



WORLD INTERNET PROJECT NEW ZEALAND

New Zealand Internet Research in the Social Sciences: a listing of recent studies

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Since the WIPNZ team last reported on the New Zealand literature on the use and effects of internet (Smith et al., 2008), a range of studies have been carried out on New Zealanders. A search was carried out on *Index NZ*, *Sociological Abstracts*, *Google Scholar* and the Voyager catalogue at the University of Auckland. Theses etc. are not included. As well as citation characteristics the abstracts included in the abstracting service or the original document (or publisher's blurb) are included here (slightly edited) – where these were available.

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It is difficult to pull together much in the way of trends from such disparate sources. Various writers and academics have commented on internet issues, often in relation to a particular New Zealand context:

- Newman (2008) and Heyday (2010) have provided a definitive history on the development of the internet in New Zealand;
- Goode (2010) examined cultural citizenship in relation to the internet;
- Brickell (2012) provides a general perspective on the internet in relation to sexuality;
- Scherer & Sam (2010) examined the role of alternative media in a political debate over the development of stadiums for sporting events;
- Some have studied specific websites: Thom et al. (2011) on online portrayals of suicide;
- Greenbrook-Held & Morrison (2011) used 2006 census data to examine household internet connectivity, showing patterns similar to those outlined in the WIPNZ surveys;
- Internet users' access to health information has been examined (Gauld, 2011; Gauld & Williams, 2009);
- Dabner (2012) studied social media, including its role in the Christchurch earthquakes;
- Groups with a particular reliance on the internet have been studied: for example, migrants (Holmes & Janson, 2008) and international students in New Zealand (Collins, 2009);
- Shaw (2009) reviews issues related to internet voting;
- Marsh et al. (2010) investigated cyber-bullying, while Theunissen (2009) looked at students' use of internet more generally.

Academic attention has not been confined to individuals and households: Zorn, Grant and Henderson (2013), for example, studied the strengthening of Resource Mobilization Chains through increasing the social media competencies of community and voluntary organizations in New Zealand, while Grimes; Ren and Stevens (2009) study firms.

Studies across a wide range of disciplines refer to internet issues as its effects diffuse through more and more areas of society. Magazines and newspapers abound with stories on the effects of the internet (excluded from this compilation), though these are often in the form of opinion pieces rather than reporting on in-depth analysis. Examination of the abstracts of the studies reported below should give a reader a good idea of the platform of studies available.

In addition to the more academic publications listed here there are many more reports from official or private corporations which are available in the 'grey literature'. Given the ubiquitous-ness of the internet this is an aspect of many studies (not reported here). Another limitation of the present compilation is that whereas the internet is involved in many ways with social life, only those studies mentioning 'internet' (as opposed to a synonym or related term) in their titles or abstracts are included. This compilation also provides some indication concerning the authors, research units and publication outlets where relevant material might be found.

References with Abstracts (from bibliographical sources)

- 2020CommunicationsTrust (2011) *ICT in Schools Report 1993-2014* http://2020.org.nz/blog/ict-in-schools-reports-2011
- 2020CommunicationsTrust (2014) 2013 Census results for households with school-aged children

The 2020 Trust commissioned Statistics New Zealand to undertake further analysis of the 2013 Census data to get an accurate count of the number and regional distribution of households with school-aged children who do not have access to the internet.

Archard, Simon (2013) Democracy in early childhood education: How information and communication technology contributes to democratic pedagogy and practices. *Early childhood folio* 17 (2): .27-32

This study draws on findings of a case study of three children, including interviews with their families, which examines the relationship between ICT and teaching and learning. Illustrates how ICT can support relational learning and contribute to democratic features of such learning.

Billot, J., Crothers, C., & Gibson, A. (2010). *Internet and Society Panel Project. The impact of participation and use of social networking sites on well-being and life satisfaction.*Auckland, New Zealand: Institute of Culture, Discourse & Communication, AUT University

The Internet and Society Panel Project (ISPP) is a stand-alone project that builds upon the credibility and output of the World Internet Project New Zealand (WIPNZ). The focus of this survey was to examine the use of Social Networking Sites (SNSs) and their effect on life satisfaction, well-being and identity formation. Participants were drawn from those respondents to the main WIPNZ survey who had agreed to the possibility of being approached again.

Bingley, Scott & Stephen Burgess (2012) A case analysis of the adoption of Internet applications by local sporting bodies in New Zealand *International Journal of Information Management* 32 (1): 11–16

As a unique type of community-based organisation (CBO), local sporting clubs are typically run by volunteers who regularly carry out the playing, coaching and administrative roles that keep them functioning. Through a case study involving a New Zealand hockey association, this article examines the extent to which sporting clubs use Internet applications by examining their use of email (for communications), club websites (for information provision) and online statistics (transactions). Rogers' (2003) Innovation-Decision Process provides the theoretical framework for the study.

Brickell, C. (2012) Sexuality, power and the sociology of the internet. *Current Sociology*, 60(1): 28–44.

The internet is an increasingly important enabler and mediator of sexual relations in society. It has begun to transform older modes of knowing, experiencing and organizing sexuality. In light of an emerging social science literature, this article considers internet-mediated sexuality and its consequences for theorizing power. It looks at three ideal-typical strands of power in relation to sexuality: the constitutive, the regulatory and the unequal. It considers empirically based discussions alongside broader theoretical concerns: Foucauldian work on discourse and subjectivity, an Althusserian account of interpellation, the symbolic interactionist focus on the presentation of self and feminist analyses of inequality. On the internet, the article suggests, the overlaps between different forms of sexual power are often complex and multi-directional.

Chen, Peter (2009) "Online Media". *Informing Voters? Politics, Media and the New Zealand Election* 2008. Eds. Chris Rudd, Janine Hayward and Geoffrey Craig. Pearson, North Shore: 138ff.

Collins, F. L. (2009) Connecting 'home' with 'here': Personal homepages in everyday transnational lives. *Journal of Ethnic and Migration Studies 35*(6): 839–859.

