

NEW ZEALAND ONLINE

What's happened to our Digital Strategy?

JOCELYN WILLIAMS

Without adequate investment in skills, people languish on the margins of society, technological progress does not translate into economic growth, and countries can no longer compete in an increasingly knowledge-based global society... In short, skills have become the global currency of the 21st Century (OECD, 2012).

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INTRODUCTION

The world started to talk about a “digital divide” in the mid-1990s¹. Governments had to grapple with its meaning and anticipate its ramifications (Maharey and Swain, 2000), although the swiftness with which the world was entering a new internet era from 1995 meant it was difficult to keep ahead with coherent strategy. Much has been achieved in regard to internet access in New Zealand since 2000. One reason is that we have a track record of relatively rapid adoption of electronic technologies (Doolin et al, 2005), and as predicted in diffusion of innovations theory (Rogers, 2003) greater penetration of the New Zealand market has been achieved for technological innovations such as smart phones. Large-scale household surveys show a gradual closing of the information and communication technologies [ICTs] access gap (Statistics New Zealand, 2009; Bascand, 2013).

Yet it may surprise some people to know that digital inclusion remains an issue in New Zealand society, especially where school-aged children in poorer communities are concerned (Statistics New Zealand, 2006a). Although New Zealand is a developed nation that by many measures appears to enjoy a good standard of living, lack of economic prosperity across the nation as a whole is driving income disparity, and the 2006-2008 global recession has led to increasingly thinly spread public sector resources. Improved economic performance is a governmental priority, and in that context digital literacy - “the

¹ Reliable sources claim that the term was first used in the Los Angeles Times in 1995 and that President Bill Clinton and Vice President Al Gore “began to popularize the phrase in 1996” (Williams, 2009, p. 28).

new forms of literacy required from the incorporation of digital technology in the structures, flows and embodied experiences of everyday life” (Goggin, 2008, p. 88) - is vital so that people can contribute to the economy. However, one fifth of New Zealand households, especially those in low socio-economic areas, remain without internet access at the time of writing (Bascand, 2013). This is a matter of concern in terms of the need to include as many skilled people in the workforce as possible, and to stimulate the economy through high-tech innovation so that it is less dependent on primary production and tourism, and more on “weightless exports” (The Committee for Auckland, 2012, p. 7). Currently “staggering talent gaps” (ibid) are being identified as cause for concern, especially a growing shortfall of IT skills that are needed to assist business to be more productive, flexible and profitable (ibid, p. 12-13).

This essay traces the evolution of a digital strategy in New Zealand, explores reasons why a digital divide persists in spite of it, and invites the reader to consider the importance of the social context for ICTs, and social interaction that facilitates learning, at least as much as the technologies themselves.

ACCESS AND INCLUSION

The skills for digital literacy in turn depend on reliable, regular access to the internet. One might infer, erroneously, from the recent dramatic rise in use of smart phones that internet access is almost ubiquitous in New Zealand society:

Roy Morgan Research yesterday reported huge uptake of new technologies over the past two years with smart-phone ownership trebling to 36 percent of the population over 14 and ownership of tablet computers up fivefold to 25 percent over the same period (Bennett, New Zealand Herald, April 26th 2013).

Indeed one third of households accessed the internet via a mobile phone in 2012, up 26 percent since 2009 (Bascand, 2013). Yet consider the way market forces dictate high costs for technologies when they are first launched, so that the less well off, the less educated, and those lacking interest, constitute a persistent ‘tail-end’ group. An access gap such as the digital divide is therefore to be expected according to this view; efforts to close technology gaps may always be futile, since innovations continually arrive on the market. In “digital have-not” communities (Foulger, 2001) the divide has been said to be more like a cliff that must be scaled in increments. The late adopters are forever behind, while the early adopters (Rogers, 2003) surge ahead, apparently increasing their lead.

There’s an appealing logic to the idea of building infrastructure and providing more devices to solve this problem, and indeed “Government investment in ultra fast broadband and technology, combined with the falling prices of devices, has already transformed many classrooms”(Jones, 2013) for example. Jones

(ibid) cites Professor Stuart McNaughton of the University of Auckland pointing out risks in this approach in the educational context. The first level of a digital divide is about whether or not people have a computer or laptop; a second digital divide is the different ways devices like laptops and LeapPad tablets are used in schools: "A laptop, a digital device, can be used like an abacus or a piece of paper - it's just a tool. And if it's not used in a way that capitalises on what it offers, then it's sort of irrelevant, almost" (McNaughton, cited in Jones, 2013). Thus despite continued focus in recent times on improving broadband and providing the devices², an entrenched digital divide remains a risk to New Zealand's goals of economic prosperity and social cohesion.

