# Editorial: Ninety-Nine Percent Fat-Free

IAN LIVINGSTONE

Filtering spam is now a major industry, and most email in-boxes are in danger of collecting as much unloved and unwanted rubbish as valuable information. One estimate gives 60 billion spam messages sent around the world every day.[1] The latest variation of so-called "image spam" which embeds an email message as a picture, making it difficult for spam filters to detect, is cunning indeed. Spam images are now being subtly altered by scattering small random dots around them, insufficient to alter the image to the human eye, but sufficient to change the file and send the devisers of spam filters back to the drawing board to seek for yet another solution. This highlights nicely the difference between data and information. The dots may be data, but they provide no information. Indeed they generate disinformation. Some modern advertising does rather much the same. What do such advertising slogans as "100 percent natural", or "ninety-nine percent fat-free" really mean? What information is conveyed by the term "natural"? What sort of fats make up the remaining one percent – high density lipids (good for you) or low density ones (bad for you)? What about "trans-fats"? And how much sugar is in the products, and what does *this* do for your health?

These illustrations suggest that in the quest for knowledge, even if the underlying data are impeccable and provide meaningful information which can be readily interpreted, much more is required in a civilised society. **Elaine Starkey** and **Ken Stevens**, of Victoria University, take us a little further up the ladder (or along the chain, if you prefer), in their article reviewing the present state of digital integration in New Zealand schools, which they now see as being in the third stage. They note that the digital era has seen a review of the definition of what counts as knowledge, and of its implications for education. From this perspective, knowledge-building is an active process based on collaboration, made possible by the development of connections within and between schools. The term "connectivism" has been developed to describe a theory for learning in the digital era. Connectivism considers how people, organisations and technology work collaboratively to construct knowledge. This way of thinking is very different from the passive view

that knowledge is something that is held in the heads of individuals. The pedagogy underpinning connectivism builds on constructivist beliefs popularised by such writers as Vygotsky, and places knowledge development into networks or communities of learners. This collaborative, connected way of considering knowledge in the digital era has implications for teaching and learning, particularly in small rural schools in this country.

**Janinka Greenwood** and **Elaine Mayo**, in an article jointly written with **Lynne Hārata Te Aika** and **Lawrence Walker**, from the University of Canterbury, take us in a similar direction. In their study of the very stressful merger of the Christchurch College of Education with the University of Canterbury, they allude to post-structural theory in its challenge to the assumption that there is a single best interpretation for any event. They take up the thesis that knowledge development is complex and unruly, non-linear rather than always linear. Complexity theory proposes fresh approaches to understanding, in which the intelligence of a collective is dependent on the emerging insights of the participants, which in turn are influenced by the growth of shared understandings. New knowledge emerges "bottom-up", in context, and the accumulation of the praxis of individuals and groups in society brings about social change. This may require an expanded definition of what constitutes research within the context of teacher education.

**Susan Lovett**, also from the University of Canterbury, draws her review from a longitudinal study "Teachers of Promise". In it she seeks to explore the perceptions and experiences of a group of teachers judged to have the potential to become strong teachers. It is these promising teachers who are needed for a vibrant teaching profession, but unfortunately, it is these very teachers who are most likely to leave teaching. Given international concerns about recruitment and retention in the teaching profession, she argues that there is an increasing need for messages about choosing teaching as a career to be promulgated in positive rather than negative terms.

In a hard-hitting review of prison education, **Nesta Devine**, from the University of Waikato, sees some of the current malaise within the Ministry of Corrections as stemming from a replacement of an earlier belief in education of inmates as a means to rehabilitation, by a narrow focus on programmes specifically intended to change the criminal behaviour for which the prisoner has been sentenced. She argues that this situation is a logical outcome of the neoliberal construction of education as a private rather than a social or public good, and of the reconceptualisation of the public service as an agency of the party or parties in power. The article considers the changes in policy discourse

relating to education in prisons, in the New Zealand context, in the period between the 1950s and the early 21st century. Informal education, including physical education and vocational education, have been severely retrenched, as have all forms of work and activity.