This paper discusses the friction involved in the transnational lives of South Korean international students living and studying in Auckland, New Zealand. In particular, it focuses on the ways in which these individuals negotiate familiar and unfamiliar embodiments as a part of their everyday lives in Auckland. Through three ethnographic case studies - the role of interpersonal networks in the negotiation of urban space, the online/off-line use of internet cafes, and the story of a group of volunteer students - this paper reflects on the different processes of embodiment in ways that offer useful insights into practices and experiences of transnationalism. This includes understanding the small details of the everyday lives of international students in Auckland and the reciprocal relationship they have with other bodies and the urban spaces they come to inhabit. Moreover, the paper illustrates the manner that scholarly understandings of transnationalism can be expanded through a focus on the embodied dimensions of everyday life. It suggests that much of what is considered transnationalism is in fact part of the ordinary everyday practices that individuals such as international students use to negotiate and make familiar the different material and immaterial spaces they encounter in migration.

Controller and Auditor General (2013) Learning from Public Entities' Use of Social Media

Crothers, Charles (2014) WIPNZ Focus Group Study. Auckland: ICDC/ School of Social Sciences & Public Policy, AUT.

A major difficulty in updating the survey instruments of WIPNZ is lack of indepth knowledge about ICT technology, how this is being used and for what purposes and what vocabulary is used in discussing it: all of which are fast-changing. Without solid understanding of these qualitative aspects survey questions can become rapidly obsolete. To research this we commissioned a research firm to run two focus-groups to begin an investigation of these matters. Participants in the focus groups were selected from WIPNZ survey respondents in terms of internet-user characteristics. Responses to a set of semi-structured questions were transcribed and some themes elicited. The possibility of extending the qualitative research online in future research is also explored – since the problem of keeping abreast with technology is an ongoing one.

Crothers, Charles (2014) New Zealanders' Views on Internet Rights. Auckland: ICDC/ School of Social Sciences & Public Policy, AUT.

Human Rights discourse has considerable visibility amongst significant sectors of the population but it is not yet clear how this approach is best projected into the realm of the internet and in particular the extent to which personal rights to privacy and freedom of speech might also be extended to also more social rights of access to the internet. To investigate this and to provide an evidence-platform existing and freshly-collected survey data were mobilised with the findings being that, while the picture is complex, there is widespread for internet rights (albeit spread across several different axes) but that these are only lightly anchored in particular social groupings.

Crothers, Charles; Billot, Jennie (2010) The New Zealand Internet Project: marrying a global survey with local funding. *New Zealand Sociology* 25 (2): 150-158

Reports on the New Zealand Internet Project (WIPNZ) research programme, the local arm of the World Internet Project (WIP). Indicates some of the programme's major phases and draws attention to the issues of carrying out global/local research and securing institutional backing and local funding in order to carry out a longitudinal survey programme that can track changes over time. Identifies other concerns that the research team has faced, including methodological matters, staff turnover and wider responsibilities of a research programme, such as keeping track of other studies on the Internet in NZ

Crowson, Maxwell; Goulding (2013) Virtually homosexual: Technoromanticism, demarginalisation and identity formation among homosexual males *Computers in Human Behavior* 29 (5): A31-A39

'Coming out' is a key stage in the identity formation process for the homosexual male when the individual discloses his homosexual status to himself and others.

Although previous research has indicated that homosexual men often use the Internet and computer-mediated communication (CMC) during the identity formation process to discover and develop their sexual and self-identities, studies to date have focused on their use of text-based CMC with scant attention paid to experiences within virtual worlds. This study explored whether homosexual males use virtual worlds in the sexual identity formation process and, specifically, the applicability of technoromanticism within this context. Qualitative retrospective biographical interviews were undertaken with 12 self-selected individuals who had engaged with virtual worlds before or during their sexual identity development. The CASE model (Community, Anonymity, Sexual experimentation, and Escape) was developed to characterise the key themes emerging from the data and illustrate the enactment of technoromanticism by homosexual males within virtual worlds. It is concluded that technoromanticism in virtual worlds can only have a profound impact on individuals if the individual's personal development online is transferred offline as there is a potential to become toxically immersed and thus stall or halt the identity development process altogether.

Dabner, N. (2012). 'Breaking ground' in the use of social media: A case study of a university earthquake response to inform educational design with Facebook. *The Internet and Higher Education* 15(1): 69–78.

On September 4 2010, a massive 7.1 magnitude earthquake struck the Canterbury region in the South Island of New Zealand. The response from the University of Canterbury was immediate and carefully co-ordinated, with the university's webbased environment and a responsive site developed on the social media platform 'Facebook' becoming prominent sources of support for many months. This case study illustrates how the university effectively utilised these environments and their impact within the wider university community. Case study methodology draws upon literature from the fields of social media, social network communities and crisis informatics. The findings propose that social media can effectively support information sharing, communication and collaboration in higher education contexts, in particular in times of crisis, but suggest there needs to be a defined purpose to integrate these within an institution's communications strategy given the resource implications and range of social media already used by students.

Department of Internal Affairs (2009) Community Access to Digital Technologies: a literature review

Department of Internal Affairs (various) Studies into –e-government usage

Down to the wire: The story of New Zealand's internet. http://downtothewire.co.nz/home/about/

Fisher, David (2013) *The secret life of Kim Dotcom: spies, lies and the war for the internet.* Auckland: Paul Little Books.

From a lonely boy's bedroom in Germany to the penthouses of Hong Kong, from Wellington's Beehive to Washington's corridors of power, from the sedate suburb of Coatesville to the motor racing tracks of Europe, this is the untold story of the charismatic internet tycoon who has driven governments to distraction winning the affection of internet users It recounts not only the high profile political and legal battles but also the behind the scenes domestic life of a man who has more wealth than he can spend in New Zealand and who once escaped to Europe for the winter ... and took his cars and furniture with him. The book is not an authorised biography but has been written with the full co-operation of Kim Dotcom, who has granted the author hours of exclusive interviews. The book also reveals: why Hollywood is obsessed with Dotcom; why he and wife Mona decided to settle in New Zealand; the full story of the dawn raid; what happened to Dotcom in jail; the truth about John Banks and Dotcom; who knew what and when; and where The Hobbit comes into it.

Gauld, R. (2011). Factors associated with e-mail and internet use for health information and communications among Australians and New Zealanders social science. *Computer Review* 29(1): 161–171.