McNaughton's point about the need to focus on how the tools are used, rather than the tools themselves, is not at all new. Even for those who do have internet at home, access alone is insufficient because:

Those who have the knowledge and experience gain the most benefit whilst those who lack the skills, knowledge and perhaps self-confidence are left further behind ... This is not an issue that will be solved by technology or by policies that focus on penetration and access as opposed to utility, value and social outcomes (Anderson, 2008, p. 21).

Research over the last decade has shown that social context has central importance for effective use of digital technologies (Gurstein, 2003). Gurstein (ibid) and many others working in the field of community informatics have been building the case over an extended period for a set of conditions that are necessary for successfully embedding internet use in a community (O'Neil, 2002; Pigg and Crank, 2004; Stoecker, 2005; Gurstein, 2007). Social context refers to resources and processes of "social facilitation" (Gurstein, 2003) that enable people's natural inclination to engage with new ideas through interacting with others:

There will be the need for coordinated planning and design, for training at all levels and for animation of the supporting structures to make the service usable. Overall of course, there will be the need for local leadership. (Gurstein, 2003).

Utopian notions of information and communication technologies (ICTs) being socially transformative were popular in the early days of widespread internet uptake (Mitchell, 1999; Barlow, 1994; Rheingold, 1993). Others expressed their reservations based on a political economy perspective (Schiller, 1999), concerned that corporate interests in internet expansion would perpetuate existing inequalities. Some continue to wonder about the increasingly tight relationship between education and the economy (Hill, 2012), questioning what may be being overlooked in the rush to mobile devices for all. Thus in research/practice partnerships around digital inclusion at community level, findings show that

² At the time of writing, this effort includes consideration by the One Laptop Per Child [OLPC] scheme of expanding to include New Zealand in its operations (Jones, 2013). OLPC is associated with the world's poorest communities (Kraemer et al, 2009).

people need a social context for their access to, successful appropriation of, and long-term engagement with ICTs (Williams, 2013). However adequate support for learning in a social context is costly. The pragmatic idea that if we simply connect people to the internet and provide devices then the digital inclusion objective is achieved, is contradicted in reality by persistent gaps especially for the unemployed without tertiary qualifications (Bascand, 2013).

SOCIAL COHESION AND THE ECONOMY

Digital inclusion depends on existing networks of support and leadership at a local community level (Gaved and Anderson, 2006; Loader and Keeble, 2004), a context that can be described as socially cohesive. Governments have been prioritising policy that serves social cohesion for some time, as well as expressing the belief that closing the digital divide will help to build it. These twin objectives were for some years explicitly connected in New Zealand's Digital Strategy (Ministry of Economic Development et al, 2005) and actively supported by its core advocates, including a Digital Strategy Advisory Group appointed in 2005 (Cunliffe, 2005) and comprised of nine members from all relevant sectors.

Given its central importance in the digital divide context, what do we understand by social cohesion, and why is it important? Like the word 'community', social cohesion has strongly positive connotations; it represents a core ideal of civil society. New Zealand government policy since the 2000s has been highly specific in defining it, saying social cohesion is present where people feel a part of society; relationships are strong; differences are respected; people feel safe and supported by others (Statistics New Zealand, 2006b); and they feel a sense of belonging, identity, and willingness to commit to shared tasks. Sometimes the term "social connectedness" is used, for example by the Ministry of Social Development [MSD] (2010), while "links between social connectedness and the performance of the economy" (ibid) are said to be evident in "several studies" (ibid). The MSD's Social Report (ibid) states that the desired outcomes of social connectedness are that:

People enjoy constructive relationships with others in their families, whānau, communities, iwi and workplaces. Families and communities support and nurture those in need of care. New Zealand is an inclusive society where people are able to access information and support.

Thus inclusion is a priority outcome for Ministry of Social Development activity, based on five indicators of social connectedness that together "measure the opportunities for and the actual levels of connection between people, both within their immediate social groups and within the wider community" (ibid). The first three of these indicators are "telephone and internet access in the home, regular contact with family/friends, [and] trust in others" (ibid). The priority given to internet access as an indicator of social connectedness is based

on the view that “the internet...improves people’s ability to access information and... provides more opportunities for people to participate in society” (ibid). An assumption about a role for internet access in social cohesion is clear here.

