INTRODUCTION

The papers collected in this special issue represent responses by a range of academics to the challenge to consider ethical issues associated with the modern evolving university: specifically, the university becoming increasingly networked, socially, politically and geographically, while responding to growth in the use of communication technology which provides both a means to managing networks and the stimulus for further network development. The presenters at the “A New Challenge for Higher Education” session of the Network Ethics: The New Challenge in Business, ICT and Education Conference (Lisbon, June 2009) responded to a request to think about ethical issues arising under such conditions of change. All reflected on emerging practice, behavior and culture of human-technology interaction in classrooms, administrative offices and university governance.

These papers provide first explorations of the ethical and pragmatic implications of an emerging 21st century university culture. They largely opt for case studies of specific aspects of university education, and thus reserve further detailed discussion of the ethical issues per se to later studies. Nevertheless, they provide important base-level studies of human-technology practice at a crucial time of change in higher education systems. This introduction sets the scene with a discussion between two academics, one of the conference session organizer (Horta) and the collection editor (Boyd), concerning the changes confronting universities and higher education at a time of global change.

THE NETWORKED ACADEMIC KNOWLEDGE SOCIETY: UNIVERSITIES, THEIR ACTIVITIES AND SOCIO-ETHICAL CHALLENGES

These challenges have three important factors: networks; ICT infrastructure; and socio-ethical principles to guide the enhancement of learning experiences and university roles.

Networking and team working have become necessary conditions in today’s university. There is a growing perception that, to improve research, education or service quality and utility, working collaborative teams are necessary (Branco, Ponomariov, & Boardman, 2010). One crucial reason is that some problems have a global dimension and concern, e.g.,
climate change, environmental preservation and pandemic management. Furthermore, knowledge is increasingly multidisciplinary, reflecting our awareness of the complexity of the challenges that science faces. Networking is necessary because it brings different knowledge perspectives into a specific framework, potentiates creativity, allowing the broadening of horizons and combining of perspectives to tackle a problem that could not be tackled otherwise (Heinze & Bauer, 2007).

Networks are throughout the university: in research institute or laboratory, in the classroom, or in negotiations with institutional partners. The challenge is to maintain their sense of purpose, which requires adaptability, leadership and knowledge linked to flexible organizational behavior (Bammer, 2008). Understanding beliefs, routines, social and cultural behaviors is as essential as challenging to facilitating and legitimising network activities. Awareness of appropriate socio-ethical frameworks helps learning networks to meet this challenge.

Network growth has been supported by ICT advances. ICT allows for increased intensity in information exchange and collaboration (Howells, 1995); the Internet allows for significant cost lowering in knowledge diffusion and sharing (Rosenberg, 2006). Dissemination of formal knowledge is easier, available to scientists, engineers, students, and to a lesser extent, the general (non-university) public. ICT also allows for a learning revolution and influences teaching practices. Online courses are widespread, syllabus and content are available, contact with academics is facilitated and flexible, and the format of conventional classes is supported by software that optimizes communication (Rosenberg, 2006) regardless of staff and student location.

The Internet has also helped universities to think more globally, through the different conceptions of internationalization (collaboration) and globalization (competitiveness) (Scott, 2000). Globalization, in particular, may be viewed as a turbulent process, transcending and ignoring national boundaries, and forcing social change that demand universities to examine their core values, roles and practices.

This rise of a networked collaborative academic world brings new issues to the fore (McRobb, Jefferies, & Stahl, 2007). Such issues can make good use of both ethical and social frameworks to resolve, since learning and research have adopted, and have been transformed by new spaces and social settings. If the learning spaces have changed, existing values, norms, and taken-for-granted behaviors may require modification, with socio-ethical values and norms evolving to align with the new learning conditions. This is especially so in the context of networks. Here individuals and groups act together, and knowledge, society and culture interact in novel ways to generate tension that may hamper the success of core activities associated with the university’s mission and role. As the scope of academic activities broadens, so does the heterogeneity of challenges and groups involved in the knowledge industry. While having these groups working in harmony may be seen to be desirable to potentiate the creation of new knowledge to benefit the worldwide society, this does not recognize the constructive nature of change: challenges to extant missions and roles are not necessarily a bad thing. Indeed, a critical approach to the normative change effects of new networks provides opportunity to optimize the outcomes of such change. As Hoffman (personal communication, 2010) reminds us, scientists are in a good position to illuminate where these rules, regularities and patterns draw attention to “leverage points, sites [or] types of interventions, unintended consequences, risks and harm”, i.e. spaces of change. This allows for a more critical and realistic identification of the new normative stands that probably are needed in many quickly growing spaces created within ICT settings or contexts.
TAKING UP THE NEW CHALLENGE FOR HIGHER EDUCATION: POTENTIAL RESPONSES

In response, the contributors to this volume provide perspectives of scholars from distant fields of science and parts of the world, drawing together institutional, learning and social perspectives. Their work falls broadly into two groups: (1) The Big Picture (Boyd & Newton; Silva et al.; Hoffman et al.; and Kenon); (2) E-learning and e-technology (Ueno & Maruyama; Ganito; Nicholas & Lewis; and Harris et al.).

Boyd and Newton open with an overview of the range of tensions and dilemma implicit in the new university environment, many of which arise from the increasingly globalised and networked higher education system we are operating within. They propose an application of an ethical tensions analysis model as a means to engage more deeply than is common with fundamental issues of curriculum and teaching and learning. Focusing on the technology of text-comparison software in evaluating student performance, they close with an optimistic claim that engagement could usefully shift responsibility from the individual academic as moral agent to the adoption of ethical practice as a communal process. They propose that it is possible, through consideration of the practices and processes of community, to frame and critique learning and teaching approaches, policies and administration, to assist students and staff to develop ethical approaches to their scholarship and profession.

