Navigating the Digital Divide

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The digital divide has now been analyzed for over a decade. Many in the field believe it is time to reflect on where we are today. Has the concept lost all meaning as academics and policy-makers grapple with the issues? Is the digital divide just a more subtle way of discussing poverty and social exclusion or is it a valid new formulation for discussing recent and novel changes occurring in an information society? Much of the content of the following special edition journal is based on papers given at a May 2003 conference on International social welfare policy and practice for vulnerable groups: International perspectives on social justice and technology - held concurrently at the Universities of Calgary and Regina, Canada. The conference involved over 100 participants from North America, South America, and Europe, and over 30 peer reviewed papers delivered in person or in real time via electronic media from such remote sites as Boston, New York, and Amsterdam. Practitioners and scholars of myriad social scientific disciplines and professions were represented.

A key component of the conference and hence this special edition journal is the interplay between social welfare, the new economy and information and communication technology (ICT). We defined social welfare broadly, to include that complex network of personal relationships, institutions, policies, and services that a society creates in order to contribute to the well-being or welfare of its members. The new economy we thought of as a complex contextual phenomenon arising from new information technologies, and increased integration and restructuring of national and regional economies. We identified ICT as any equipment or interconnected systems including all forms of technology used to create, store, manipulate, manage, move, display, switch, interchange, transmit or receive information in its various forms. A handful of writers analyze the relationships between ICT and such diverse phenomena as culture, globalization, and social change (Ess, 2001; Gere, 2002; Katz & Rice, 2002; Katz, 2003). But there is a lack of research on the relationship between human social welfare and ICT from an interdisciplinary perspective.

Recent advances in computer and related technologies have revolutionized virtually all areas of human life. A growing scholarship has captured many, but not all, of the arising social, economic, and political implications. A significant literature examines the so-called digital divide – the technological gap within and between societies (Compaine, 2001; Mack, 2001; Norris, 2001). Allison (2002)

discusses the interplay of technology, development, and democracy, and the resulting conflict or cooperation. Several scholars consider the relationship between activism, advocacy, and the Internet (Hick & McNutt, 2002), more responsive governance and access to political processes (Asgarkhani, 2003ab) and human rights and technology (Hick, Halpin, & Hoskins, 2000). Much of this writing, however, tends to consider information and communication technologies (ICT), and the social welfare of people, separately; only a small literature considers the interconnections between the two.

The present special edition journal analyzes ICT and social welfare with respect to the new economy. This is a significant area in the literature, given the potential reciprocal influence of the new economy over social welfare and technology. New information technologies, increased integration, and restructuring of national and regional economies all contribute to the creation of a new economy in an increasingly 'borderless' world (Lund, 2002; Sauter & Schinke, 2001). This global integration promises to be culturally, economically, politically, and socially transformative, with consequences that could be both beneficial and detrimental.

Our approach is interdisciplinary, and relevant to information studies, economics, political science, sociology, as well as such caring professions as education, medicine, nursing, and social work. Particular attention is given to understanding the prospects and problems inherent in information technology, lessons that could be learned from different attempted applications, as well as a greater awareness of the benefits and limitations of technology in relation to social welfare and the new economy. The empirical literature on the digital divide is growing. In Canada, recent reports by Statistics Canada provide evidence that internet users are differentiated from non-users according to age, education, and income level (Dryburgh, 2001; Sciadas, 2002). Statistics Canada (2003) data show that there is income based inequity in access to technology with 22.6 % of households in the lowest income quartile and 75.8% of the highest quartile having internet access at home. The data on education levels and Internet access shows that those with a university education have a home access rate of 78.7% whereas those with less than high school have a rate of 25.5% (Statistics Canada, 2003). Gender, rural versus urban locations, and parental education are likewise associated with children's use and attitudes towards information and communication technologies (ICT) (Looker & Thiessen, 2003). In rural Saskatchewan we found internet usage in the 65 to 70% range, although direct usage rates were highest for age groups below 50 years and for those with some post-secondary education, and indirect usage was high for those above 50 and with only primary school education (Jones & Schmeiser, 2003).