What have been the roots of these priorities? A close relationship between economic growth and social cohesion has been asserted in both right-wing and left-wing political agendas. In 1998, social cohesion was elevated as a primary policy focus for the National government of the day in the strategic context of “the interdependence of social and economic objectives ...[and] an emphasis on a strong economy and a cohesive society” (Davey, 2000, p. 119). Conservative political interests can suggest that focusing on stimulating the economy has a public good rationale, while social cohesion, inclusion, and a level playing field as ingredients for a healthy society and a prosperous economy are also ideals central to political concerns on the left. For New Zealand’s conservative National, social cohesion is a desirable by-product of the economic growth priority, while for left-leaning Labour, social cohesion is a primary goal, and economic growth is a tool for achieving it.

Yet superficially different political flavours of social policy have often been similar to one another. Ironically, “far-reaching reform of economic policy was started by the ostensibly left-wing Labour Government of 1984-1990” (ibid, p. vii). In these ways “both right- and left-wingers are talking about “community” [and] “partnership””(ibid). Both right and left have pursued versions of neoliberal economic policies since the 1980s that have arguably “undermined the redistributive egalitarian consensus that underpinned the welfare state, with painful consequences for socially vulnerable groups such as women, old people, the young and ethnic minorities” (Hall, 2013). Stuart Hall’s blunt view is that now “the breakdown of old forms of social solidarity is accompanied by the dramatic growth of inequality and a widening gap between those who run the system... and the working poor, unemployed, under-employed or unwell” (ibid).

In the mid-1990s the right wing lobby group the New Zealand Business Round Table commissioned a report “to look at whether recent economic policy in New Zealand has damaged or promoted social cohesion” (Bates, 1996). The author Winton Bates, an Australian economics consultant (and formerly an advisor to the New Zealand Treasury) described the welfare state as “the redistributive state ...because all these policies, including those designed to protect jobs, involve redistributions of income” (ibid). He argued that policy reforms pursuing a free market goal were desirable because the welfare/redistributive state had undermined social cohesion. This position was consistent with the ideas of National Prime Minister Jenny Shipley. As she stepped up to the PM role in 1998, Shipley swiftly set about trying to legislate for values of individual responsibility (Williams and Sligo, 1999; Sligo and Williams, 2000) arguing that a variety of social issues like mental health and household budget management are matters of individual responsibility. The thinking here was akin to British PM Margaret Thatcher’s remark in 1987: “There’s no such thing as society. There are individual men and women and there are families” (The Guardian, 2013).

The New Zealand experiment in forging a new private and public morality was intended to shift society from one still imbued with values of social welfare, to one founded more on self-interest using a document called the 'Code of Social and Family Responsibility' [CSFR] (Davey, 2000). An unpopular initiative in the context of several years of free market policy reforms, the CSFR didn't progress beyond the distribution of two million copies of a booklet about family responsibility to all New Zealand households. This and other reforms of the late 1990s were perceived as attacks on beneficiaries and public spending generally, and included privatisation of state-owned assets, valorisation of the market and championing the power of business interests to create trickle down benefits for society. In this context, social cohesion becomes an outcome of improved economic performance, achieved by acting to limit the practices of Bates' "redistributive state". However the election of a Labour government by the turn of the millennium brought the pursuit of social cohesion by different means.

SOCIAL COHESION, COMMUNITY AND DIGITAL STRATEGY

Welding a link between the economy and social cohesion became important to the Labour government that held power through most of the first decade of the 21st Century, from 1999 to 2008. This government began to refer to a "knowledge economy" (Department of Internal Affairs et al, 2002, p. 3) and "the goal of becoming a [radical and emancipatory] knowledge-driven society..." (Maharey, 2003). In this context communication technologies were seen as key enablers of social cohesion, and in turn a cohesive, digitally literate society would enable economic growth because "people who feel socially connected also contribute towards building communities and society" (ibid). Digital technology was described as "an enabler of innovation and productivity gains" (Ministry of Economic Development et al, 2004, p. 9), while "a strong and developed innovation system and culture will underpin economic growth and social well-being for New Zealand" (ibid). Ministries needed to move quickly to find digital divide solutions, and at the same time ICTs were seen as having the capacity to bring about a transformation of the nation across a number of dimensions.