On quite a different tack, our final article on the post-school sector, by **Lise Bird Claiborne** and **Alexandra Smith**, from Victoria University, reviews recent innovations in policies and practice for inclusion of tertiary education students with impairments. During 2006 New Zealand's first code of practice, Kia Ōrite, was widely available, though it was just beginning to affect practice. This review centres the arrival of the Code in the context of tertiary education access and greater focus in government policy, particularly from the Ministry of Education and the Office of Disability Issues. Discussion of policy and practice in Aotearoa New Zealand is set within the context of wider international issues.

In the next article we consider another "hot issue", brought to the fore by recent technological advances, namely that of text bullying. **Juliana Raskauskas** and **Jane Prochnow**, from Massey University, Palmerston North, observe that negative peer interactions such as bullying are a common occurrence in schools across New Zealand, where students reported higher than average rates of bullying in international studies such as the Progress in International Reading Literacy Study (PIRLS). In addition to physical and emotional bullying in schools, students today may also face bullying through personal technologies such as mobile phones. This article discusses the nature and prevalence of text-message bullying through emerging research involving secondary school students. Cyber-bullying can be particularly damaging because many young people have their cell-phones with them most of the day and night, and so are not safe from this form of psychological harassment even in their own homes.

Two articles in this issue cover the early childhood sector. Three authors, **Carmen Dalli** from Victoria University, together with **Judith Duncan** and **Julie Lawrence**, from the Children's Issues Centre at the University of Otago, observe that macro early childhood policies at the kindergarten association and government levels have resulted in changes in the daily experiences of children and kindergarten teachers. A study of under-three year olds and their teachers in selected kindergartens in two urban areas of New Zealand, along with a national survey of kindergarten associations, and focus group discussions conducted as part of the project, demonstrated that the national picture of kindergartens is no longer a homogenous one.

**Colin Tarr,** Director of Teacher Education at Te Tari Puna Ora o Aotearoa/New Zealand Childcare Association, wrote his article following

a visit to view early childhood centres in Finland. In 2002 a long term strategic plan for New Zealand early childhood education and care (ECEC) provision was announced with three goals, those of increased participation, improved quality and the promotion of collaboration. To realise these goals, New Zealand can learn much from Finland. Finland participated in the Thematic Review of Early Childhood Education and Care Policy project conducted by the OECD in 2000. The purpose of the project was to provide comparative information to help inform ECEC policy-making in OECD countries. This article reviews the OECD report on Finland.

In continuing our series of articles on the National Certificate of Educational Achievement (NCEA), **Erin Pilcher** and **David Philips**, from the New Zealand Qualifications Authority, present some findings from an investigation of the ways schools are adapting to the new style of standards-based assessment provided by the NCEA. On the basis of two studies, an introductory one using information collected from 15 secondary schools, plus an online survey, the authors present evidence to show that schools are now working actively to create more flexible courses, and a wider range of courses, with the object of providing different pathways to cater for student needs.

In a final article, **David Philips** analyses how research on the NCEA, using multiple sources of enquiry, has contributed towards understanding its impact on learners, teachers and parents. He notes that the introduction of the NCEA by the New Zealand Qualifications Authority has been strongly contested, but following government reviews of the conduct of the 2004 national secondary examinations, changes in the 2005 and 2006 examinations were made, which have met with increased acceptance. Further system review, research and technical monitoring are underway. The author argues for a rigorous research-based impact evaluation, conducted carefully over time, sampling systematically the views of all the various stakeholders, but bearing in mind that ultimately it is the government of the day which will have the final say.

Interestingly enough, this may bring us full circle, because ultimately the data ⇒ information ⇒ knowledge chain, linear or non-linear, individual or collaborative, constructivist or connectivist, must survive the rigorous appraisal which impact evaluation brings, in order to ensure a well-informed educational community.

What price wisdom?

**Notes**

1. Schwartz, R. (2007, May 28) Three gangs behind image spam barrage. *Dominion Post*, p. C6.