In relation to other OECD countries, some observers claim Canada has been part of "a quantum leap into the information economy" (Conference Board of Canada, 2004, p. 1). A 2004 survey by the Conference Board of Canada, for instance, examines connectivity: "the availability and use of information and communication technologies (ICT) and associated services to facilitate communications, interactions, and transactions, whenever and wherever" (p. 2). Here, the Conference Board considers availability, price, reach, and use as the key components to connectivity. Combining these four criteria in comparison with other OECD countries, Canada "outperforms the majority of comparator countries" and ranks second with Sweden – with first place going to the United States of America (p. 2). But even the most optimistic assessments of ICT in Canada will point to the persistence of a digital divide, as well as the problems associated with ICT's potential to promote social goods (pp. 3-4). Indeed, some observers argue that the human dimension and professional discretion of such helping professions as nursing and social work have been reduced by information and time management systems (Menzies, 2005). In what ways does ICT reinforce, and in other instances forestall, a number of characteristics of professional intervention described by many authors? Among them are increasingly rigorous time management, the growing surveillance of professionals by management structures, physical and emotional burn-out, a lack of professional autonomy, an increasingly antagonistic relationship with clients, professional demoralization, a deskilling of professional intervention, and an unclear sense of professions' ultimate direction (Carniol, 2003; Graham, Swift & Delaney, 2003; Jones & Novak, 1993).

In the Global South, a growing scholarship considers the limits and potentials of ICT (Cohen, 2004; Keniston & Kumar, 2004). The digital divide is understood to reflect, firstly, divisions between those who are rich, educated, and have power, and those who lack these things. Some stress the importance of a second divide along linguistic and cultural lines, particularly between those who do and those who do not speak English or another west European language, or Chinese (Harwit, 2004; Wang, 2001). Related to these divides is a third: the growing digital gap between countries of the North and South. A fourth divide sees the emergence of a "digerati", or beneficiaries of ICT within certain developing countries such as India, and the majority of people in the South who remain outside this milieu (Keniston, 2004, 12-16). As for social welfare, some think that e-governance can enable governments in the South to improve such things as poverty programs (Kaushik, 2004); but others emphasize the fact that "many projects aimed at harnessing IT for development fail" (Kumar, 2004, p. 134).

The links between Internet non-access, non-use and poverty are complex; technology and society are intertwined. Recent studies explore the concept of the digital divide as a 'gloss' for long-standing societal inequalities (Hick & Parsons, upcoming 2005, Seedco, 2002). The Internet, like ICT in general, tends to adapt to existing patterns, permits some innovations, and reinforces particular types of change (DiMaggio, Hargitaai, Neuman, & Robinson, 2001). Recent research has found that ICT is not an external variable that can be injected from the outside to address social welfare issues (Hick, 2004; Warschauer, 2003; Servon, 2002). Instead it is woven in a multifaceted way into social structures and processes (Hargittai, 2002; Pinkett, 2002; Stanley, 2002). Our special edition journal recognizes the historical value of the concept of digital divide in drawing attention to potential problems associated with ICT, but uses the recent concept of social inclusion and exclusion to reveal the range of socio-economic issues and challenges in a more nuanced way, as they may coincide with ICT.