A draft Digital Strategy emerged out of the government's growing focus on the community as a critical element of ICT strategy through, for example, a "Connecting Communities" conference (New Zealand Community Employment Group, 2003). In addition, wide consultation was conducted at community and business forums in 2004, each addressed by the then Associate Minister for Information Technology and for Communication, David Cunliffe. The Digital Strategy, formally adopted as policy from 2005 (Ministry of Economic Development et al, 2005) explicitly and repeatedly highlighted a relationship between internet access, digital literacy, and social cohesion (or connectedness, as previously explained).

At the same time that the Digital Strategy drew a direct line between internet connectedness and social cohesion, a nagging sense that “without people, technology is nothing” (New Zealand Community Employment Group, 2003, p. 1) began to be expressed. The central importance of embedding ICT use within social contexts – because “technological and social realms are highly intertwined and continuously reconstitute each other in a myriad of ways” (Warschauer, 2003, p. 205) - was also beginning to be asserted in research on the digital divide. Ideas from diffusion of innovations theory, especially that “interpersonal contacts [are] important influences on adoption behaviour” (Valente and Davis, 1999, p. 57) and “some individuals will act as role models for others, opinion leaders within their communities and important determinants of rapid and sustained behaviour change” (ibid.) were borne out in New Zealand community internet research conducted around this time (Williams, 2010). The findings highlighted the value of social cohesion already present in a community for the success of a community internet scheme, while suggesting the possibility that social cohesion may be strengthened as a result of successfully embedding internet use (Williams, 2013). In a similar vein, Kenneth Frank and colleagues in a US study draw attention to the intangible resources required in implementing computer technology programmes: “Reformers and innovators must consider the distribution of social capital in any school in which they seek to implement change. Is there enough social capital to implement the innovation?” (Frank et al, 2005, p. 149). Technologies are indivisible from the social context in which they become embedded.

As the decade progressed, the significance of internet connectedness for our social networks more generally (Wang and Wellman, 2010) became strongly evident in research. Not only is the social relationships dimension important for people’s successful engagement with new, especially “equivocal” communication technologies (Vishwanath, 2006), but it is strengthened as people become more confident online. The more connected we are in terms of the internet, the more friends we have, and the more cohesion is built in real world communities (Wellman, 2009). Thus government ministries have been on the right track in highlighting a role for digital connectivity within broader goals of strengthening the fabric of society. Yet as it is increasingly apparent that the IT skills required to power the economy are in short supply, we still have one fifth of households without internet (Bascand, 2013), and a significant body of families with school-aged children remain likewise excluded, the other side of the same coin must be attended to: greater digital connectivity is achieved within socially supportive settings.

The three iterations of New Zealand’s Digital Strategy (a draft in 2004, a formal strategy in 2005 and an ‘upgrade’ in 2008) all grappled with operationalising the role of community in the digital divide context. One by one they made considerable progress in moving beyond the appealing promise contained within, such as “our communities will be stronger by being better connected and organised” (Ministry of Economic Development et al., 2005, p. 4). More

specific operational tactics that would seriously address objectives of digital opportunity and community building began to be framed. Assertions that the Digital Strategy “focuses on implementation, providing detail on what the government and other stakeholders will actually do...” (ibid, p. 7) were fleshed out in a framework of action. A number of initiatives that were in place, and programmes that were achieving some success including Netsafe (Ministry of Economic Development et al, 2004, p. 43) and Computers in Homes (ibid., p. 37), were highlighted as exemplars.

DIGITAL INCLUSION FOR OPPORTUNITY

Data sourced from the 2006 census of population and dwellings revealed there were 116,000 New Zealand households with school-age children in private occupied dwellings that had no internet access³, while 290,000 did have access (Statistics New Zealand, 2006a). More recent data from the three-yearly Household Use of Information and Communication Technology survey (Statistics New Zealand, 2009) shows that of 13,713 households surveyed, the percentage of households with dependent children that had internet access increased from 79% in 2006 to 88% in 2009. While this is a different measure to “households with school-aged children” and does not fully capture all dwellings in the way the census does, it gives a useful insight that shows while the gap is closing, a significant access gap persists.