Research into the use of e-mail and the Internet for health information and communications has predominantly hailed from North America and European Union countries. By drawing on an Australian and New Zealand survey sample (n = 406)

of health Internet users, this article expands the field. It explores factors associated with a series of e-mail and Internet use behaviors including use of e-mail to communicate with doctors, presenting Internet information to doctors, perceptions of Internet information reliability, and checking of web site credentials. Regression results reveal a digital divide within the Internet using population; that those who e-mail doctors believe this improves communications; that more frequent Internet searchers had higher odds of finding information not previously provided by their doctor, and of taking Internet information to their doctor; that those expressing difficulty communicating with doctors had higher odds of believing Internet information to be more useful; and that older respondents were more likely to perceive Internet information to be reliable, yet less likely to check web site provider credentials. Implications of these findings are discussed.

Gauld, R., & Williams, S. (2009). Use of the Internet for health information: A study of Australians and New Zealanders. Informatics for Health & Social Care 34: 149-158 This article presents descriptive data from surveys that probed the use of health information by Internet users in Australia and New Zealand. Using this data, the article also contributes to understanding of factors associated with a series of Internet health information use outcomes. Four hundred six respondents (151 Australians; 255 New Zealanders) had used the Internet for health information and were asked about emailing doctors, Internet searching, taking Internet information to the doctor and perceptions of Internet information reliability. Regression analyses were conducted to examine associations between key outcomes and independent variables. A bootstrap procedure was performed to select variables used in logistic regression models. Fifty-two percent of health Internet users had emailed their doctor. Few significant differences between Australian and New Zealand responses were found. Internet use for health information was below levels found in North American and European studies, but there was similar prevalence of emailing and presenting Internet information to doctors. Emailers were more likely to believe this improved communication with doctors (OR = 3.59; 95%CI 1.95, 6.61). Frequent Internet searchers were more likely to take Internet information to their doctor (OR = 2.41; 1.47, 3.92), and believe the Internet to be a more useful information source (OR = 2.47; 1.22, 5.03). Females were less likely to email their doctor (OR = 0.47; 0.26, 0.85). More educated respondents were more likely to email their doctor (OR = 1.99; 1.16, 3.39) and to check website credentials (OR = 2.61; 1.53, 4.43). This study suggests that there is a digital divide among health care Internet users. It shows that, for males, email could have health care advantages. Doctors may need to develop strategies to deal with patients presenting with Internet information, including how to source information and check its credibility

Gauld, Robin & Shaun Goldfinch with Tony Dale (2006) *Dangerous enthusiasms: e-government, computer failure and information systems development*. Dunedin: Otago University Press. (Reprinted 2012).

Information and the technology that supports its collection, communication and analysis is a core concern of modern government, making e-government (meaning electronically enabled government) fundamental to the ongoing 'reinvention' of public administration. But the quest for e-government opens up a range of issues - whether to take a 'big bang' or an incremental approach to computerisation, how to deal with security and privacy concerns, how to reconfigure the machinery of government to fit ICT practices - and decisions - hardware and software procurement, software architecture, access by whom to what. The spending of public money is always intriguing and perhaps money spent on ICT has been the most intriguing of all, with some spectacular failures costing millions. This book is written for a general audience and takes a critical look at policies, problems and prospects for e-government in a series of case studies. Why have ICT failures in the public sector occurred and what lessons do they

Goode, L. (2010) Cultural citizenship online: The Internet and digital culture. *Citizenship Studies* 14(5): 527–542.

provide for the future?

This paper explores connections between cultural citizenship and Internet-based media. It argues that engaging with cultural citizenship assists in moving debates beyond misleadingly narrow conceptions of the digital divide. It suggests that cultural citizenship invokes questions of access, visibility and cultural recognition, as well as tensions between intra- and inter-cultural communication online. The paper calls for a reflexive and critical research agenda which accounts for the 'attention economy' of the Internet and issues of

cultural ethics online. The paper concludes that research and debate in this field must acknowledge ongoing tensions and contradictions between a postmodern 'remix' ethic in which the Internet serves as an open cultural archive which citizens can freely access and rework, on the one hand, and claims for cultural authorship, sovereignty and protection, on the other.

Greenbrook-Held, J., & Morrison, P. (2011) The domestic divide: Access to the Internet in New Zealand. *New Zealand Geographer* 67(1): 25–38.

We use unit records of the 2006 census to show that access to the Internet in the home varies geographically in New Zealand primarily as a result of demographic and socio-economic differences among individuals. Of particular significance is the much lower rates of domestic access experienced by Māori and Pacific Island individuals even after controlling for differences in their age, gender, education, income, occupation and settlement type. While differences in Internet access by ethnicity has been noted before, it is the magnitude and persistence of this difference in New Zealand after controlling for correlated factors that renders this study unique. Our results have important implications in an education environment increasingly reliant on Web access, but they also raise questions about the extent of access to the Internet outside the home

Grimes, A.; Cleo Ren and Philip Stevens (2009) *The need for speed: impacts of internet connectivity on firm productivity.* Wellington: Motu Economic and Public Policy Research.

Fast internet access is widely considered to be a productivity-enhancing factor. Internet access speeds vary regionally within countries and even within cities. Despite articulate pleas for network upgrades to accelerate internet access, there is little rigorous research quantifying benefits to individual firms that arise from upgraded internet connectivity. We use a large New Zealand microsurvey of firms linked to unit record firm financial data to determine the impact that differing types of internet access have on firm productivity. Propensity score matching is used to control for factors, including the firm's (lagged) productivity, that determine firms' internet access choices. Having matched firms, we examine the productivity impacts that arise when a firm adopts different types (speeds) of internet connectivity. Broadband adoption is found to boost productivity but we find no productivity differences across broadband type. The results provide the first firm-level estimates internationally of the degree of productivity gains sourced from upgraded internet access

Harlow, Ann (2010) Online surveys--possibilities, pitfalls and practicalities: the experience of the TELA evaluation. *Waikato journal of education* 15 (2):95-108

Discusses the use of an online (web, or web-based) survey in a large longitudinal research evaluating the TELA (laptops for teachers) project. Informs of the pros and cons of internet surveys, the practical strategies that were effective in engaging teachers and how online responses were managed, all considered in the light of current research literature

Health, Ministry of (2009) Connected health. A quantitative study: survey of information and communication technology usage in the Health and Disability Sector. Wellington: Ministry of Health.

From 2007 to 2009, the Ministry of Health commissioned qualitative and quantitative research studies of the health sector's ICT usage and requirements - the most extensive research of its kind undertaken in New Zealand. The research provides establishes benchmark data of current health ICT usage.

