia stack.

A system of event sampling built up a picture of how often pupils interacted with the stack including how they spread their touches across the screen, along with how often they interacted with the adult and how often they were distracted from the task. Field notes written from the video footage gave an additional ethnographic element to the findings. The full findings, including the video clips and analysis have been made available over a website to encourage peer feedback and to make the dissemination of the work more accessible to practitioners.

The findings showed that the majority of these pupils demonstrate a preference for where they touch a display that is consistent across a desktop computer and whiteboard, that the researcher termed a comfort-zone. This led to direct implications for teacher training for people who would work with pupils who have PMLD, in order to enable the pupils to learn how to explore the display spatially before requiring a conceptual level of interaction. There was also evidence of adult behaviour during interactions with the pupils that illustrates Vygotsky's theory of the zone of proximal development.