By far the most important reason given in the 2009 Household Use of ICT survey (Statistics New Zealand, 2009) for not having internet access in households with dependent children was “costs are too high.” This had increased significantly from 45% in 2006 to 58% in 2009. Among a similar sized sample of 13,046 respondents in 2012 (Bascand, 2013, p. 14), for the twenty percent of households who do not have access to the Internet at home, “the main reason remains a lack of interest. However, this figure is steadily declining, while concern over cost has increased, deterring over a third of households from getting connected (ibid, p. 2).

Interestingly, the cost factor is having further ramifications, with “laptops [taking] top spot as the most common way people connect... [as] there are more types of devices available to connect with, and this is something Kiwis are embracing” (ibid, p. 4). Smaller mobile devices (smart phones and tablets) are enjoying a surge in popularity while sales of personal computers (PCs) are plummeting, with data showing global shipments of PCs fell 14 percent in the first three months of 2013 (Liedtke and Svensson, 2013). Thus relative costs appear to be

³ The census expected in 2012 was delayed because of the 2012 Christchurch earthquakes, and at time of writing had just been conducted. Just prior to publication of this essay, data from the 2013 census of population and dwellings began to be released. The large number of households with school-aged children that had no internet access in 2006 (112,000) had been reduced to about 60,000 (L. Zwimpfer, 2020 Communications Trust, personal communication, 5 March 2014) with the main concentration remaining in metropolitan Auckland. The number is still concerning, given the number of individual family members affected, the effect these conditions have on digital literacy and educational achievement, and the importance of digital skills in most employment.

driving people toward the more limited digital interface of phones, which can't provide the necessary functionality for novice internet users to learn from, or for school children and students to carry out complex tasks.

The digital divide issue as understood within the context of a PC or laptop at home with internet access affects equality of opportunity for children at school who do not have ready access to these resources. It also affects adults in the job market and family groups and communities who need access to cheap communications media as part of the conduct of everyday life, including the experience of education, which is increasingly drawing on online resources and applications, and implicitly assuming people have access to these. Sufficient funding to fully support the "social facilitation" (Gurstein, 2003) dimension that plays a key role in ensuring novice internet users stay online and continue to develop their digital literacy in socially supported ways, including at home in a family context (Williams, 2013), remains a challenge. Whānau of school-aged children need to be embraced by the social facilitation of ICT use, because they can then engage in the child's learning and support it. Many approaches to digital inclusion have succeeded in creating opportunities at community level despite tight budgetary restraint over the last 10-12 years, and the scale of the task implied in our most recent statistics. Each of these models has not only endured but flourished, in large part because of the commitment of those involved including the motivation of communities themselves.

Computer Clubhouse (Computer Clubhouse, 2013), a programme that aims to empower young people aged 10 – 18 through technology, is a global network that was first established in New Zealand as Clubhouse 274 at Kia Aroha College in Otago, one of New Zealand's lowest socio-economic urban communities. A variation on this model is High-Tech Youth Studio (2013), which operates as Studio MPHS in the McLaren Park and Henderson South community in West Auckland, and a number of other locations around the country. The Clubhouses are "members of the Intel Computer Clubhouse Network, an international community of over 123 Computer Clubhouses located in 23 different countries around the world" (Milne and Usmar, 2011, p. 1). Here, the focus is not on digital literacy within the family home but, in the context of a purpose-built facility, to "provide a creative and safe out-of-school learning environment where young people from underserved communities work with adult mentors to explore their own ideas, develop skills, and build confidence in themselves through the use of technology" (ibid). Writing about Clubhouse 274, Milne and Usmar argue for a strengths-based approach to digital literacy that is "grounded both within...the social and cultural worldview of the predominantly Māori and Pacific community the project serves" (Milne and Usmar, 2011, p. 11). This empowers "Māori and Pasifika youth members, their families and wider community ... [to] tell their own stories, in their own words, and from their point of view" (p. 1).

Another scheme called Computers in Homes, managed by the 2020 Communications Trust (2013), frames its digital inclusion philosophy and practice from the perspective of the school child at home in a family context: whole

families acquire skills together in the household setting. Funding for this scheme directed through the Department of Internal Affairs is limited, while waiting lists of primary schools wanting to be involved (to assist families who have no computer or internet at home) grow longer each year. Computers in Homes operates within numerous communities around New Zealand designated as decile 1, an index used to allocate resources by the Ministry of Education (Ministry of Education, 2011). The Ministry of Education states that “Decile 1 schools are the 10% of schools with the highest proportion of students from low socio-economic communities” (ibid). The scheme began in 2000 in Porirua, north of Wellington with a mission “to provide all New Zealand families who are socially and economically disadvantaged with a computer, an internet connection, relevant training and technical support” (Computers in Homes, 2013, Founding Mission and Goals page). Unlike Computer Clubhouse, the focus here is on family opportunity, and parents’ digital literacy in support of the child’s achievement.