- Heyday. (2010). *Down to the wire: The story of New Zealand's internet*. http://downtothewire.co.nz/home/about/
- Hinze, Annika Carole Chang & David M. Nichols (2010) Contextual queries and situational informational needs of mobile users. Hamilton: Dept. of Computer Science, University of Waikato

Holmes, P., & Janson, A. (2008). Migrants' communication practices with ICTs: Tools for facilitating migration and adaptation? *International Journal of Technology, Knowledge and Society* 4(6): 51–62.

Migrants to a new homeland face significant adaptation and communication challenges. Information communication technologies (ICTs) are obvious tools to bridge these challenges. In this paper we investigate how migrants' communication practices shape their use of email and the Internet as part of their settlement process, and consequently, their inclusion in and contribution to the community, economy, and society. The study used an experimental research design whereby student researchers undertook email and follow-up face-to-face interviews with 28 diverse migrants to New Zealand. The findings showed that their use of computer-mediated communication (CMC) was influenced by their preferred cultural communication practices in some instances, but not in others. CMC enabled migrants to make sense of their immigration/adaptation experience, as well as manage daily living, thus negating earlier research that "problematizes" migrants with respect to technology use and adaptation. Yet, this empowerment did not necessarily facilitate intercultural communication or cultural inclusion. Further, both inter- and intra-cultural communication of differences emerged, especially in relation to trust and emotion, and in differences between CMC and face-to-face communication: ICTs are not neutral tools for communication. Yet, migrants valued CMC as a tool for long term economic integration with potential widespread results for success in the host society. The outcomes of the study indicate the need to research cultural groups both separately and within, and the need to explore migrants' economic and social contributions to the receiving society through ICT uptake.

Honey, M; Roy, DE; Bycroft, JJ; Boyd, MA; Raphael, D (2014) Promoting the meaningful use of health information for New Zealand consumers. *Studies in Health Technology and Informatics* 201: 11 – 17. Identifier: http://hdl.handle.net/2292/23292

This New Zealand study surveyed consumers to gain an understanding of their health information requirements. Some 1783 questionnaires were available for descriptive statistical analyses. The internet was the third most preferred source of health information. Two thirds of participants had used the internet to access health information, because of the speed of access and to find information before going to the doctor. There was little awareness or use of existing New Zealand-based online health resources. The authors note that study implications include promoting existing resources and increasing the use of electronic communication between consumers and healthcare providers as these are currently underutilized

Horsburgh, S., Goldfinch, S., & Gauld, R. (2011). Is public trust in government associated with trust in e-government? *Social Science Computer Review* 29(2): 232–241.

The term e-government describes the use of information and communications technology, particularly the Internet, for the delivery of public services. As governments invest in e-government, there is only limited knowledge of the extent of public trust in the new electronic modes of delivery; we also know little about whether there is any relationship between trust in government and trust in e-government. This article reports on research designed to probe this issue. Drawing on survey data from Australia and New Zealand, a series of hypotheses are tested pertaining to relationships between public trust in government and e-government, in the use of information and communications technology and trust in e-government, and support for e-government investment and development. Trust in government was found not to be correlated with trust in facets of e-government service provision but was associated with support for e-government investment. More intensive Internet users were more likely to trust e-government services.

Hunter, Alison (2009) High-tech rascality: Asperger's syndrome, hackers, geeks, and personality types in the ICT industry. *New Zealand sociology* 24 (2): 39-61

Examines four types of people (usually male) who are attracted to computer work: computer hackers, computer geeks, people with Asperger's Syndrome, and people whose behavioural preferences fit the ISTJ Myers-Briggs classification. Argues that these individuals are likely to contribute to communication difficulties within the industry and may be susceptible to ethical lapses. Offers some ideas about how the situation could be addressed.

Kean, Nicola. "2008: The Campaign in Cyberspace" *Key to Victory: The New Zealand General Election of 2008*. Victoria University Press: pp.205ff.

Keegan, Peter J. Keegan, Te Taka Laws, Mark (2011) Online Māori resources and Māori initiatives for teaching and learning: current activities, successes and future directions *MAI review (Online)*, n.1:13p

This paper provides an overview of some current Māori information communication technology (ICT) initiatives, online Māori language resources and Māori initiatives for teaching and learning. The first section provides examples of key ICT and web-based resources in the Māori language and for the Māori language (for example, monolingual sites in the Māori language, bilingual/multilingual sites providing education/historic information, online dictionaries, and other computer mediated communication resources). The second section focuses on a recent bilingual Student Online Learning and Management System called 'eWānanga', which provides a learner support service that is based on traditional educational learning models intermixed with Māori pedagogies to offer students more appropriate flexible blended learning. The third section discusses web/ICT resources and online learning systems based on Māori experiences in New Zealand. The paper concludes by noting gaps, areas of concern, future directions and lessons to be learnt for other indigenous groups around the world interested in both developing web/ICT resources and engaging in online learning activities.

Keegan, Te Taka; Paora Mato & Stacey Ruru (2015) Using Twitter in an Indigenous language: An analysis of te reo Māori tweets. *AlterNative* 11 (1): 59-75

Language revitalization theory suggests that one way to improve the health of a language is to increase the number of domains where the language is used. Social network platforms provide a variety of domains where indigenous- language communities are able to communicate in their own languages. Although the capability exists, is social networking being used by indigenous- language communities? This paper reports on one particular social networking platform, Twitter, by using two separate methodologies. First, Twitter statistics collated from the Indigenous Tweets website are analysed. The data show that languages such as Basque, Haitian Creole, Welsh, Irish Gaelic, Frisian and Kapampangan do have a presence in the "Twittersphere". Further analysis for te reo Māori (the Māori language) shows that tweets in te reo Māori are rising and peak when certain events occur. The second methodology involved gathering empirical data by tweeting in te reo Māori. This served two purposes: it allowed an ancillary check on the validity of the Indigenous Tweets data and it allowed the opportunity to determine if the number of indigenous- language tweets could be influenced by the actions of one tweeter.

