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# The next big thing?

**A history of educational computing policy for  
New Zealand schools 1960-2004**

**A thesis in partial fulfilment of a Masters of Education  
Massey University, Palmerston North, New Zealand**

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**[2006]**

**Who controls the past commands the future. Who commands the future conquers the past.**

*George Orwell*

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# Acknowledgements

There are a number of people I would like to thank for their support with this thesis. My first thanks goes to my supervisors, Professor Roger Openshaw and Dr. Mark Brown, who have provided me with many stimulating conversations and suggestions.

I would also like to thank those organisations and individuals who provided me with information and support. My thanks here goes to the National Archives, the National Library, the Massey University library, Murray Brown and the staff at the Ministry of Education, the Ministry of Economic Development, Treasury, Perce Harpham, Phillip Capper and Elizabeth Bowen-Clewley (Liz).

A special thanks to Lindsay Scott who, as a friend and previous employer, has provided me with so many of the initial opportunities propelling me towards the ideas in this thesis.

And finally thank you to my wife Sandra and daughter Rosa. Their support has been immeasurable.

Robert Stratford

# Foreword

Computers have helped to transform our lives. Computers are at the centre of the ‘knowledge-age’ and the way our society now communicates, stores and analyses diverse masses of information. Computers are now integrated into an enormous number of day-to-day technological devices. They provide powerful research and analysis tools with professionals in such varied fields as medicine, music, sports and design now using computers in an array of new projects. Computers have even been instrumental in the research and preparation of this thesis.

While computer technology has made numerous positive contributions to our society, there are also instances where they have not added to the general good. What has become apparent is that among the benefits brought by computers, there are also more complex social realities into the bargain. Computers don’t just deliver technical solutions; they change the way people carry out certain tasks and they also create new sorts of activities. Computers are cultural devices operating within a social context and they can affect, or fail to affect, social situations in a variety of predictable and unpredictable ways.<sup>1</sup>

With the introduction of computers into classrooms, powerful technological tools have become available for teaching and learning. In today’s classrooms we can variously send or receive information; manipulate or develop text, audio and video imagery; we can also instantly communicate with experts, students and teachers from across the planet. Despite this, a range of negative social/technological interactions have developed. It is also apparent that, as of 2006, computers have yet to transform classrooms in the same ways they have affected some other domains. Schools and classrooms across the world may have

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<sup>1</sup> H. Bromley (1998). Introduction: Data Driven Democracy? Social Assessment of Educational Computing. In H. Bromley and M. W. Apple *Education/Technology/Power: Educational Computing as a Social Practice*. New York: SUNY Press.

introduced computers, but the overall result for education and student learning has been far from revolutionary.<sup>2</sup>

Understanding why computers have so often failed to deliver their promised benefits to education brings us back to concepts such as educational change, social context and 'people effects'.<sup>3</sup> Educational change occurs in a dynamic and complex social environment. This complexity has not been well understood in New Zealand's educational computing policy. The result has been a simplification of the potential of computers in education. It is an overarching aim of this research to disentangle such simplistic approaches and provide insight into the rationales and processes that have helped construct educational computing policy.

This thesis is not pro- or anti- computers and it does not deny that computers can make a powerful contribution to teaching and learning. In exploring the complexity and social dynamics surrounding educational computing policy, this thesis attempts to provide an informed basis for future educational computing policy. It seeks to understand the past and build a discussion about educational computing policy which leads to better, more humane, ways for governments to support the carefully considered use of computers in schools.

**Robert Stratford, August 2006.**

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<sup>2</sup> See for instance L. Cuban (2001). *Oversold and underused: computers in the classroom*. Cambridge, Mass: Harvard University Press.

<sup>3</sup> K. Ryba (1989). An ecological perspective on computers in special education. In R.I. Brown and M. Chazen (Eds). *Learning with computers and emotional problems*. Calgary: Detselig Enterprises.