Silva et al. also draw on the wide range of institutional components and processes that comprise an educational environment, demonstrating the importance of a whole-of-system approach to e-education. The current literature on e-learning, they claim, seems to neglect hitherto an important discussion: how both individuals (students and lecturers) and organizational bodies manage the evolution towards e-education, especially in the light ethical dilemmas arising from this evolution. This requires a debate about human-centered learning and its dimensions, which has commenced, but importantly must be aligned with a debate about the evolution and nature of e-learning management systems. Silva et al. provide an opening for that debate.

Hoffman et al. follow these broad critiques of the university system with a close examination of the management of strategic international policy, especially in their context of Finish higher education. They find that while the Finish education system has strong reputation, there are some fundamental issues impeding quality. These appear to be well hidden in the system. Importantly, Hoffman et al. identify the increasing use of ICT-based management as problematic, and question whether it truly meets educational and social needs. Furthermore, they suggest that engagement with such a critique remains limited.

Extending the issue of relationships, Kenon then provides the example of critique of a program for building partnership between higher education institutions and high schools that allow students and educators to engage with preparation programs located in countries outside their native lands. Focusing on trans-institutional, trans-sectoral and transnational relationships, Kenon demonstrates the educational, social and economic benefits of such extensive networked educational programs.

Moving to a more specific emphasis on e-learning and e-technology, Ganito opens the second set of papers with an illuminating discussion of the role of the mobile phone in the classroom, a discussion that underlies the importance of ethical education programs such as Ueno & Maruyama’s in Japan (below). Portugal has one of the world’s most intense uptakes of the mobile phone, and this has had an impact on educational delivery. While there may be anxiety about this impact, Ganito make some positive proposals about the mobile phone being taken up as an innovative educational tool. Such uptake, however, requires new skills, strategies and network ethics in the educational system.

Staying with the role of mobile phones and other electronic media, and considering
social relationships within higher education, Ueno and Maruyama return to a very practical, if fundamental, aspect of networked societies, the education of young people, with regards to the ethical use of communication technology, mobile phones and the Internet. This is important, since students arrive at university in Japan having previously being uneducated in such ethical matters, and so bring to their higher education inappropriate and disruptive (and worse) behavior; academic integrity is at risk. Ueno & Maruyama describe a successful higher education student program in ethical behavior, and illustrate how they can inform and change student values and views regarding network ethical issues.

In considering electronic resources for higher education, delivery of text is often high on the agenda. In considering the role that various electronic and/or on-line communication platforms may play in education, Nicholas and Lewis ask questions about the effectiveness of these to provide core textbooks to students. Are students ready, they ask, to change from print to Internet textbooks? Building on two pilot studies, and describing two different e-text delivery modes and student responses to these, Nicholas & Lewis suggest there are still practical and behavior obstacles to overcome in the effective use of e-texts, both for students and academics. These appear to be transitional, and it is expected that uptake and use will improve in time.

Harris et al. close this collection of papers by reflecting on a wide range of social networking tools- otherwise shorthand as Web 2.0 technology- such as Facebook, Twitter, Ning, Basecamp and blogs. Their particular interest is the scope to which these may enrich university educational activities through their capability to support communication, group work, networking and project archiving. They contextualize this potential against current electronic tools, recognizing the challenges and potential disruptive nature of new technologies. In doing so, and by relating stories from students and teachers about their use, they flag the need for new roles, structures and activities that allow the virtual campus to reduce social distance over time and place, engender new forms of creativity, and increase availability of, and access to, information. Adoption of such e-technology, they acknowledge (in common with other authors in this collection) is likely to be a gradual process, and it is clear that there is some way to go in engaging all parties to a Web 2.0-based education.

**CONCLUSION**

This collection of papers, results from shared concerns that the emerging and expanding duality of the networked university- increasing multi-layered characterization and purpose of higher education and the ever-expanding reach and range of networked ICT-based learning activities and associated challenges- was approached only through limited debates in higher education. The authors’ unifying concern is of the ethical or value basis for these debates and the evolution of pedagogy, research, and practice structures required to maintain quality in higher education in an increasingly networked world. Regardless of author background or experience, all consider the whole-of-system context: issues of mobile phones in learning environments challenge conventional pedagogical practices; Web 2.0 discussions are easier to understand in terms of whole-of-system approaches, if harder to resolve in terms of new teaching and learning practices and institutional structures. Conceptual models based on ethical consideration provide one path for deep engagement, and inevitably highlight the intersection of curriculum, power, organization, social behavior, and cultural values. The need to engage teaching and learning practices by questioning whether institutional structures have the capacity to cope with emergent re-evaluation of curriculum is a valid question.

Finally, this collection brings together a wide range of higher education academics, each with their own perspective, experience and attitude towards evolving pedagogy. For
many, this is an early formal scholarly engagement with teaching and learning; most are not from an education discipline background, but bring experience from other disciplines. They reflect the growing interest in the scholarship of teaching and learning. Here, while some present overt teaching & learning, ethics and/or ITC papers, others examine a broader picture, the context of their teaching and learning, and attempt to tackle large-scale and generic aspects of higher education in an effort to contextualize and enhance their individual experience of being researchers and educators.

REFERENCES


William Boyd is the Professor of Geography and Chair of both the Human Research and Animal Ethics Committees at his University. He has published widely on environmental history and issues, heritage and archaeology, and teaching and learning in higher education. He is currently the Director of the Southern Cross Environmental Innovations Research Centre, a transdisciplinary group of academics that conducts research across the science and social science disciplines to address the urgent environmental and social needs of the 21st century.

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