King, Brian (2012) Location, lore and language: An erotic triangle. *Journal of Language and Sexuality* 1 (1): 106-125

This study addresses how language interacts with the erotic and 'place' (our socially understood surroundings) in an online, text-only, mostly linguistic environment to create an erotic atmosphere, and how eroticised atmosphere relates to linguistically driven sexual subject formation. Analysis focuses on extracts from a conversation in which public erotic discussions unfold between participants who are (ostensibly) men who desire men. A 'room' spatiality is continually performed, sometimes relying upon idealised images of 'erotic oases' from the offline world to build an erotic atmosphere. These offline erotic oases are places of 'deviance' characterised by semi-public sex (e.g. parks, public washrooms, and saunas). This type of atmosphere is contested by some participants while others embrace it. Analysis demonstrates that eroticism, spatiality, and language adapt to one another along a reformulating path. This suggests that a more nuanced understanding of language and the erotic depends on spatial investigations as much as discursive theory.

Kypri, Kypros; Ari Samaranayaka; Jennie Connor; John D. Langley; & Brett Maclennan (2011) Non-response bias in a web-based health behaviour survey of New Zealand tertiary students *Preventive Medicine* 53 (4): 274–277

In 2005, random samples of students aged 17-25 years from 12 New Zealand tertiary institutions (n = 7130) were invited to complete a web-based health behaviour survey, with three e-mail reminders. Early respondents (before 2nd reminder) were compared with late respondents (after 2nd reminder). Late respondents served as a proxy for non-respondents. Respondents whose participation was hardest to elicit reported more risk behaviour. Assuming non-respondents' behaviour is similar or more extreme than that of late respondents, prevalence will have been substantially underestimated.

Ladbrook, Judine (2010) Research note: our emerging net generation : are they information literate? *New Zealand journal of educational studies* 45 (1): 67-75

This note seeks to find out how Year 10 students (14 years of age) accessed, critiqued and synthesised online information, and whether these skills were being developed in English classes. Asks a number of key questions as guidance for this research, including: What do teachers know about students' online literacy, and how do they take online text into account when choosing texts for classroom use? How do students find and use information from the internet when researching topics for school, and how do teachers help them with this?

Lips, Miriam; Elizabeth Eppel, Dr Dalice Sim, Lynn Barlow and Dr Karl Lofgren (2014) *Kiwis managing their online identity information. Interim report. Survey findings.* Wellington: Victoria University of Wellington.

The findings of a major national study, led by the Chair of e-Government at the School of Government, examining the information behaviours of Kiwis in online commercial transactions, online transactions with government and on social networking sites, is now available. One of the project objectives is to identify effective solutions for managing risks around online identity information behaviours and people's experiences with cybercrime or cyber-enabled crime. The full report includes summary findings and an executive summary

Lips, A Miriam B (2013) Reconstructing, attributing and fixating citizen identities in digitalera government *Media*, *Culture & Society* 35 (1): 61-70

Increasingly, governments are replacing traditional forms of managing citizen identity, such as a passport, population register and driver's licence, with new forms of citizen identity information management enabled by information and efficiency and effectiveness, they also see advantages of a step-increase in fraud prevention, public safety protection and increased citizen trust. At the same time however, it is widely expected that the introduction of these digital identity information systems in citizen-government relationships will lead to fundamental changes in the management of citizen identity and, with that, the meaning of citizenship (Crossman, 2007; Lips et al., 2009a; LSE, 2005; OECD, 2009; UK House of Lords, 2009). For example, several scholars acknowledge digital citizen identity information systems as discriminatory 'surveillance' technologies as they sieve and 'socially sort' through obtained personal information for the purpose of judgment, thus affecting people's life chances (Lyon, 2003a: 20, 2003b; Murakami-Wood et al., 2006). Thus far, there is no systematic empirical evidence about what changes are happening in these ICTenabled citizen-government relationships. Few available research findings indicate that change outcomes depend on the actual use of citizen identity information collected or generated via these digital systems (Lips et al., 2009b; Nissenbaum, 2010). In other words, changes in citizen-government relationships are determined by how citizen identity is reconstructed, attributed and fixated in an informational sense by government agencies. This contribution will empirically explore ICT-enabled citizen identity reconstruction, attribution and fixation in e-government service relationships and present a conceptual overview of shifts on citizen identity and citizenship dimensions in public service provision.

Lips, A Miriam B1; Taylor, John A; Organ, Joe1 (2009) Identity Management, Administrative Sorting and Citizenship in New Modes of Government *Information, Communication & Society* 12 (5): 715-734

In many countries, the introduction of new forms of identity management (IDM) in government, such as identity cards, smart cards or web-based e-authentication solutions, is receiving a lot of attention. Critics of these initiatives generally point at the expected outcome of substantial information imbalances between government and citizens. Clearly, newly formed, ICT-facilitated information relationships between government and citizens would not only need a reorganization of the e-government service domain itself but also a reconsideration of citizens' rights and responsibilities. However, to be able to address these issues adequately, we first need to gain further empirical understanding about what changes are happening to information relationships between citizens and government as a result of the introduction of new forms of IDM in e-government service provision. So far however there is not much empirical knowledge available about what changes are occurring both within and to these flows of information in new e-government service relationships between citizens and government. Accompanying these changes, important questions arise as to how, and to what extent, new forms of IDM have an effect upon what may be called the 'administrative sorting' activities of governments: those classifying processes caused by administrative systems and depending on the values embedded in those systems, which are necessary to the establishment of service relationships with citizens. What, then, are the effects on the citizen of administrative sorting in digitized service relationships, when set against the traditional concept of citizenship? This article reports on empirical findings derived from case study research on new forms of IDM in UK e-government. Moreover it seeks to conceptualize 'administrative sorting' and 'IDM' in e-government service relationships with citizens, also compared to traditional forms of IDM in the 'paper-based era' of public service provision, and explores what the implications are for the citizen and citizenship. Adapted from the source document.

Logan, Keri; Crump, Barbara (2008) Digital Development: Bridging the Digital Divide International Journal of Technology, Knowledge and Society 4 (3): 169-176

This paper describes the work-in-progress evaluation of a mobile computing support service for voluntary and non-profit groups. The Pilot Project has recently been launched in Wellington, New Zealand, after more than a two-year preparatory period and adopts a partnership approach. Its overall purpose is to empower the voluntary sector through developing a community of practice around information and communications technologies (ICTs). The vision for financial sustainability is a key objective that, it is hoped, will be achieved through the business model which has been used. This paper describes the mixed method evaluation plan that involves participation of key stakeholders from beginning to end of the Pilot Project, discusses difficulties during project development and presents initial results.

Marsh, L., McGee, R., Nada-Raja, S., & Williams S. (2010) Brief report: Text bullying and traditional bullying among New Zealand secondary school students. *Journal of Adolescence* 33(1): 237–240.