The analytical construct of *social exclusion* has developed beyond earlier notions that stressed economic disadvantage or deprivation (Hoovelt, 1997; McGrew 2000; Raphael 2003; Thompson, 2000) to a recognition that the conditions, processes and environment of social exclusion involve those persons systematically and disproportionally deprived of access to social, economic and/or political spaces, resources and opportunities (Alvi et al 2003; Farrington, 2002; Joint-Lambert, 1995; Letivas, 2003; Peace, 2001). Excluded people may experience a persistent scarcity of opportunities and access to social, health, and educational services, labour markets, means of production and credit, and political decision making. The theory of *social inclusion* therefore captures the ability of people to participate as valued, respected and contributing members of society (Gilbert, 2003; Voyer, 2003). Individuals and groups can experience degrees of inclusion along a continuum in some dimensions and exclusion in various degrees along other dimensions; the notion changes over time, person, and place, and is best seen as fluid rather than as something that bifurcates people or communities into mutually exclusive camps of inclusion or exclusion (Letivas, 2003). It is a multidimensional social lens through which to understand social well-being, equality and citizenship (Gilbert, 2003) – and is best understood as 'human flourishing' rather than the absence of overt exclusion (Letivas, 2003; Sen, 2002; Sen, 2000).

With greater socioeconomic and political inclusion comes the possibility for greater self-actualization and greater economic growth through innovation and co-development (Dyer et al., 1991; Jacobs, 2000). So too may social capital be enhanced within a given community: improvements in the functions of obligations and

expectations, trust, information potential, authority relations, appropriable social organizations and social networks (Coleman, 1990; Judge, 2003; Putnam, 1993). The European Union and myriad international development organizations have adopted social inclusion/exclusion as social policy criteria; and the social inclusion agenda involves examining the values that characterize a good society and the policies and practices that embody these values. ICT is not neutral when it comes to community and social capital, organizational change, and political and cultural participation. Good things may well occur, as highlighted by a recent American publication emphasizing the potential of the Web-mediated GIS tools to advance disease surveillance, improve community access to public health decision making, and improve government participation in catastrophic planning, response and risk management (Croner, 2003). Other aspects are seen as problematic, from the prospect of government and corporate intrusion into individuals' lives to the growing technological focus of thinking and human relations. But rather than bifurcating into "utopian claims or systpic warnings", many scholars call for "more nuanced and circumscribed understandings" regarding how ICT might "adapt to existing patterns, permit certain innovations, and reinforce particular kinds of change" (DiMaggio, Hargittai, Neuman, & Robinson, 2001, p. 307).

The commensurately nuanced and mixed results of ICT in social welfare, themes of recent scholarship, are certainly echoed in upcoming articles. But prospects and solutions likewise appear in the following pages. The special edition journal is divided into three sections. The first analyses the digital divide, social welfare, and the new economy from a broad, macro perspective, with emphasis on such phenomena as: globalization and neoliberalism. The second seeks to understand better the digital divide in relation to social inclusion: how it is that people and communities are inside or outside prevailing power structures and have or lack opportunities and access to resources. The third and final section examines the digital divide in relation to a key component of many social welfare systems - the caring professions.

The section Macro Perspectives on the New Economy contains a number of unifying themes. The first is the complex and varying nature of the relationship between the digital divide and social inclusion. In some instances the digital divide reinforces existing lines of social cleavage. In others it creates new patterns of privilege and power. Sometimes the digital divide can even serve as a mechanism to level the playing field. The precise patterns vary across time, space and culture. So that in some places the divide is reinforcing the rural – urban gap, but not the gender gap, and indeed reversing some of the traditional age distribution effects. In others the divide might be

reinforcing all three. On top of this process we also need to consider the changes in risk.

What we need to create is a multi-dimensional matrix of inequality, poverty and exclusion. This will enable us to understand and parse out the interlocking forms of oppression, and the forces that generate and legitimate diverse and complex experiences of exclusion. An empirical approach is posited by Jones and Schmeiser in Article 1 while the theoretical call to arms is presented by Quark in Article 3. Between them, globalization, neo-liberalism and the new economy have contributed to a reduction in personal safety, degradation of the environment, an increase in the rate of breakdown in families and communities, an increase in stress from risk, an increase in uncertainty and pessimism, and a decrease of trust in social institutions. As a result we need to look towards notions of social exclusion / inclusion that are: (a) simultaneously a global and local (or global) phenomenon (b) a function of individual – group relationships (c) temporally differentiated (d) a function of spatial distribution and mobility (e) emergent (f) both a condition and a process (g) interdependent with the rest of social space. We also need to acknowledge the systemic dimension of exclusion. Finally we must recognize that the digital divide may set up situations where certain groups have difficulty pursuing well-being[1].