Other recent initiatives emerging from digital literacy needs at community level include the Manaikalani Project in Auckland:

... working with teachers to develop a digital age pedagogical framework to deliver the curriculum to the students from Year 1-13. The students are being offered the opportunity to own personal netbook devices and wireless internet access is being offered across the community to enable the students to continue working from home (The Manaikalani Project, 2013).

This scheme is described as “world-leading” (Jones, 2013) in its approach to digital learning, collaborating across communities.

WHO PAYS FOR DIGITAL INCLUSION?

Adequate funding is a challenge for community internet schemes that aim to open up opportunity for young people needing the skills and pathways that will take them into employment in the New Zealand economy. Thankfully, energetic leaders in those environments have been able to pursue arrangements with many stakeholders who see the value of what they are doing, as is the case in the examples cited above. The thinking behind the Digital Strategy has always been that it works on the basis of collaboration and partnerships. As shown elsewhere (Williams, 2009, section 2.1.9, p. 45) the Digital Strategy explicitly identified a role for the voluntary and community sector, alongside government and business, in making the strategy work. This was described in the document as “the joined-up, partnership approach” (Ministry of Economic Development et al, 2004, p. 2). David Cunliffe, at that time Minister for Information Technology and Communications, asked readers to “think of the Strategy as a vote of confidence in the ability of local government, economic development agencies, and others

to form partnerships and get active at the local level” (ibid.). In this context, the government is more of a facilitator of funding arrangements that bring together business, community or other parties to achieve public good ends.

The Community Partnership Fund [CPF] was a key pillar of the first Digital Strategy in 2005 – the idea is that public funding needs to be matched by private funding and community resources in order for progress to be made on the digital divide. This is sometimes referred to as a PPP (public/private partnership) strategy (Department of Internal Affairs et al, 2002) involving an agreement between a public sector agency, a private ‘for profit’ entity and a non-profit organisation to achieve an agreed outcome. One criticism of this model is that it may imply that local communities and businesses pay for social services twice: not only do they pay taxes, but they are expected to come up with further resources (volunteered time, equipment, knowledge, expertise) to help solve local problems.

The National government now entering its third successive term in office has embedded different strategic priorities to those of the previous Labour administrations. The Ministry of Economic Development no longer hosts a Digital Strategy website, for example. A search online leads to a Community Partnership Fund site, last active in 2008. However the official website of the New Zealand Government retains a detailed archive of the evolution of the strategy (Cunliffe, 2008) and its forward planning as it existed in late 2008. Responsibility appears to have been devolved to the Department of Internal Affairs through which funding is directed to groups that apply to it. Resources for supporting social services are severely constrained in the context of a fragile global economy; the available budget is thinly stretched.

We hear much less now about a digital divide in New Zealand. This does not mean it ceases to exist. Having once created an inspired rationale for digital inclusion as an imperative in building the economy (ibid), New Zealand administrations risk appearing to step away from responsibility for social cohesion outcomes without continued, overt commitment to and accountability for a digital strategy that seems so important for achieving them. Schools and commercial interests are being left to partner up to close the gaps. Interestingly, political motivations are ascribed to a similar absence of debate about, or reference to, a digital divide in the US:

The notion that the Digital Divide was naturally closing, was similarly promulgated by a Bush Administration that had little interest in issues of digital access, so little that according to Hammond, “it stopped referring to the Digital Divide as being too divisive,” and instead used the term ‘Digital Inclusion’. The Administration similarly downgraded the National Telecommunications & Information Administration itself, in ‘Washington Speak’, “ultimately ‘zeroing out’ the NTIA’s budget and effectively killing it (Rapaport, 2014).

It is not my contention that anyone is overlooking the value and importance of existing community level digital literacy initiatives in New Zealand, but there is still a long way to go to achieve full digital inclusion here. Government ministers and their teams must continue to be receptive to lobbying from grass roots community internet schemes and organisations which expend a great deal of energy ensuring that their achievements are worthy of continued investment.

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