This descriptive study examined text and traditional bullying in New Zealand (NZ), and the relationship between text bullying and traditional bullying, and feeling unsafe at school. A self-report online survey assessed the frequency of bullying among 1169 15 year old secondary students, for five categories of bullying: text messages, rumours, exclusion, teasing, and physical bullying. Results show that in the school year assessed 47% reported having been bullied sometimes or often and 37% reported bullying others; 11% reported being text bullied, while 7% reported text bullying others. Students involved in text bullying were significantly more likely to be involved in traditional forms of bullying and were less likely to feel safe at school.

Morrison, Rachel (2009) Are Women Tending and Befriending in the Workplace? Gender Differences in the Relationship between Workplace Friendships and Organizational Outcomes. Sex Roles 60 (1-2): 1-13

This study investigated gender differences in the perceived benefits of workplace friendships and the relationship between friendship factors and organizational outcomes. Four hundred and forty-five respondents from predominantly Western countries including New Zealand, Australia and America completed an Internet based questionnaire which asked them to describe the benefits received from workplace friends, and which measured workplace friendship and organizational variables. Friendship prevalence and opportunities were more strongly correlated with job satisfaction for men. Women were significantly more likely than men to describe the benefits of workplace friendship in terms of social and emotional support in times of stress, while men focused mainly on the benefits friends provided them in their career or in functional aspects of 'getting the job done'.

National Library (2008) *Aotearoa People's Network impact evaluation 2008* [commissioned by] National Library of New Zealand Te Puna Mātauranga o Aotearoa Wellington: National Library of New Zealand.

NetGuide (2012) Few Kiwis know their content is filtered: InternetNZ, May 2012: p.1836 NetGuide (2012) The lure of free wi-fi NetGuide, Feb 2008: p.46

NetGuide (2012) Ultra-fast broadband (UFB) case study: Manaia View School: 20-23

Reports on a Northland school that has been connected to ultra-fast broadband (UFB) through Orcon for over a year, speaking with the principal Leanne Otene. Discusses Manaia View's status as an ICT leading school, how they partnered with other schools to negotiate for lower prices, how the school is using UFB access, how they set boundaries and controls on pupils' use of the Internet, and Otene's opinion of the opportunities UFB opens to schools.

NetGuide (2010) Cyber-crime: we're guilty too NetGuide, Nov 2010; p.16

Newman, K. (2008). *Connecting the Clouds: The Internet in New Zealand*. Oxford, New Zealand: Activity Press.

Connecting the Clouds (Activity Press, 2008) documents the rise of the Internet in New Zealand and looks to the future as it becomes an increasingly vital part of our economic and social infrastructure. Controversial and enlightening, this book takes us from small beginnings to today's borderless world where fast, pervasive always-on Internet has arrived at our digital doorstep. It backgrounds the evolution of electronic communications in New Zealand from the telegraph and telephone, through to advances in computer and Internet technology which continue to transform government, business, communities and our personal lives. From promising beginnings-New Zealand was the first nation in Asia-Pacific to fully connect to the US-based Internet backbone-we're lead to the question of what went so wrong that a nation of early adopters of technology and the Internet plummeted to the bottom of the OECD scorecard for broadband, research development and technology reinvestment. We look at just why New Zealand has had to reregulate the telecommunications market and, looking ahead, examine what happens when telecommunications, broadcasting, entertainment and computing converge on a common platform. Connecting the Clouds takes the reader on an informative and entertaining ride through our telecommunications history and the people who have shaped it. This comprehensive, thoroughly researched and illustrated book provides invaluable insights into the evolving communications framework that helped New Zealand shift from an isolated outpost of the British Empire to a nation of digital pioneers intimately connected and active in the emerging global village. Writer Keith Newman has conducted over 100 interviews with visionaries and scientists, computer programmers, telecommunications experts, engineers, business leaders and politicians, including those who have played a part in the rise of the Internet and those who will drive it forward into the

next wave. The result is a fascinating, highly readable account that marks a key chapter in New Zealand's development as a modern nation

- Nielsen (2006) The Broadband Report: Insights into the broadband customer in New Zealand
- O'Carroll, A. (2013). Kanohi ki te kanohi A Thing of the Past? Examining the Notion of "Virtual" Ahikā and the Implications for Kanohi ki te kanohi. *Pimatisiwin: A Journal of Aboriginal and Indigenous Community Health 11*(3): 441-455.
- O'Carroll, A. (2013). Maori identity construction in Social Networking Sites. *International Journal of Critical Indigenous Studies* 6(2): 2-16.
- O'Carroll, A.D. (2013). Virtual whanaungatanga Māori utilising social networking sites to attain and maintain relationships. *AlterNative* 9(3): 230-245. **A326**

Discusses the concept of whanaungatanga from both customary and contemporary perspectives, providing analyses into how relationships amongst Māori are attained and maintained through social networking sites (SNS). Presents a model of whanaungatanga which is explored and discussed in relation to virtual whanaungatanga.

O'Carroll, A.D. (2013). An analysis of how Rangatahi Maori use social networking sites. *Mai Journal* 2(1): 46-59.

Provides a descriptive analysis of rangatahi Māori use of social networking sites (SNS). Explores the complexities that are attached to using SNS and how rangatahi negotiate and navigate these complex issues.

O'Donnell, Michael (2010) Trade Me: the inside story. Wellington: Phantom House.

Few companies have captured the hearts and minds of New Zealanders like Trade Me. Originally built by university drop-out Sam Morgan on a borrowed laptop, Trade Me was to change the face of retailing in New Zealand, destroying newspapers' classifieds businesses and going on to become part of the vernacular as some 2.5 million Kiwis became members. Now for the first time the story of Trade Me is told, the first 10 years of this remarkable company. Author Mike O'Donnell is Head of Operations at Trade Me and tells of its fragile beginnings, to being laughed out of the room by Telecom, through to it becoming the number one force on the New Zealand internet, and being sold for a staggering \$750 million. Featuring a foreword by Trade Me founder Sam Morgan and numerous interviews with all members of the original Trade Me team, this is the first ever history of arguably New Zealand's most loved company, and has the added benefit of the story being told from the inside

Parliamentary Library (2011) New Zealand Parliamentarians and Online Social Media

The majority of New Zealand members of Parliament (MPs) have at least one online social media account on the most popular online social media sites used by New Zealanders. Online social media influenced the 2008 New Zealand General Election campaign, and is likely to impact more upon future election campaigns. Online social media can facilitate better engagement and communication between MPs and the general public.