In Article 2, Jaffe and Gertler show that the digital divide produces an increase in exposure to, and vulnerability to, risk, ganging up on vulnerable and excluded peoples to create a double exposure. However, the new economy brings increased risks in numerous guises. For example, technical innovations alone are not enough to obviate the risks associated with e-governance. Instead we also need to examine the social structures, cultural values and attitudes, and ethical issues as they relate to the creation of e-citizens. Perhaps most important are the risks associated with the rise of techno-oligarchies in place of democracy, where ICT and neo-liberalism are together at the root of this socio-political transformation.

The subjugation of national democracies (and other forms of national governance) to supranational powers serves to reinforce the pre-eminent position of those with privilege at both local and national levels. The events since 9/11 have shown that culture has replaced ideology in current strategic alliances. Trade may or may not follow the flag, but culture certainly will follow power and commerce. In addition to international institutions we must add the challenge to

[1] Perhaps the most relevant example of this are the welfare recipients with visual impairments who are trained to work as telemarketers and then fired from their job placements because they are dragging down the team average, or need special accommodations.

democracy that supranational corporations represent. Facilitated by neo-liberalism and globalization we have seen the rise of corpocracy, with large supranational entities functioning effectively beyond the regulation of any one nation state and with the equivalent economic power of large countries. To corpocracy and technocracy we must also add the considerable asymmetries of knowledge that are being reinforced and expanded by ICT and the new economy to create an expertocracy and digerati. The United States has skilfully employed the World Trade Organization (WTO) to safeguard its pre-eminent position through intellectual property rights and extended patent protection. These asymmetries of knowledge, with eighty percent of science and technology happening in and owned by the Organization for Economic Cooperation and Development (OECD) serve to reinforce the structure of global production and consumption and the global assembly line.

In section two, individuals, families, organizations and nations can be split into distinct categories according to their interaction with ICT. But, as this section outlines the divides are not straightforward, nor are the implications or solutions. Recent research has found that ICT is not an external variable that can be injected on its own to address individual poverty, organizational effectiveness or national development. It is woven in a multifaceted way into social structures and processes and requires a multidimensional solution. From this perspective the goal of using ICT with low income groups or developing nations is not to overcome a digital divide, but rather to further a process of technical and social change that enables the building of capabilities and opportunities to participate in social life or, in the case of nations, in the global economic order – some have called this digital inclusion. In Article 4 Cheryl Parsons and Steven Hick examine the multiple aspects of ICT in relation to the concept of social inclusion and advance the notion of community technology centres and their potential for addressing digital gaps. They argue that the concept of digital inclusion as opposed to the concept digital divide, more accurately captures the phenomenon of ICT gaps.

Talk of the importance of addressing the digital divide is waning. Previously, governments at all levels, businesses, non-profit organisations and community developers all spoke with a united voice about this issue. There was a great sense of urgency, resulting in a variety of policies and programs. Now it is primarily non-profit organizations and communities voicing concern. The governments around the world seem to have moved on to different priorities. The digital gap that exists at the organizational level– or what is called an organizational digital divide is the topic of Article 5 by John McNutt. The potential of ICT to assist nonprofit advocacy organizations in their struggle for social and economic justice is considerable. But like

individuals, such organizations report that a lack of expertise and expense are the primary barriers. It is the under-funded advocacy and social justice organizations that face the biggest barrier, and due to the nature of their work could possibly benefit the most from electronic advocacy.