Paterson, Craig; Williams, Ruth; Hunt, Tony (2013) Students' understanding and searching of the Internet *Set: research information for teachers*, n.1:pp.37-44

Details a study that investigated the strategies that a small group of Year 6 children used in accessing information from the Web. Considers the implications of these findings for the ways in which teachers approach information literacy and the changing role of the Internet in schools

Phillips, Jock (2013) A click to the past: digital history in New Zealand *New Zealand journal* of history 47 (2): 232-248

Explores the evolution of the digital age and some of the implications and possibilities for historians in NZ. Draws on a survey conducted in June 2013 of

historians either working in history programmes of universities, freelance or government historians, on how the internet has transformed the discipline

Research NZ (2014) A report on a Survey of New Zealanders' Use of Mobile Electronic Devices, 2014

Richardson, M (2005) "Getting on": Older New Zealanders' perceptions of computing. *New Media & Society* 7:219-245.

This article explores older New Zealanders' perceptions of the barriers to, benefits and negative consequences of computer-based information and communication technologies (ICTs) through the analysis of focus group discussions involving 98 respondents. Older people engage with computers in a context constituted by discourses positioning them as declining in the ability to learn skills such as computing, but creating a burden on society if they do not. In this paradoxical context, participants identified emotional and material barriers, as well as benefits and negative $% \left(\frac{1}{2}\right) =\left(\frac{1}{2}\right) \left(\frac{1}{2}\right)$ consequences to computer use that are shaped by age and gender. Significant gaps between the New Zealand Government's identification of the benefits of computing for older people and the benefits identified by older people themselves are highlighted. The article argues for the need for a more balanced approach acknowledging potential negative consequences, promoting the 'people-centred' benefits of computer use over and above the national economic benefits emphasized in the government's drive to encourage older people's uptake of computer-based ICTs.

Scherer, J., & Sam, M. P. (2010) Policing the cyber agenda: New media technologies and recycled claims in a local stadium debate. *Sport in Society* 13(10), 1469–1485.

In conjunction with the extensive growth of new media technologies, stadium debates and competing claims on civic resources are being increasingly played out in cyberspace. Using case material from Dunedin, New Zealand, we critically examine the deployment of popular video sharing websites like YouTube that allow dominant interest groups to articulate their 'unfiltered' ideological positions. We suggest that stadium proponents (in the private and public sectors) are utilizing new media technologies (e.g., websites, blogs, etc.) as part of highly orchestrated public-relations campaigns that are designed to create the impression of popular support and optimistic momentum for development. In bypassing traditional media and skirting oppositional viewpoints, we argue that these types of promotional strategies have profound implications for local democratic politics.

Scherer, J., & Sam, M. P. (2012). Public broadcasting, sport and cultural citizenship: Sky's the limit in New Zealand. *Media, Culture & Society*, *34*(1), 101–111.

Access to live telecasts of sport -- as a matter of cultural citizenship -- is an increasingly complex and contentious political issue in the new digital broadcasting landscape. Debates over the 'viewing rights' of citizens are further heightened within nations where public broadcasters once played pioneering roles in providing live, free-to-air telecasts of sporting events of national significance (Rowe, 2004a, 2004b; Scherer and Whitson, 2009). The technological developments associated with digitization -- coupled with the ongoing convergence of broadcasting, telecommunications and the internet -- has, on the one hand, produced unprecedented opportunities for audiences to watch sport on a host of platforms. These now include specialty subscription sport channels -- channels that were simply unthinkable in an earlier era of analogue broadcasting along with mobile phones and other new media devices. Within this context, pay-TV networks are investing enormous resources to purchase the exclusive rights to various sporting properties that are now frequently bundled by sports organizations into multi-platform packages (e.g. pay-TV, free-to-air and digital/online rights). These developments have, in turn, injected vast sums of money into the coffers of various governing bodies, teams and leagues around the world: revenue that has fuelled the explosive growth of the salaries of professional athletes in recent years. On the other hand, access to live broadcasts of the most popular and desirable sports -- now regarded by distributors as 'premium content' -- is often restricted to audiences who can afford subscription fees to digital specialty channels and the requisite technologies. All of these developments -- including the ability of deeppocketed, vertically integrated media conglomerates to overpay for various sporting properties and amortize the cost of those rights over other properties and platforms -- have further challenged the traditional cultural remit of public broadcasters to provide live, free-to-air coverage of sporting events.

Shaw R. (2009). Politics and the internet: The New Zealand research. *Political Science* 61: 5–19.

The new wave of information communication technologies is transforming politics around the world. A growing international literature notwithstanding, however, scholarship on the relationship between politics and the internet in New Zealand remains scant. The purposes of this article are to review the published academic literature regarding the impact of the internet on politics in New Zealand and to sketch a future research agenda which will address the gaps in that scholarship. The focus throughout is on research conducted on or about the New Zealand case — whether by New Zealand scholars or others — and on formal institutional politics.

- Smith, Nigel (2009) [Review of] Connecting the Clouds: The Internet in New Zealand New Zealand Sociology 24 (2): 115-116
- Smith, P., Smith, N., Sherman, K., Kripalani, K., Goodwin, I., Bell, A., & Crothers, C. (2008). The Internet: Social and demographic impacts in Aotearoa. New Zealand *Observatorio* (*OBS*) 2(3): 307–330.

The World Internet Project focuses on the social impact of the Internet. This paper presents a summary of findings of the first World Internet Project survey to be undertaken in New Zealand. It provides an overview of New Zealanders' usage and attitudes relating to the Internet in 2007. A national probability sample of 1430 New Zealanders was analysed, with data collected through telephone interviewing. The first part of the paper highlights the main findings. The second part shows how the demographic variables of gender, age, ethnicity, area and income affect New Zealanders' interactions with the Internet. As the first comprehensive study of its type in New Zealand, these findings provide significant insight into key social changes related to the Internet. They also highlight some areas where further research is required.

- Statistics NZ (various) Household Use of Information and Communication technologies (ICT) Survey
- Statistics NZ (2013) Strong connection between ICT and business-growth_activities

 This article paints a picture of the use of ICT in New Zealand businesses—
 in particular, the relationship between using ICT and carrying out activities that contribute to business growth.
- Statistics NZ (2009) Information and communication technology in New Zealand and Australia.