Those still active in the field are increasingly recognizing that the narrow digital divide frame of reference (access and use behaviour) resulted in policies and programs that did not address the broader issues implicated in the digital gap. Early attempts seemed to emphasize priorities of business and e-commerce over citizen rights and social inclusion. Now that research has more clearly shown how digital gaps are more related to income levels, discrimination and employment opportunities than to the existence of computers and wires, the enthusiasm of governments is diminishing. ICTs are inextricably integrated with the transition to an information society or knowledge economy. If opportunities are to be distributed equitably throughout society then digital inclusion must be an integral part of public policy.

In the third section our attention turns to applications relevant to the caring professions. Members of the caring professions tend to be "people persons". Yet the caring professions also have long-standing histories dealing with technology. Such common activities as advocacy, referrals, and resource mobilizing all fall into the general theoretical and practical understanding of "technology" in its broadest parameters. That is, these activities involve a knowledge of how to do things, including a "know how of information" (Cohen, 2004, p. 35). But recent advancements in ICT have had a transformative impact upon caring professions, as with other parts of social welfare in the new economy, moving caring professionals well beyond previous parameters of knowledge and practice. This section considers important aspects of ICT that will influence caring professionals in the coming years.

Article 6, by Carol Kauppi and Rashmi Garg, presents findings from a three-year demonstration project in Sudbury, Ontario that used Internet-based technologies combined with other program elements to support teen mothers through the establishment of a computer-mediated peer support group. A carefully nuanced assessment of qualitative data leads these authors to conclude that most participants of the Cybermoms program gained some benefit from access to computers and the Internet, particularly in terms of online peer support. "Through interactions within the program, such as the real time chat sessions with social service providers and decision-makers, the young women seemed to transcend some of the limitations and boundaries of their lives, for example those related to their status as clients of oppressive service systems." At the same time, online

participation "could not change their immediate life circumstances". Other benefits of ICT technologies included schooling, labour market transitioning, and life skills that arose from interacting with others and learning ICT.

Article 7, by Heather Coleman and Don Collins, moves the analysis from direct practice to the education of social service workers. Research, they argue, on the use of technology in social work education is underdeveloped and not well designed or comprehensive, making firm assertions about its effectiveness premature. In particular, the authors recommend that more critical analyses and rigorous research be conducted on the use of technology in social work education to determine what kind of technology works best with what kind of student in what kind of course.

Article 8, by Sam Lanfranco, provides a framework to help human service organizations identify and organize strategies in response to the challenges and opportunities of ICT within the new economy. Here, Lanfranco seeks to better equip human services' stakeholders, from policy maker and manager through to service provider and client, to better understand and work within the electronic workspace. His Article likewise provides insight into how social service agencies might progress from traditional ways of doing things to those ICT-enabled structures and processes that allow better knowledge management and knowledge networking within and beyond their organizations. Ultimately, human service organizations could become learning organizations in their own right.

Each Article offers some qualifications, but also some very significant hope, regarding ICT's prospects. Kauppi and Garg provide convincing evidence that ICT can genuinely, albeit modestly, improve the lives of consumers of social welfare. Moving to human service organizations, Colman and Collins, posit some limitations but also some prospects for education and Lanfranco insists that "there is not time to simply wait for a new generation of human services professionals to come out of educational programs that, as of now, are still weak in dealing with the ICT-enabled reality that confronts human services." To this end, education and post-degree continuous learning are paramount.

ICT represents both a significant risk and challenge to individuals and social welfare systems. At the same time it presents an opportunity for fundamental improvements in both social inclusion and the practice of social welfare. As with all forms of technology and physical capital (and even theories and methods of analysis), people and social structures must acknowledge the use and usefulness of the tool, but not become in its thrall. When the tool or technology becomes a thing of blind faith and worship – as the magic solution to all our problems – that is when risks are greatest and the difficulties

really begin. Practitioners and policy makers should be open to the opportunities that technology presents and be critical of technology's use and design that hampers social inclusion. Just as some uses of technology can control and dominate us, alternative uses of technology can democratize society and promote social inclusion. Restructuring technology's design, use and practice is crucial for general social progress and change. And this restructuring will undoubtedly involve the very technology we are seeking to change.

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