Selected statistics about: sales of ICT goods and services, ICT use & Internet connection types and speeds.

- Statistics NZ (2007) Information and communication technology in New Zealand: 2006

 An overview of the supply and use of ICT in New Zealand.
- Stephens, Christine (2014) Social integration of older New Zealander. INsite 8 (7): 12-13

 Reports on research conducted by Massey University's Health and Ageing Team (HART) which discloses the long term physical and psychosocial benefits of older people engaging with the Internet. Explores these findings. Urges caution however on some of the positive results of the study.
- Tallon, Rachel (2013) The challenges of the diverse media landscape when learning about current events in the social studies classroom. *Curriculum matters* 9: 29-45

 Acknowledges the challenges presented to students for learning about global and national current events by the diverse learning environment created by the

changing media landscape of the Internet and their feelings of being overwhelmed by having to absorb so much information from so many sources. Argues that a critical literacy approach to news media promotes a deeper level of learning about current events by teaching students to view news media as a cultural text. Presents problematic aspects of our current news media landscape, and learning about events through a resource such as a weekly quiz, to support this argument. Calls for social-studies educators to maintain a critical disposition towards the nature, placement, and power both of news media and of classroom-education resources about news.

Theunissen, C. (2009). A New Zealand-based students' perceptions and use of the internet as a communication tool and source of information. *Communication Journal of New Zealand 10*(1): 28–45.

Discusses a 2007 pilot study in the form of a quantitative survey among NZ-based students undertaken to determine their use and perceptions of the Internet as a communication tool and source of information and knowledge. Reports on the initial key findings of the paper. Suggests that the results provide an insight into students' current perceptions and use of the Internet, compared to a small number of select other, more traditional information sources. Suggests that perceptions of reliability and citing sources for academic work were frequently shaped by tutors and tutors' perceptions of source reliability, signifying the need for educational leadership from tutors to provide guidelines regarding the reliability of emerging sources such as podcasts, video podcasts (vidcasts), blogs and wikipages

Thom, K., Edwards, G., Nakarada-Kordic, I., McKenna, B., O'Brien, A., & Nairn, R. (2011). Suicide online: Portrayal of website-related suicide in the New Zealand media. *New Media & Society 13*(8): 1355–1372.

Media reporting can impact negatively or positively on suicidal behaviour. Specific reporting methods such as the use of sensationalism can influence suicidal behaviour. This paper presents the findings from a study that aimed to provide an in-depth examination of New Zealand mainstream news items in which websites played a role in suicide. We used framing analysis to interpret the role online technology plays in the reporting of the suicide event. The findings indicate that news items were primarily framed in such a way so that the role of online technology was often overemphasised at the expense of the suicide events themselves. While websites were characteristically framed as 'enablers' or 'preventers' of suicide, the contribution of mental wellbeing to suicide was largely marginalised in the news media reports. The paper concludes by considering the implications of these framings for existing media studies of suicide and the media's role in suicide prevention.

UMR (2012) Social Media in New Zealand, November 2012.

Whanganui Learning Centre & Gail Harrison under the AKO Aotearoa Spotlight (2009)

Improving Participation, Retention & Progression of Maori Tertiary Learners in the
Whanganui Region

This project investigated how two Private Training Establishments could improve the participation, retention and progression of Maori Tertiary Learners in the Whanganui Region. The project benefited both parties and the learners engaged in the process. Penny Robinson's literature research paper on the issue is also included.

Winter, Michael (2005) *Digitally Boosted Study Support Centres: final evaluation report, 2005* Wellington: Ministry of Education.

WIPNZ (2014) Internet Trends in NZ Report 2007–2013 Seven Years Tracking New Zealanders' use of the Internet

WIPNZ (2013) WIP New Zealand report 2013

WIPNZ (2013) WIP: Online Engagement with Government

A special report which delves in detail into the responses to questions about online engagement with Government. The report draws mainly on 2011 results, also comparing back to 2007, when the first WIPNZ survey was conducted.

WIPNZ (2012) WIP International Comparisons: Highlights from a NZ Perspective

The results of the 2009 World Internet Project NZ (WIPNZ) survey have recently appeared in an international report comparing 14 WIP international partner countries. The WIPNZ team have prepared a short report of highlights from these international comparisons, looking at the results from a New Zealand perspective.

WIPNZ (2011) The Internet in New Zealand 2011

The third World Internet Project New Zealand survey was conducted in July-August 2011. The sample of 1255 New Zealanders were asked about their usage of and attitudes to the Internet. The latest findings are compared with the 2007 and 2009 surveys and the significant trends presented.

WIPNZ (2010) Comparison: 2007-2009

The second bi-annual survey of more than 1200 New Zealanders shows the internet is increasingly moving into open spaces in the house. The percentage of people who use the internet mainly in living areas (including lounge, kitchen, dining room) rose from 33 per cent in 2007 to 45 per cent in 2009. The report which compares data collected in 2007 and the most recent data collected in late 2009 investigates New Zealanders' usage of and attitudes towards the internet.

WIPNZ (2009) The Internet in New Zealand 2009 Report

The second full survey was conducted in August and September 2009. It questioned a sample of 1250 New Zealanders about their usage of, and attitudes towards, the Internet. Analysis focused on the social, political and economic impact of the Internet in New Zealand.

Zorn, T. E., Grant, S., & Henderson, A. (2013). Strengthening resource mobilization chains: Developing the social media competencies of community and voluntary organizations in New Zealand. *Voluntas*, 24(3), 666–687.

There is potential for nonprofit organizations to increase effectiveness by mobilizing social media to help achieve goals. However, the sector is only just becoming aware of the possibilities for social media and lags behind other sectors in its use. We report a New Zealand initiative to enhance the capability of nonprofit organizations through action research that has implications for nonprofit organizations elsewhere. Borrowing from resource mobilization theory, we introduce the concept of resource mobilization chains to explain the requirements for and obstacles to taking advantage of social media. A survey and two in-depth case studies found that nonprofit organizations demonstrated extremely limited familiarity with and use of social media. Participants were enthusiastic about the potential of mobilizing social media to achieve organizational goals, but struggled to take concrete steps to implement their aspirations. Lack of resources was a key obstacle identified in both survey and case study research.